

# Measuring Environmental Compliance Assistance Outcomes

A Benefit Cost Analysis of the Kentucky  
Business Environmental Assistance Program

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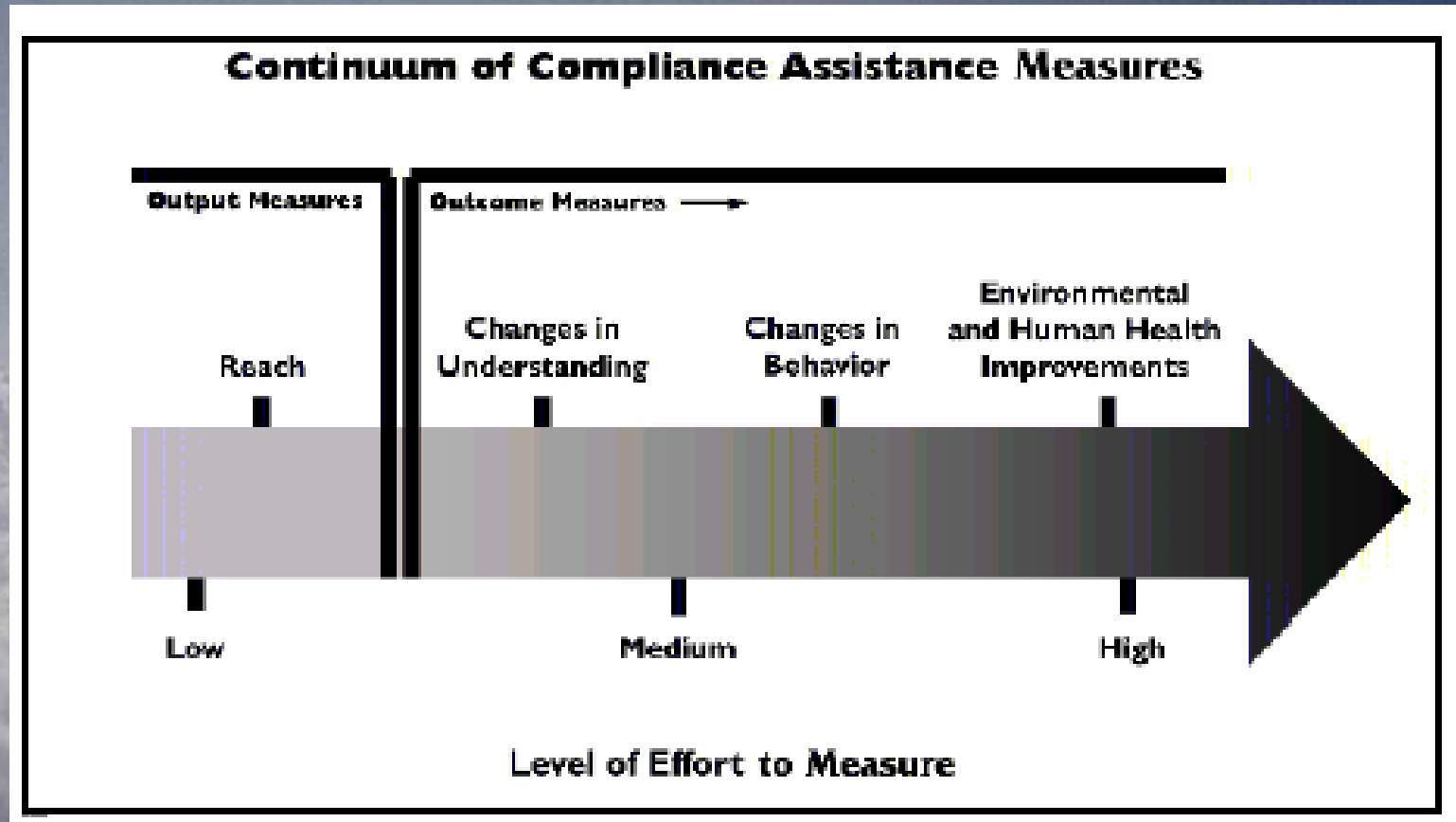
# KY SBAP

- Compliance and Technical Assistance Program (KBEAP) located at the KSBDC at the University of Kentucky
- 4.5 FTE
- CAP is operational
- Ombudsman is located at the Kentucky Division of Compliance Assistance (RoseMarie Wilmoth)

# Why Outcome Evaluation?

- Need to communicate **VALUE** of program to stakeholders
- Strategic Planning and Program Review
  - Identify opportunity for improvement
  - Program gaps
  - Identify future CA target areas

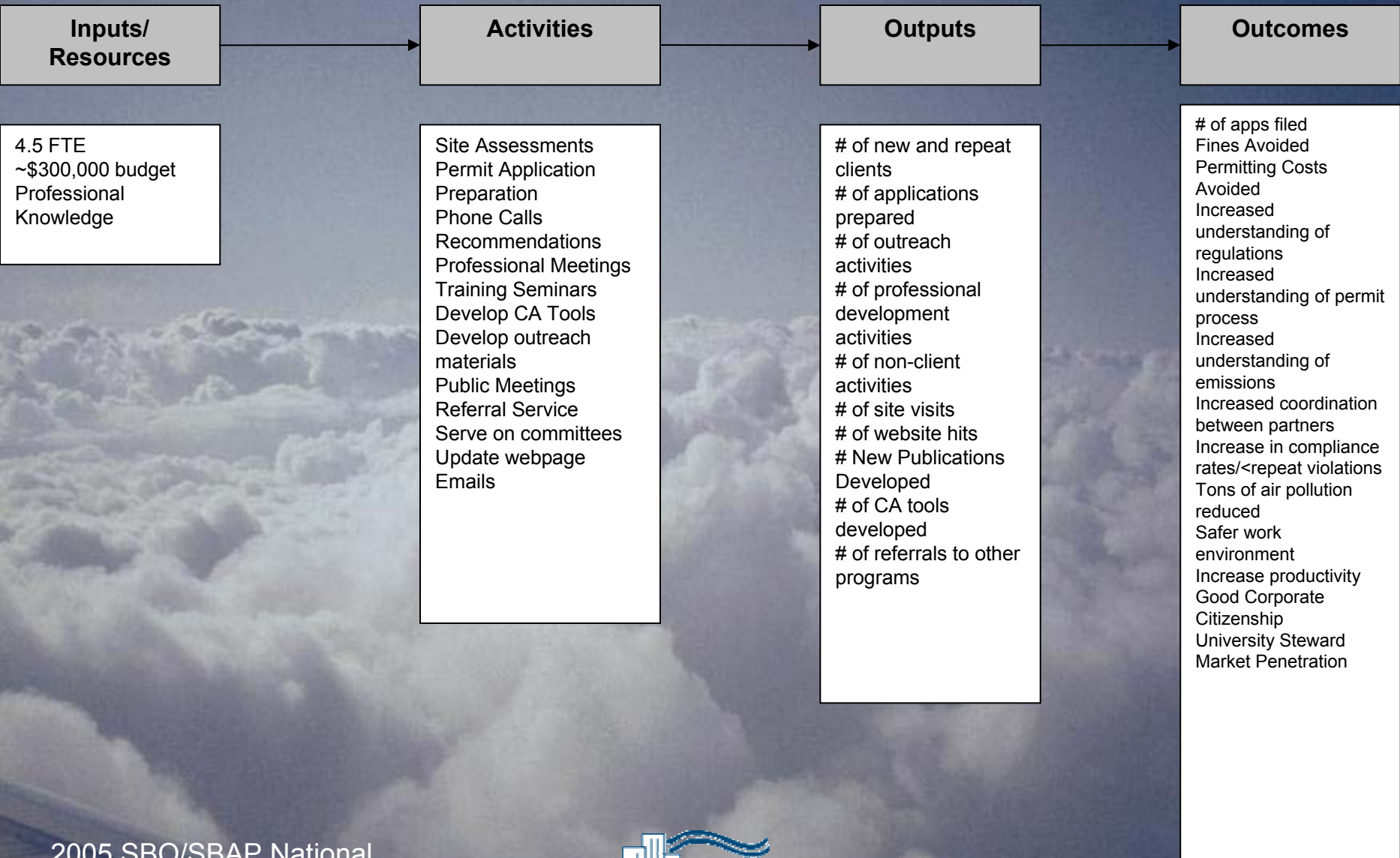
# Outputs Versus Outcomes



OECA Guide for Measuring Compliance Assistance Outcomes

# KBEAP Program Model

**Vision: To be the leading source of environmental technical and compliance assistance for Kentucky small businesses, business assistance providers, and the University community while fostering environmental stewardship.**



# Benefit Cost Analysis

- Hypothesis (FY 95-2004)
  - B/C Ratio  $>1$
  - Net Benefits = positive
- Identify Environmental Compliance Assistance Measures (Logic Model)
- Develop Model
- Sensitivity Analysis
  - Discount Rate
  - Assumptions
- Results
- Recommendations

# Measures

- **Benefits**

- P2 savings due to air, water and waste
- E2 savings
- Fines Avoided
- Permit Savings
- Non-client Assistance
- Training
- Insurance Reductions
- Productivity Increases
- Good Corporate Citizen Value (Shareholder Value)
- Value of Green Image (Product Branding)

- **Costs**

- Budget
- Productivity losses due to P2 activities or Compliance Activities
- Capital Expenditures for P2 or Compliance Equipment/Services
- Productivity losses due to “down time” for upgrades

- **Limitations: Data Gaps and External Validity**

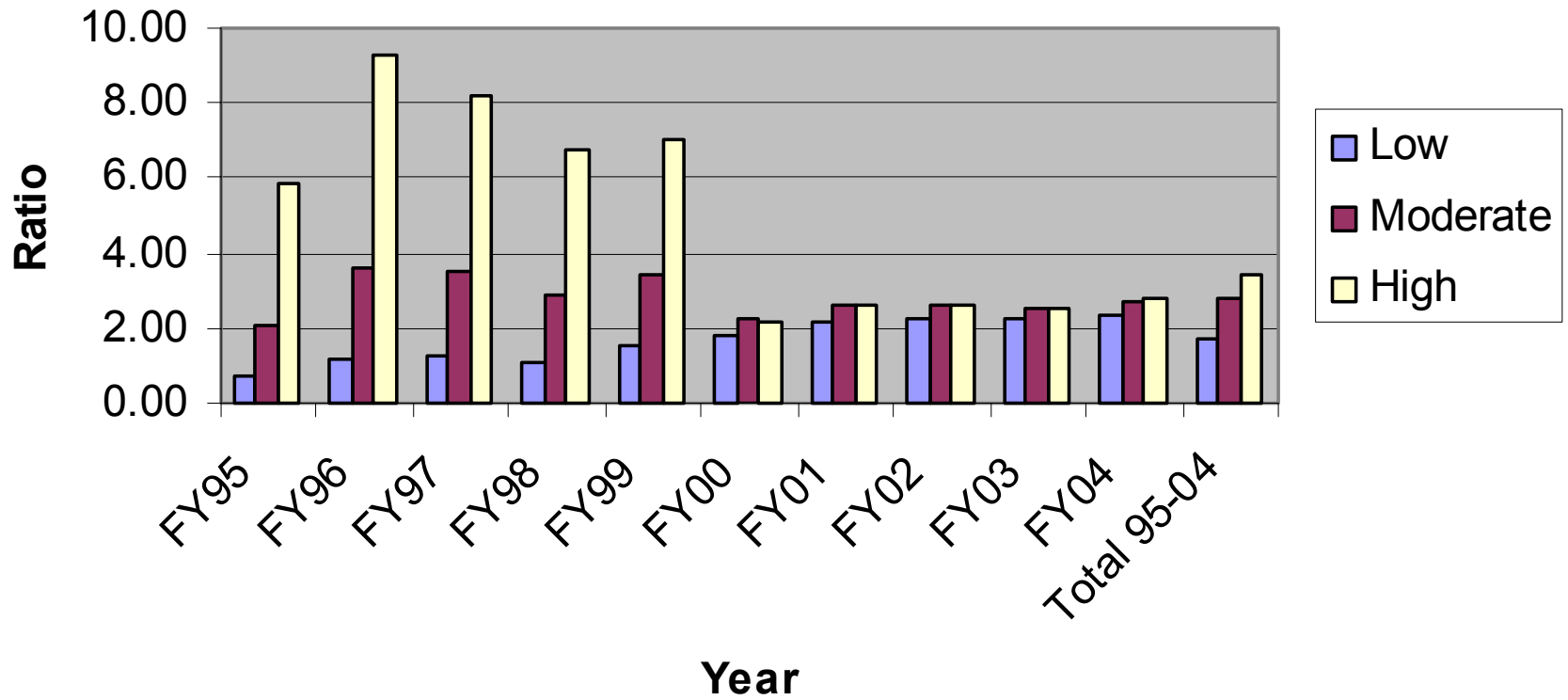
- **MEASURES ARE LIMITED TO FIRM LEVEL. SOCIETAL BENEFITS NOT INCLUDED IN THE MODEL**

# Results

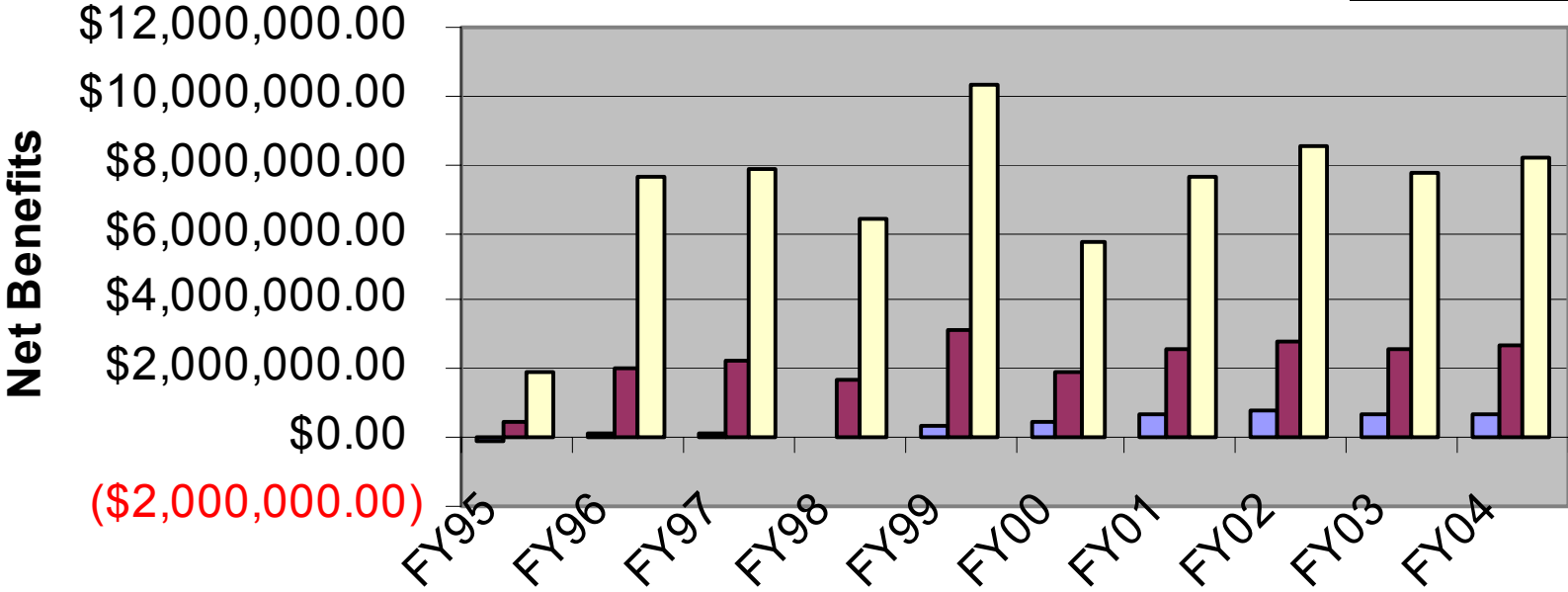
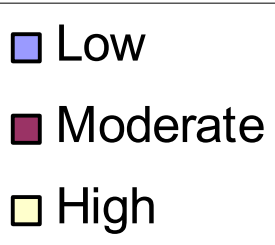
	Variation Discount Rate	Variation Limits
B/C Ratio per fiscal year	$2.83 \pm 0.53$	$3.16 \pm 0.92$
Net benefit per fiscal year (\$000)	$2,216 \pm 766$	$3,266 \pm 1,060$

**Translates to ~ \$37,500 in net benefits to the client (business) by using KBEAP services!**

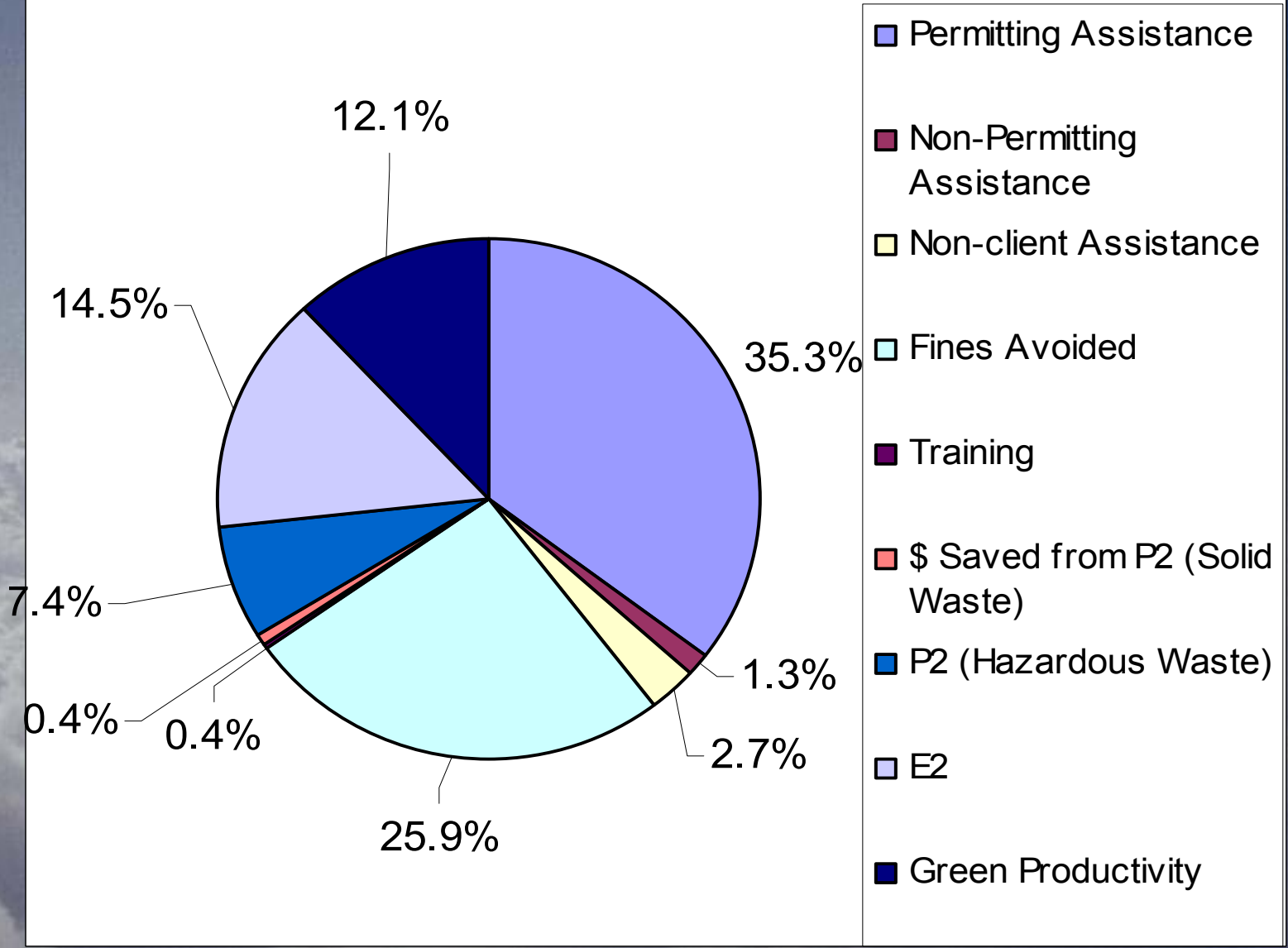
## Summary Benefit Cost Ratio



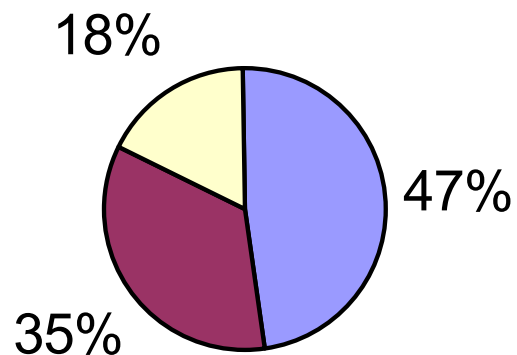
# Summary of Net Benefits



# Benefits FY 95-04 (Moderate Limits)



## Costs 95-04 (Moderate Limits)



■ Budget

■ Production Value Loss (CA)

■ Production Value Loss (CA DownTime)

# Internal Recommendations

- Incorporate B/C information into marketing materials to educate the client on compliance assistance benefits
- Define a set of compliance assistance metrics to track future outcomes, especially those that experienced data gaps during the analysis
- Focus on services that yield highest benefits
- Develop tools that minimize production time losses.....  
Make it easier to comply!!!
- Close data gaps
  - Modify KBEAP Client Evaluation
  - 2 year CA Focus Group Study

# External Recommendations

- CA outcomes measurement on a national level
- Development of standardized set of metrics on a national level
  - Establish protocols for measurement and annual reporting
  - Or national survey of SBAPs every 5 years to evaluate outcomes based on developed metrics

# External Recommendations

- Use the B/C model as a learning tool for other CA programs as they develop
- Test for Validity by Replication
- Economic Research Opportunities
  - Small Business and Green Marketing Value
  - Small Business Value of Green Image
  - Financial Performance and Environmental Performance in the small business arena
  - Productivity studies relating to environmental performance
  - Documentation of Insurance Reductions due to P2

# Final Thoughts

- Defining “Compliance Assistance” is important in determining appropriate measurements
- Programs need to think what program changes could result in moving from outputs to outcomes
- If you haven’t measured it, you can’t manage it.

# Final Thoughts

- Compliance assistance programs such as KBEAP have the opportunity to provide significant benefits to small businesses but the effort required to track these outcomes is still in its infancy both on a national and state level. It is hoped that this analysis will provide the impetus for other programs to explore outcome evaluation as well as lead to a national initiative to better understand the outcomes relating to environmental compliance assistance program and small businesses.

# Contact Information

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