

GES 678: Week 10

Cost-Benefits and Cost Avoidance

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Lecture

Types of benefits

- Monetary
 - Cost Savings
 - * Reduce current expenses
 - * “Doing more with less”
 - Cost Avoidance
 - * Replacement of intensive processes with ones that are more efficient
 - * Better results with same resources
 - Revenue Generation
 - * New products
 - * Efficiencies in creation of products
- Efficiency
 - Productivity
 - Outputs
- Qualitative

Cost-Benefit Model

- Identify cost by year
- Benefits by year
 - Savings
 - Benefits to organization
 - Future/external benefits
 - Cost avoidance
- Compare benefits and costs
- Calculate cost/benefit ratio

Efficiencies Benefits

- Productivity
 - Output more results with current resources
- Outputs
 - Reduce time to create products
 - Reduction or removal of workflows

Qualitative benefits

- Immeasurable benefits
 - Job satisfaction
- Positive impact on workflows and operations
- Improved decision-making
- Quality of service

Suggestions/reminders

- Take projections as far as necessary
- Estimate and document intangibles
- Include costs of new demands (e.g. regulation) on organization and savings

Cost Avoidance

- Resource allocation to other tasks
 - People
 - * Reassigned
 - * Trained to new functions
 - * e.g. field collection staff -> GIS techs or analysts
 - Funding
 - * Transfer funds from retired functions to pay for new capability
 - * e.g. maintenance of older software to pay for new modules
- Find efficiencies in processes
 - Removal of steps
 - * Remove redundancy
 - * Streamlined process
 - * e.g. print and then scan documents
 - Shorten durations
 - * Less steps can be shorter duration workflows
 - * Automation of workflows
- Retired processes
 - Retire unused or unnecessary processes
 - * Tasks no longer needed
- Software/data/licensing costs

- Often higher costs to support older software
- Reduce costs to procure data when data is generated by a new process
 - * Business data purchase is removed by GIS integration with permitting system

Funding Sources

Government Grants

- Federal - FEMA, HUD, DOT
- State - DNR
- Local/Regional
- GIS strengthens proposals by showing accountability and efficiency
 - Hazard mitigation or infrastructure projects

Return on investment

The measure of the financial and operational benefits gained compared to the costs of implementing and maintaining the system.

Bottom line: *is the GIS program worth the time, money, resources spent on the implementation and ongoing costs?*

- ROI analysis demonstrates cost savings and efficiency gains
- Evidence-based approach gains leadership buy-in
 - Reduced duplication of services

Cost sharing

- Shared costs across departments
- Multiple departments benefit
- Shared costs reduce duplication
- Promotes enterprise-wide adoption

Partnerships

- Collaborations with utilities, universities, nonprofits
- Access to additional funding and expertise
 - Joint ventures with university providers

Programmatic Approach

- Treat GIS as a program, not a one-off project
- Governance ensures sustainability and accountability
- Secures ongoing operational funding