

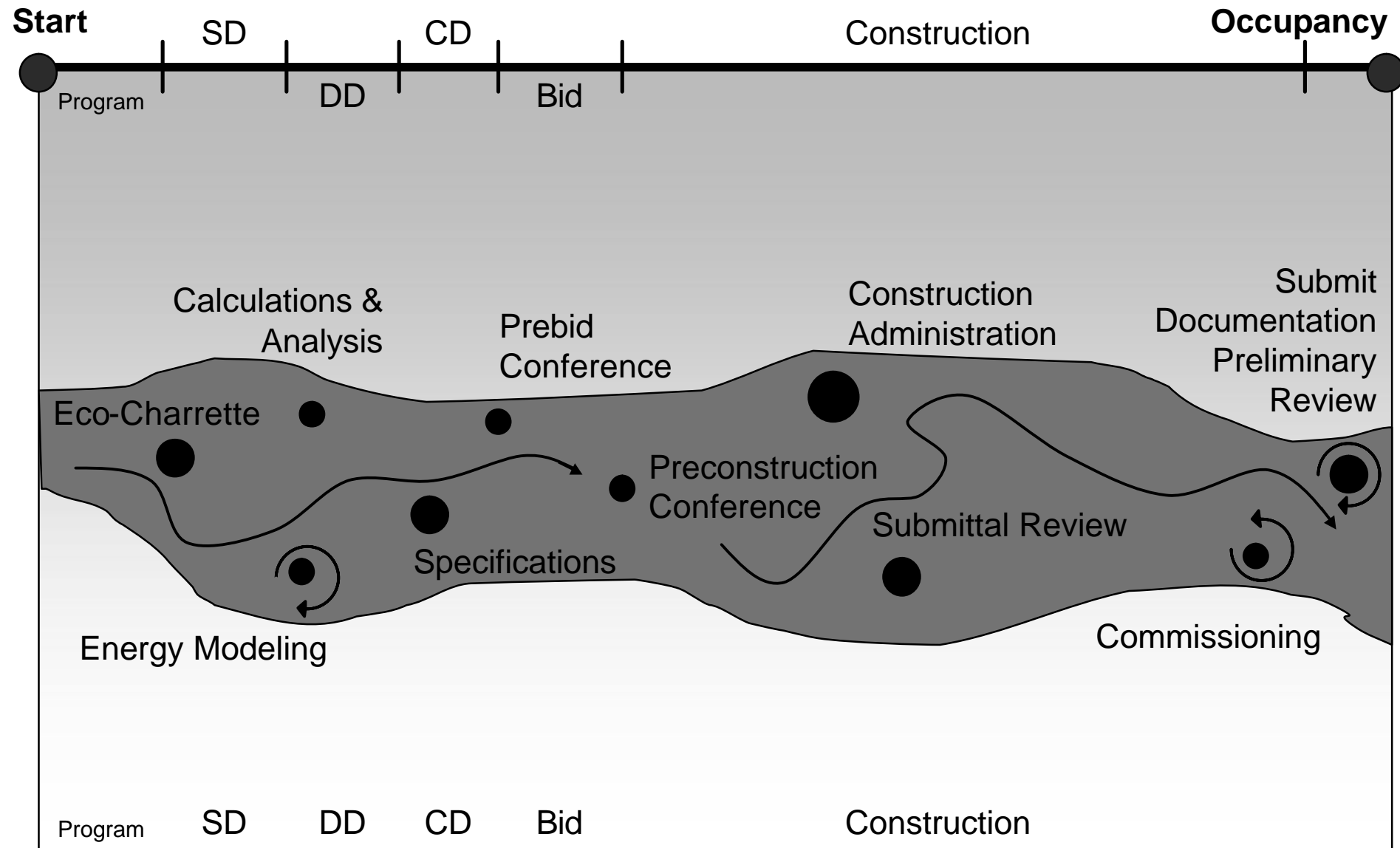
Green Building Cost

Does Green Building cost more?

Frequently, but it doesn't have to.....

- Integrated *vs* Piecemeal
- Quantum *vs* Incremental
- Experience
- Schedule
- Communication

Integrated Design:



California's Sustainable Building Task Force Survey

Assumptions:

Discount Rate of 7%

2% Inflation

20 year term

Program:

40 LEED Registered Projects

32 Offices / 8 Schools

Dates of Completion: 1995 – 2004



LEED Levels and calculated premium:

Certified:	0.7% (8 projects)
Silver:	1.9% (21 projects)
Gold:	2.2% (9 projects)
Platinum:	6.8% (2 projects)

The Costs and Financial Benefits of Green Building

Greg Kats and colleagues at Capital E

<http://www.cap-e.com/publications/default.cfm>

Benefit:

Present value benefit of \$50-70/s.f.

70% of benefit from improved health & productivity

Costing Green - Davis Langdon

A comprehensive Cost Database and Budgeting Methodology

By Lisa Fay Matthiessen and Peter Morris

<http://www.nrdc.org/buildinggreen/factsheets/cost.asp>

Over 800 recent projects

Over 60 projects actively pursuing LEED

Data collected:

- **Costs**
- **Control qualities**
- **Descriptors (location, design intent, program, etc.)**
- **LEED checklist**

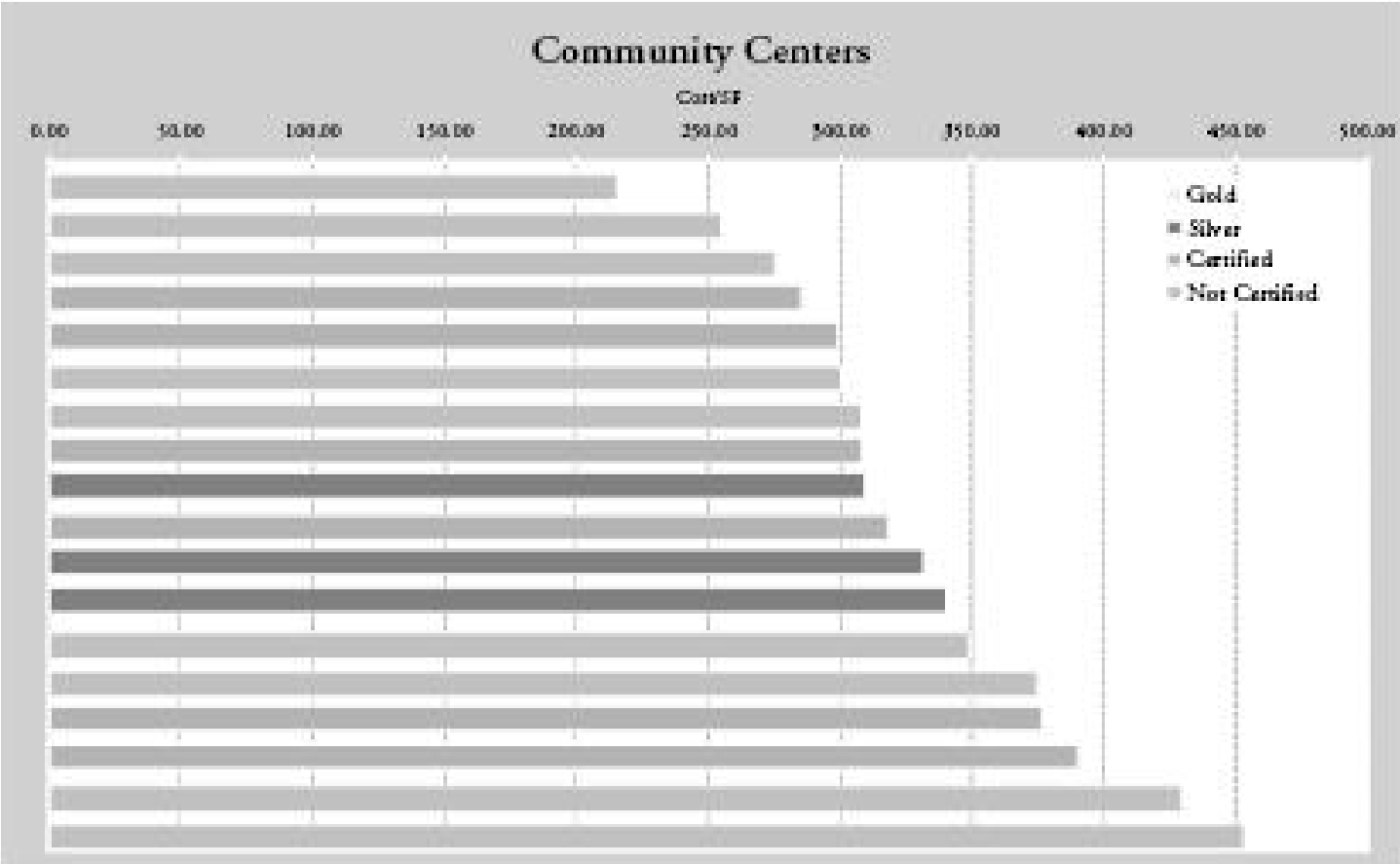


Costing Green - Davis Langdon

- There is no statistically significant difference for the buildings in this study.
- LEED projects can be designed and built with standard budgets.
- Sustainability is not an add-on.
- Using integrated design, green is cost-effective.



Cost of Green



Community Centers

Green Building Returns

Does Green Building pay for itself?

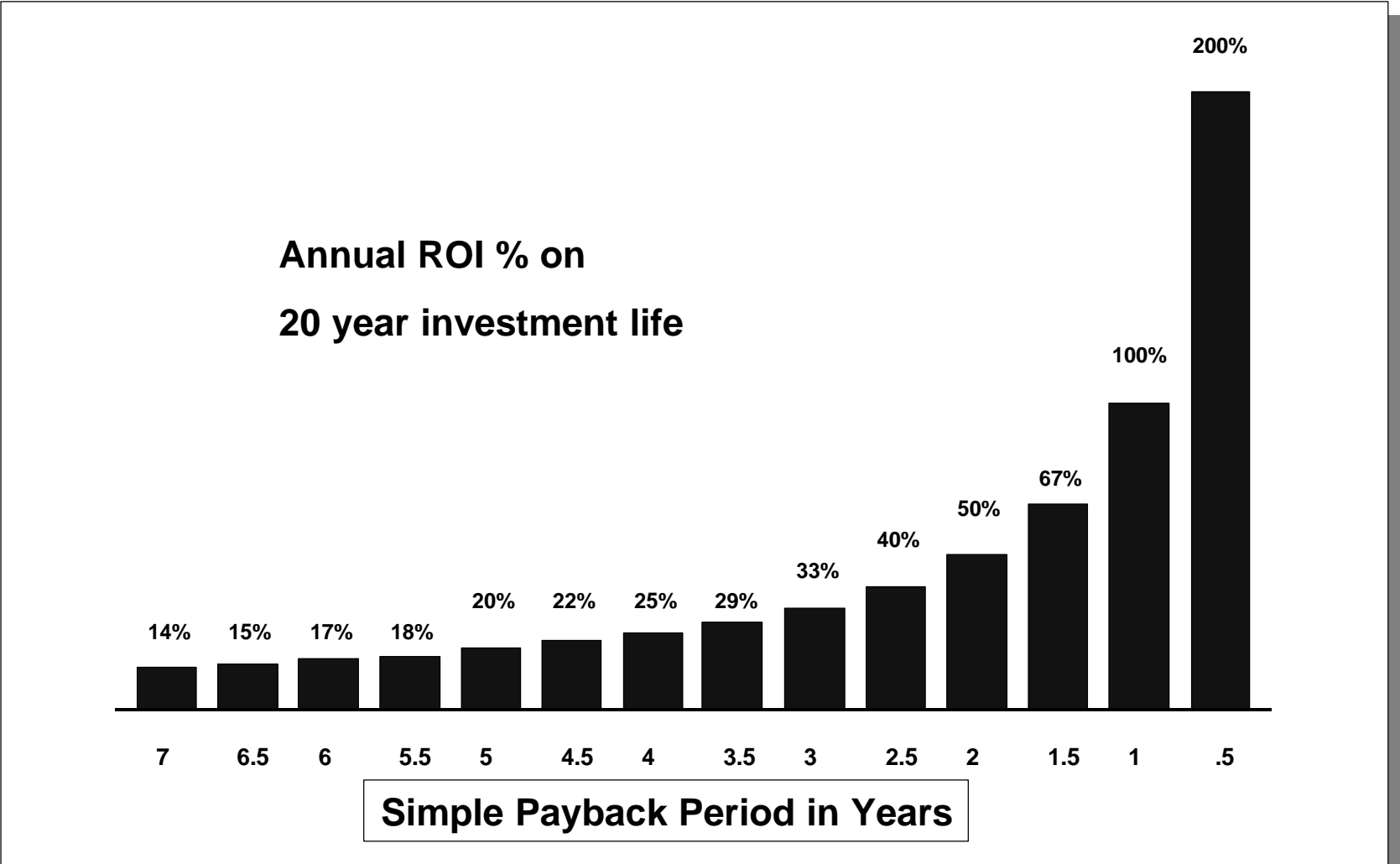
Yes, but it depends.....

- Who pays and who benefits
- Time horizon
- What's included in accounting

Green Building Cost Accounting

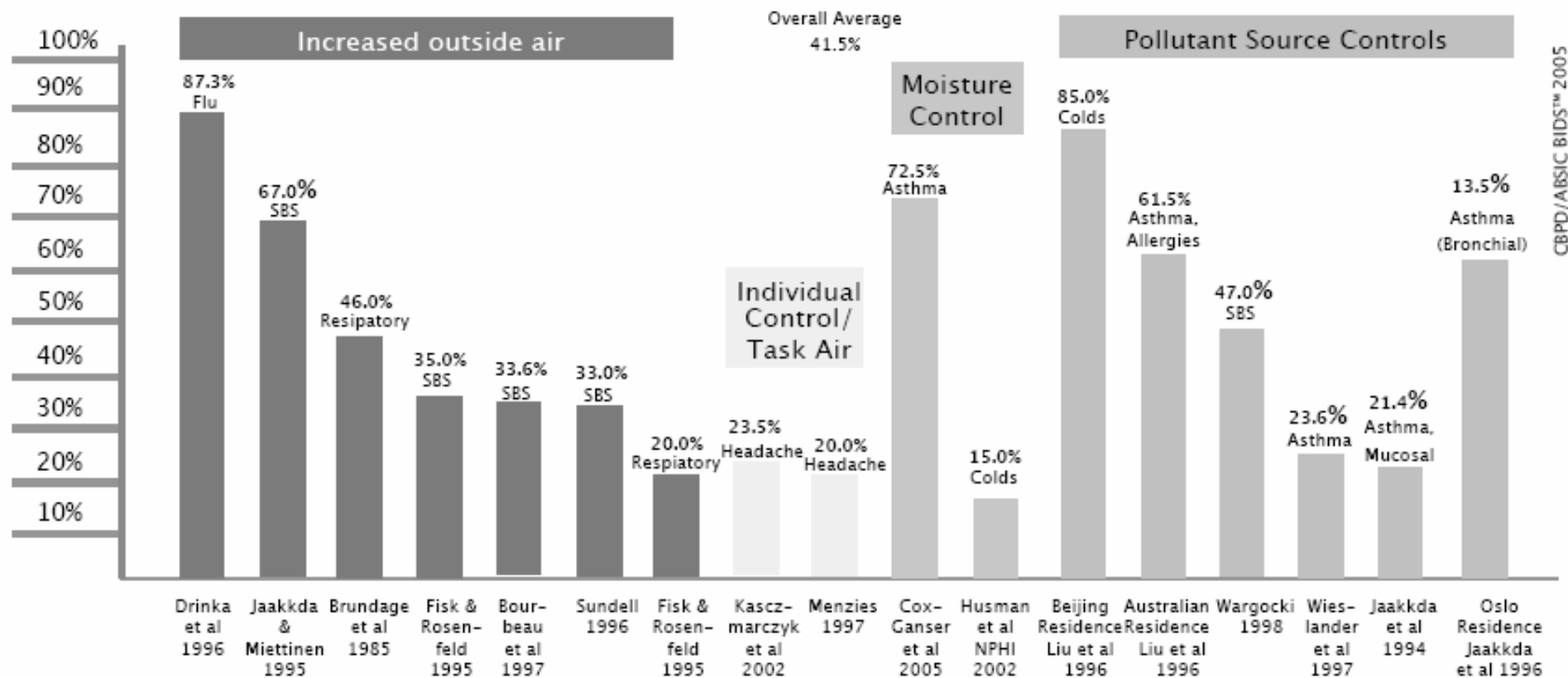
- Soft cost *vs* hard cost
- Return On Investment (ROI) *vs* Simple Payback
- Life Cycle Cost (LCC)
- First cost *vs* operating cost

Payback vs Return On Investment



Benefits of Green Building

Figure B: Health Gains from Improved Indoor Air Quality



Challenges



Structural barriers to implementing green building strategies

- » **Financial disconnect (cost and benefit)**
- » **Financial model (value = NOI/Cap rate) doesn't support green building**

Difficult to translate the financial benefits of building green

Sustainability is Good Business

Publicly Traded USGBC Affiliated Companies
vs. Market Averages

