



Used Oil Recycling Public Education Assessment

Used Oil Recycling/Household Hazardous Waste

2007 Workshops

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Used Oil Recycling Public Education Assessment Tasks

- ❖ Analyzed data from the Used Oil Block Grant Annual Report Forms for 2004/05**
- ❖ Measured “effectiveness” as public education dollars spent per gallon of oil collected, divided by the diversion rate**
- ❖ Identified the most and least effective PE programs**
- ❖ Identified the most and least cost-effective PE budget proportions and PE practices**

Methodology

- ❖ Entered Used Oil Block Grant Report Form (2004/2005) data into a statistical software program
- ❖ Calculated effectiveness of programs and divided programs into effectiveness quartiles
- ❖ Performed descriptive statistical analysis of characteristics of the top and bottom program effectiveness quartiles
- ❖ Performed multiple regression analysis of characteristics predicting effectiveness
- ❖ Identified the most effective programs in each of four budget levels

Proportion of Grant Budget Spent on PE by Most and Least Effective Programs

Variables	Least Effective programs		Most Effective programs	
	Median	Mean	Median	Mean
Total Grant Budget				
Public Education	.66	.64	.30	.39
Mass Media	.28	.37	.12	.18
Person to Person	.02	.09	.00	.03
K-12 School	.00	.02	.00	.02
Premiums	.07	.15	.07	.15

Figure 1. Proportion of Grant Budget Spent on PE by Most and Least Effective Programs

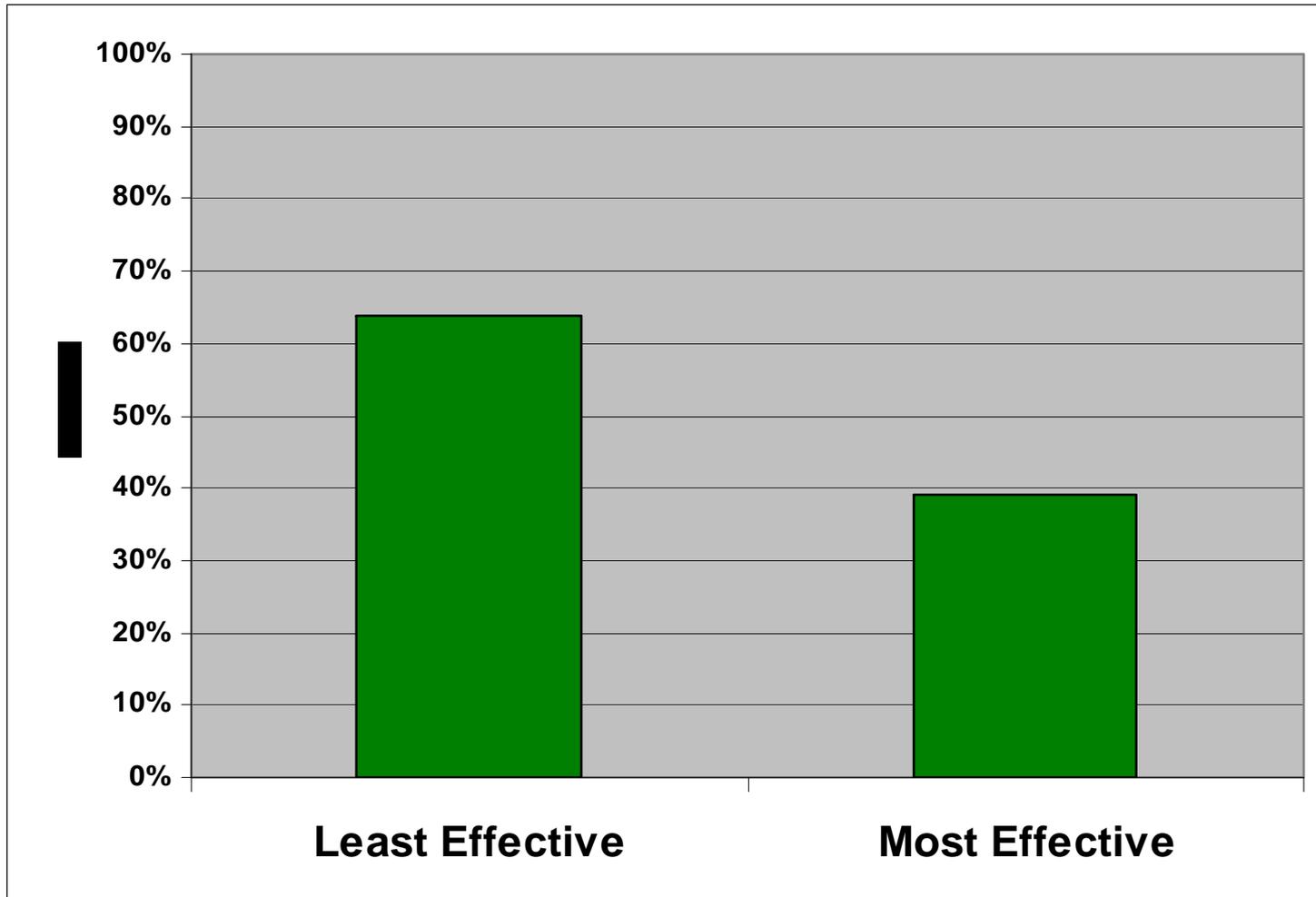


Figure 2. Proportion of Grant Budget Spent on PE by Most and Least Effective PE Programs and by Budget Size

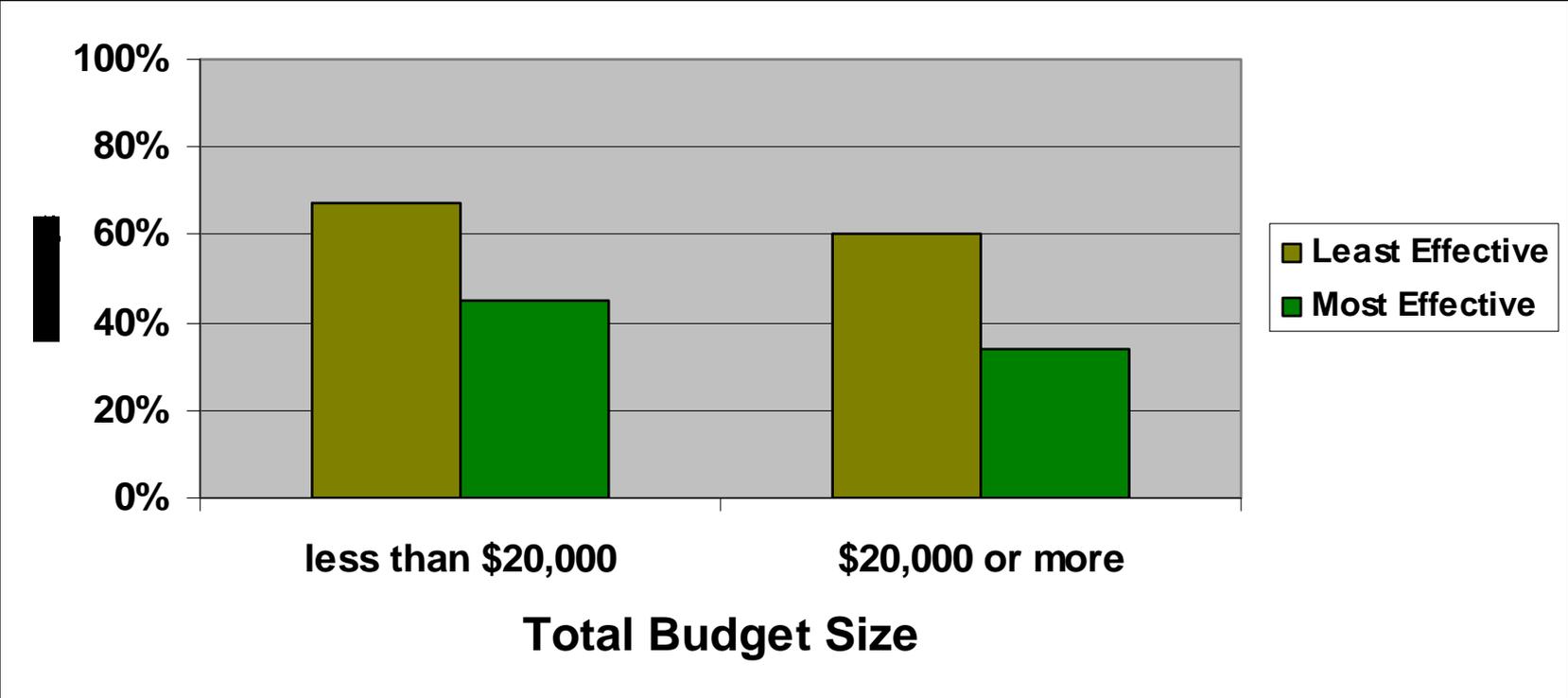


Figure 3. Proportion of Grant Budget Spent on PE by Most and Least Effective Programs Per Outreach Category

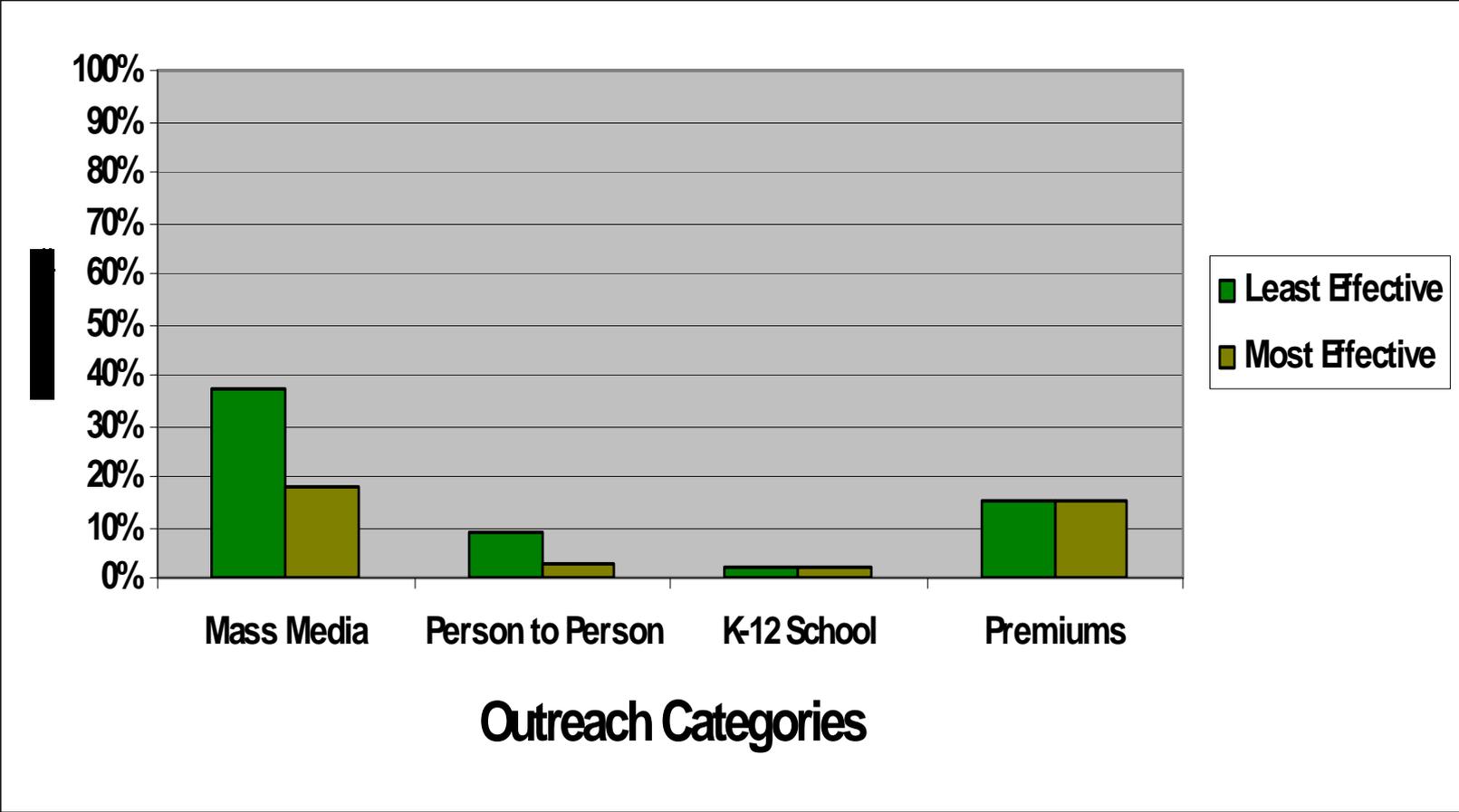
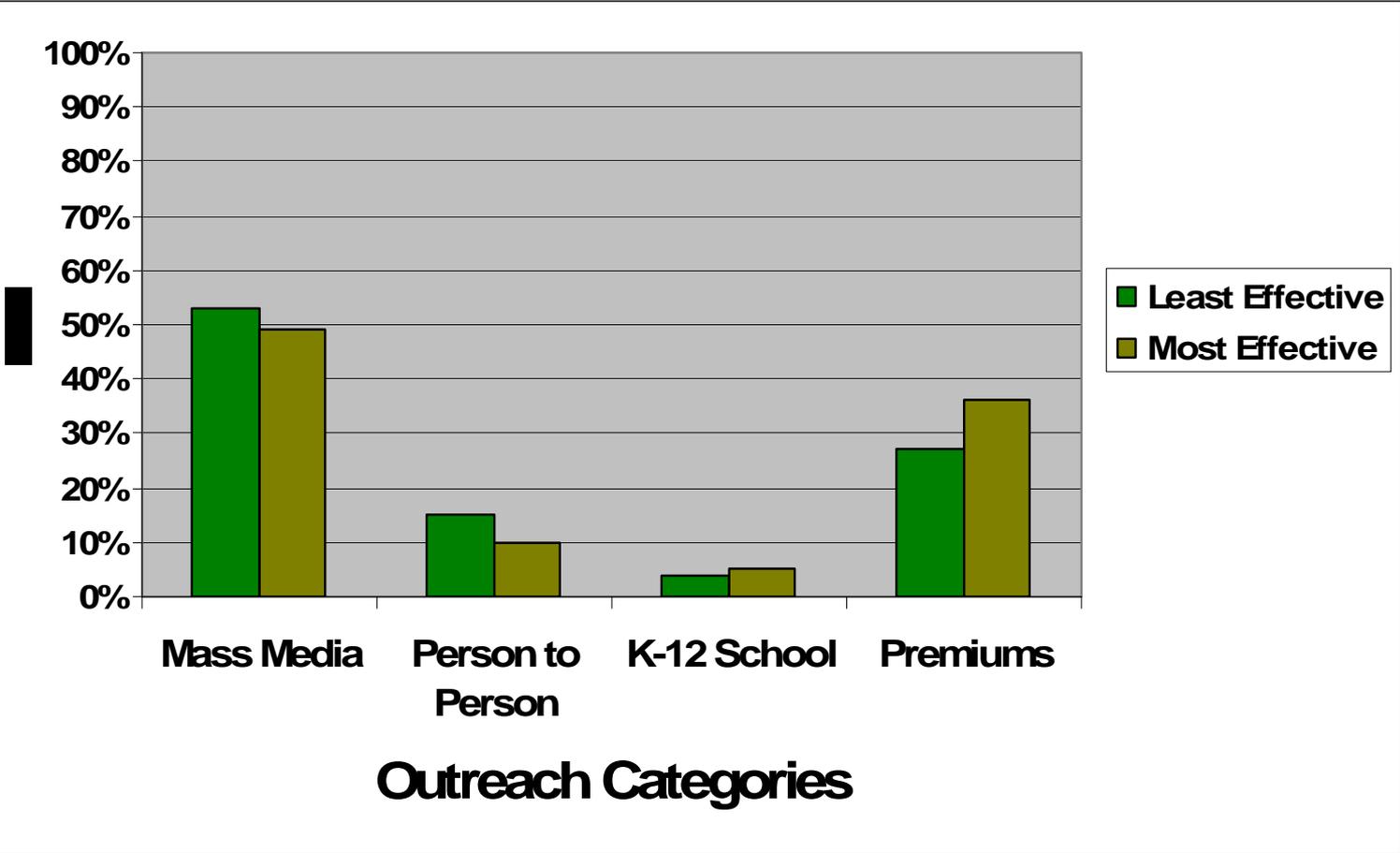


Figure 4. Proportion of PE Budget Spent by Most and Least Effective Programs Per Outreach Category



Mass Media and Person to Person Outreach

Most effective programs are more likely to target the following DIY groups:

- ❖ the general public**
- ❖ auto enthusiasts**
- ❖ immigrants**
- ❖ shade tree mechanics**
- ❖ growers**

Mass Media and Person to Person Outreach

- ❖ Most effective programs are more likely to use radio, newspapers, bus/public transit and the Penny Saver for mass media outreach**
- ❖ Most effective programs are more likely to do person-to-person outreach at cultural events, car club/auto events, environmental events and county fairs**

Mass Media and Person to Person Outreach

- ❖ Most effective grantees are more likely to offer oil collection containers, oil funnels and oil rags as premiums**
- ❖ Least effective grantees are more likely to offer calendars as premiums**

Most Effective PE Program Practices

- ❖ Detailed analysis of grantee files found that the most effective programs had the following in common:**
 - Regular assessment of PE methods**
 - Adjustment of PE methods to address identified problems**
 - Focus on target audiences and tailored approaches to reach each target audience**
 - Advertise via radio, Penny Saver, floor graphics at auto parts stores**

Least Effective PE Program Practices

- ❖ **Detailed analysis of grantee files found that the less effective programs tended to exhibit the following:**
 - **Minimal/less formal assessment of PE methods**
 - **High staff turnover and reliance on interns**
 - **No adjustment of PE methods to address identified problems**
 - **Use television and billboards for outreach**

Multiple Regression Analysis of Characteristics

Predicting PE Program Effectiveness

Variables	Standardized Coefficients
PE percentage of budget	-.385***
Number of targeted groups	.162**
Number of media types	.142*
Oil Hauling and Collection percentage of budget	.039
Number of site visits	.336*
DIYer Rate	-.054
Regional (not regional=0)	-.042
Total Budget	-.479***
Number of CCC	.635***
R ²	.22***

Significance levels: * =.10, ** =.05, *** =.01

All things being equal*, the most effective programs...

- ❖ Spend a lower percentage of their total budget on public education**
- ❖ Target more DIY audiences**
- ❖ Use more media types**
- ❖ Conduct more site visits at CCCs**

***(Controlling for the size of the total budget, the percentage of DIYers, number of CCCs and whether or not the grantee is a part of a regional organization)**

Conclusions

The most effective grantee PE programs:

- ❖ **Expend 40% or less of their total grant budget on PE**
- ❖ **Target a variety of DIY audiences**
- ❖ **Attend a variety of cultural and environmental events for person-to-person outreach**
- ❖ **Use a variety of low cost media types**
- ❖ **Formally assess PE practices and correct problems**
- ❖ **Conduct more site visits to CCCs**