

**Storm Water Public Education Program
Resident Population Telephone Survey
- 2004 Evaluation and Next Steps -**

**Prepared for:
State Water Resources Control Board
and
Rogers & Associates**

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Background and Objectives

- To combat the problem of storm water pollution in Los Angeles County, the State Water Resources Control Board (SWRCB), in conjunction with Rogers & Associates, developed the “Erase the Waste” public education campaign, designed to reduce harmful storm water pollution in Los Angeles County and improve the environments of the region’s coastal and inland communities.
- Launched in August 2003, the two-year, \$5 million outreach campaign encourages Los Angeles County residents to take ownership of their communities, help reduce storm water pollution from the local landscape and be part of the “pollution solution” by adopting simple, everyday actions, including:
 - Throwing trash in a trash can or recycling container (as appropriate), not on the ground or into a storm drain
 - Cleaning up after dogs every time
 - Always putting cigarette butts in an ashtray
 - Joining or organizing community clean ups to help protect neighborhoods
 - Reducing, reusing and recycling materials whenever possible
- To help motivate residents, the overarching campaign message focuses on the potential health problems associated with storm water pollution that affect the welfare and safety of families and children.
- The campaign utilizes a strategic mix of multi-media advertising, community outreach, media relations, corporate and non-profit partnerships, special events and community, school and business outreach.
- As part of the campaign, English and Spanish print, radio and television advertisements primarily target three groups of residents, defined by their unique polluting tendencies and lifestyle characteristics, as identified in previous research.
 - These groups, “Neat Neighbors,” “Fix It Foul-Ups” and “Rubbish Rebels,” collectively make up five and one-half million residents or approximately 74% of the total County population age 16 and over.

- To help evaluate the effectiveness of the current “Erase the Waste” campaign, research was needed to identify current attitudes, beliefs and behaviors related to storm water pollution prevention among Los Angeles County residents.
- The specific goals of this 2004 evaluation are to:
 - Determine the level to which the “Erase the Waste” Public Education Campaign has penetrated public consciousness and influenced intentions and/or behavior.
 - Evaluate the effectiveness of the campaign in reaching residents identified as key target groups.
 - Provide insights based on key learnings that will maximize the potential for success of future pollution-reduction efforts in Los Angeles County.
- This report provides the findings from the most recent (2004) campaign evaluation survey and also includes data from the 1997 baseline and 2001 studies for comparative purposes.

Survey Methodology 1997-2004

- Prior to the 1997 public education campaign conducted on behalf of the Los Angeles County Department of Public Works, baseline data regarding Los Angeles County residents' storm water-related attitudes and behavior was collected to establish a starting point for the measurement of campaign impact.
- In order to identify and track changes in resident awareness and attitude levels associated with each of the storm water public education campaigns, subsequent evaluation studies were conducted among 1,000 Los Angeles County residents in both June 2001 (for the DPW campaign) and July 2004 (for the current SWRCB campaign).
- For each of these studies, participants were drawn from a representative sample of random-digit phone numbers for Los Angeles County.
 - Quotas were established for gender, age and ethnicity based on census data.
 - Interviews were conducted in either English or Spanish at the preference of the interviewee.
- Participants were:
 - 16+ years of age.
 - Permanent residents of Los Angeles County.
 - Residents of Los Angeles County for six months or more.
- In addition to collecting general information among all Los Angeles County residents, a segmentation analysis of the baseline data determined which residents offer the best potential targets for social marketing efforts.
 - Based on their willingness to change and their contribution to pollutant volume, two groups, Neat Neighbors and Fix It Foul-Ups, were identified as the primary audiences for campaign messages.
 - While a third segment, Rubbish Rebels, ranked high in its level of polluting behaviors, because of this segment's relatively small size (9% of residents in 1997 and 8% in 2004) and because of prior knowledge that it would be difficult to impact, the campaign did not specifically target this group.
 - Expectations were that core elements of the campaign would "spill over" and reach Rubbish Rebels with critical messages.
 - The behavior of these three groups of residents is a key focus of the current 2004 campaign evaluation.

- All data reported are unweighted.
- Statistical significance testing is based on a 90% confidence level.
 - The number of people answering any question (referred to as the “base”), as well as the placement of the numbers on the normal or bell curve, affect whether or not two numbers are considered “statistically significantly different.”
 - For ease of interpretation, all statistically significant differences between numbers are indicated by up or down arrows or by a letter designation.
- Up arrows (↑) signify a statistically significant increase in 2004 relative to the 2001 time period.
- Down arrows (↓) signify a significant decrease from 2001 to 2004.
- When target audiences (segments) are compared to each other, a letter next to a percentage figure indicates that that segment is significantly higher on that measure than another segment.
 - In these cases, an “N” signifies a percentage that is significantly higher than the percentage for “Neat Neighbors,” “F” means the number is higher than the percentage for “Fix It Foul-Ups” and “R” indicates it is higher than “Rubbish Rebels.”
- Over the course of the baseline and two evaluation studies, the proportion of the population that falls into each of the target groups (Neat Neighbors, Fix It Foul-Ups and Rubbish Rebels) has varied, possibly in response to underlying demographic, social and economic trends that affect such activities as do-it-yourself home maintenance, ownership of lawns/gardens and smoking. This, in turn, effects the overall impact of each group on the volume of particular pollutants. At present:
 - Neat Neighbors account for 43% of residents, down somewhat from their levels in 1997 and 2001.
 - Fix It Foul-Ups are now 23% of the population, up from their 1997 and 2001 levels and emphasizing the importance of continued behavior change in this group to reducing storm water pollution.
 - Rubbish Rebels are 8% of residents but continue to account for pollution volumes well out of proportion to their small numbers.

Executive Summary

Campaign Approach

- To maximize its impact within a limited budget, the “Erase the Waste” campaign leverages learnings from previous public education efforts in several ways. In particular:
 - The campaign’s messages are aimed at changing the attitudes and behaviors of specific groups of County residents, Neat Neighbors, Fix It Foul-Ups and Rubbish Rebels, based on the 1997 segmentation research that revealed that these groups account for relatively high volumes of storm water relevant pollutants and, in the case of Neat Neighbors and Fix It Foul-Ups, are open to changing their polluting behavior if given a good reason to do so.
 - The messages focus on consequences of polluting behavior such as threats to health, child health/safety and the appearance and quality of life in residents’ own neighborhoods because earlier research showed these concerns to be more compelling to residents than more general threats of harm to the environment.
 - Each message targets a specific polluting behavior and suggests direct action that residents can take to reduce their polluting behavior or to get involved in clean-up activities.
- With this targeted approach, the current campaign did not:
 - Attempt to reach all possible audiences (e.g., residents segments known as Prove It To Me Polluters, Preoccupied Polluters and Concerned Non-Contributors were not targeted).
 - Target all possible polluting behaviors (e.g., polluting behaviors related to lawn and garden care and automobile maintenance were not targeted).

Concern and Knowledge

- Concern about pollution (including both ocean/river/beach pollution and neighborhood litter/pollution) is at a moderately high level, although it is slightly depressed among residents overall and among most of the target segments relative to 2001.
 - A similar pattern occurs for most other areas of public concern, indicating that on a relative basis storm water pollution is about as important to residents now as during prior public education efforts.
- Despite the small decline in concern, most residents nonetheless consider themselves to be knowledgeable about neighborhood litter and pollution and its effects on the environment.
 - There has been a notable increase in the percentage of target audience residents (Neat Neighbors, Fix It Foul-Ups and Rubbish Rebels) who consider themselves to be “very knowledgeable” about these issues, suggesting that the successive public education efforts have made residents feel well-informed about this topic.

Message Awareness and Attitudes

- The “Erase the Waste” campaign, especially its television ads, appears to have successfully reached the public with its messages about neighborhood litter/pollution and pollution of the ocean/rivers/beaches.
- About two-thirds (64%) of residents have seen or heard messages about pollution of the oceans, rivers and beaches in the past few months, an increase over past years that suggests the impact of repeated public education campaigns.
 - Most recall ocean/river/beach pollution messages from television (71%), while somewhat fewer recall them from newspapers (33%) and radio (15%).
- Nearly one-third have heard messages about litter or pollution in neighborhoods, with half recalling seeing the messages on television, indicating the impact of this medium for the current campaign.
 - Thirty-one percent of residents recall reading neighborhood litter/pollution messages in newspapers, while 10% heard them on the radio, 8% saw them on a billboard and 7% saw them in a brochure or pamphlet.

- The campaign's messages about specific sources of litter/pollution appear to have made an impact among County residents.
 - On an unaided basis, about one-third of residents recall litter being mentioned in the ads, suggesting that the messages targeting this source of pollution have been especially successful.
 - Unaided, 23% of those who saw or heard messages recall the ads mentioning cigarette butts, up from 14% in the 2001 survey.
 - Food wrapper messages are recalled by 10%, up from 3% in 2001.
 - Relative to 2001, however, fewer residents recall messages about dog waste as a source of litter/pollution on an unaided basis.
- Aided, most residents recall messages about picking up after their pets (75%), proper disposal of cigarettes (66%), the impact of litter or pollution on families' health (62%) and proper disposal of fast food wrappers (54%).
 - The very high aided awareness of dog waste messages relative to unaided awareness of the same issue suggests that residents consider dog waste a special category and do not automatically think of it when asked about litter or pollution. This supports targeting this behavior specifically because residents would be unlikely to make changes in this area in response to more generalized anti-littering messages.
- While most residents find the messages meaningful, thought-provoking, informative and change-inspiring, these persuasion measures are slightly lower than in 2001.
 - These lower persuasion measures may be in part a result of the lack of messaging on this topic in the years immediately prior to the current campaign.
 - Additionally, the lower scores may be in keeping with residents' somewhat lower level of concern about these problems and their high degree of confidence that they are already knowledgeable about these issues.

Behavior Change Intentions

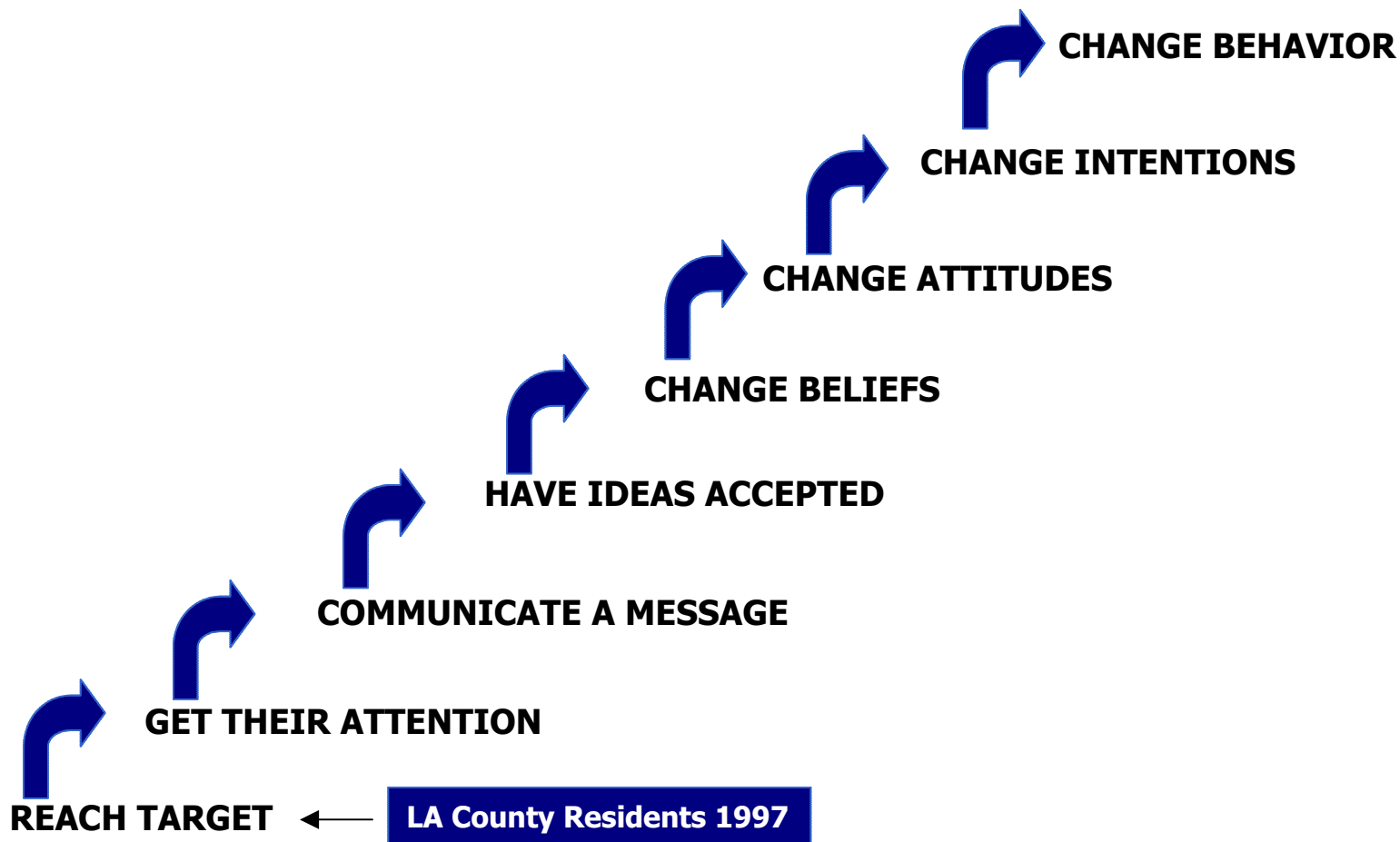
- Residents' expressed willingness to change specific polluting behaviors, including behaviors targeted in the campaign messages, is generally near or above the high levels seen in previous survey waves and has increased overall for Neat Neighbors and Fix It Foul-Ups, two of the key target audiences for the campaign.
- Nearly half of Neat Neighbors and Rubbish Rebels claim to have changed at least one of their polluting behaviors in the past year.

Polluting Behaviors

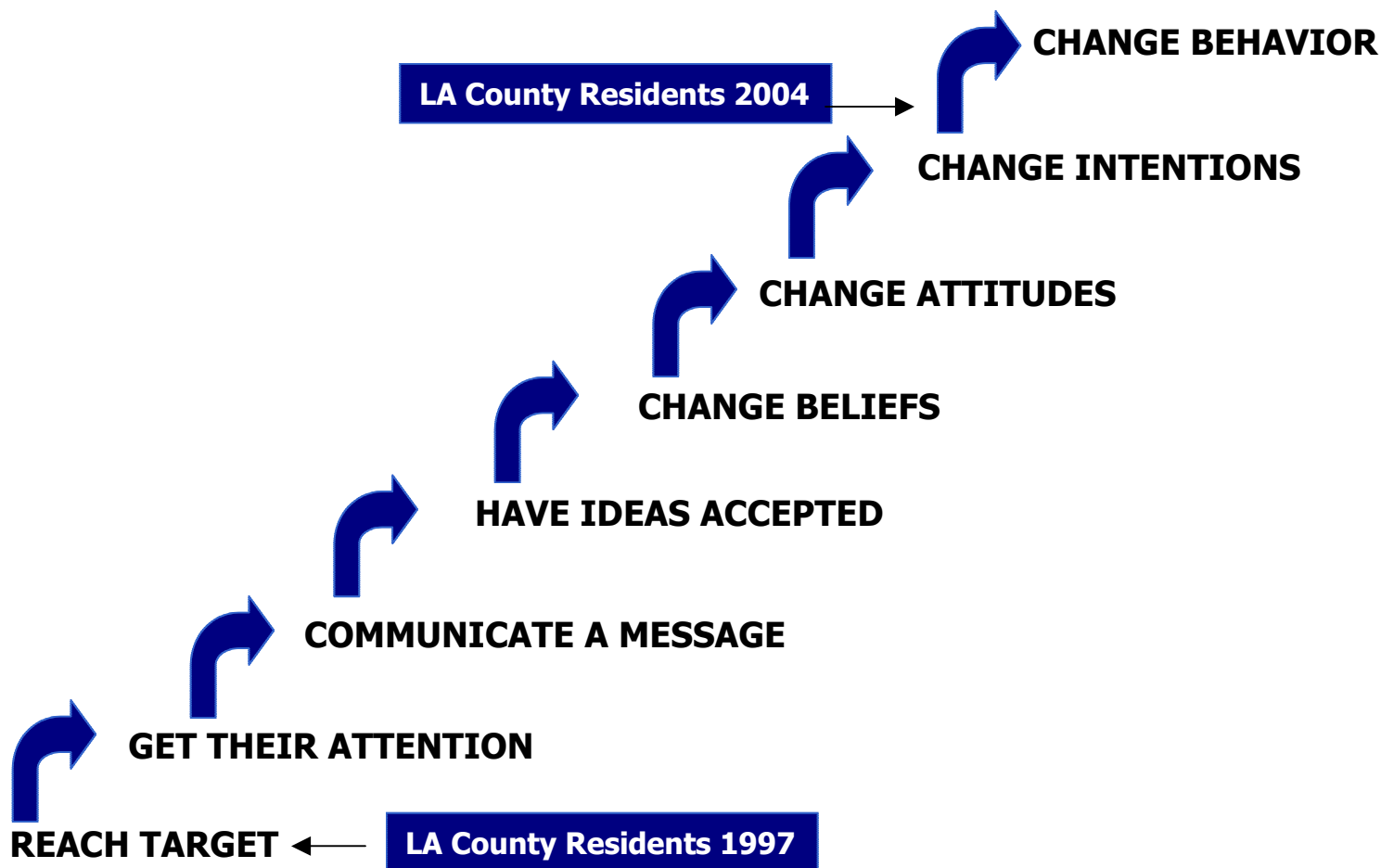
- Residents' actual behavior has improved both for County residents as a whole and among most of the target audiences for the types of polluting behaviors specifically targeted by the campaign.
 - Individual polluting behaviors such as various forms of littering have generally declined since the baseline study and are engaged in by about one-fifth of residents. This suggests that campaign messages about these forms of pollution and behavior change have been successful.
 - In contrast, household-based lawn/garden maintenance activities that contribute to storm water pollution, are engaged in by about one-sixth of residents and have generally increased, suggesting opportunities for future campaign efforts that target these sources of storm water pollution.

Overview of Social Change Process

- It is widely recognized that in order to create behavior change related to societal, rather than individual needs, a **process** of education and encouragement must take place that involves the following series of steps:



- The efforts of the Storm Water Public Education and "Erase the Waste" campaigns have moved Los Angeles County residents from being unaware of the problem to intending to, or actually starting to change, their behavior, although sustained efforts are needed to reinforce these messages over time.



Attitudes and Awareness

- In comparison with earlier evaluation surveys, Los Angeles County residents are slightly less concerned about a number of current issues facing their city, although concern about pollution of the ocean/rivers/beaches remains moderately high (56%) and concern about littering/pollution in neighborhoods is moderate (40%).
 - The decrease in many local County societal concerns among residents overall is also evident among the key storm water target groups, Neat Neighbors, Fix It Foul-Ups and to a lesser extent, Rubbish Rebels.
 - The lower concern with litter relative to other problems may reflect residents' sense that this is not an issue in their own neighborhoods or their feeling that this is a problem that is under their own control and therefore not a major cause for concern.
- Most residents consider themselves knowledgeable about pollution issues and, among the target groups, there has been a notable increase in the percentage considering themselves very knowledgeable, indicating that the education campaigns are providing information that these groups of residents can understand and use.
- The 2004 public education campaign, especially the television ads, appears to have successfully broken through to County residents, as more Los Angelenos recall water pollution-related advertising compared to 2001 (64% from 58%).
 - Among key target groups awareness of water pollution advertising is also on the rise, especially among Fix It Foul-Ups and Neat Neighbors.
 - This increase in advertising awareness of water pollution primarily stems from television advertising (71%) and, to a lesser extent, newspaper advertising.
- Awareness of neighborhood litter/pollution advertising is recalled by somewhat fewer Los Angeles County residents overall (30%) than the messages about water pollution.
 - Those who do recall neighborhood litter/pollution advertising are likely to recall the message through television, followed by print and radio.

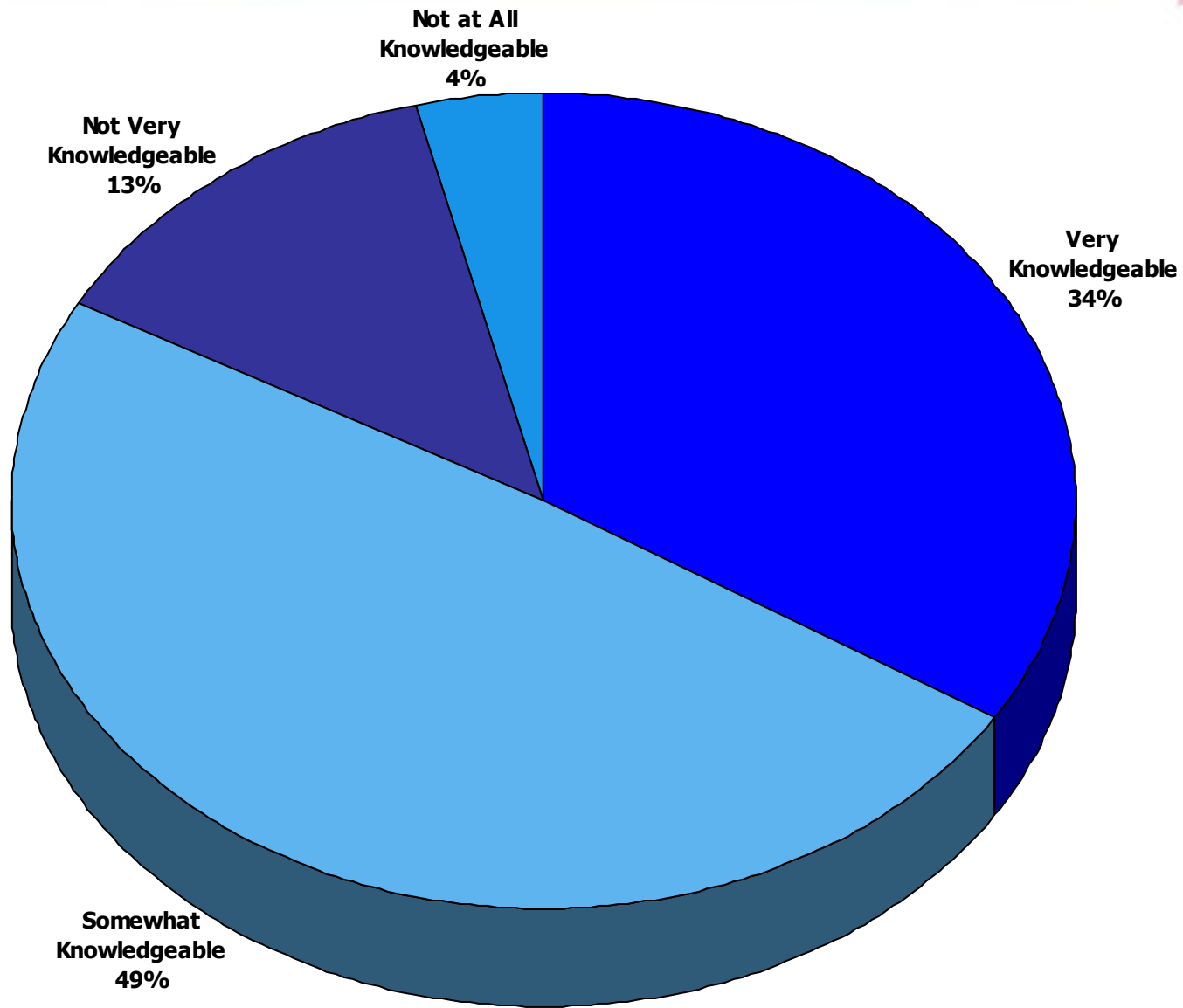
Very Concerned About Issues Facing Los Angeles County

Question: How concerned are you about each of the following issues?	1997	2001	2004
<u>Issues Facing Los Angeles County</u>			
Traffic congestion	50%	63%	63%
Crime	79%	68%	61%↓
Quality of the public schools	66%	61%	58%
Pollution of the ocean, rivers and lakes/beaches	57%	61%	56%↓
Air pollution or smog	58%	59%	54%↓
Terrorism	N/A	N/A	48%
Unemployment	47%	42%	43%
Litter	44%	48%	N/A
Litter or pollution in your neighborhood	N/A	N/A	40%
Race relations	46%	36%	30%↓
Base: Total Los Angeles County residents	(1,000)	(1,000)	(1,000)

Very Concerned About Issues Facing Los Angeles County

Question: How concerned are you about each of the following issues?	Neat Neighbors			Fix It Foul-Ups			Rubbish Rebels		
	1997	2001	2004	1997	2001	2004	1997	2001	2004
Issues Facing Los Angeles County									
Traffic congestion	56%	63%	63%	43%	67%	66%	47%	53%	53%
Crime	85%	72%	63%↓	79%	61%	58%	65%	59%	61%
Quality of the public schools	68%	60%	59%	68%	59%	58%	60%	64%	56%
Pollution of the ocean, rivers and lakes/beaches	67%	66%	59%↓	41%	49%	52%	46%	53%	43%
Air pollution or smog	65%	63%	59%	46%	51%	52%	39%	53%	56%
Terrorism	N/A	N/A	49%	N/A	N/A	48%	N/A	N/A	44%
Unemployment	51%	45%	47%	43%	35%	34%	44%	41%	48%
Litter	50%	52%	N/A	33%	41%	N/A	32%	36%	N/A
Litter or pollution in your neighborhood	N/A	N/A	42%	N/A	N/A	39%	N/A	N/A	34%
Race relations	50%	35%	34%	39%	33%	28%	39%	33%	32%
Base: Total Los Angeles County residents	(503)	(546)	(430)	(127)	(156)	(230)	(85)	(116)	(82)

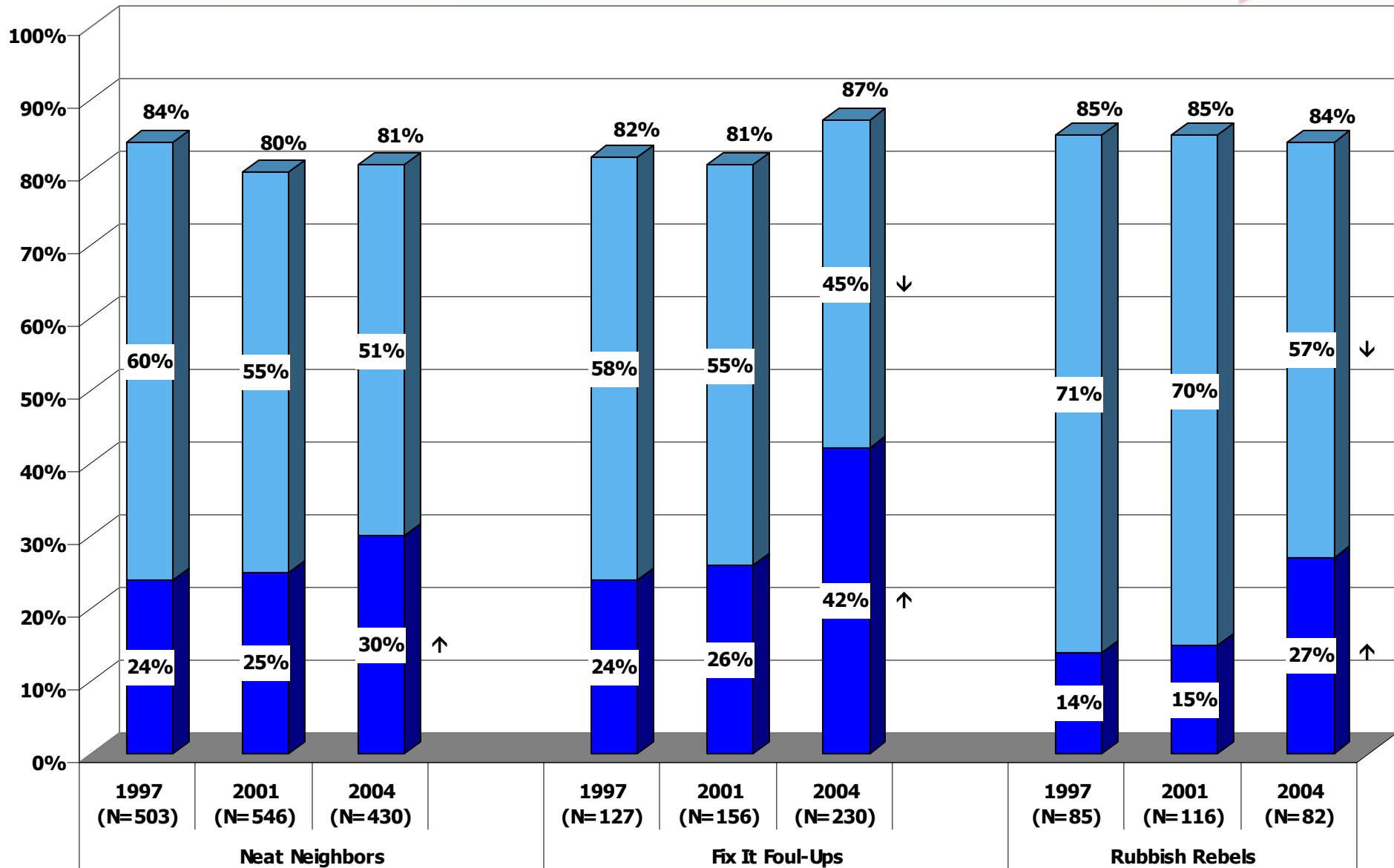
Knowledge of Neighborhood Litter/Pollution Causes



Base: Total Los Angeles County residents (N=1,000)

Question: Compared to most people, how knowledgeable are you about what causes litter and pollution and how to clean it up?

Knowledge of Litter/Pollution Causes



Base: Total Los Angeles County residents (see base sizes above)

Question: Compared to most people, how knowledgeable are you about what causes pollution of the ocean, rivers and lakes/litter or pollution in your neighborhood?

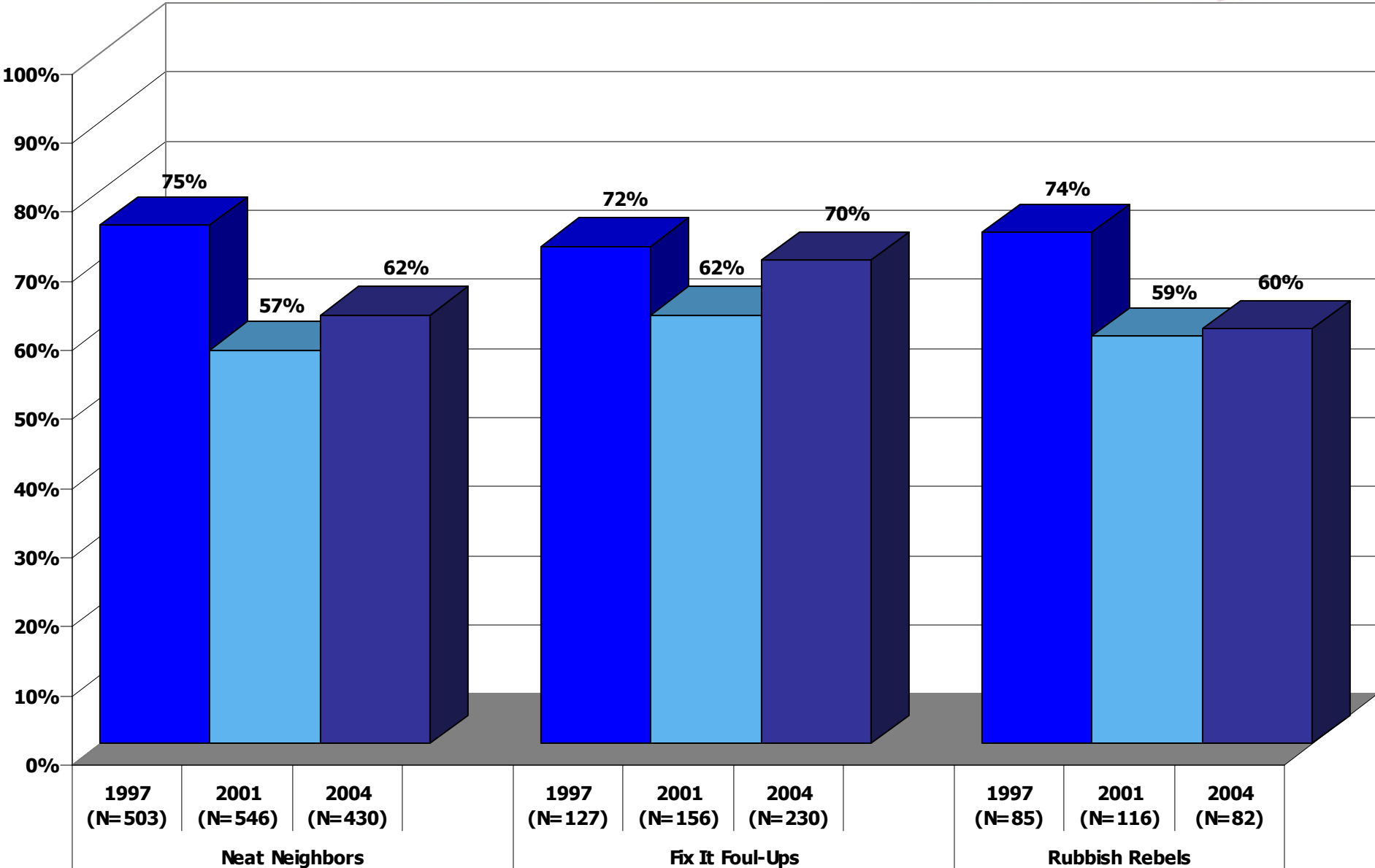
■ Somewhat Knowledgeable
■ Very Knowledgeable

Evaluation and Next Steps

Resident Population Survey

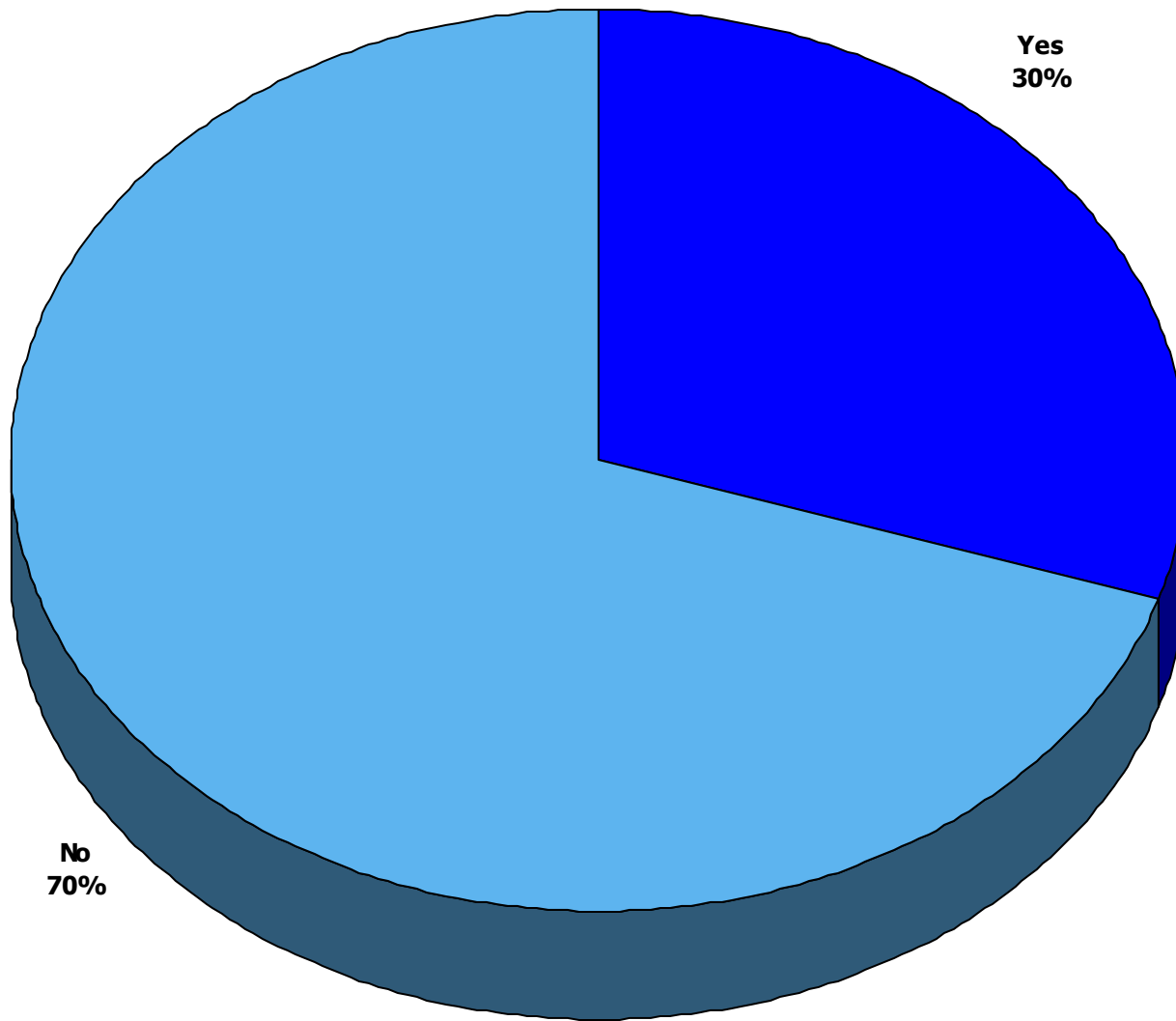
Question: In the past few months, do you recall seeing or hearing anything about pollution of the oceans, rivers and lakes/beaches?	1997	2001	2004
Yes	73%	58%	64%↑
No	27%	42%	36%↓
Base: Total Los Angeles County residents	(1,000)	(1,000)	(1,000)

Recall Seeing/Hearing Information About Pollution of Waters



Base: Total Los Angeles County residents (see base sizes above)

Question: In the past few months, do you recall seeing or hearing anything about pollution of the ocean, rivers and lakes/streams?



Neat Neighbors (N=430)	31% ^F
Fix It Foul-Ups (N=230)	25%
Rubbish Rebels (N=82)	32%

Base: Total Los Angeles County residents (N=1,000)

Question: In the past few months, do you recall seeing or hearing anything about litter or pollution in neighborhoods?

Question: Where have you seen or heard something about pollution of the ocean, rivers and lakes/beaches?	1997	2001	2004
<u>Sources of Water Pollution Information</u>			
Television	82%	79%	71%↓
Newspaper	52%	40%	33%↓
Radio	21%	17%	15%
Friends/family	10%	6%	5%
Magazine	14%	9%	4%↓
On sidewalk/storm drain	1%	3%	4%
Billboard	4%	6%	4%
Work	3%	3%	1%↓
Internet	0%	3%	3%
School	4%	5%	3%↓
Brochure/pamphlet	3%	2%	2%
Meeting	1%	2%	0%↓
Base: Total Los Angeles County residents who are aware of water pollution advertising	(730)	(583)	(634)

Sources of Water Pollution Information – Unaided

Question Where have you seen or heard something about pollution of the ocean, rivers and lakes/beaches?	Neat Neighbors			Fix It Foul-Ups			Rubbish Rebels		
	1997	2001	2004	1997	2001	2004	1997	2001	2004
<u>Sources of Water Pollution Information</u>									
Television	81%	82%	68%↓	80%	75%	73%	86%	81%	76%
Newspaper	51%	43%	32%↓	67%	40%	43%	43%	35%	25%
Radio	19%	18%	18%	25%	19%	16%	19%	17%	8%
Friends/family	8%	7%	4%	13%	2%	3%	5%	3%	12%↑
Magazine	16%	10%	4%↓	11%	10%	6%	8%	6%	2%
On sidewalk/storm drain	1%	3%	4%	1%	4%	5%	1%	3%	0%
Billboard	4%	6%	3%↓	3%	6%	8%	9%	4%	2%
Work	4%	2%	0%↓	1%	3%	0%↓	1%	9%	0%↓
Internet	1%	4%	4%	0%	2%	2%	0%	3%	6%
School	5%	6%	2%↓	3%	3%	3%	11%	4%	8%
Brochure/pamphlet	3%	3%	2%	7%	3%	1%	5%	0%	0%
Meeting	1%	2%	0%↓	0%	3%	0%↓	3%	3%	0%
Base: Total Los Angeles County residents who are aware of water pollution advertising	(377)	(309)	(268)	(91)	(97)	(161)	(63)	(69)	(49*)

*Caution: Small base

Sources of Neighborhood Litter/Pollution Information – Unaided

Question: Where have you seen or heard something about litter or pollution in neighborhoods?	Total Residents	Neat Neighbors	Fix It Foul-Ups	Rubbish Rebels
<u>Sources of Litter/Pollution in Neighborhoods Information</u>				
Television	50%	48%	46%	65%
Newspaper	31%	24%	44% ^{NR}	15%
Radio	10%	10%	13%	15%
Billboard	8%	9%	7%	4%
Friends/family	7%	6%	7%	12%
Brochure/pamphlet	7%	4%	15% ^N	12%
On sidewalk/storm drain	4%	6% ^R	4%	0%
School	3%	4% ^F	0%	4%
Work	2%	2%	4%	0%
Meeting	2%	2%	2%	0%
Internet	2%	1%	4%	8%
Magazine	1%	0%	6% ^{NR}	0%
Base: Total Los Angeles County residents who are aware of neighborhood litter/pollution advertising	(295)	(131)	(56)	(26*)

*Caution: Small base

Advertising Message Recall/Impact

- The campaign appears to help residents successfully connect the idea that dirty and littered neighborhoods will result in damage to the County's waters.
 - Roughly three-in-ten County and target group residents now recognize this connection.
 - Further, messages related to pollution in neighborhoods and of polluted runoff water affecting the ocean are the most memorable from the campaign; nearly three in ten of those who recall water/neighborhood pollution advertising play back these messages unaided.
- The linkage of neighborhood litter and pollution to the health of families, however, does not yet appear to be fully communicated to many residents, most notably Fix It Foul-Ups and Rubbish Rebels.
 - Of the three target groups, this message is most recalled by Neat Neighbors, perhaps because it integrates the types of information that are motivating to these residents – protecting their children, their environment and their health while improving their neighborhoods.
 - Since these messages are relatively new, it may be that more time and repetition is needed for them to reach their full impact with other target groups.
- Consistent with the campaign's featured pollutants, on an unaided basis, Los Angelenos cite litter/trash, bottles/cans, cigarette butts, dog droppings and food wrappers as the most common neighborhood pollution culprits mentioned in recent advertising.
 - Though not highlighted in the County's advertising messages, but featured in other environmental education efforts, motor oil dumping is also remembered as being featured in recent pollution-related advertising.
- The key target groups are likely to recall pollutants that are most relevant to their own behavior.
 - With the highest incidence of cigarette usage, Rubbish Rebels are most likely to link cigarette butts with neighborhood pollution.
 - Reflecting their interest in do-it-yourself automobile maintenance, Fix It Foul-Ups are most likely to recall motor oil as being a neighborhood hazard.
 - With Neat Neighbors' strong sense of pride in their neighborhoods, these residents most often recall trash and litter as causing neighborhood pollution.

- In terms of persuasion, Neat Neighbors are the target group most likely to admit being affected by the campaign. Around four-in-ten Neat Neighbors (41%) feel that messages in the campaign made them change their behavior as it relates to neighborhood litter and pollution.
 - Neat Neighbors also feel that the campaign contains meaningful messages (53%), makes them think more about their behavior (49%) and, to a lesser extent, teaches them something new (37%) and makes them more active in neighborhood clean-up activities (35%).
 - While some Fix It Foul-Ups and Rubbish Rebels find the campaign's messages meaningful and feel it makes them think about their behavior, these two groups are less likely than Neat Neighbors to admit that they learned something new or that the campaign persuaded them to change their behavior.

Question: What information have you seen, heard or read about pollution of the ocean, rivers, beaches or about litter or pollution in neighborhoods?	All Residents	Neat Neighbors	Fix It Foul-Ups	Rubbish Rebels
Specific Information Recalled				
Pollution in Neighborhoods (Net)	29%	30%	30%	37%
Neighborhood pollution/litter	8%	11% ^F	4%	9%
Air quality/smog	4%	4%	5%	4%
Cigarette butts	4%	3%	5%	5%
Proper disposal of animal waste	3%	3%	4%	2%
Graffiti	1%	1% ^R	2% ^R	0%
Toxic pesticides	1%	1%	0%	2%
Polluting the Storm Drain Pollutes the Water/Ocean (Net)	28%	30%	31%	23%
Storm drains go straight to the ocean/whatever goes in drains goes into the ocean	17%	19% ^R	20% ^R	9%
Illegal to dump down storm drains	7%	8%	8%	11%
Water Pollution (Net)	27%	25%	24%	44% ^{NF}
Pollution/mercury poisoning harms/kills wildlife and fish	8%	9%	5%	18% ^{NF}
Beach is polluted	7%	8%	7%	16% ^F
Ocean/bay is polluted	6%	7%	5%	7%
Beach closures	3%	2%	4%	2%
Oil spills/oil in the ocean	2%	1%	1%	5%
Raw sewage getting into the ocean	2%	2%	2%	0%
Boats dump garbage/oil into the ocean	1%	1%	1%	5%
Base: Recall seeing, hearing or reading about pollution of the ocean, rivers, beaches or about litter or pollution in neighborhoods	(686)	(288)	(169)	(57)

Question: What information have you seen, heard or read about pollution of the ocean, rivers, beaches or about litter or pollution in neighborhoods?	All Residents	Neat Neighbors	Fix It Foul-Ups	Rubbish Rebels
Specific Information Recalled (Continued)				
Health (Net)	5%	4%	5%	4%
Unsafe/hazardous to swimmers	3%	2%	4%	4%
Bacterial contamination	3%	2% ^R	1%	0%
No smoking on beaches/elimination of cigarette butts on beach	4%	5%	2%	7%
Recycling	3%	2%	3%	2%
Pollution is getting worse	3%	2%	2%	2%
California's beaches ranks worst in nation	2%	2% ^R	1%	0%
Heal the Bay/beach cleaning crews	1%	1%	1%	2%
Don't remember	12%	11%	14%	7%
Base: Recall seeing, hearing or reading about pollution of the ocean, rivers, beaches or about litter or pollution in neighborhoods	(686)	(288)	(169)	(57)

Recall of Specific Advertising Messages – Aided

Question: Do you recall the ads mentioning any of the following messages about litter or pollution in neighborhoods?	All Residents	Neat Neighbors	Fix It Foul-Ups	Rubbish Rebels
<u>Recall of Specific Advertising Messages</u>				
Pick up after your pet	75%	75% ^R	79% ^R	58%
Dispose of cigarettes properly	66%	71% ^F	50%	61%
Litter or pollution can impact families' health	62%	65%	60%	53%
Dispose of fast food wrappers properly	54%	58% ^F	46%	44%
Trash carries germs	50%	50%	46%	39%
Base: Total Los Angeles County residents who recall neighborhood litter/pollution advertising	(495)	(225)	(102)	(43*)

*Caution: Small base

Question: What kinds of problems did the ads say are being caused by litter or pollution in neighborhoods?	All Residents	Neat Neighbors	Fix It Foul-Ups	Rubbish Rebels
<u>Consequences of Litter/Pollution in Neighborhoods</u>				
Polluting the ocean	29%	27%	34%	33%
Causing health problems	22%	25% ^{FR}	16%	14%
Killing/threatening marine life	14%	16%	13%	14%
Making neighborhoods ugly/dirty	12%	13%	11%	12%
Poisoning beaches	11%	11%	14%	7%
Clogging gutters/storm drains	11%	10%	18% ^N	12%
Spoiling/contaminating neighborhoods	9%	10%	10%	5%
Spreading disease	8%	11% ^{FR}	4%	2%
Closing beaches	7%	8%	10%	7%
Kids swim in pollution	3%	3% ^R	6% ^R	0%
Air quality/air pollution	3%	3% ^R	4% ^R	0%
Flooding	1%	1%	1%	5%
Don't know/don't remember	23%	23%	23%	14%
Base: Recall litter/pollution advertising	(487)	(220)	(99)	(43*)

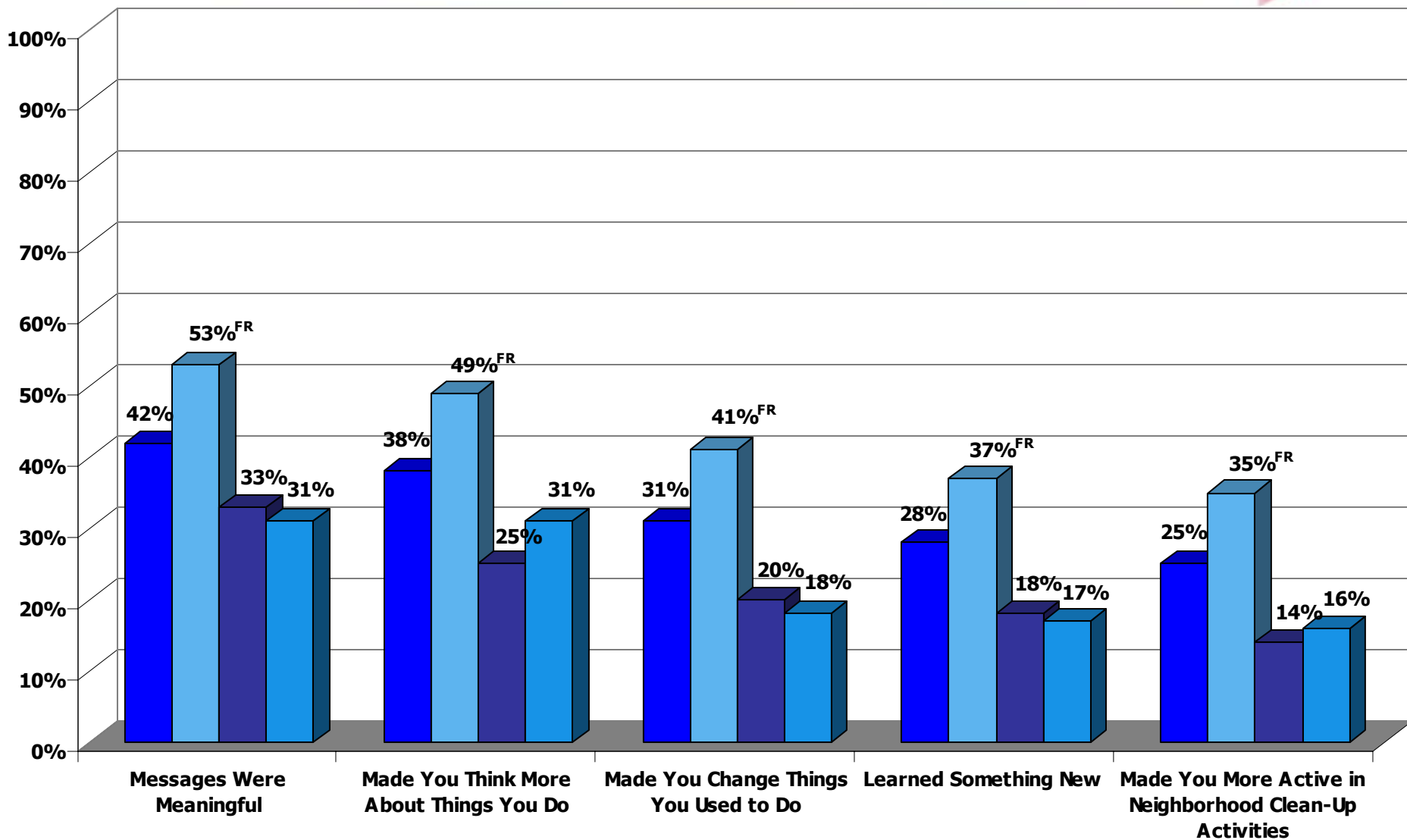
*Caution: Small base

Recall of Specific Sources of Litter/Pollution – Unaided

Question: What things do you recall the commercials or ads mentioning as sources of litter or pollution in neighborhoods?	All Residents	Neat Neighbors	Fix It Foul-Ups	Rubbish Rebels
<u>Pollution Agents Mentioned in Commercials As Sources of Litter/Pollution in Neighborhoods</u>				
Litter/trash	31%	36% ^{FR}	21%	23%
Cigarette butts	23%	22%	24%	33%
Motor oil	21%	20%	28%	23%
Bottles	16%	13%	12%	14%
Dog waste/droppings	11%	12% ^R	12%	5%
Cans	11%	9%	9%	7%
Food wrappers	10%	11%	12%	7%
Recyclable materials	8%	10%	6%	9%
Hazardous waste	7%	8%	7%	7%
Chemicals	5%	7%	3%	2%
Paint	4%	5%	4%	2%
Harmful liquids	4%	5%	2%	7%
Six-pack rings	4%	4%	1%	5%
Coffee cups	4%	3%	4%	5%
Fertilizer	3%	3% ^R	3% ^R	0%
Pesticides	3%	2%	3%	5%
Leaves	2%	1%	4%	0%
Base: Total Los Angeles County residents who recall neighborhood litter/pollution advertising	(489)	(223)	(99)	(43*)

*Caution: Small base

Persuasion Statement Ratings – Agree Strongly



■ All Residents (N=1,000)
■ Neat Neighbors (N=430)
■ Fix It Foul-Ups (N=230)
■ Rubbish Rebels (N=82)

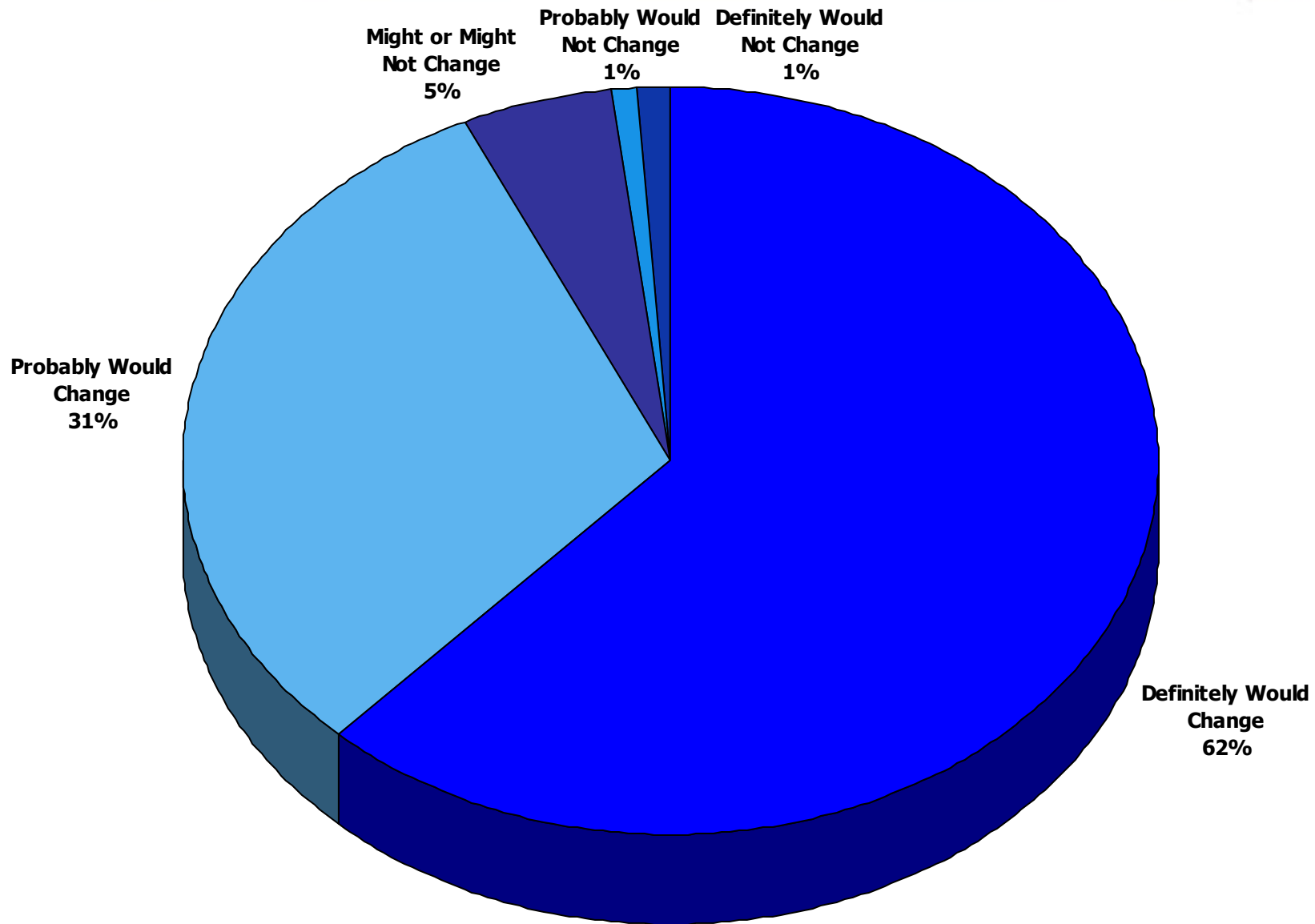
Base: Total Los Angeles County residents (see base in box)
Question: How much do you agree with this statement?

Attitudes Toward Water Pollution Clean-up

- Almost all Los Angelenos claim to be willing to change at least some of their pollution-causing activities (93%), suggesting that the County campaign finds synergy with the general social background of environmental concern and anti-pollution messages.
- Residents are especially willing to change individual littering behaviors.
 - In line with the “Erase the Waste” advertising’s core messages, residents are most willing to use trash cans instead of littering, pick up their dogs’ droppings and dispose of cigarette butts in the proper manner, suggesting that the ads have created a positive attitude toward these specific behavioral changes.
 - Residents are, however, somewhat resistant to paying up to \$5.00 a month for the County to clean up the environment, participating in community and beach clean-up activities and patronizing only select fast food restaurants with litter reduction programs, indicating that they are less open regarding behavior changes that have been less intensely targeted or which require greater sacrifice of time and money.
- Some residents are reluctant to change polluting behaviors associated with lawn and garden care, perhaps due to lack of awareness of less polluting alternatives or lack of targeting of these behaviors in the current campaign.
- The campaign appears to be especially well-tuned to Neat Neighbors, who are the most compliant target residents in the sense that seven-in-ten of them (70%) are willing to change their behavior in order to help combat neighborhood litter and pollution.
 - Even for behaviors such as paying \$5.00 a month or participating in clean-up activities, the majority of Neat Neighbors express willingness to make a change.
- Fix It Foul-Ups continue to show the most significant change in attitudes over the past seven years, indicating that the campaign has also reached this important group.
 - While only one-third of them were willing to make changes in their habits in 1997, over half of them now say they are willing to make concessions (from 35% in 1997 to 59% currently).
 - Fix It Foul-Ups are most willing to consider changing their behavior in terms of always cleaning up dog waste and carrying all of their trash and cigarette butts to an appropriate receptacle.
 - The vast majority of Fix It Foul-Ups, however, are unlikely to consider eliminating the use of fertilizers and pesticides outdoors.

- Consistent with 1997 and 2001, only about one-third of Rubbish Rebels say they are willing to change their behavior for the sake of a cleaner environment suggesting the campaign's focus has not penetrated this group's innate resistance.
 - Virtually all remain willing to properly dispose of litter if given a reason to change, indicating some openness to future messages, if they are specifically targeted toward the concerns of this group.
 - While Rubbish Rebels acknowledge cigarette butts as a source of litter and pollution, many of these residents are not sufficiently motivated to dispose of their cigarette waste in the proper manner.
 - Half of all Rubbish Rebels are also not interested in participating in community clean-up programs or patronizing only fast food restaurants with litter reduction programs.

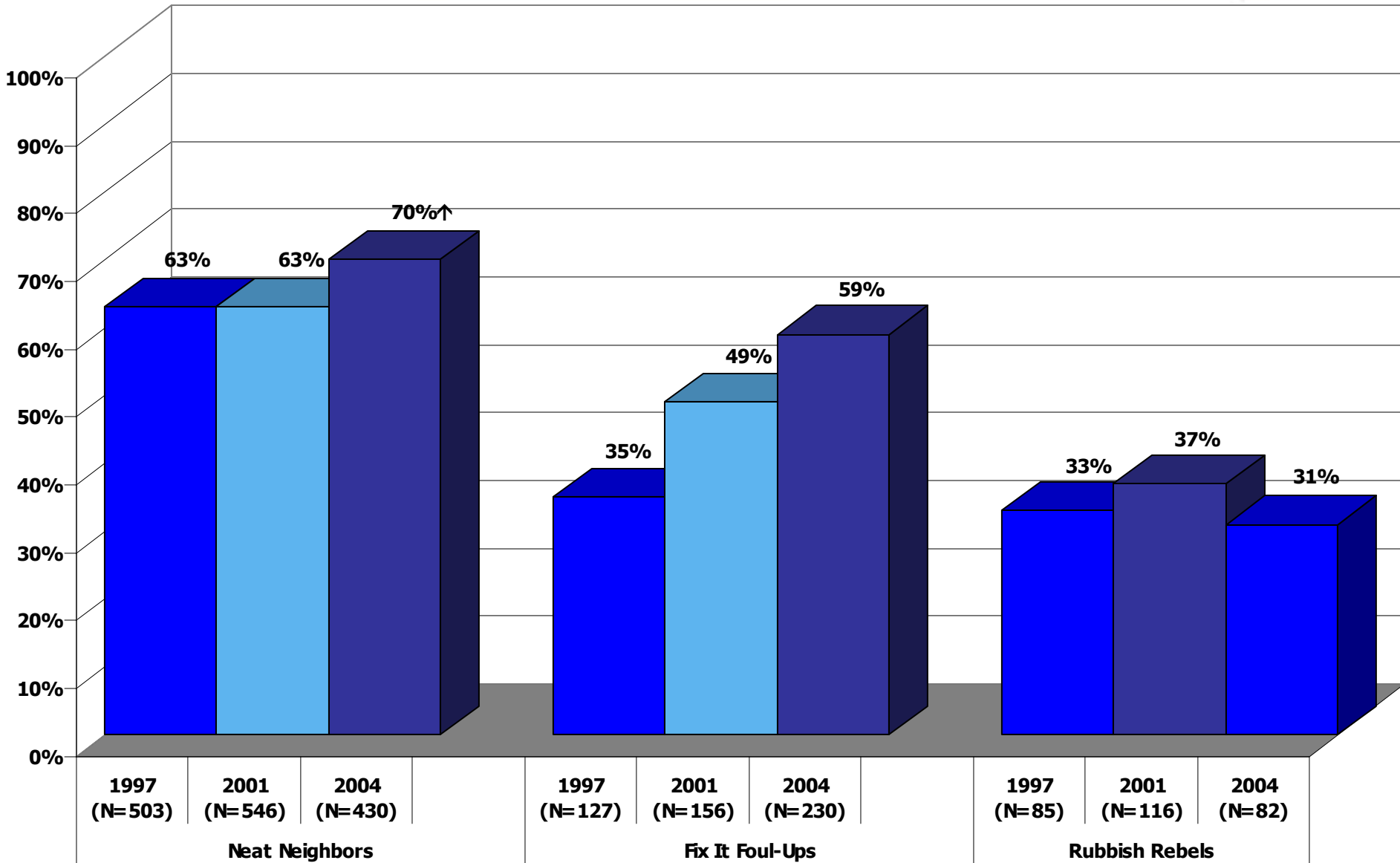
Willingness To Change Pollution-Causing Behaviors



Base: Total Los Angeles County residents (N=1,000)

Question: If you learned that something you were doing could contribute to litter or pollution in your neighborhood, how willing would you be to change your behavior?

Definite Willingness To Change Neighborhood Pollution-Causing Behaviors



Base: Total Los Angeles County residents (see base sizes above)

Question: If you learned that something you were doing could contribute to pollution of the ocean, rivers and lakes/litter or pollution in your neighborhood, how willing would you be to change your behavior?

Question: Which of the following would you be willing to do if you learned that there was a good reason for doing so?	Yes		
	1997	2001	2004
Polluting Actions Would Change			
Dispose of cigarette butts in an ash tray or trash can, rather than on the ground ^{**}	100%	100%	97%
Carry all of your trash and papers to a trash can and dispose of them there ^{***}	100%	100%	100%
Pick up your dog's droppings every time you walk your dog ^{**}	99%	98%	99%
Participate in a community clean-up program	N/A	77%	73%
Participate in a beach clean-up	N/A	75%	65%
Prevent water from running off your lawn, garden or plants into the street [†]	98%	100%	100%
Sweep leaves, dirt and debris from the gutters in front of your house or apartment	97%	94%	93%
Cut down on the amount of fertilizer you use ^{††}	98%	96%	95%
Stop using fertilizer ^{††}	90%	79%	79%
Cut down on using pesticides outdoors ^{††}	99%	98%	97%
Stop using pesticides outdoors ^{††}	100%	100%	100%
Patronize only those fast-food restaurants with litter reduction programs	N/A	76%	74%
Pay up to \$5.00 a month more on your water bill to improve water quality	N/A	71%	63%
Base: Total Los Angeles County residents to whom the activity applies	(500)	(543)	(430)

*Caution: Small base

**Have a dog (N=177/161/141)

†Let water run into street in the past month (N=235/65/52)

††Have a garden (N=274/285/266)

††Dropped cigarette butt in past month (N=71/53/34*)

†††Littered in past month (N=40*/28*/17*)

Question: Which of the following would you be willing to do if you learned that there was a good reason for doing so?	Yes		
	1997	2001	2004
Polluting Actions Would Change			
Dispose of cigarette butts in an ash tray or trash can, rather than on the ground ⁺⁺	92%	96%	88%
Carry all of your trash and papers to a trash can and dispose of them there ⁺⁺⁺	91%	100%	88%
Pick up your dog's droppings every time you walk your dog**	83%	94%	96%
Participate in a community clean-up program	N/A	58%	58%
Participate in a beach clean-up	N/A	43%	47%
Prevent water from running off your lawn, garden or plants into the street [†]	73%	54%	63%
Sweep leaves, dirt and debris from the gutters in front of your house or apartment	89%	87%	83%
Cut down on the amount of fertilizer you use ⁺⁺	87%	65%	52%
Stop using fertilizer ⁺⁺	23%	22%	15%
Cut down on using pesticides outdoors ⁺⁺	87%	66%	58%
Stop using pesticides outdoors ⁺⁺	68%	27%	11%
Patronize only those fast-food restaurants with litter reduction programs	N/A	50%	47%
Pay up to \$5.00 a month more on your water bill to improve water quality	N/A	36%	42%
Base: Total Los Angeles County residents to whom the activity applies	(122)	(135)	(230)

*Caution: Small base

**Have a dog (N=47*/47*/75)

[†]Let water run into street in the past month (N=73/24*/53)

⁺⁺Have a garden (N=79/85/147)

⁺⁺Dropped cigarette butt in past month (N=25*/24*/18*)

⁺⁺⁺Littered in past month (N=23*/3*/8*)

Question: Which of the following would you be willing to do if you learned that there was a good reason for doing so?	Yes		
	1997	2001	2004
Polluting Actions Would Change			
Dispose of cigarette butts in an ash tray or trash can, rather than on the ground ⁺⁺	96%	89%	42%
Carry all of your trash and papers to a trash can and dispose of them there ⁺⁺⁺	93%	96%	93%
Pick up your dog's droppings every time you walk your dog ^{**}	92%	92%	72%
Participate in a community clean-up program	N/A	66%	53%
Participate in a beach clean-up	N/A	71%	59%
Prevent water from running off your lawn, garden or plants into the street [†]	76%	74%	68%
Sweep leaves, dirt and debris from the gutters in front of your house or apartment	81%	87%	82%
Cut down on the amount of fertilizer you use ⁺⁺	100%	91%	90%
Stop using fertilizer ⁺⁺	81%	73%	68%
Cut down on using pesticides outdoors ⁺⁺	95%	94%	86%
Stop using pesticides outdoors ⁺⁺	95%	79%	69%
Patronize only those fast-food restaurants with litter reduction programs	N/A	61%	52%
Pay up to \$5.00 a month more on your water bill to improve water quality	N/A	62%	58%
Base: Total Los Angeles County residents to whom the activity applies	(84)	(112)	(82)

*Caution: Small base

**Have a dog (N=36*/36*/31*)

†Let water run into street in the past month (N=42*/23*/23*)

††Have a garden (N=43*/47*/49*)

††Dropped cigarette butt in past month (N=28*/28*/24*)

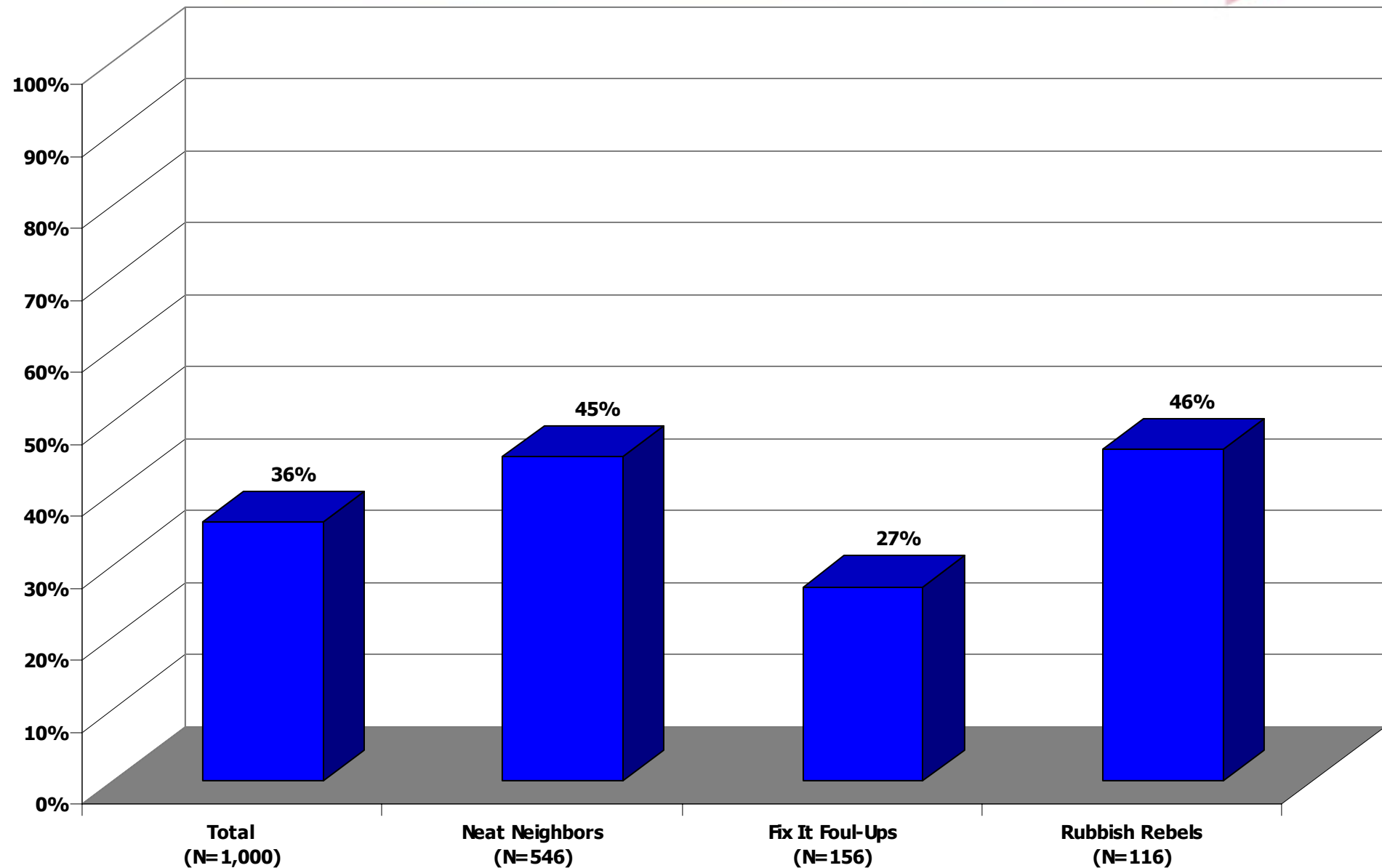
†††Littered in past month (N=81/81/57)

Behaviors Related to Water Pollution

- Among County residents overall, Erase the Waste appears to have encouraged a reduction in most of the polluting behaviors specifically targeted by the campaign.
 - About one-third of County residents claim to have changed their polluting/littering behavior in the past year, with nearly half of Neat Neighbors and Rubbish Rebels claiming improvements.
 - Individual littering behaviors targeted in the ads all show a general pattern of decline, suggesting that residents have taken these messages very much to heart.
 - Dropping of cigarette butts has also declined, with campaign messages acting in concert with an overall decline in smoking among County residents.
- Failing to clean up dog waste appears has held steady since 2001, suggesting that the current ads targeting this behavior reinforced previous gains but did not produce additional behavior change.
- In contrast to behaviors targeted in the campaign, lawn and garden maintenance activities that were not a focus of the messages appear to be on the rise among County residents.
 - This change may be due to both the lack of messages focusing on these particular behaviors as well as fading memories of past droughts and their drought-associated water conservation/pollution efforts.
 - Future reduction in storm water pollution caused by these activities could potentially be achieved by utilizing the successful approach (targeting of messages to particular groups, focusing on specific behavioral change, tying the consequences of polluting activities to target group concerns) taken with the littering messages.

- Neat Neighbors have generally maintained their relatively low levels of polluting and litter generating behavior, although the size of this group means they are still a significant source of storm water pollution volume.
 - The greatest improvement in pollution/littering reduction among this group comes in their long term trend toward dropping fewer cigarettes butts on the ground, a change that may reflect both the impact of campaign messages and lower levels of cigarette smoking within this group.
 - An important exception to Neat Neighbors' generally low polluting/littering behavior is an apparent gradual increase in spraying the lawn or garden with pesticides, although they are still less likely to engage in this behavior than other target groups.
- Fix It Foul-Ups have sustained most of the reductions in polluting behavior they showed in the 2001 survey, although they still pollute at rates well above those of Neat Neighbors.
- While improved in terms of some of their littering behaviors, Rubbish Rebels remain a difficult audience to impact and have rates of pollution-causing behavior far in excess of the general population.

Changed Any Pollution Behaviors in the Past Year



Base: Total Los Angeles County residents (see base sizes above)

Question: In the past year, have you changed any of your habits related to reducing any of the following? Evaluation and Next Steps: 2004 Storm Water Resident Population Survey

Prevalence of Polluting/Potentially Polluting Behaviors

Question: Which of these things have you personally done in the past month?	Neat Neighbors			Fix It Foul-Ups			Rubbish Rebels		
	1997	2001	2004	1997	2001	2004	1997	2001	2004
<u>Polluting Behaviors in the Past Month</u>									
Drop a cigarette butt on the ground	14%	10%	8%	20%	15%	8%↓	33%	26%	29%
Drop litter on the ground or out a car window	6%	5%	4%	13%	2%	4%	61%	71%	70%
Allow paper or trash to blow into the street	2%	4%	3%	4%	4%	2%	79%	72%	67%
Throw something in the gutter or down a storm drain	1%	3%	1%↓	2%	2%	1%	38%	16%	17%
Empty the car ashtray into the street	1%	0%	0%	3%	1%	1%	12%	3%	6%
Throw fast food wrappers in the street or gutters	N/A	N/A	2%	N/A	N/A	2%	N/A	N/A	26%
Walk a dog without picking up the droppings	2%	2%	1%	4%	3%	4%	24%	5%	13%↑
Water the lawn or garden and let the water run into the street	9%	12%	12%	23%	15%	23%↑	39%	20%	28%
Hose leaves or dirt off a driveway or sidewalk into the street	9%	12%	10%	24%	18%	21%	26%	21%	23%
Wash off paint brushes under an outdoor faucet	5%	4%	7%↑	11%	6%	6%	15%	4%	16%↑
Spray the garden or lawn with pesticides	3%	5%	9%↑	17%	19%	18%	4%	4%	13%↑
Use too much manure or fertilizer	1%	1%	1%	3%	2%	1%	4%	1%	5%↑
Base: Total Los Angeles County residents	(503)	(546)	(430)	(127)	(156)	(230)	(85)	(116)	(82)

Note: A **decrease** in the behavior (indicated by a ↓) is a **positive** change.

Individual Pollution Volumetrics Rate

Pollution-Causing Behaviors	Number of Occurrences Per Month Per 100,000 Population*											
	All Residents			Neat Neighbors			Fix It Foul-Ups			Rubbish Rebels		
	1997	2001	2004	1997	2001	2004	1997	2001	2004	1997	2001	2004
Drop a cigarette butt on the ground	15,600	13,100	10,000	14,000	10,000	8,000	20,000	15,000	8,000	33,000	26,000	29,000
Drop litter on the ground or out a car window	12,700	12,000	9,000	6,000	5,000	4,000	13,000	2,000	4,000	61,000	71,000	70,000
Allow paper or trash to blow into the street	9,900	11,500	7,800	2,000	4,000	3,000	4,000	4,000	2,000	79,000	72,000	67,000
Throw something in the gutter or down a storm drain	5,100	4,000	2,800	1,000	3,000	1,000	2,000	2,000	1,000	38,000	16,000	17,000
Empty a car ashtray into the street	2,500	600	1,200	1,000	<100	<100	3,000	1,000	1,000	12,000	3,000	6,000
Throw fast food wrappers in the street or gutter	N/A	N/A	4,000	N/A	N/A	2,000	N/A	N/A	2,000	N/A	N/A	26,000

*All estimates assume one occurrence per month.

Household Pollution Volumetrics Rate

Pollution-Causing Behaviors	Number of Occurrences Per Month Per 100,000 Population*											
	All Residents			Neat Neighbors			Fix It Foul-Ups			Rubbish Rebels		
	1997	2001	2004	1997	2001	2004	1997	2001	2004	1997	2001	2004
Water the lawn or garden and let the water run into the street	13,000	12,800	15,500	9,000	12,000	12,000	23,000	15,000	23,000	39,000	20,000	28,000
Hose leaves or dirt off a driveway or sidewalk into the street	12,200	13,700	31,100	9,000	12,000	10,000	24,000	18,000	21,000	26,000	21,000	23,000
Wash off paint brushes under an outdoor faucet	6,300	4,400	6,700	5,000	4,000	7,000	11,000	6,000	6,000	15,000	4,000	16,000
Spray the garden or lawn with pesticide	5,100	6,900	10,400	3,000	5,000	9,000	17,000	19,000	18,000	4,000	4,000	13,000
Walk a dog without picking up the droppings	4,200	2,700	2,800	2,000	2,000	1,000	4,000	3,000	4,000	24,000	5,000	13,000
Use too much manure or fertilizer	1,300	1,200	1,600	1,000	1,000	1,000	3,000	2,000	1,000	4,000	1,000	5,000

*All estimates assume one occurrence per month.

	All Residents	Neat Neighbors	Fix It Foul-Ups	Rubbish Rebels
<u>Individual Pollution-Causing Behaviors*</u>				
Drop a cigarette butt on the ground	743,150	255,144	136,740	176,721
Drop litter on the ground or out a car window	668,835	127,820	68,370	426,568
Allow paper or trash to blow into the street	579,657	95,865	34,185	408,287
Throw something in the gutter or down a storm drain	208,082	31,955	17,092	103,595
Empty a car ashtray into the street	89,178	<4,000	17,092	36,563
Throw fast food wrappers in the street or gutters	297,260	63,910	34,185	158,440
<u>Household Pollution-Causing Behaviors**</u>				
Water the lawn or garden and let the water run into the street	485,730	161,701	165,775	71,951
Hose leaves or dirt off a driveway or sidewalk into the street	410,520	134,751	151,360	59,103
Wash off paint brushes under an outdoor faucet	209,961	94,326	43,246	41,115
Spray the garden or lawn with pesticide	325,909	121,276	124,737	33,406
Walk a dog without picking up the droppings	87,745	13,475	28,830	33,406
Use too much manure or fertilizer	50,140	13,475	7,208	12,849

Note: All estimates assume one occurrence per month.

*Based on 7,431,500 individuals age 16 or older in Los Angeles County.

**Based on 3,133,744 households in Los Angeles County. All estimates assume one occurrence per month.

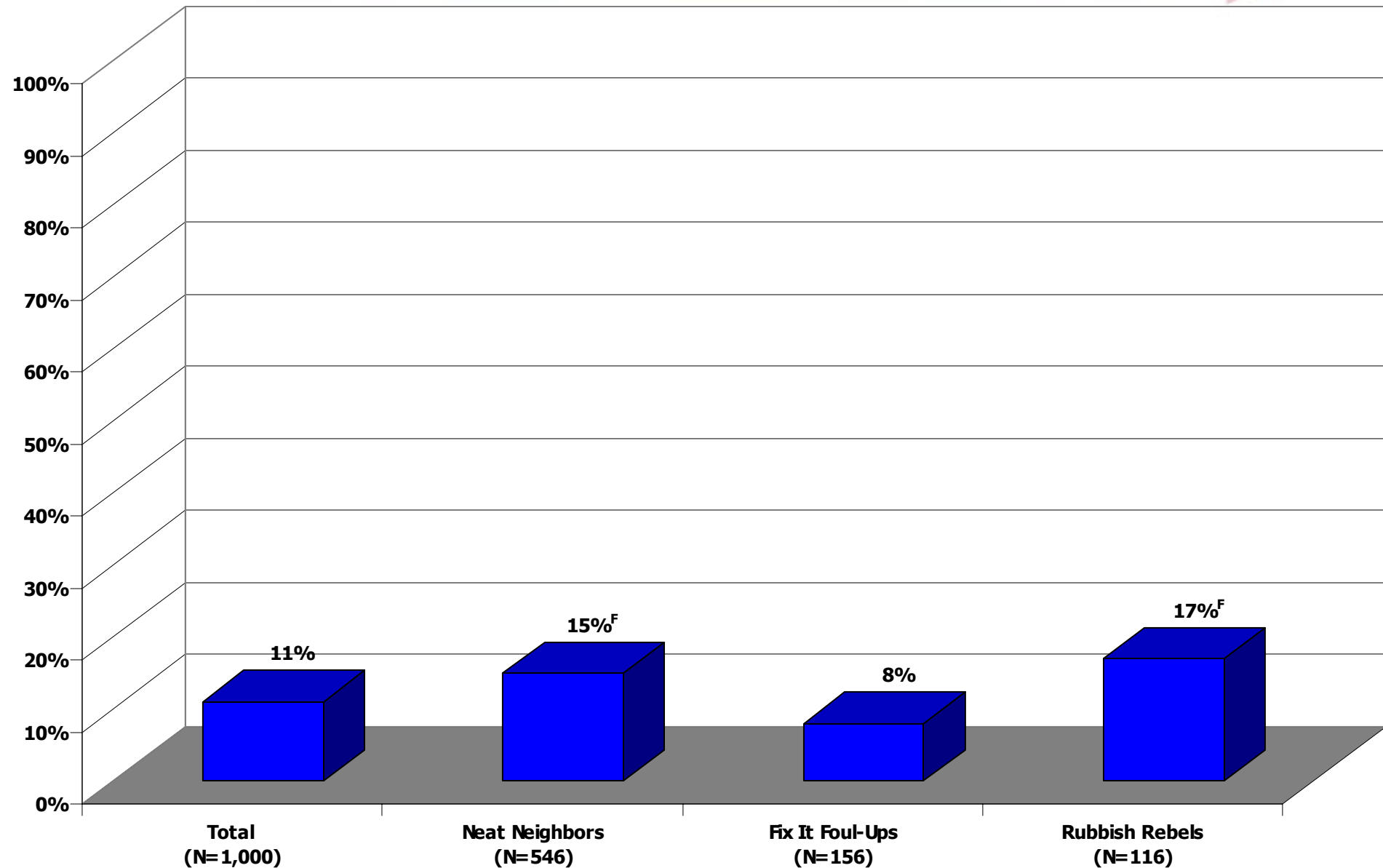
Lifestyle Characteristics

- The campaign messages using the beach as a setting are attuned to Los Angeles County residents most of whom engage in some sort of beach or water sports-related recreational activity at least once per year.
 - Rubbish Rebels are especially likely to make beach and water-sports activities part of their leisure time activities, suggesting they may be especially interested in messages targeting pollution/littering issues that involve these water-oriented sites.
 - About one-tenth of residents have been personally impacted by a beach closure, with the number being slightly higher for the beach-oriented Rubbish Rebels and Neat Neighbors.
- More than half of residents have taken children to parks or playgrounds in the past year, indicating the potential relevance of anti-pollution/littering messages involving children and these public spaces.
- About one-third of County households have a dog, supporting the continued relevance of the campaign's messages about responsible clean-up of dog droppings.
- The nationwide decline in cigarette smoking is reflected in the behavior of County residents, with only 13% percent now saying they smoke.
 - Rubbish Rebels, however, do not appear to be participating in the reduction in smoking, indicating the continued importance of cigarette disposal messages targeting this group.
- Internet access is widespread (80%) among County residents and is even higher among Fix It Foul-ups and Rubbish Rebels, offering the possibility for increased impact of this medium in future campaigns.

Beach/Water Activities - Past Year Participation

Question: Which, if any, of the following things have you done in Southern California in the past year?	Neat Neighbors			Fix It Foul-Ups			Rubbish Rebels		
	1997	2001	2004	1997	2001	2004	1997	2001	2004
Beach Activities (Net)	65%	69%	63%↓	76%	55%	65%↑	76%	76%	82%
Walking or jogging on the beach	55%	58%	51%↓	61%	45%	50%	66%	69%	67%
Dining or shopping on a pier	42%	43%	40%	46%	42%	42%	47%	57%	50%
Walking, jogging, rollerblading, skating or cycling on a pier	36%	37%	29%↓	40%	37%	32%	47%	53%	44%
Water Sports (Net)	48%	49%	46%	57%	43%	46%	71%	58%	66%
Swimming in the ocean, rivers or lakes	33%	36%	35%	42%	25%	32%	54%	49%	56%
Fishing	20%	22%	16%↓	33%	19%	15%	29%	26%	20%
Boating or sailing	19%	16%	15%	20%	21%	21%	28%	20%	23%
Jet skiing	7%	6%	5%	12%	6%	7%	8%	12%	17%
Surfing	6%	5%	8%↑	5%	6%	7%	14%	12%	17%
Waterskiing	6%	4%	4%	7%	4%	5%	6%	7%	6%
Snorkeling/scuba diving	N/A	3%	4%	N/A	6%	5%	N/A	1%	6%↑
Taking kids to parks/playgrounds	N/A	N/A	57%	N/A	N/A	55%	N/A	N/A	59%
Base: Total Los Angeles County residents	(503)	(546)	(430)	(127)	(156)	(230)	(85)	(116)	(82)

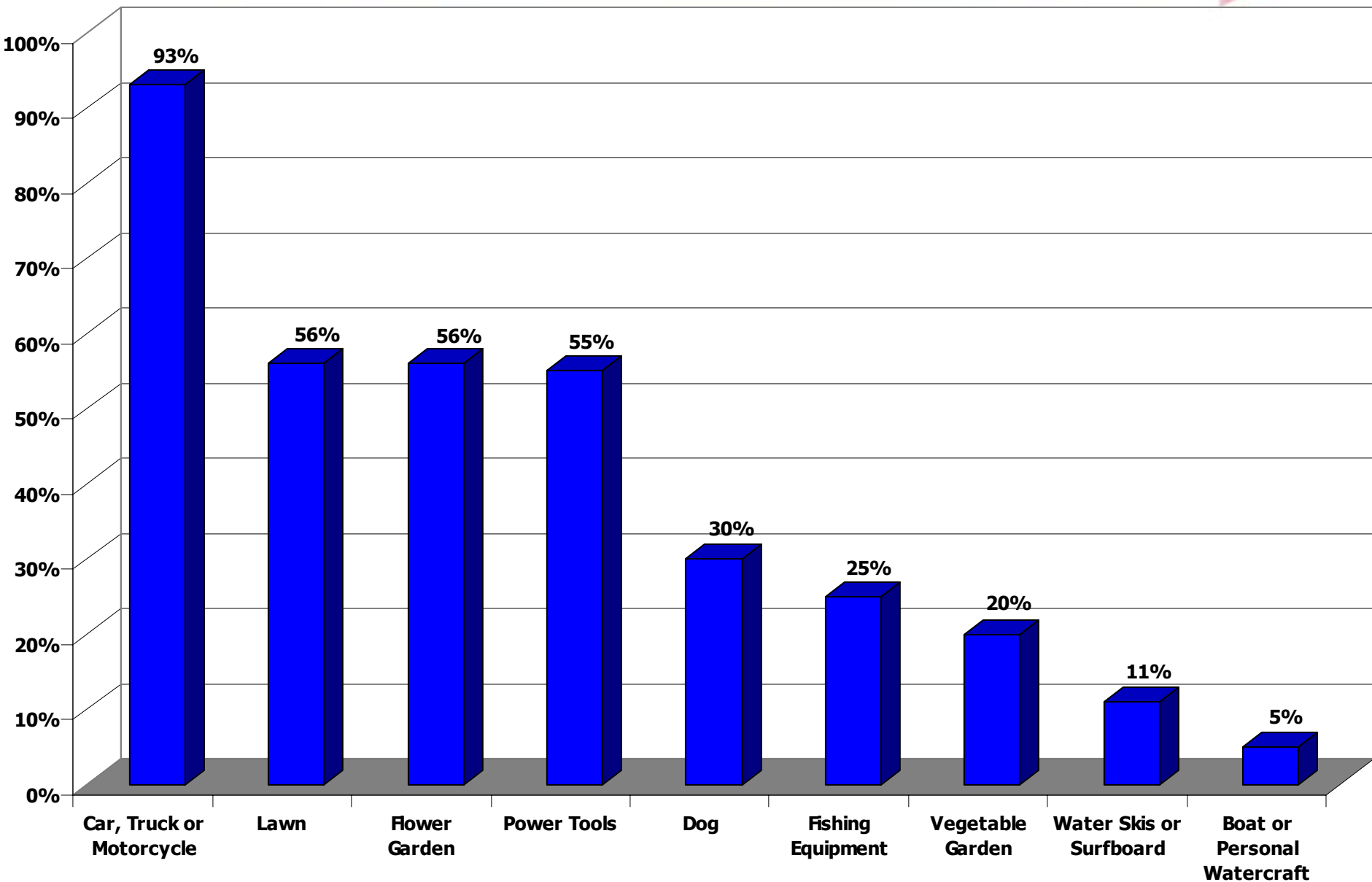
Beach Closures - Have Been Impacted in Past Year



Base: Total Los Angeles County residents (see base sizes above)

Question: Would you say that in the past year you have or have not been personally impacted by beach closures?

Incidence of Potential Pollutant Ownership



Base: Total Los Angeles County residents (N=1,000)

Question: Which of the following do you, or does someone in your household, have?

Question: Do you have access to the Internet?	All Residents	Neat Neighbors	Fix It Foul-Ups	Rubbish Rebels
Have Internet Access (Net)	80%	80%	86% ^N	93% ^{NF}
At home	64%	63%	73% ^N	67%
At work	44%	44%	48%	46%
At school	21%	20%	21%	46% ^{NF}
Somewhere else	37%	34%	40%	63% ^{NF}
Do not have Internet access	20%	20% ^{RF}	14% ^R	7%
Base: Total Los Angeles County residents	(1,000)	(430)	(230)	(82)

Internet Access

	2004 Total	Gender		Age Groups					Ethnicity			
		Male	Female	16-24	25-34	35-44	45-54	55+	White	Hispanic	Black	Asian
Have Internet Access (Net)	80%	84%↑	77%	87%	81%	83%	85%	72%↓	89%	71%↓	85%	90%
At home	64%	68%↑	61%	61%	64%	68%	71%	59%↓	79%	48%↓	59%↓	81%
At work	44%	49%↑	38%	35%↓	53%	56%	53%	29%↓	53%	32%↓	47%	54%
Somewhere else	37%	39%	35%	54%↑	42%↑	31%	31%	31%	38%	35%	43%	53%↑
At school	21%	18%	24%↑	62%↑	20%	14%	15%	7%↓	14%↓	26%	24%	32%
Do not have Internet access	20%	16%	23%	13%	19%	17%	15%	28%↑	11%	29%↑	15%	10%
Base Total Los Angeles County residents	(1,000)	(486)	(514)	(162)	(191)	(184)	(174)	(289)	(435)	(440)	(81)	(60)

Question: Do you have access to the Internet?

Cigarette Usage

Question: Do you personally smoke cigarettes?	1997	2001	2004
Yes	N/A	20%	13%↓
No	N/A	80%	87%↑
Base: Total Los Angeles County residents	(N/A)	(1,000)	(1,000)

Cigarette Usage

	2004 Total	Gender		Age Groups					Ethnicity			
		Male	Female	16-24	25-34	35-44	45-54	55+	White	His-panic	Black	Asian
Yes	13%	16%	10%↑	13%	17%↑	14%	14%	10%	14%	11%	19%	15%
No	87%	84%↑	90%	87%	83%	86%	87%	90%↑	86%	89%	82%	85%
Base: Total Los Angeles County residents	(1,000)	(486)	(514)	(162)	(191)	(184)	(174)	(289)	(435)	(440)	(81)	(60)

Question: Do you personally smoke cigarettes?

Cigarette Usage

Question: Do you personally smoke cigarettes?	Neat Neighbors			Fix It Foul-Ups			Rubbish Rebels		
	1997	2001	2004	1997	2001	2004	1997	2001	2004
Yes	N/A	18%	13%↓	N/A	22%	9%↓	N/A	24%	26%
No	N/A	82%	87%↑	N/A	78%	91%↑	N/A	76%	74%
Base: Total Los Angeles County residents	(N/A)	(546)	(430)	(N/A)	(156)	(230)	(N/A)	(116)	(82)

Demographic Characteristics

- The evaluation survey reflects the County's broad population trends toward slightly older households with a consequent small decline in the percentage of households with children.
 - Neat Neighbors and Rubbish Rebels, however, have a relatively high percentage of households with children, suggesting that child-centered messages will continue to be especially relevant to these groups.
- The County's increase in Hispanic residents is especially visible among Neat Neighbors and Rubbish Rebels suggesting that future campaigns may wish to continue to appeal to the linguistic and cultural preferences of this important population.

	1997	2001	2004
<u>Gender</u>			
Male	49%	52%	49%
Female	51%	48%	51%
<u>Age</u>			
16-18	5%	8%	7%
19-24	14%	14%	10%↓
25-34	22%	21%	19%
35-44	21%	22%	18%↓
45-54	14%	14%	17%↑
55-64	11%	9%	13%↑
65+	13%	12%	16%↑
Median (years)	38.8	38.4	43.9
<u>Education</u>			
Grade school or less	7%	5%	9%↑
Some high school	9%	15%	11%↓
High school graduate	25%	24%	21%
Trade or technical school	3%	2%	2%
Some college	28%	23%	23%
College graduate	19%	19%	24%↑
Some post graduate work	3%	3%	2%
Post graduate degree	7%	8%	10%
Base: Total Los Angeles County residents	(1,000)	(1,000)	(1,000)

	1997	2001	2004
<u>Marital Status</u>			
Married	46%	39%	48%↑
Single	34%	41%	34%↓
Divorced	10%	10%	10%
Widowed	7%	6%	6%
Separated	3%	3%	2%
<u>Number of Children Under 18 in Household</u>			
None	53%	36%	48%↑
One	17%	17%	22%↓
Two	19%	16%	18%
Three	6%	8%	9%
Four or more	4%	4%	4%
<u>Number of Household Members</u>			
One	15%	18%	18%
Two	27%	26%	27%
Three	18%	18%	19%
Four	20%	18%	18%
Five	11%	11%	11%
Six or more	8%	9%	7%↓
Median	3.0	3.0	3.0
Base: Total Los Angeles County residents	(1,000)	(1,000)	(1,000)

	1997	2001	2004
<u>Residence Type</u>			
Private home/house	64%	57%	60%
Apartment	26%	33%	29%↓
Condo/townhouse	8%	7%	8%
Other	2%	3%	3%
<u>Annual Household Income*</u>			
Less than \$40,000	59%	60%	45%↓
\$40,000 to under \$60,000	20%	19%	18%
\$60,000 to under \$80,000	11%	11%	15%↑
\$80,000 or more	10%	9%	22%↑
Median	\$38,600	\$38,700	\$45,400
<u>Employment Status</u>			
Employed full-time	50%	51%	51%
Employed part-time	15%	15%	16%
Retired	15%	13%	16%↑
Not employed	19%	21%	17%↓
Base: Total Los Angeles County residents	(1,000)	(1,000)	(1,000)

*Base: Those 19 years of age or older (N=950/920/934)

	1997	2001	2004
<u>Ethnicity</u>			
White/Anglo/Caucasian	45%	36%	45%↑
Hispanic/Latino/Spanish Origin	30%	37%	40%
Black/African American	10%	13%	8%↓
Asian/Oriental/Pacific Islander	11%	9%	6%↓
Native American/Indian	1%	1%	1%
Other	2%	1%	2%↑
<u>Length of Time Lived in Los Angeles County</u>			
6 months to less than 5 years	6%	10%	11%
5 years to less than 15 years	21%	19%	20%
15 years or longer	73%	71%	69%
Base: Total Los Angeles County residents	(1,000)	(1,000)	(1,000)

Demographic Characteristics

	Neat Neighbors			Fix It Foul-Ups			Rubbish Rebels		
	1997	2001	2004	1997	2001	2004	1997	2001	2004
<u>Gender</u>									
Male	45%	49%	46%	65%	60%	50%↓	65%	60%	56%
Female	55%	51%	54%	35%	40%	50%↑	35%	40%	44%
<u>Age</u>									
16-18	2%	8%	6%	6%	3%	5%	25%	22%	23%
19-24	12%	14%	7%↓	19%	5%	6%	32%	34%	27%
25-34	26%	25%	24%	12%	16%	13%	27%	17%	26%
35-44	21%	24%	23%	20%	19%	13%	8%	15%	12%
45-54	16%	12%	18%↑	17%	18%	24%	1%	9%	4%
55-64	9%	9%	11%	17%	15%	20%	4%	1%	5%
65+	13%	8%	11%	10%	24%	20%	4%	1%	4%
Median (years)	39.0	36.3	40.8	41.3	48.9	50.9	23.0	23.7	25.0
<u>Education</u>									
Grade school or less	6%	6%	11%↑	4%	5%	6%	4%	3%	0%↓
Some high school	10%	18%	13%↓	6%	6%	6%	21%	21%	20%
High school graduate	25%	25%	22%↓	27%	24%	19%	28%	34%	30%
Trade or technical school	3%	2%	2%	1%	3%	2%	2%	3%	0%↓
Some college	27%	21%	20%	31%	25%	24%	27%	25%	28%
College graduate	20%	16%	21%↑	17%	25%	27%	9%	12%	14%
Some post graduate work	3%	3%	1%↓	6%	2%	3%	1%	1%	4%
Post graduate degree	7%	8%	9%	7%	10%	13%	6%	3%	5%
Base: Total Los Angeles County residents	(503)	(546)	(430)	(127)	(156)	(230)	(85)	(116)	(82)

Demographic Characteristics

	Neat Neighbors			Fix It Foul-Ups			Rubbish Rebels		
	1997	2001	2004	1997	2001	2004	1997	2001	2004
<u>Marital Status</u>									
Married	50%	41%	53%↑	52%	42%	53%↑	27%	24%	31%
Single	31%	42%	31%↓	32%	35%	28%	68%	64%	57%
Divorced	10%	9%	9%	9%	9%	12%	1%	8%	6%
Widowed	6%	4%	5%	3%	10%	7%	1%	1%	4%
Separated	2%	3%	2%	4%	3%	1%	2%	3%	2%
<u>Number of Children Under 18 Years Old in Household</u>									
None	52%	41%	43%	57%	60%	53%	41%	32%	39%
One	16%	19%	21%	19%	17%	23%	15%	31%	23%
Two	19%	21%	20%	16%	14%	16%	29%	25%	24%
Three	8%	13%	11%	3%	6%	6%	7%	9%	8%
Four or more	4%	5%	5%	5%	4%	2%	7%	4%	6%
<u>Number of Household Members</u>									
One	14%	15%	15%	13%	22%	20%	2%	10%	10%
Two	28%	22%	23%	28%	33%	33%	25%	24%	16%
Three	17%	19%	22%	22%	16%	16%	18%	17%	21%
Four	19%	21%	20%	20%	13%	19%	28%	22%	21%
Five	13%	12%	13%	7%	6%	6%	16%	16%	21%
Six or more	9%	10%	8%	9%	8%	6%	11%	9%	12%
Median	3.0	3.0	3.2	3.0	2.0	2.8	4.0	3.0	3.6
Base: Total Los Angeles County residents	(503)	(546)	(430)	(127)	(156)	(230)	(85)	(116)	(82)

Demographic Characteristics

	Neat Neighbors			Fix It Foul-Ups			Rubbish Rebels		
	1997	2001	2004	1997	2001	2004	1997	2001	2004
<u>Annual Household Income</u>									
Less than \$40,000	55%	54%	47%↓	36%	41%	32%↓	56%	57%	43%↓
\$40,000 to under \$60,000	23%	21%	21%	36%	20%	15%	16%	20%	27%
\$60,000 to under \$80,000	11%	10%	13%	14%	17%	20%	18%	15%	16%
\$80,000 or more	11%	15%	19%	14%	22%	34%↑	10%	9%	14%
Median	\$38,300	\$37,400	\$42,400	\$47,400	\$47,800	\$63,500	\$37,100	\$36,200	\$45,300
Base: Los Angeles County residents 19 years old or over	(503)	(502)	(352)	(127)	(151)	(170)	(85)	(90)	(56)
<u>Residence Type</u>									
Private home/house	67%	59%	60%	81%	71%	72%	58%	44%	61%↑
Apartment	23%	32%	29%	15%	21%	19%	35%	47%	32%↓
Condo/townhouse	8%	5%	8%↑	2%	5%	8%	6%	5%	7%
Other	1%	3%	3%	1%	3%	2%	1%	4%	0%↓
Base: Total Los Angeles County residents	(503)	(546)	(430)	(127)	(156)	(230)	(85)	(116)	(82)

Demographic Characteristics

	Neat Neighbors			Fix It Foul-Ups			Rubbish Rebels		
	1997	2001	2004	1997	2001	2004	1997	2001	2004
<u>Employment Status</u>									
Employed full-time	55%	54%	53%	54%	51%	55%	39%	47%	46%
Employed part-time	13%	14%	16%	16%	10%	11%	26%	25%	21%
Retired	15%	10%	12%	13%	22%	23%	2%	1%	6%↑
Not employed	17%	22%	18%	18%	17%	12%	32%	27%	27%
<u>Ethnicity</u>									
White/Anglo/Caucasian	46%	33%	36%	55%	49%	64%↑	28%	22%	24%
Hispanic/Latino/Spanish origin	32%	44%	49%	24%	21%	25%	45%	49%	48%
Black/African American	9%	12%	8%↓	3%	13%	8%	14%	16%	17%
Asian/Oriental/Pacific Islander	9%	9%	8%	13%	10%	4%↓	13%	10%	9%
Native American/Indian	1%	1%	1%	0%	1%	1%	0%	1%	2%
Other	2%	0%	1%↑	4%	3%	1%	0%	3%	1%
<u>Length of Time as a Resident of Los Angeles County</u>									
6 months to less than 5 years	5%	11%	12%	9%	6%	8%	6%	10%	11%
5 years to less than 15 years	21%	21%	24%	20%	11%	11%	19%	25%	21%
15 years or longer	74%	68%	64%	71%	83%	81%	75%	65%	68%
Median (years)	18.2	20.0	23.1	17.9	30.0	32.1	18.4	16.0	19.3
Base: Total Los Angeles County residents	(503)	(546)	(430)	(127)	(156)	(230)	(85)	(116)	(82)

Conclusions

Conclusions

- Los Angeles County residents continue to maintain a moderately high level of concern regarding pollution of oceans/rivers/beaches and their neighborhoods. The “Erase the Waste” campaign appears to address these concerns with messages that residents find memorable and change-inspiring.
- The campaign connects with residents’ concerns and willingness to change their polluting behavior and, for the types of polluting behaviors specifically targeted in the campaign messages, appears to be lessening the polluting behavior of key target groups.
 - County residents have reduced some of their individual polluting behaviors such as various forms of littering and failing to clean up after their dogs, indicating that these targeted messages are having an impact.
 - Given that Countywide public education efforts on these issues were inactive for two years immediately preceding the current campaign, these gains are especially significant.
- The pattern of message awareness and behavior change between 1997, 2001 and 2004 suggests that some residents’ behavior worsened during the time that County communication efforts were less active and then improved again during the current campaign, especially in response to the broadcast television messages.
 - This pattern underlines the important role of visual broadcast media and of consistent, continual messaging in accomplishing change in polluting behavior.
- Polluting behaviors, such as lawn/garden maintenance activities, and resident groups that were not targets of campaign messages did not show improvements and, in many cases, have worsened since 2001.
 - These differences highlight the relative effectiveness of the targeted messages and suggest that expanded targeting with messages tailored to each key audience and additional behaviors could further reduce storm drain pollutant volume.

Points for Consideration

- Given both the end of the current contract in 2005 and the Board's commitment to improving water, considerable public education work remains to be done. Points to consider regarding this work include:
 - What are the future goals for SWRCB public education efforts for Los Angeles County (e.g., reductions in specific pollutants, new concerns or areas of focus)?
 - Should future campaigns focus on the same pollutants and behaviors, expand to a wider list or rotate sequentially through a longer list of pollutants and behaviors
 - Should future campaigns target the same resident groups or should the audiences for the messages be broadened?
 - What other state or local education efforts can future campaigns coordinate with in order to maximize pollution reduction impact without duplication of efforts?
 - Given limited budgets, what role should various media, especially broadcast media, play in future campaigns?
 - What additional fine-tuning of the campaign and its messages can most help achieve SWRCB's goals?

Appendix A: Questionnaire

Appendix B: “Erase the Waste” Print Advertisements



Okay, we've shown you the problem. Now here's the solution. 1: Prevent pollution before it happens to ensure your family's health. 2: Put your butts in the ashtray every time you smoke. 3: Erase the waste in your neighborhood first. That way, it can't find its way to the river or beaches, either. It's that simple, that healthy, that responsible. Want more tips? Call 1-888-CLEAN-LA today. Or visit www.erasethewaste.com. We'll fill you in.

Erase the
Waste

Brought to you by the State Water Resources Control Board



Trash isn't just a nasty habit. It's a real health threat. Because plastic bottles, fast food wrappers and cups that get tossed on the ground carry germs and bacteria that can make you sick. The answer? Put trash in trash bins. Recycle when you can. That will prevent pollution in your neighborhood before it affects your family's health—or finds its way to the river or the beach. Want more tips? Call 1-888-CLEAN-LA today. Or visit www.erasethewaste.com.

**Erase the
waste**

Brought to you by the State Water Resources Control Board



Dog poop. It's a serious health problem. Why? Because it contains disease-carrying bacteria that can make people sick. And because there are 3 million dog owners in LA. Do the math. Then do this. Pick up after your pooch. Remind your neighbors to pick up after theirs. Good manners, great health policy. Want more tips? Call 1-888-CLEAN-LA today. Or visit www.erasethewaste.com. Your dog can't help it. But you can.

Erase the
Waste