

# Benefits of geospatial information

Joep Crompvoets

# Outline

Introduction

Assessing benefits

Costs & Benefits

Review existing studies

Conclusions

# Introduction



Which car is more beneficial?



Which computer is the most beneficial?



# Beneficial

Having a good effect

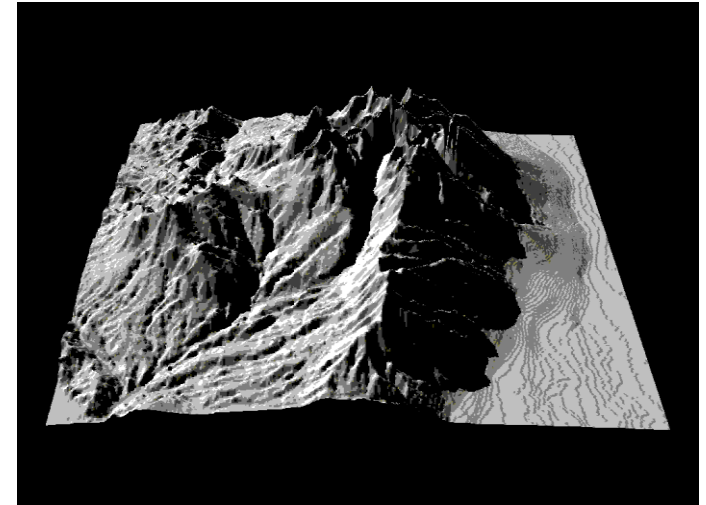
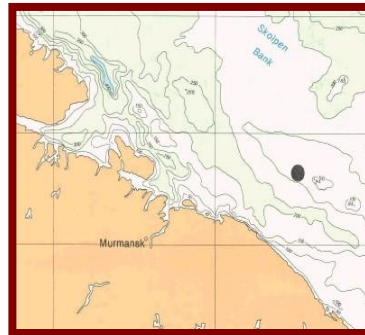
*Cambridge Academic Content Dictionary © Cambridge University Press*

Producing good results or helpful effects

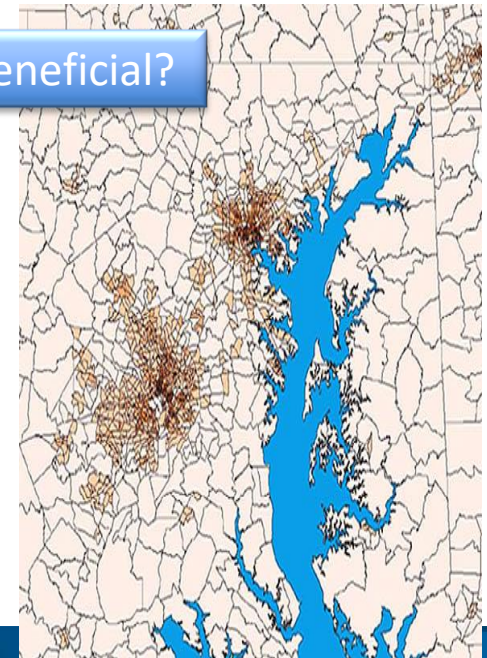
*Meriam-Webster dictionary*

“Something resulting into good” -> effective

# Introduction



Which geospatial data/information is the most beneficial?

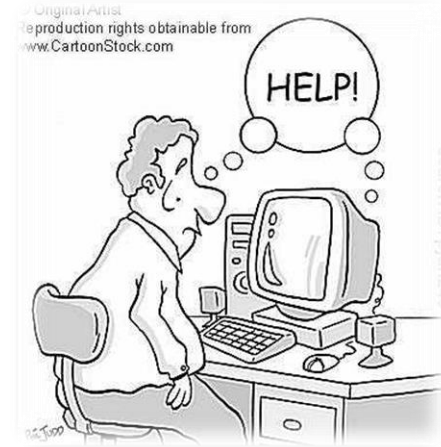


# Why assessing benefits?

- **There might be several reasons**
  - Motivate budgets
  - Describe a specific status
  - Evaluate certain investment choices
  - Because of legislation
  - Highlight good practices
  - ...
- **In general several aspects are covered**
  - Measure what exists
  - Measure the usage, usability
  - Measure the impacts

# Criteria for assessment

- Effective
- Relevant
- Efficient
- Satisfactory
- Sustainable
- Compliant
- Coherent
- Well used



## Complexity

- Multi-objectives
- Multi-stakeholders
- Multi-understandings
- Multi-criteria
- Multi-scale
- Multi-sectors
- Multi-purposes to assess

# Why is the obvious not obvious? CBA

## CBA of Geospatial information

### – Costs

- Creating, Transferring, Collecting, Processing, Storing, Making available, ...

### – Benefits

- Comparing, Registering/detecting change, Improved decisions, Better allocations, Transparency, Responsibility/Accountability, Learning, ...



# Costs vs. Benefits

CBA	COST	BENEFIT
Time	Immediate	Longer Term
Tangibility	Very Tangible, Direct, Unconditional	Not so Tangible, Indirect, Conditional
Measurable	Easier (Euros)	Difficult (Better Decisions, ...)
Locus	Internal	Mostly External

# Review existing benefits studies

>50 studies

- Benefits higher than Costs
- Limited quantitative benefits studies
- Benefits in terms of return of investment, market size growth, value
- Different order of magnitude (partly because of the varying territorial size, administrative level)
- Multiple methods and approaches
- Incorporate different views/understandings



# Conclusions

- Serve multiple purposes
- Multiple assessment criteria
- Complicated -> Do not oversimplify
- Multiple assessment methods and approaches
- Difficulty to compare different benefit studies
- Bias – effort to reduce biasness
- Difficulty to do a thorough Costs Benefits Analysis