Latest Trends in Operations & Maintenance Cost Data 2020
Today’s Agenda

• Review of the Benchmarking Process

• Continual Improvement in a Changing World
  • Predicting facility costs over time

• Benchmarking over time: The IFMA 2020 O & M Index
  • Quantifying Competitive Cost Changes

• 2020: The COVID-19 Pandemic and Benchmarking
  • The outlier year
What is benchmarking?

- People in competition
- Common goal
- Measure performance
- Improve
Benchmarking Culture & Competitive History

• Where did benchmarking come from?
• Idea rooted in competitive history
• Does Everyone Remember Sports?
Benchmarking Culture & Competitive History

- Competitive environment
- Consensus metrics
- Consensus goals – continual improvement
- Sharing of information
- Transparency in performance
- Stakeholder involvement:
  - Athletes
  - Coaches
  - Support Personnel
  - Fans

TEAMWORK!
Benchmarking Culture & Competitive History

End Result = Everyone gets better
The Rise of Business Benchmarking

- Robert C. Camp – Xerox – 1980s
- Part of D.M.A.I.C Process – Lean Logistics movement
- Became a readily embraced and popular business technique
“Best-in-class” became a widely recognized term
Business Benchmarking: Definition

“The search for industry best practices that lead to superior performance”
- Robert Camp

Best Practice – what gets the job done!
The Benchmarking Process
The Benchmarking Process

Practices → How to Close Gap & Improve → Commitment Participation Communication → Superior Performance

Metrics → Quantify
**Types of Benchmarks**

- **Internal**
  - ✓ Intra-organizational
  - ✓ Sub-units vs. other sub-units
- **Competitive**
  - ✓ Inter-organizational
- **Generic**
  - ✓ Across industries
Benchmarking Methodology

1. Define what to benchmark
2. Form a benchmarking team
3. Identify benchmarking partners
4. Collect and analyze benchmarking information
5. Take Action

There is always room for improvement!
1. What to Benchmark
What are we measuring?

**Metrics**

“85% of work orders completed on time”

$3.65/RSF Maintenance Costs

**Practices**

“We actively use a green recycling program.”
Common FM Metrics

- Space
- Occupancy
- Staffing
- Operating Costs
  - Maintenance
  - Janitorial
  - Utility
  - Security
- Sustainability
- Energy Management & Consumption
- Occupant Satisfaction
Facility O & M Practices: 2017

- Task Frequencies
- Task Usage

### Janitorial Practices

In an effort to keep costs down, the frequency of certain tasks has decreased. Compared to IFMA’s 2009 measurements, the daily task of trash removal, restroom cleaning and recyclable collections has increased while other tasks remain about the same.

<table>
<thead>
<tr>
<th>Janitorial Practice</th>
<th>More Than Once a Day</th>
<th>Once a Day</th>
<th>Daily/Weekly</th>
<th>Weekly</th>
<th>Bi-Weekly</th>
<th>Monthly</th>
<th>Quarterly</th>
<th>Semi-Annually</th>
<th>Annually</th>
<th>As Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trash removal</td>
<td>30%</td>
<td>53%</td>
<td>8%</td>
<td>5%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Low dusting</td>
<td>2%</td>
<td>17%</td>
<td>9%</td>
<td>33%</td>
<td>7%</td>
<td>11%</td>
<td>5%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>High dusting</td>
<td>1%</td>
<td>2%</td>
<td>11%</td>
<td>17%</td>
<td>17%</td>
<td>10%</td>
<td>9%</td>
<td>2%</td>
<td>1%</td>
<td>10%</td>
</tr>
<tr>
<td>Carpet vacuuming</td>
<td>6%</td>
<td>44%</td>
<td>18%</td>
<td>17%</td>
<td>3%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Upholstery vacuuming</td>
<td>2%</td>
<td>14%</td>
<td>9%</td>
<td>19%</td>
<td>7%</td>
<td>13%</td>
<td>8%</td>
<td>4%</td>
<td>2%</td>
<td>16%</td>
</tr>
<tr>
<td>Recyclables collected</td>
<td>14%</td>
<td>49%</td>
<td>10%</td>
<td>15%</td>
<td>3%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Spot carpet cleaning</td>
<td>5%</td>
<td>21%</td>
<td>9%</td>
<td>11%</td>
<td>3%</td>
<td>10%</td>
<td>4%</td>
<td>2%</td>
<td>1%</td>
<td>28%</td>
</tr>
<tr>
<td>Entire carpet cleaning</td>
<td>1%</td>
<td>4%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>10%</td>
<td>22%</td>
<td>18%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Kitchen/break room and/or workroom cleaning</td>
<td>23%</td>
<td>54%</td>
<td>5%</td>
<td>6%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>Restroom cleaning</td>
<td>54%</td>
<td>39%</td>
<td>2%</td>
<td>2%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Steam cleaning of ceramic walls</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>3%</td>
<td>6%</td>
<td>5%</td>
<td>7%</td>
<td>23%</td>
</tr>
<tr>
<td>Sweep/mop tile or composition flooring</td>
<td>10%</td>
<td>58%</td>
<td>10%</td>
<td>11%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Clean light fixtures/ventilation grilles</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
<td>4%</td>
<td>2%</td>
<td>18%</td>
<td>16%</td>
<td>10%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Spot clean walls/switchplates</td>
<td>3%</td>
<td>18%</td>
<td>9%</td>
<td>19%</td>
<td>4%</td>
<td>9%</td>
<td>5%</td>
<td>2%</td>
<td>2%</td>
<td>26%</td>
</tr>
<tr>
<td>Spot clean glass/entrance doors</td>
<td>10%</td>
<td>43%</td>
<td>11%</td>
<td>14%</td>
<td>2%</td>
<td>4%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Interior window/window blind cleaning</td>
<td>5%</td>
<td>9%</td>
<td>2%</td>
<td>7%</td>
<td>3%</td>
<td>14%</td>
<td>14%</td>
<td>16%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Exterior window washing</td>
<td>1%</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>15%</td>
<td>26%</td>
<td>23%</td>
</tr>
<tr>
<td>Duct &amp; clean desk equipment</td>
<td>1%</td>
<td>16%</td>
<td>9%</td>
<td>21%</td>
<td>5%</td>
<td>7%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>14%</td>
</tr>
<tr>
<td>Data center cleaning</td>
<td>1%</td>
<td>8%</td>
<td>3%</td>
<td>7%</td>
<td>2%</td>
<td>6%</td>
<td>8%</td>
<td>5%</td>
<td>4%</td>
<td>20%</td>
</tr>
<tr>
<td>Sanitize telephones and/or keyboards</td>
<td>1%</td>
<td>9%</td>
<td>3%</td>
<td>12%</td>
<td>3%</td>
<td>6%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>25%</td>
</tr>
</tbody>
</table>
Facility Demographics

What are factors that affect benchmarking comparisons?

• Facility Use
• Facility Size
• Facility Age
• Industry
• Single facilities vs. Campus Groups
• Region/Area
2. Form a Benchmarking Team
Facility Benchmarking Teams

• How do we find the people?
• Recruit a representative team
  • All Levels and educational backgrounds
    • Facility Manager
    • Upper level management
    • IT (Data Analyst)
    • Staff managers
    • Technicians
    • Custodians

Champions
Facility Benchmarking Teams

- When do we meet and what do we do?
- Regular meetings
- Foster your Champions
- Have an agenda

Benchmarking Team Agenda
1. Review of initiatives
2. Departmental Progress Reports/Updates
3. Review of audits of collection process
4. Review of data
5. Discussion of upcoming events
6. Report on organizational benchmarking awareness
7. Setting of new goals
Facility Benchmarking Teams

• How do we implement the plan?
• Have a written action plan
• Corporate commitment to act upon the results
• Follow a Benchmarking Model (Methodology)
• Settle-in for a long and iterative process
3. Identify Benchmarking Partners
Persons or organizations who supply you with information

**Partners can include:**
- Industry Associations
- Database Developers (Sources of info)
- Other units within an organization
- Other organizations
Competitive Partnerships

Competitive Partnerships (Organizations working together)

• Can be the most rewarding partnerships
• Unique insights into long-term benchmarking process
• Examples of industries improved using competitive partnerships:
  • Professional Sports
  • Auto Manufacturing Industry
  • Manufacturing & Logistics Industries
  • Electric Utilities
  • Transportation Infrastructure (DOTs)
Participate in the next O&M Survey!!!
4. Collect and Analyze Benchmarking Data
Benchmarking is only as good as your metrics
Train your team on collection
Use Automated data collection as much as possible
Have set intervals for collecting the data
Use Checklists
Audit the collection process

CHECKLIST

- 
- 
- 
- 
- 
- 
- 
-
**ANALYZING DATA**

### Comparing Metrics

**How are we performing?**
- “Apples to Apples”
- Compare data from similar facilities & industry
- Means, Medians, Quartiles
- Technical Reports & Databases

### Comparing Practices

**Who is doing what?**
- “Apples to Apples”
- “Apples to Oranges”
- Practices can be adopted from any industry
- Who or % using
- Reports, Inquiries

### Linking Metrics to Practices

**What are the best-in-class doing?**
- Specific Database queries
- Direct analysis of raw data
- Ex. 68% of FM Staff Energy trainings result in decreased consumption
5. Take Action
✓ Implement new practices
✓ Measure
✓ Regulate & Audit
✓ Develop into your own best practice
Continual Improvement In A Changing World
Continual Improvement

• Completed the benchmarking cycle: Now What?

• Goal is to Keep Getting Better
  • In FM, this means driving down costs!

• Costs keep changing!
  • Inflation
  •Changing Contracts/Services
  • Changing Practices/Regulations

• How to set benchmarking standards?
Operating Costs

Competitive Benchmarking Surveys are a snapshot in time

- Ex. IFMA 2017 O & M Benchmarking Study

- How do Operating Costs and Benchmarks change over time?
1. Take time to truly understand each specific building
   - Specific Building Profile
   - 5 years cost history
   - Project out 1-2 years of project costs & needs
   - Develop a linear equation
   - Energy use and cost will be the most difficult to predict
Predicting Facility Operating Cost Changes

2. Validate the current year predictions
   • Then Look ahead one year
   • Investigate “key categories of interest”

3. Use the linear equation
   • Project Costs for 5 years
   • Establish a +/- percentage
   • Detail is important but don’t get lost in it!
Predicting Operating Costs: Other Strategies

• Industry Models

• Asset Registries

• Don’t Recommend:
  • Last Year’s Reactive Cost + Fixed Contingency Amount
Putting It All Together
What We Know:

• Surveys represent a snapshot in time
• Costs keep changing for each facility
• These costs can be predicted reasonably well
What We Wanted to Find Out:

• How much do costs change on a yearly basis?
  • What is the standard change experienced by the FM industry?
  • How do my cost changes compare to my competitors?
  • How do we factor in inflation and costs changes to dated benchmarks?
Quantifying Competitive Cost Changes

What We Did:

1. Contacted Group of SMEs
   • Consensus: \( \leq 4\% \) each year
   • Job Requirement \(< 4\%\)
   • Large budget cuts may be more common
   • Increases \(> 5\%\) would be difficult to handle
Quantifying Competitive Cost Changes

What We Did:

2. Created a targeted benchmarking study
   • Same facilities in 2017 O & M Study
   • Small group representative of all participants
   • Asked about the percent change in costs experienced by these facilities and why these changes occurred.
Cost Changes in Past 2 years

• Janitorial: +1%
• Maintenance: +2%
• Utility: +3%
# Distribution of Cost Changes

<table>
<thead>
<tr>
<th></th>
<th>Janitorial</th>
<th>Maintenance</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs <em>Decreased</em></td>
<td>35%</td>
<td>23%</td>
<td>18%</td>
</tr>
<tr>
<td>Costs Remained the same</td>
<td>6%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>Costs <em>Increased</em></td>
<td>58%</td>
<td>65%</td>
<td>71%</td>
</tr>
</tbody>
</table>
Why Do Costs Change?

Janitorial Costs

- Renegotiated contracts w/ provider: 37%
- Changes in salaries: 34%
  - Changes in the costs of goods/supplies: 31%
  - Change in square footage: 11%
  - Budget Cuts: 3%
  - Other: 17%

- Other: 23%
- Budget Cuts: 3%
- Net usage reduction: 6%
- Change in square footage: 6%
- Expanding Total Space: 11%
2020: The outlier year
  • For many 2020, won’t fit their cost prediction lines
  • Keep this in mind while benchmarking as well
COVID-19 FM Survey

Facilities have experienced:

- Full & Partial Shut-Downs
- Telecommuting Work Force
- Impacted Project Schedules
- Blown Budgets
- Material Supply Shortages:
  - Disinfectant, Hand Sanitizer, Cleaning Supplies, PPE, TP
Key Action Points

1. Understand “Metrics” vs. “Practices”
2. Commit to following the “5 Step Process”... YOU can do this!
3. Leverage IFMA’s Benchmarking Resources
4. Having the data helps you save money & improve