The Cost-Benefits of IPM from a Facility Director’s Perspective

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Overview Salt Lake City School District

- **Students**
  - 24,000 students
  - 53% are ethnic minority
  - 60% from low income families
  - 33% learning English as a second language

- **Facilities**
  - 36 schools - 3,800,000 Ft²
  - 44 facilities - 4,110,000 Ft²

- **Expenditures FY07-08**
  - $17,899,000 M&O budget
    - Maintenance $1.51 per Ft²
    - Custodial (including pest management) $1.51 per Ft²
    - Utilities & other $1.33 per Ft²
    - Capital improvements $0.79 per Ft²
  - **$5.15 per Ft²**
Pest Management Practices

- Do nothing
- Unrestricted pesticide use
- In-house pesticide applicators
- Contracted pesticide applicators
- Combined in-house / contracted
- Integrated Pest Management
Pest Management Factors

- Factors influencing the cost of pest management regardless of practice:
  - Age of the buildings
  - Building maintenance and operation
  - Maintenance and custodial budgets appropriate for the level of care expected
  - Organizational structure that is conducive to success
  - Sanitation is a high priority
  - Culture of environmental responsibility
  - Geographic location
Traditional Pest Management Costs

- Contracted pest management
  - District’s practice for the past 30+ years
  - Budget (FY07-08) - $28,000
  - $0.007 per Ft$^2$
  - Level of satisfaction – Acceptable
Integrated
Pest Management Costs

- Personnel costs
  - Initial training
  - On-going education
  - Monitoring and reporting
  - Tools and resources
  - Professional development

- Material costs
  - Exclusion
  - Pesticides and herbicides
IPM Training and Education

- Initial training may have associated costs if hired consultants are utilized.
- On-going education takes time but there are no new dollars spent, just time spent on new tasks.
- Training materials cost <$15/person (40) for binders, tabs and copying, etc.
IPM Monitoring and Reporting

- Monitor traps
  - Approx 3,600/yr @ $0.50 ea
- Time required to inspect monitor traps and report findings is part of the normal custodial inspections of their buildings
IPM Tools of the Trade

- Flashlight, UV light, eye loupe, collection jars, camera, gloves, caulk, sealant, knee pads, field guides, etc.
- $100 to $300 per person (3) initially and $100/yr thereafter for supplies
IPM Diagnostic Tools

- Microscope - $700
- Reference - $125
  *Truman’s Scientific Guide to Pest Management Operations*
- Other texts - $150
Professional Development

- Custodial Supervisors and key Grounds staff hold Utah Non-Commercial Pesticide Applicator licenses*
- $20 per license, valid for 3 years - varies with state
- Requires time for studying and exam preparation

* Not required for school employees in the State of Utah
Exclusion

- Goal is to seal building from pests
- Overall costs will vary greatly depending upon:
  - Building age
  - Level of maintenance
  - Maintenance budget
- Estimated - $4,000 for door sweeps, screens, caulking, etc. over first 2 years of program
Other IPM Tools

- **Pesticides**
  - Used ONLY if required to control severe infestations
  - Use approved and listed caution labeled products only
  - Products are used in the least amount possible and only in the target area
  - Products are only applied by licensed applicators

- **Herbicides**
  - Used ONLY as needed if turf areas have weed infestations that exceed an established threshold
  - Not used as a substitute for weeding in planting beds
  - Use approved and listed caution labeled products only
  - Products are only applied by licensed applicators
Perspectives on IPM Costs

- Is the cost to repair something in support of a new program really a new cost if it should have been repaired for other reasons?
- Should new activities that replace or enhance existing activities be considered a new cost?
- Is the time required to increase staff awareness, create an atmosphere of cooperation, improve the environment and foster sustainability a cost?
Benefits

- Cost savings – Yes, but will vary greatly with the situation
- Health Benefits - Unable to quantify at a District level but are well documented
- Regulatory Compliance – Unable to quantify but IPM reduces OSHA and State Risk Management worries
- Public Relations – **Priceless!**
Summary

- **Costs**
  - No new personnel
  - Start up costs
    - $2,400 - tools, training, etc.
    - $2,000 - exclusion
  - On-going costs
    - $1,500-$1,800/year – monitoring supplies
    - $1,000-$2,000/year – exclusion
    - $0/year – pesticides (not budgeted)
    - $1,500/person (3)/year – professional development (highly recommended but unable to budget)

- **Benefits**
  - Savings from eliminating contracted pest management - $28,000/year
Questions?