

Fleet Benchmarking

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September 25th, 2006

CASCOR Client & Manufacturer Conference
September, 2006



Today's Discussion

- Benchmarking
 - What it is.
 - Why do organization's benchmark?
 - Topics Benchmarked.
- Pitfalls and Other Considerations
- MRU Vehicle Equivalency Tool
- Examples
- Typical and New Ways To Provide Data

What is Benchmarking?

- “A systematic process of comparison used to gain insight into and improve an organization's performance.”
 - Sal Bibona

Benchmarking's Importance

- Can be a powerful tool to:
 - Learn and
 - Improve performance
 - Effectiveness, economy & quality
 - Serve as a catalyst for change
 - Help “make the case”.
 - Introduce outstanding practices to an organization

Why Benchmark?

- Look for ways to make program better, cheaper, and more reliable and smoother running.
- Help organization maintain or regain its competitive position.
- Provide an assessment of where you are.
- Guidance where you need to go.

Understanding Results

- Lately, many fleets believe it is important to be in the top quartile or even decile.
- All right, but what about avoiding extremes in the data?
 - Try to rely on medians not averages, since medians avoid the impact of data extreme.
- Benchmarking should not be an exercise in bragging rights.
- Instead, stay focused on improvement and not just being called as the best.

Pitfalls

- Not properly taking into account in-house versus outsourced work.
- Not properly incorporating overhead into direct labor hour rates.
- Including capitalized work as part of the standard MRU.
 - These should be added as an extra.
- Confusion on including depreciation expense.
 - Property accounting and not fleet management will set depreciation practices.

Avoid Playing Number Games

- Colleague reviewed the results of an investor owned utility thought they were the most cost-effective.
 - However, they were not.
- Closer look revealed that they did include many overhead costs in delivery of maintenance services.
- This had artificially made them look good, when in fact they were among the most expensive.

More than One Factor

- Look at more than one factor.
- Example: Percent of staff in administration
 - Some took this as a negative factor.
 - But if the value added by the administrative resulted in significantly lower costs, then that may be ok.
- When all or most of the indicators are in the wrong direction, then there may be a problem.

Detail vs. Overview

- It is not easy to make these comparisons.
- The more time and money obviously the better, but sometimes the costs are not worth it if you are can be satisfied with an overview rather than getting lost with too much detail.

Doing It Yourself

- Using networks to informally benchmark is fine.
- But it is good to get a professional consultant with the expertise and experience to:
 - Formulate the right questions,
 - Interpret the results,
 - Maintain confidentiality if needed, and
 - Avoids pitfalls.
- The writing questions is an art.
 - Obtaining enough detail for meaningful info, but not so onerous to scare away participants.

Embracing The Differences

- Please note to embrace fleet differences.
- Don't use differences as an *excuse* to avoid comparisons or learning from others.
- Differences can be accommodated through:
 - MRU vehicle equivalency analysis for comparing fleets of different size and mix.
 - Quantifying their impact to assess significance.
 - Example: Accident costs were only 2% of the total repair costs and not enough to tip the comparison of in-house equipment versus rental equipment.

Some Quantitative Topics Benchmarked

- Costs by vehicle type
- Facility capacities
- Fleet size and distribution
- Fleet utilization
- Labor rates
- MRU updates and ratios
- Organization size and structure
- Performance measurement statistics
- Vehicle age and replacement guidelines

Some Qualitative Topics Benchmarked

- Areas in most need of improvement.
- Best practices
- Characteristics of low cost fleets
- Chargebacks protocols
- Customer relations practices
- Facilities characteristics
- Fleet organization structure
- Fleet replacement and disposal practices
- Information technology
- Pools and assigned vehicles
- Question customers should be asking
- Service levels agreements
- Training strategies
- Work force management practices

What is MRU Analysis?

- Management tool that weights a fleet according to its relative maintenance requirements.

$MRUs = (\text{No. of vehicles in a class}) \times (\text{MRFclass}),$

MRFclass is the maintenance and repair factor for the particular class of vehicles.

1 MRU typically = 20 mechanic hours per year

- Provides a common basis to analyze fleets of different size and composition.
- Also, adjust for percent in-house work.

Some Advantages

- Flexible to specific organizational needs.
- Adaptable to changing fleet conditions.
- Simple to use.
- Understandable by non-fleet managers.

MRUs Are Not Work Standards

Work Standards

- Very detailed increments of work.
- Used to compare or estimate detailed work requirements.
- E.g. Hours to R&R brake pad.

MRUs

- Annual labor per vehicle by class.
- Works best at high or strategic level.

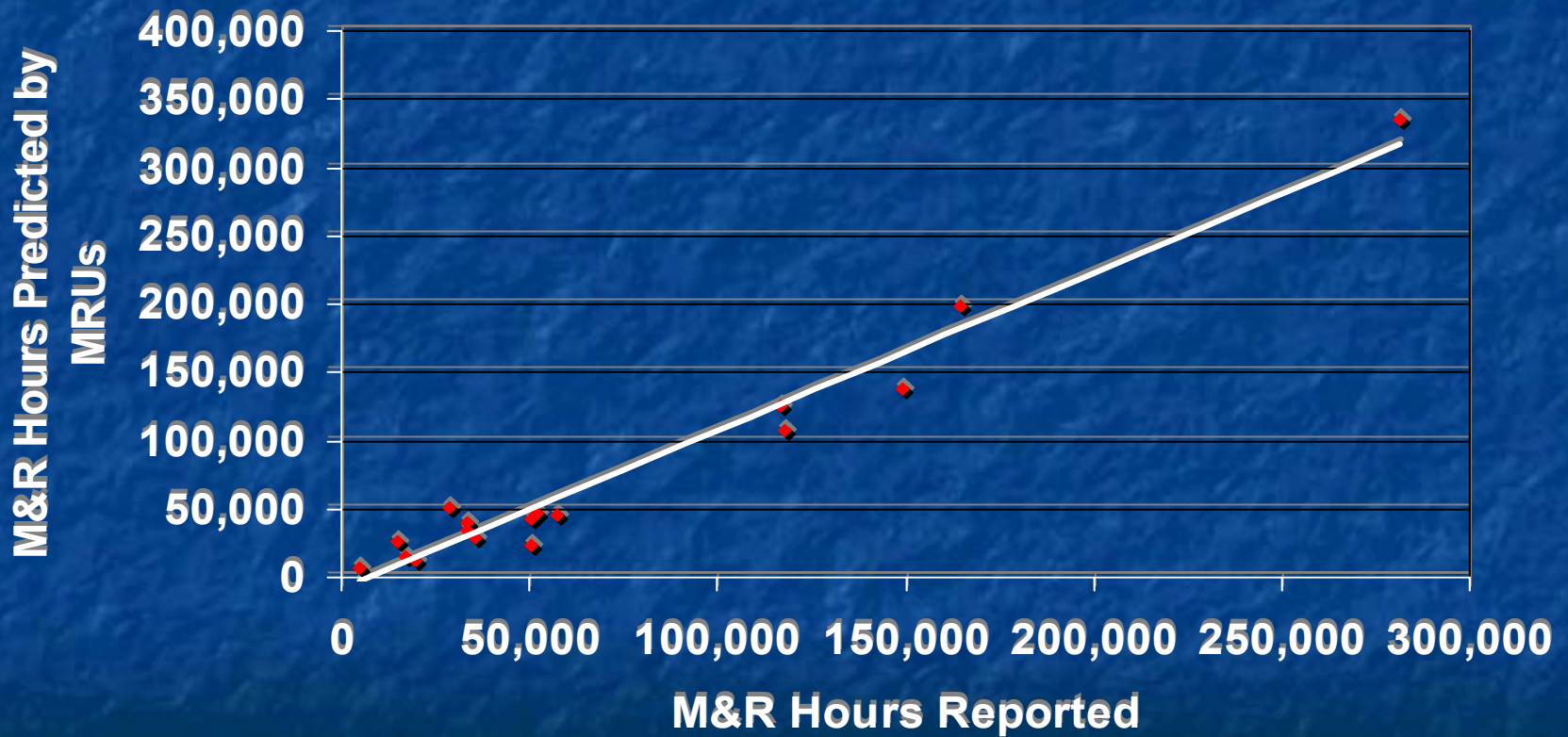
MRUs Can Also Help In

- Resource Planning
- Analyzing budgets
- Analyzing staff performance and facility performance
- Identifying operational anomalies

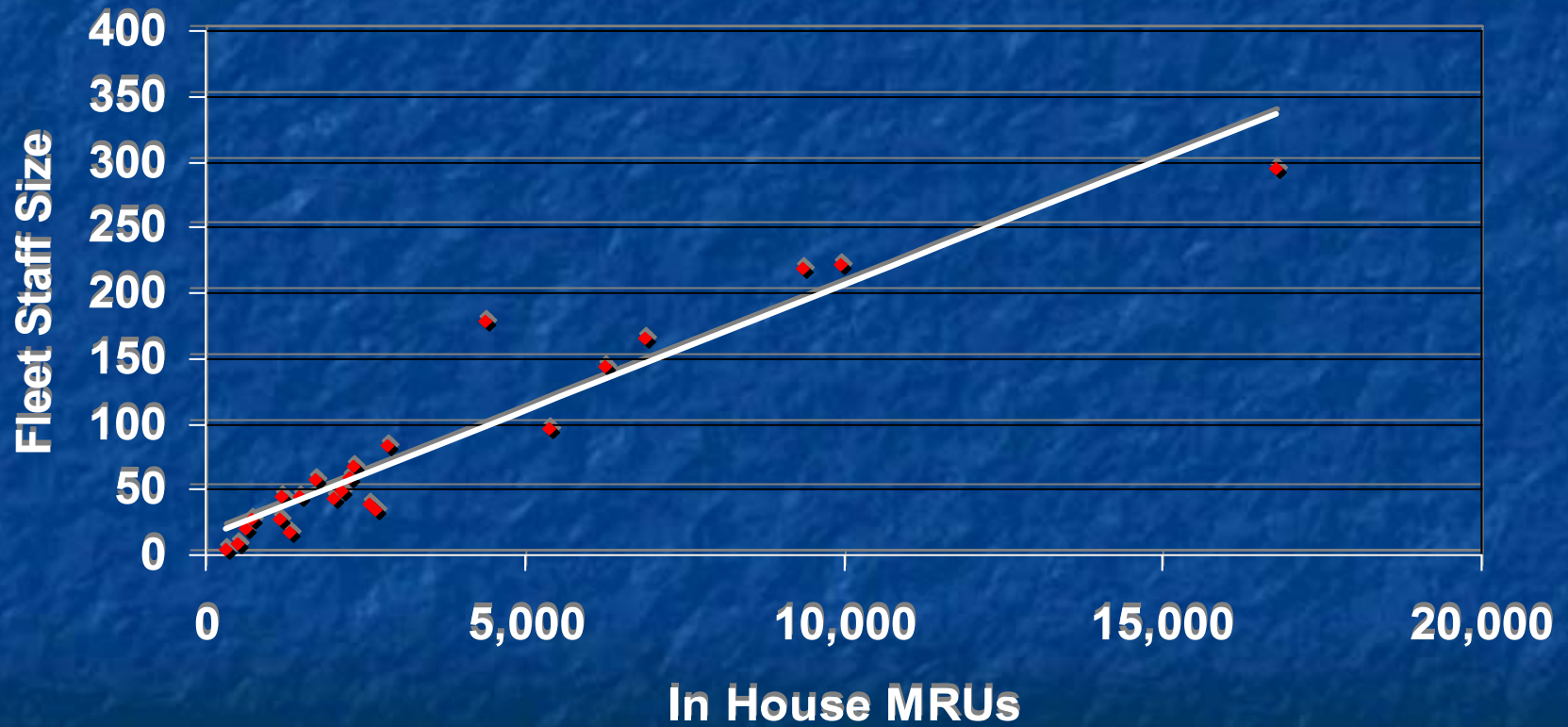
MRU Formula

- $MRUs = (\text{No. of vehicles in a class}) \times (\text{MRF class}),$
- MRF class is the maintenance and repair factor for the particular class of vehicles.
- 1 MRU typically = 20 mechanic hours per year
- Also, adjust for percent in-house work.

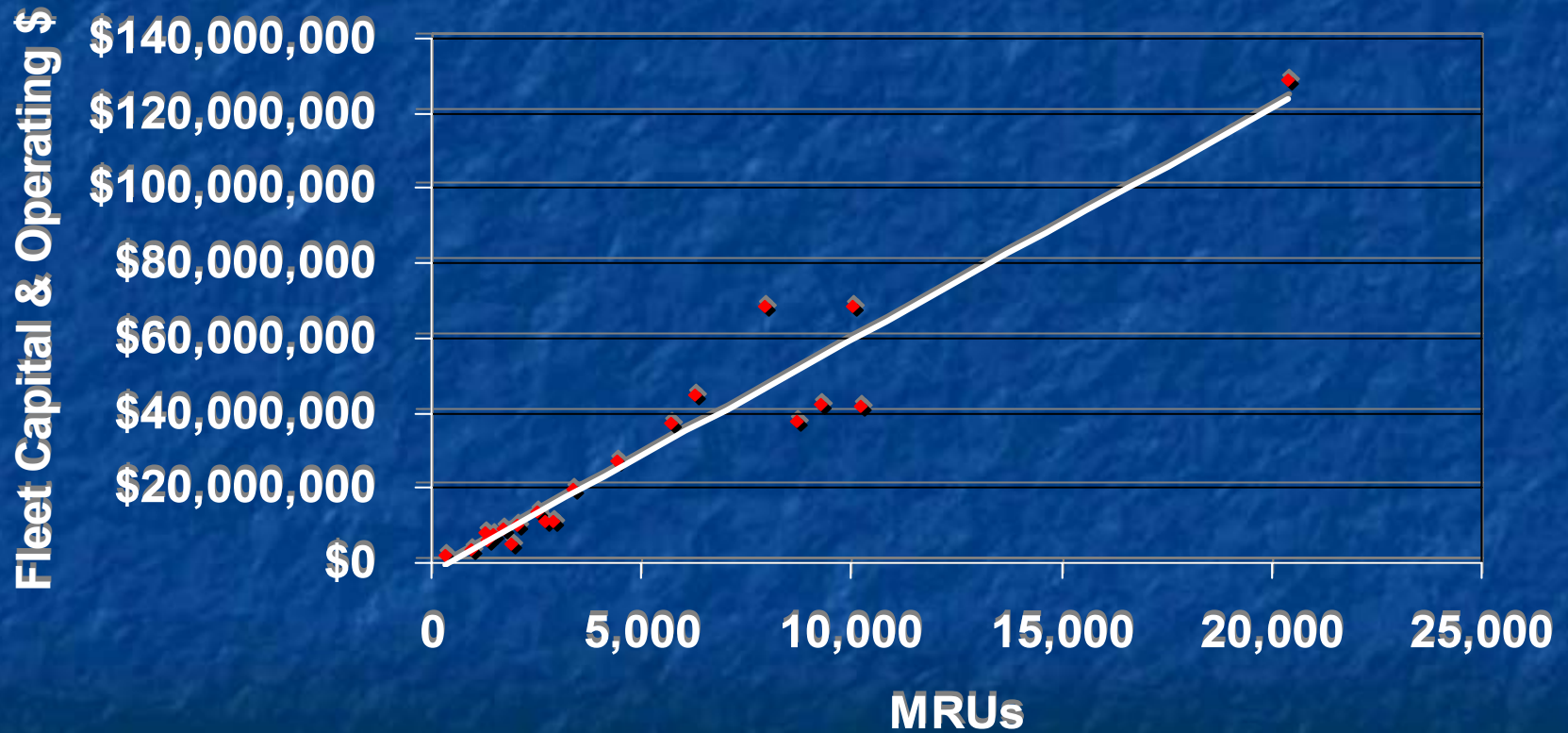
Predicting M&R Hours



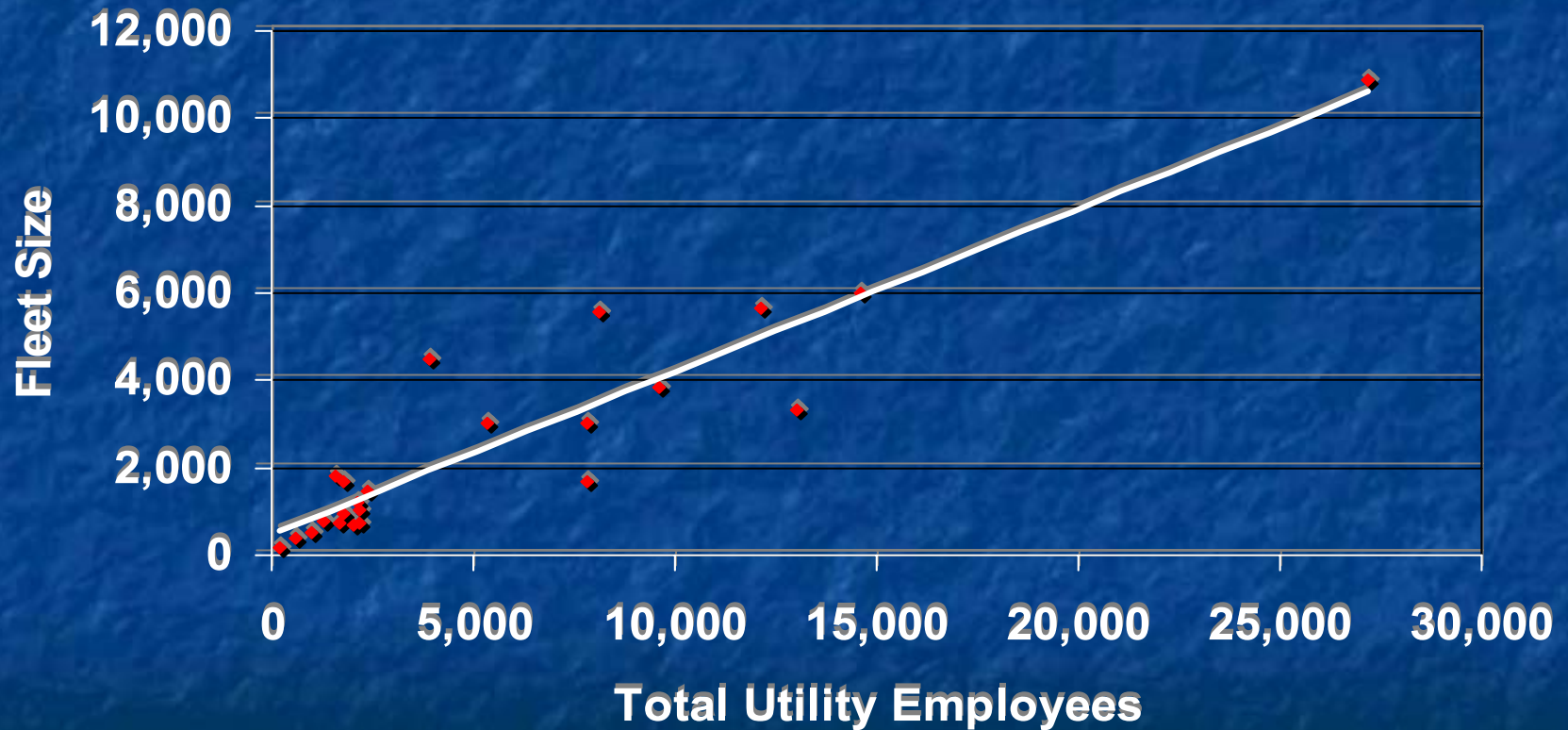
Predicting Fleet Staff



Predicting Capital & Operating Expenses



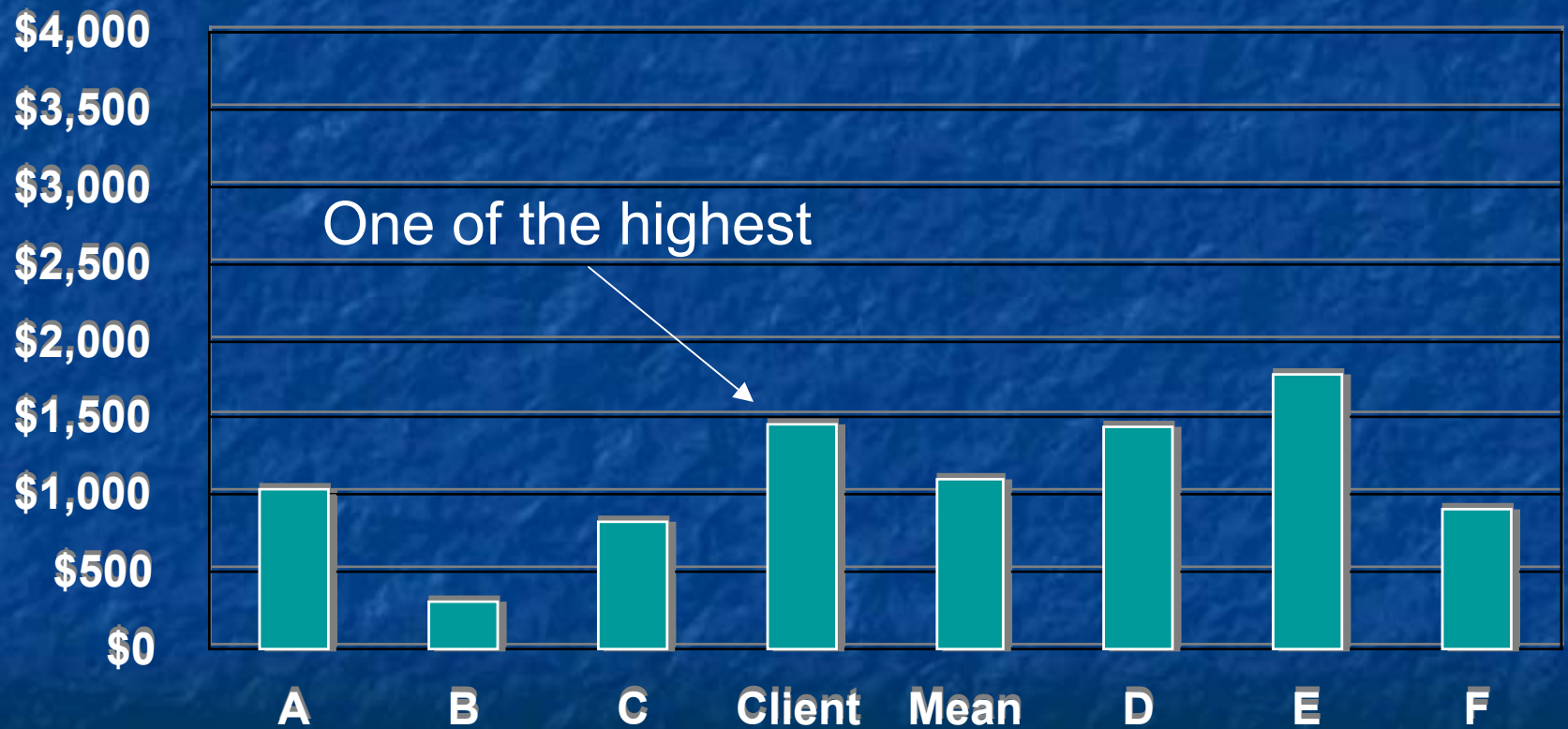
Fleet Vs. Utility Employee Size



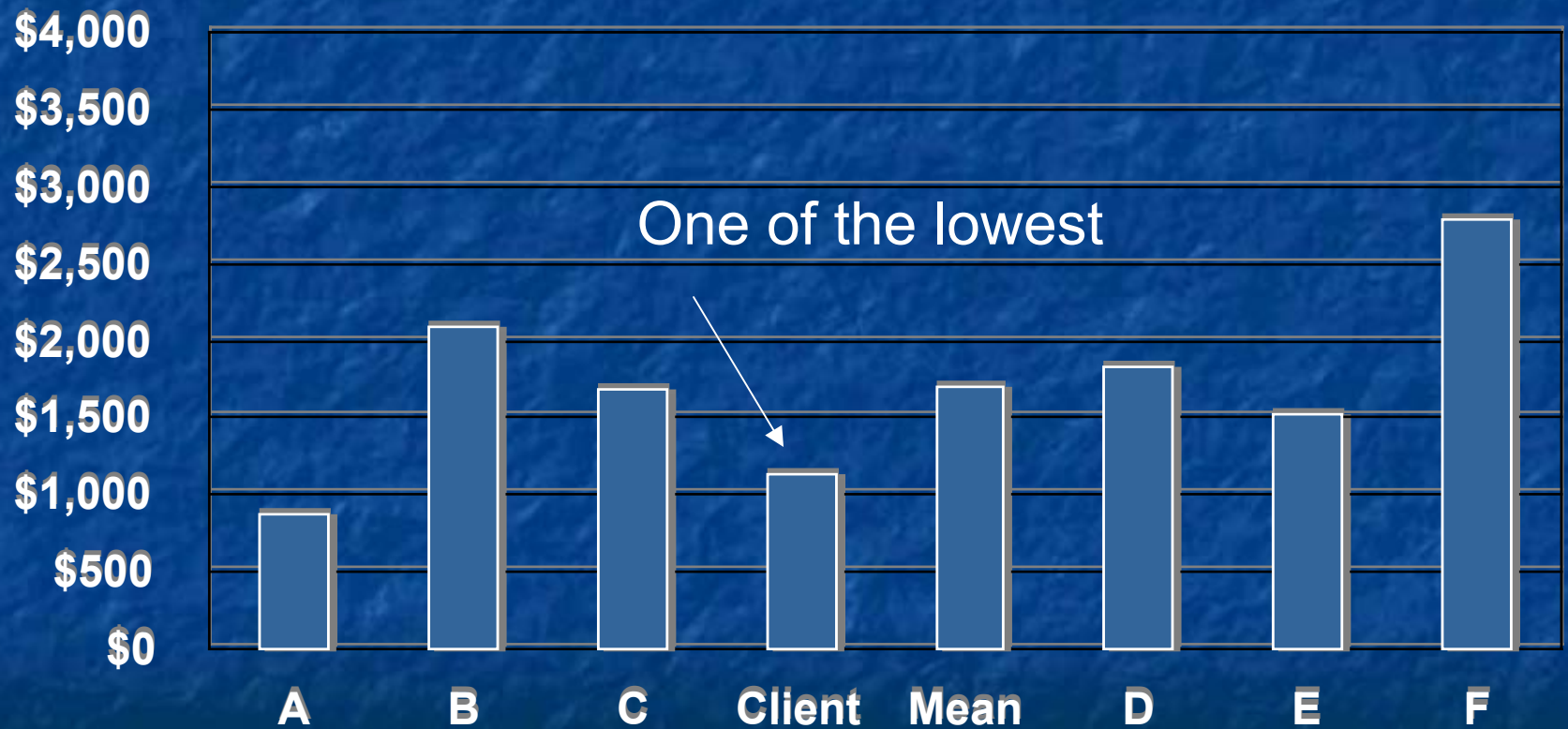
Two Benchmarking Examples

- Lifecycle costs need to be considered.
- Quality should not be ignored.

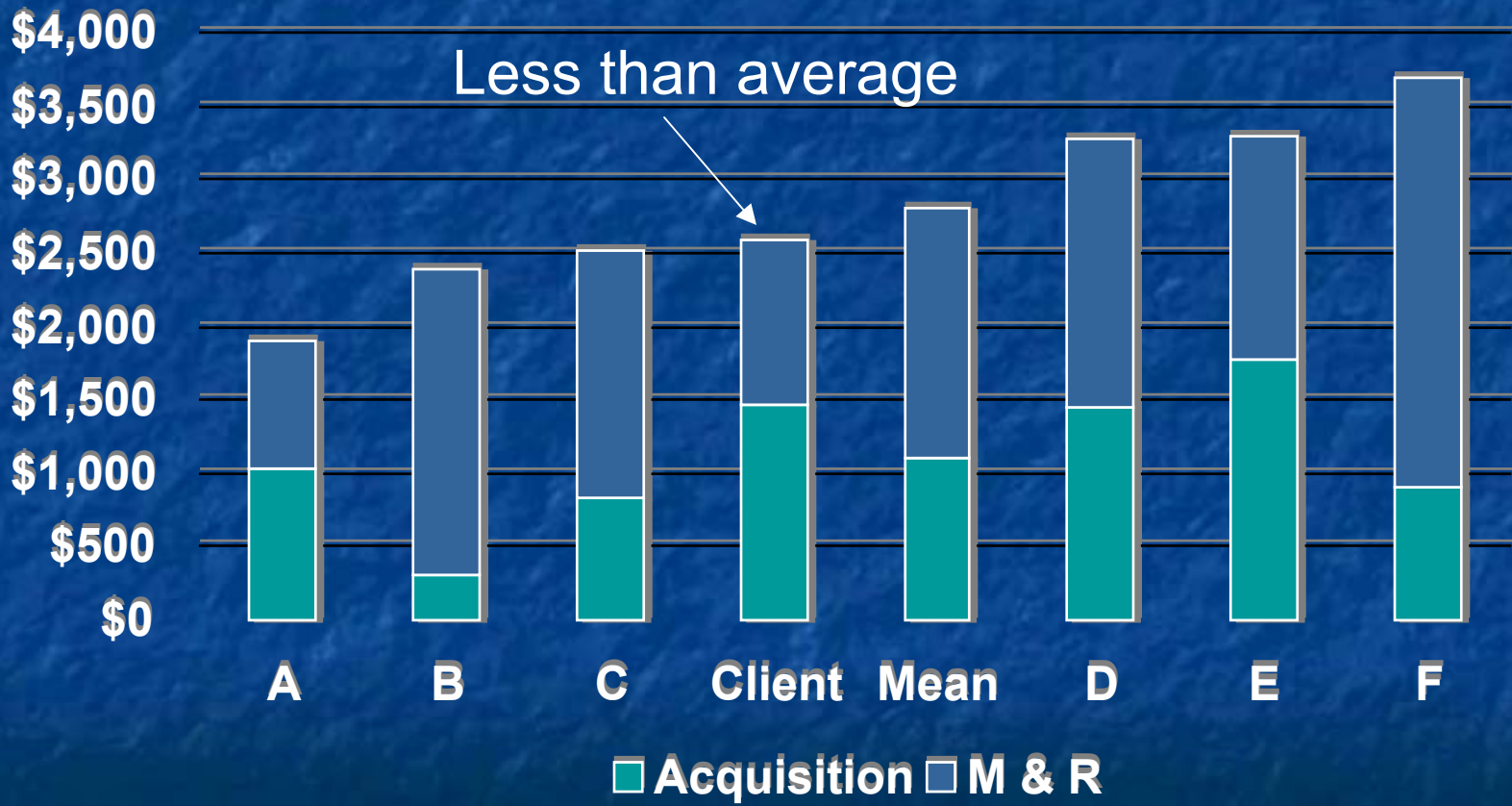
County Fleet Acquisition Costs Per MRU



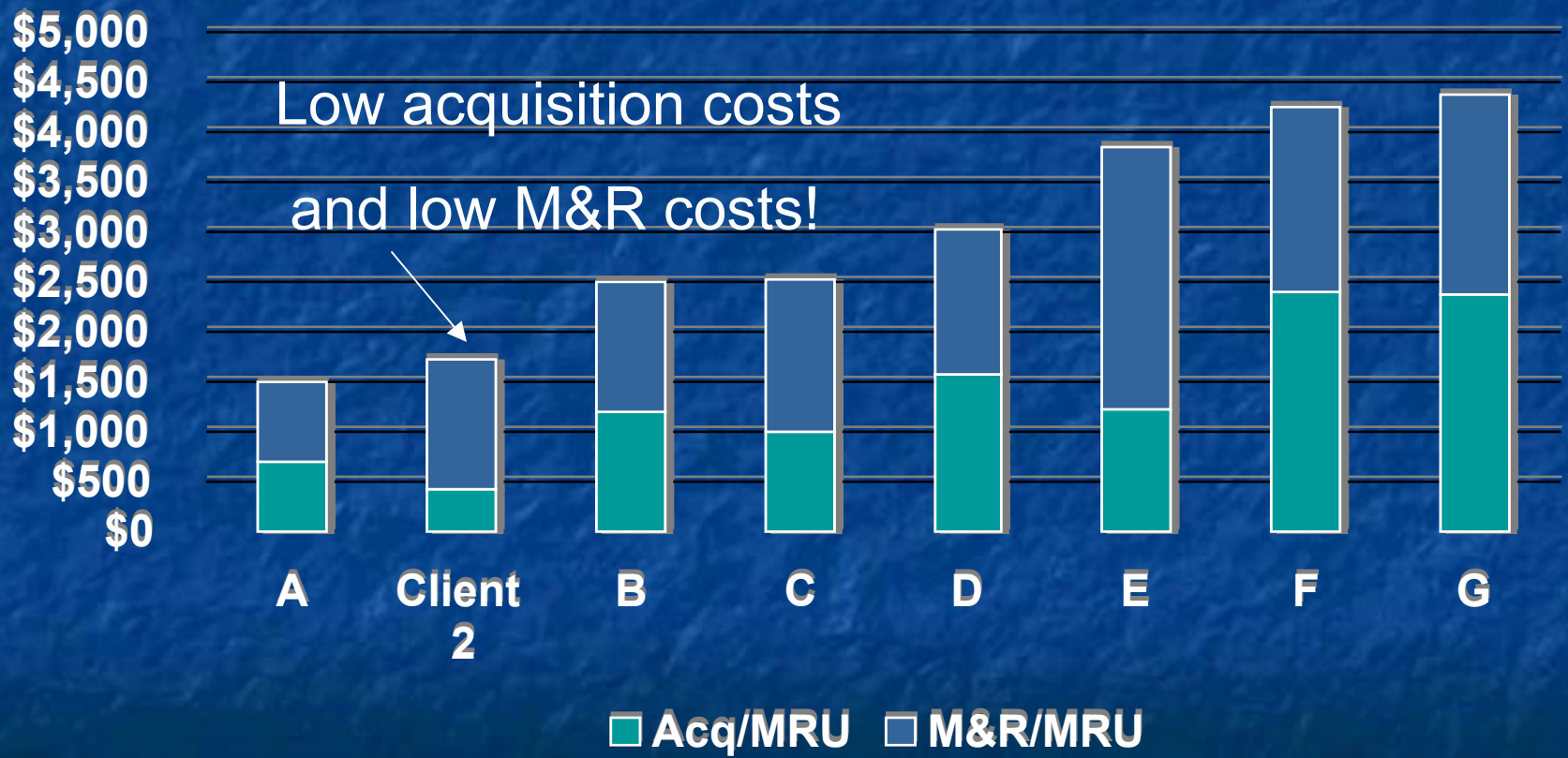
County Fleet M&R Costs Per MRU



County Fleet Total Cost Per MRU!!



City Total Fleet Costs Per MRU



What's going on?

What about quality?

Typical Data Needed

- Fleet Inventory Data
- Fleet Organization
 - Size and Composition
- Fleet Department Costs
 - Operating and Capital
- Mechanic Labor Activity
 - Direct & Indirect Time
- Various Performances Statistics

A New Way!

- Closed Work Order Reports
- Fleet Inventory roster
- Your vehicle class code system
- Work order class and cause system
- Table of organization of the fleet department
- Fleet manager's summary budget report

Advantages

- Simplifies the process
 - Already sending in data
- Eliminates the drudgery on your part
- Provides better and more consistent info.
- Quicker turn-around
- Levels the playing field
 - Third party does the interpreting on a uniform basis
- Nevertheless, automation will not eliminate human judgment and intervention.

Remember!

- Numbers do not give you the answers; they just point you towards them.
- Challenge the numbers.
- Don't use MRU analysis exclusively to evaluate a organization's fleet.
- Learn what they include and do not include.