



Texas Department of Transportation

Providing safe, effective, and efficient movement of people and goods.

2009 Litter Attitudes and Behaviors Study

Presentation of Findings

March 4, 2010

Agenda

- Background
- Objectives
- Research Methodology
- Results
- Appendix

Background

- The Texas Department of Transportation (TxDOT) manages the Don't Mess with Texas campaign aimed at litter prevention public education, using agency of record EnviroMedia Social Marketing (ESM).
- To inform the campaign, periodic research, such as the Litter Attitudes and Behaviors Study as well as the Visible Litter Study are conducted.
- This deck presents the results from the 2009 Litter Attitudes and Behaviors Study.

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Research Objectives

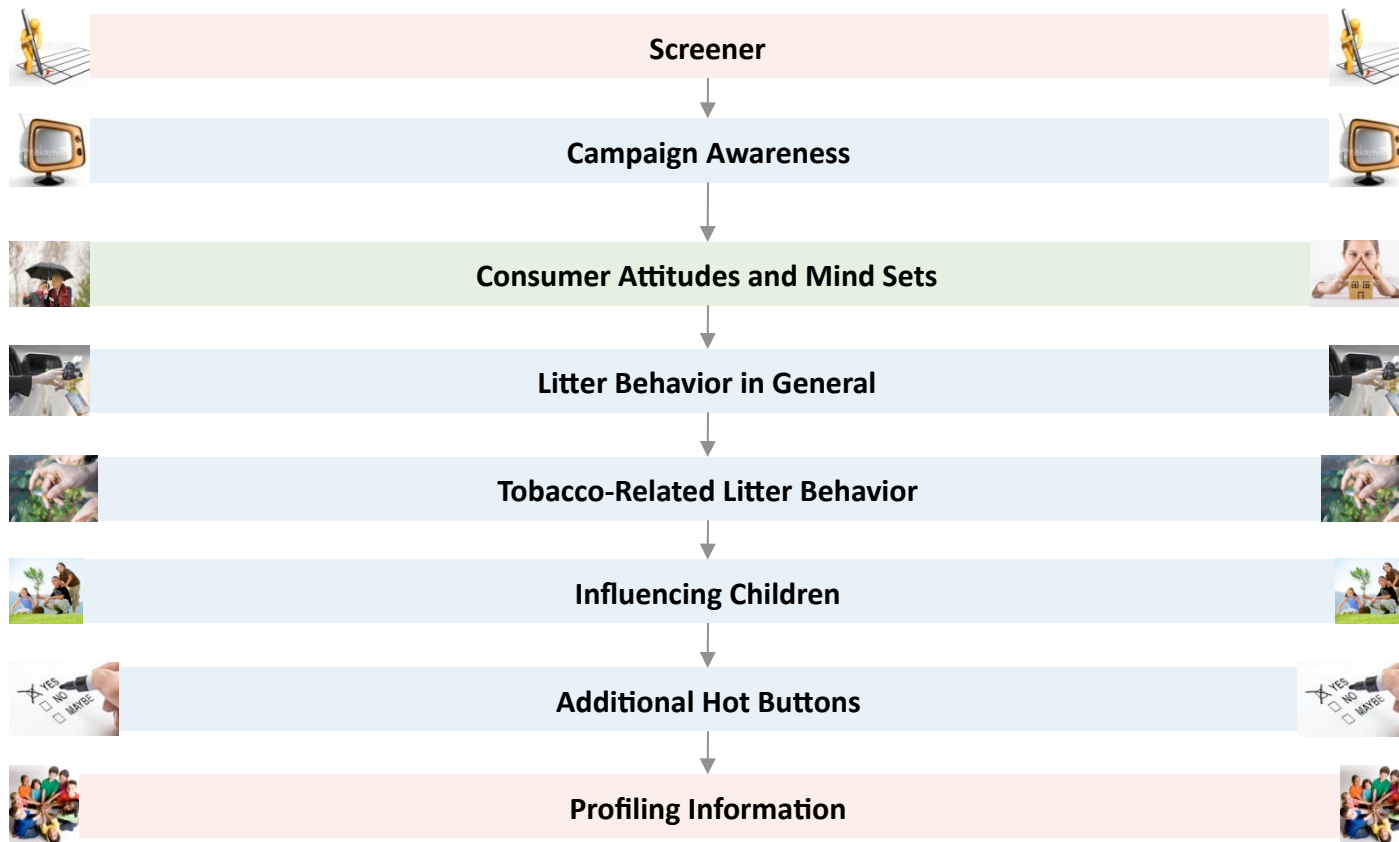
- With the overarching goal to derive insights to inform campaign strategies, this study focused on getting:
 1. A baseline read of current littering behavior, and awareness of the current litter prevention campaign.
 2. An understanding of what, if any, factors contribute to the litter problem in Texas, given that 2009 field research indicated tobacco litter is the biggest problem.
 3. Insights to create a holistic strategy for
 - a. Prevention: Influencing children from littering through adults who are best able to shape their attitudes and behaviors; and
 - b. Changing Behavior: Identifying and converting adults most likely to litter into Non-Litterers.

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Research Methodology – Survey Flow

- The 2009 Litter Attitudes & Behaviors Study was a large-scale quantitative study carried out using a structured survey.
 - While using the same questions as in the previous LA&B study on the awareness and behavior tracking measures, the survey was also revised/customized to address the overarching goals of the current LA&B Study.



Research Methodology – Research Design

■ Respondent Profile

- Resident Texans aged 16+ (driving age and above).
- Demographically representative of the State as per the Census.

■ A 'hybrid' data collection methodology with a combination of both online and telephone data collection approaches were used.

- A total of 1,255 respondents completed the survey; 74 of them completed the survey in Spanish.
- The error term (margin of error) associated with this sample size of 1,255 is +/- 2.8%.

	Online	Telephone	Total
Total Sample Size	625	630	1,255

Sample Overview

- Overall sample matches the census profile very closely.
 - Online sample skewed slightly younger; the telephone sample skewed slightly older, white and female.

Regions	Census	Sample Total	Online Sample	Telephone Sample
West Texas markets	8%	8%	8%	7%
East Texas markets	6%	6%	6%	6%
Houston	25%	25%	25%	25%
Austin/Waco/Bryan	11%	11%	11%	11%
Dallas-Ft. Worth	29%	29%	29%	30%
San Antonio/South/ El Paso	21%	21%	21%	21%

Age Groups	Census	Sample Total	Online Sample	Telephone Sample
16 – 24	19%	15%	19%	10%
25 – 34	19%	16%	19%	14%
35 – 44	18%	19%	19%	20%
45 – 54	18%	19%	19%	20%
55 – 64	13%	16%	13%	18%
65+	13%	15%	11%	18%

Ethnicity	Census	Sample Total	Online Sample	Telephone Sample
White, not Hispanic	47%	58%	54%	62%
African-American, not Hispanic	11%	10%	12%	8%
Hispanics	36%	30%	35%	26%

Gender	Census	Sample Total	Online Sample	Telephone Sample
Males	50%	47%	50%	44%
Females	50%	53%	50%	56%

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Results

- Campaign awareness
- Litter behavior
- Understanding tobacco litter
- Attitudinal segmentation of Texans

Campaign Awareness: Topics Covered

- Current awareness of communications about litter prevention was studied at the following levels:
 - Recall of 'any' litter prevention communication
 - Awareness of the main slogan used in these communication efforts
 - Recall of the Don't Mess with Texas campaign, overall and for specific ads/programs
 - Understanding of the intended messages from the Don't Mess with Texas campaign
 - Places where the campaign was seen/read/heard

What Is The Recall Of 'Any' Litter Prevention Communication?

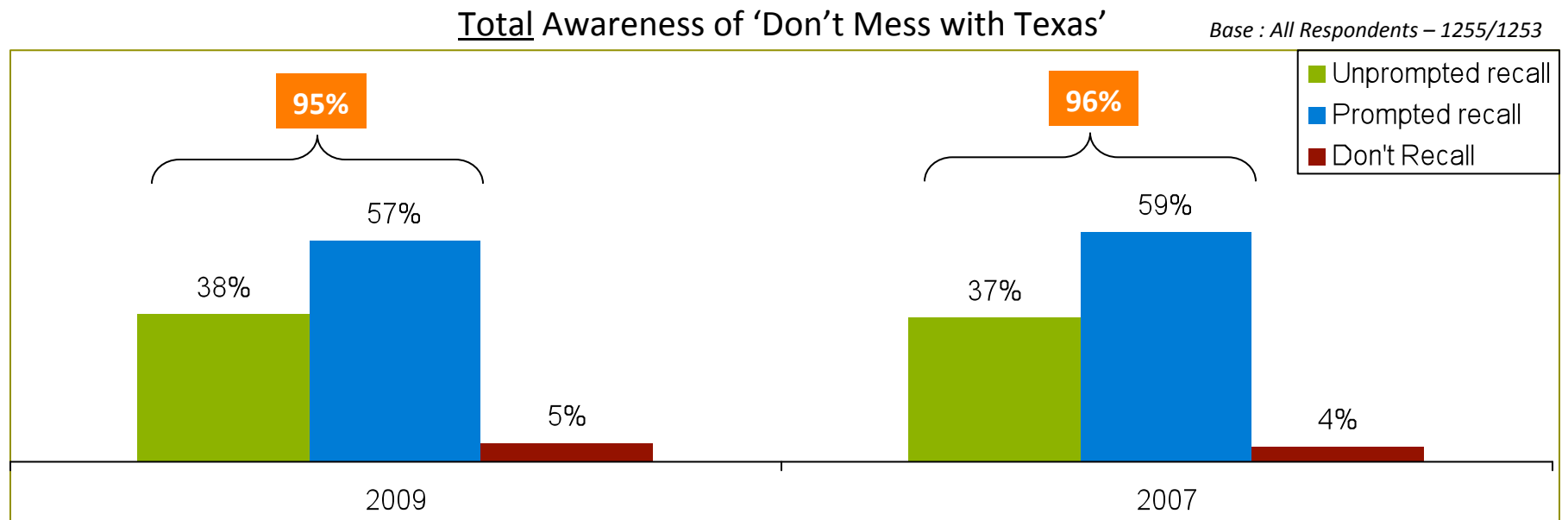
- Awareness for 'ads or public service messages related to litter or littering' is currently at 60%. This is statistically similar to the levels seen in 2007.
- No difference exists with 2007 in terms of recall of 'any' litter prevention communication in the last 3 months, as well as more than 3 months prior.



B1. In the past three months, have you seen, read, or heard any ads or public service messages related to litter or littering?
B2. Have you seen, read, or heard any ads or public service messages related to litter or littering more than three months ago?

What Is The Total Awareness For ‘Don’t Mess with Texas’?

- 95% are aware of the slogan “Don’t Mess with Texas” at a total level.
- This is similar to 2007 levels.



B3. What was the main slogan used in the ads or public service messages? Please be as detailed and specific as possible. (Open End)

B4. Have you seen, read, or heard the slogan Don't Mess with Texas?

What Does The Slogan ‘Don’t Mess with Texas’ Mean To Texans (Unprompted)? (Slide 1 of 2)

- ‘Don’t litter in Texas/Keep Texas clean’ is the key take-away from the DMWT slogan for most respondents (60%).
- 15% also talk about the ‘fines/punishments’ involved for littering, while around 11% express the message of ‘don’t ruin the environment.’

Meaning of ‘Don’t Mess with Texas’

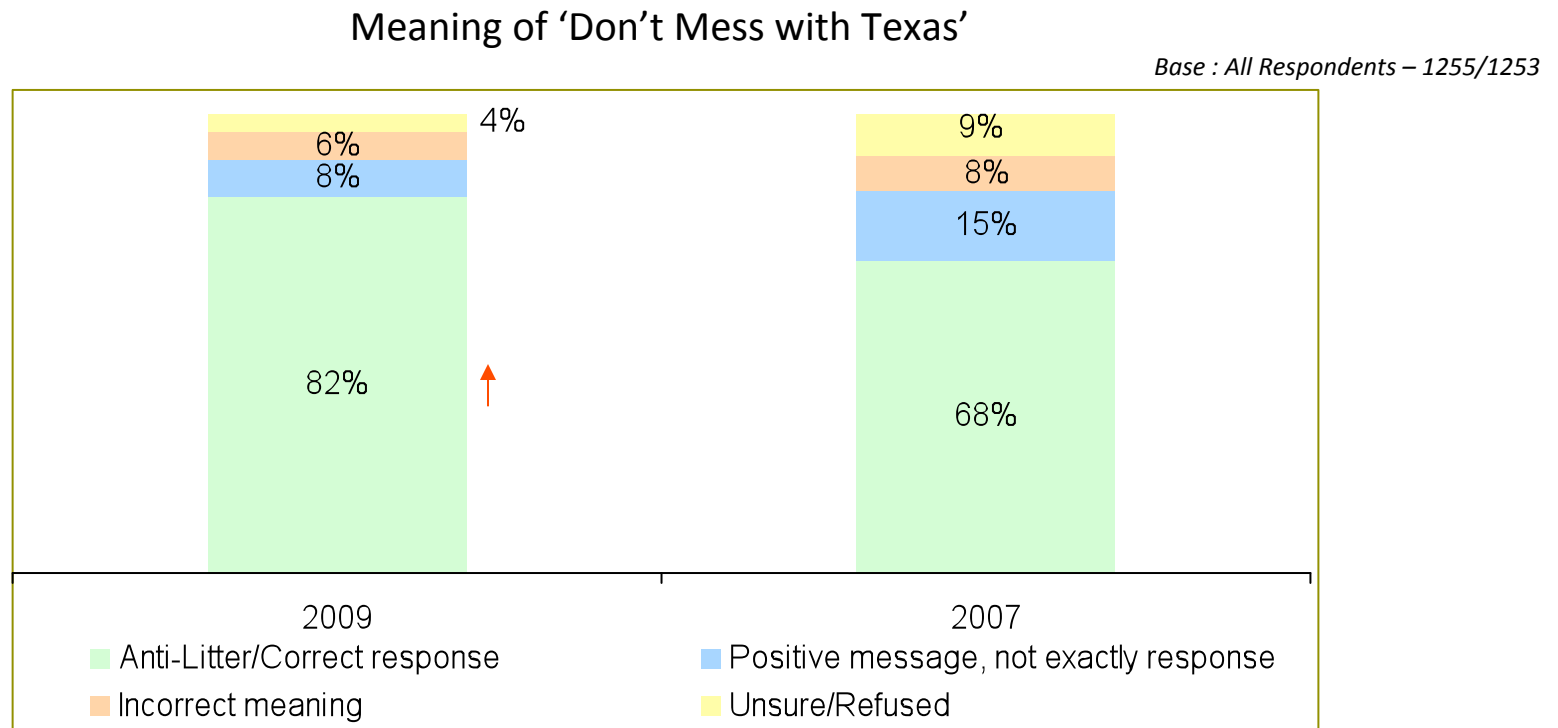
Base : All Respondents – 1255

Don't litter in Texas/Keep state clean/Keep Texas clean	60%
If you litter in Texas, you will be fined/punished	15%
Littering of any kind will destroy our state/Don't ruin our great state/Don't mess with our beautiful environment	11%
Treat Texas with respect/Dispose in a responsible manner/Respectful to our state/Take care of Texas	5%
Follow the laws of the state/Follow the laws and be a good citizen and community member/Laws are very strict/Don't commit crime	4%
Keep Texas beautiful/Keep country beautiful	3%
It's a great slogan/It's catchy/Good slogan	1%
Others	6%
None/DK/CS/Nothing	4%

B5. In your own words, what does the slogan Don't Mess with Texas mean to you? Please be as detailed and specific as possible. (Open End)

What Does The Slogan 'Don't Mess with Texas' Mean To Texans (Unprompted)? (Slide 2 of 2)

- The incidence of those recalling the correct meaning of the DMWT slogan has increased significantly to 82%, compared with 68% in 2007.



B5. In your own words, what does the slogan Don't Mess with Texas mean to you? Please be as detailed and specific as possible. (Open End)

Where Did They See/Hear/Read The DMWT Slogan? (Aided With A List Of Media Vehicles)

- When aided with a list of media channels, ‘street or highway signs,’ ‘TV ads,’ ‘billboards’ and ‘bumper stickers’ are mentioned as the most common media vehicles where people came across the DMWT slogan.
- ‘Trash cans,’ ‘radio ads,’ ‘TV news,’ ‘T-shirts’ and ‘litterbags’ form the second tier of sources where people came across the DMWT slogan.

Media channels, where seen DMWT (Aided with media list)

Base : Aware of DMWT – 1194

Street or highway signs	48%	At school	6%
TV ads	47%	On food or beverage packaging	6%
Billboards	40%	Online ads	6%
Bumper stickers	39%	Campus or school cleanup	5%
Trash cans	24%	From my kids	5%
Radio ads	20%	At the movies	5%
On the news (TV)	19%	Bus/airstream/van at events (Road Tour)	5%
T-shirts	17%	Litter Force characters	4%
Litterbags	15%	Social networking platforms	2%
In the newspaper	13%	Scholarship	1%
Other merchandise (hats, cups, etc.)	12%	Others	3%
Gas stations	11%	Not sure	3%
On the Internet	8%		

B8. In which of the following places have you seen, read, or heard the slogan Don't Mess with Texas?

Campaign Awareness: Summary (Slide 1 of 2)

- About 60% of Texans are aware of 'any' litter prevention ads, which is statistically the same as the 63% seen in 2007.
- The total awareness for 'Don't Mess with Texas' is at 95%, with 38% aware of it at an unprompted level. These levels are statistically the same as the recall levels in 2007.
- The correct recall of the meaning of DMWT has increased to 82% from the 68% it was in 2007, with a majority of Texans (60%) taking away the message 'Don't litter in Texas/Keep Texas clean.'

Campaign Awareness: Summary (Slide 2 of 2)

- Very few Texans recall specific advertisements of the DMWT campaign – most of them talk about ads at a generic level like ‘TV ads,’ ‘billboards,’ ‘signs on the side of highways’ etc.
 - Ads having ‘Texas celebrities’ is mentioned by about 4% of those aware of the campaign.
- ‘Street or highway signs,’ ‘TV ads,’ ‘billboards’ and ‘bumper stickers’ are the most common media vehicles where Texans came across the DMWT slogan.

Results

- Campaign awareness
- Litter behavior
- Understanding tobacco litter
- Attitudinal segmentation of Texans

Litter Behavior: Topics Covered

- Current litter behavior was studied at the following levels:
 - Incidence of litterers
 - Incidence of recent litterers
 - Incidence of self litterers
 - What was littered and when
 - Littering when alone vs. in a group
 - Serious vs. minor litter
 - Reasons for littering and incentives to stop littering

Criteria Used To Define Litterers, Recent Litterers & Active Litterers

- **Litterers & Recent Litterers:** Responses to the following 10 statements were used to define someone as a “Litterer.” Eight of these statements are identical to the 8 statements used in the 2007 LA&B. In 2009, the definition of “Litterer” was expanded by adding 2 more statements.
 - You noticed that some trash fell out of a car/vehicle you were driving or riding in
 - **You noticed that some trash fell out of a pickup truck you were driving or riding in (New Statement Added in 2009)**
 - Someone in a vehicle you were in threw out trash in an area that already had lots of litter
 - Someone in a vehicle you were in threw a can, bottle, or other litter out onto the side of the road
 - You had problems with a vehicle and left debris like a tire, part of a tire, or other stuff on the roadside
 - Rather than keep an alcohol container in the car you, or someone in a vehicle you were in, threw out a can or bottle
 - Rather than keep a cigarette butt in the car you, or someone in the vehicle you were in, threw the cigarette butt out the window
 - You threw out a small item, like a candy wrapper, cigarette butt, a lottery ticket, or something like that
 - You or someone you were with got a ticket or a warning for littering
 - **You have never littered intentionally, but it’s possible that you may have littered accidentally (New Statement Added in 2009)**

- **Active Litterers:** Respondents were asked a direct question, about whether they themselves had littered personally (either intentionally or accidentally) in the past month
 - Note, in 2007 LA&B, no time frame was used. A time frame of 1 month was used in 2009 to get more accurate recall for subsequent in-depth questions, which were not included in 2007.

Definitions of Litterers, Recent Litterers & Active Litterers

- A Litterer is someone who either littered personally or happened to be with somebody who littered (ever).
 - In 2007 – this was computed using 8 statements. We used the same 8 statements to compare with 2007.
 - We used all 10 statements to set baseline for future studies.

- A Recent Litterer is a Litterer, who either littered personally or happened to be with somebody who littered in the past 3 months.
 - In 2007 – this was computed using 8 statements. We used the same 8 statements to compare with 2007.
 - We used all 10 statements to set baseline for future studies.

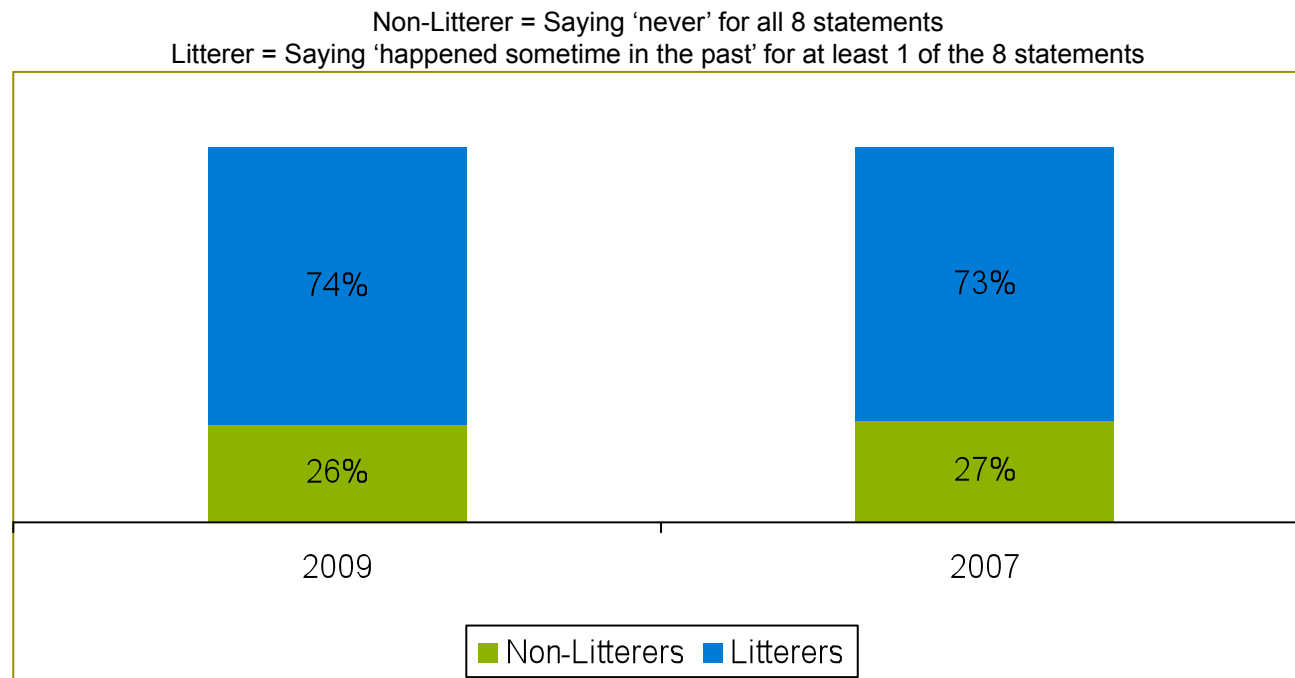
- An Active Litterer is someone who admits to have littered personally (either intentionally or accidentally) in the past month (Question used: D2 - Can you think of items that you yourself might have discarded as litter in the past month, either because you didn't think much of it, or because you thought of it as a minor item, or it was accidental?)
 - In 2007 LA&B the period (of past month) for active litterers was not defined.
 - We included time period to get richer responses in subsequent in-depth questions, which were not done in 2007.

What Is The Incidence Of Litterers vs. Non-Litterers? (Comparing 2009 vs. 2007)

- In the 2007 LA&B, incidence of Litterers was identified to be 73% using responses to 8 statements.
- Using the same 8 statements, we find the incidence of Litterers to be unchanged at 74% in 2009.

Incidence of Litterers Vs. Non-Litterers

Base : All Respondents – 1255/1253



D1. Please tell us if any of the following have happened. Our main purpose is to understand how it sometimes happens that people litter. For each of the following, tell us if it has never happened, it happened about 1 or more years ago, or between 3 and 12 months ago, or it happened in the past 3 months.

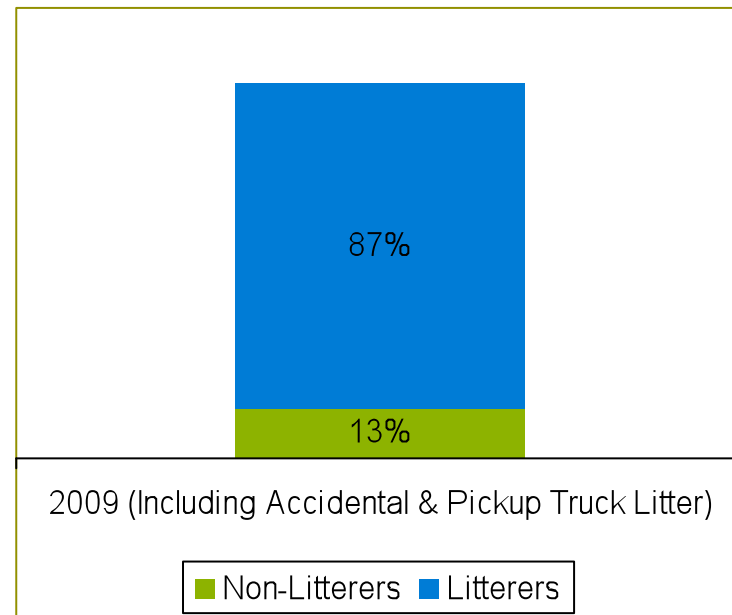
Incidence of Litterers With The Expanded Criteria (Using 10 Statements, Baseline For Future Studies)

- With the inclusion of 2 additional statements about 'pickup truck litter' and 'accidental' litter, the incidence of Litterers is now 87%.
- This expanded definition of the "Litterer," will be the baseline going forward.

Incidence of Litterers Vs. Non-Litterers

Base : All Respondents – 1255

Non-Litterer = Saying 'never' for all 10 statements
Litterer = Saying 'happened sometime in the past' for at least 1 of the 10 statements



D1. Please tell us if any of the following have happened. Our main purpose is to understand how it sometimes happens that people litter. For each of the following, tell us if it has never happened, it happened about 1 or more years ago, or between 3 and 12 months ago, or it happened in the past 3 months.

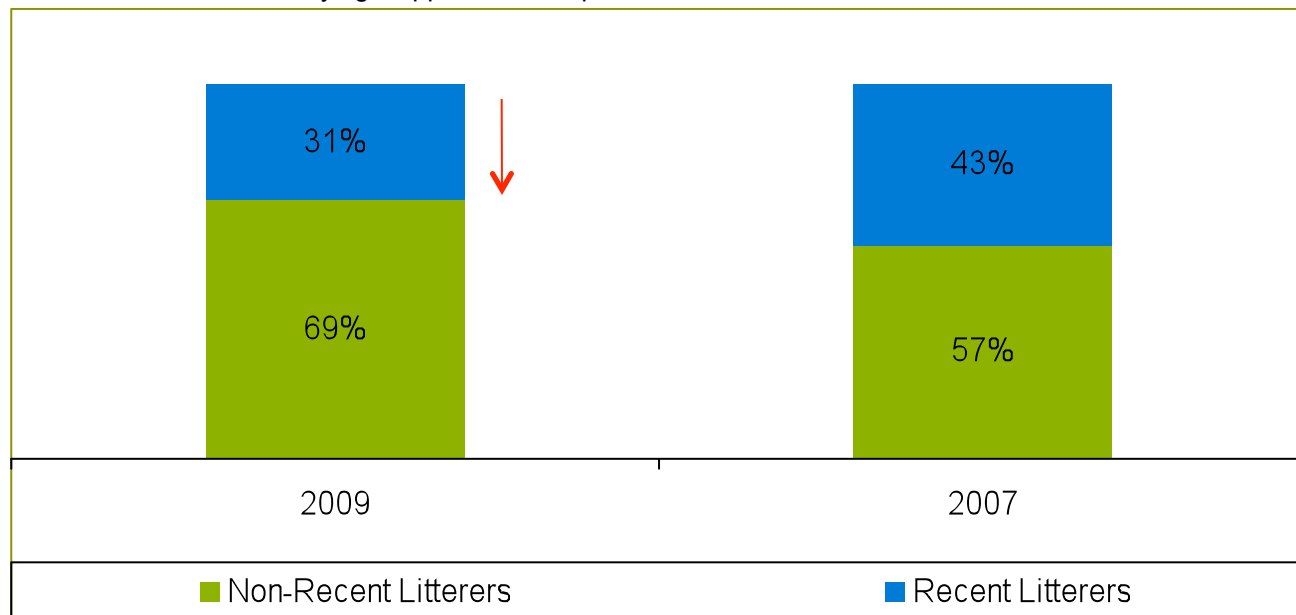
What Is The Incidence Of Recent Litterers vs. Non-Recent Litterers? (Comparing 2009 vs. 2007)

- Using the same 8 statements used in the 2007 LA&B, the incidence of Recent Litterers in 2009 has dropped to 31% from the 43% level in 2007.

Incidence of Recent Vs. Non-Recent Litterers

Base : All Litterers (using 8 causes) – 929/915

Non-Recent Litterer = NOT saying 'happened in the past 3 months' for all 8 statements
Litterer = Saying 'happened in the past 3 months' for at least 1 of the 8 statements



D1. Please tell us if any of the following have happened. Our main purpose is to understand how it sometimes happens that people litter. For each of the following, tell us if it has never happened, it happened about 1 or more years ago, or between 3 and 12 months ago, or it happened in the past 3 months.

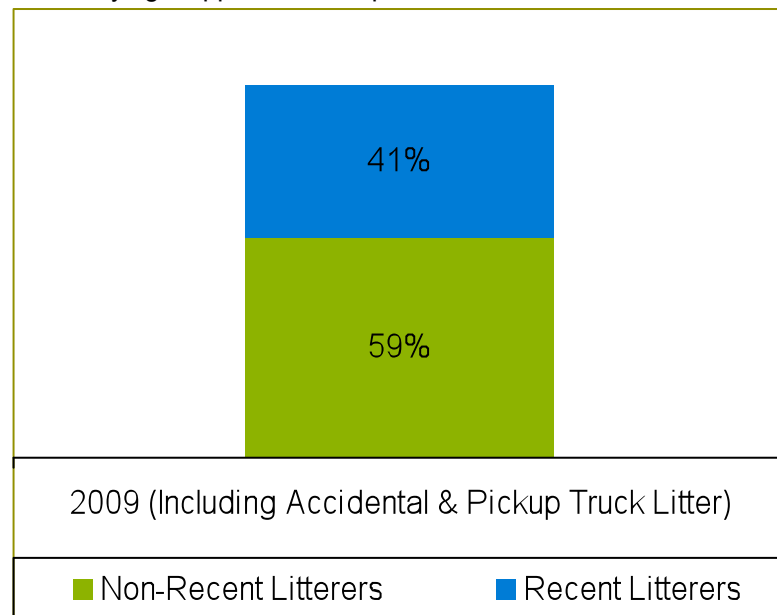
Incidence of Recent Litterers With The Expanded Criteria (Using 10 Statements, Baseline For Future Studies)

- With the inclusion of 2 additional statements about ‘pickup truck litter’ and ‘accidental litter,’ the incidence of Recent Litterers is now 41%.
- This expanded definition of the “Recent Litterer,” will be the baseline going forward.

Incidence of Recent Vs. Non-Recent Litterers

Base : All Litterers (using all 10 causes) – 1089

Non-Recent Litterers = NOT saying ‘happened in the past 3 months’ for all 10 statements
Recent Litterers = Saying ‘happened in the past 3 months’ for at least 1 of the 10 statements



D1. Please tell us if any of the following have happened. Our main purpose is to understand how it sometimes happens that people litter. For each of the following, tell us if it has never happened, it happened about 1 or more years ago, or between 3 and 12 months ago, or it happened in the past 3 months.

What Was Littered In The Past Month?

- Incidence of those littering ‘small pieces of paper’ and ‘food/organic material, raw food’ in the past month higher compared to those littering other items.

Items that were discarded personally

Base : All Respondents – 1255/1253

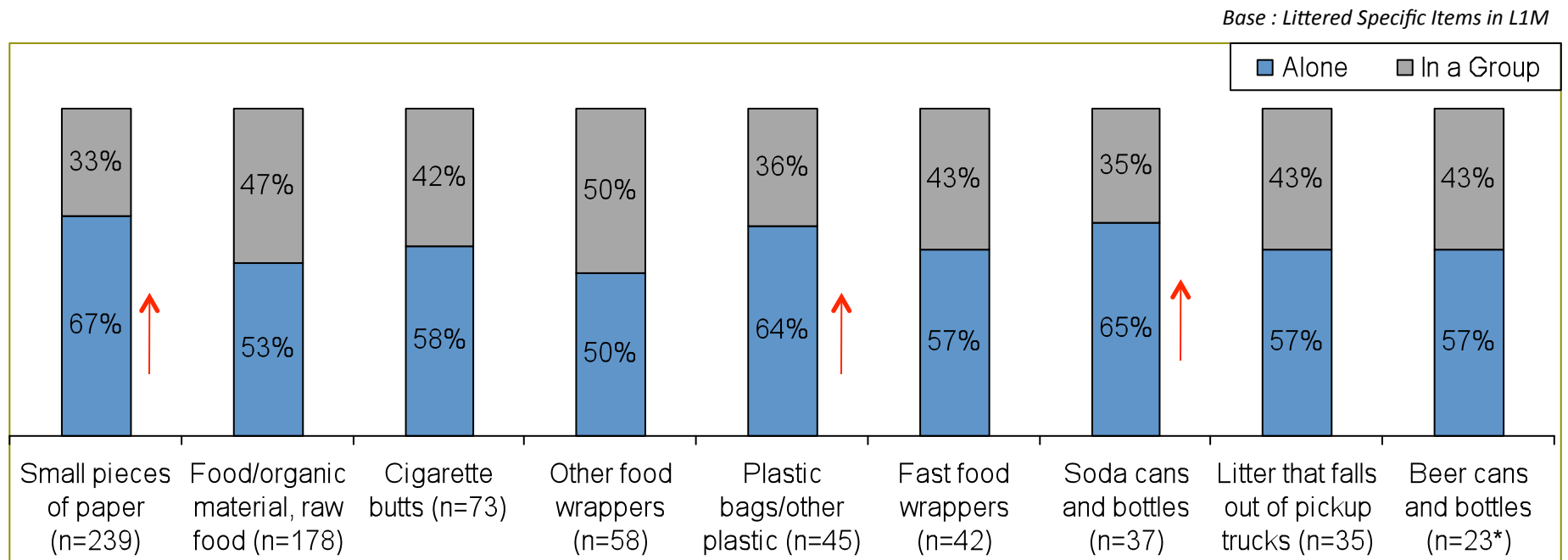
	2009 "In The Past Month"	2007 "Period Undefined"
Small pieces of paper (receipts, lottery tickets, gum wrappers)	19%	18%
Food/organic material, raw food	14%	12%
Cigarette butts	6%	10%
Other food wrappers (chip bags/candy)	5%	5%
Plastic bags/other plastic	4%	3%
Soda cans and bottles	3%	4%
Fast food wrappers	3%	2%
Litter that fell out of pickup trucks	3%	2%
Beer cans and bottles	2%	2%
Cardboard	1%	<.5%
Others	5%	8%
None of the above	58%	48%

D2. Can you think of items that you yourself might have discarded as litter in the past month, either because you didn't think much of it or because you thought of it as a minor item, or it was accidental?

Do Texans Litter Alone Or In A Group?

- Among those who litter specific items, those littering 'small pieces of paper,' 'plastic bags/ other plastic' and 'soda cans/bottles' tend to litter these items more often when they are alone, rather than when in a group.
- No significant difference on whether alone or in a group, when littering the other items.

Whether littered when alone or in a group?



D4. Were you alone or with other people in a group when this happened?

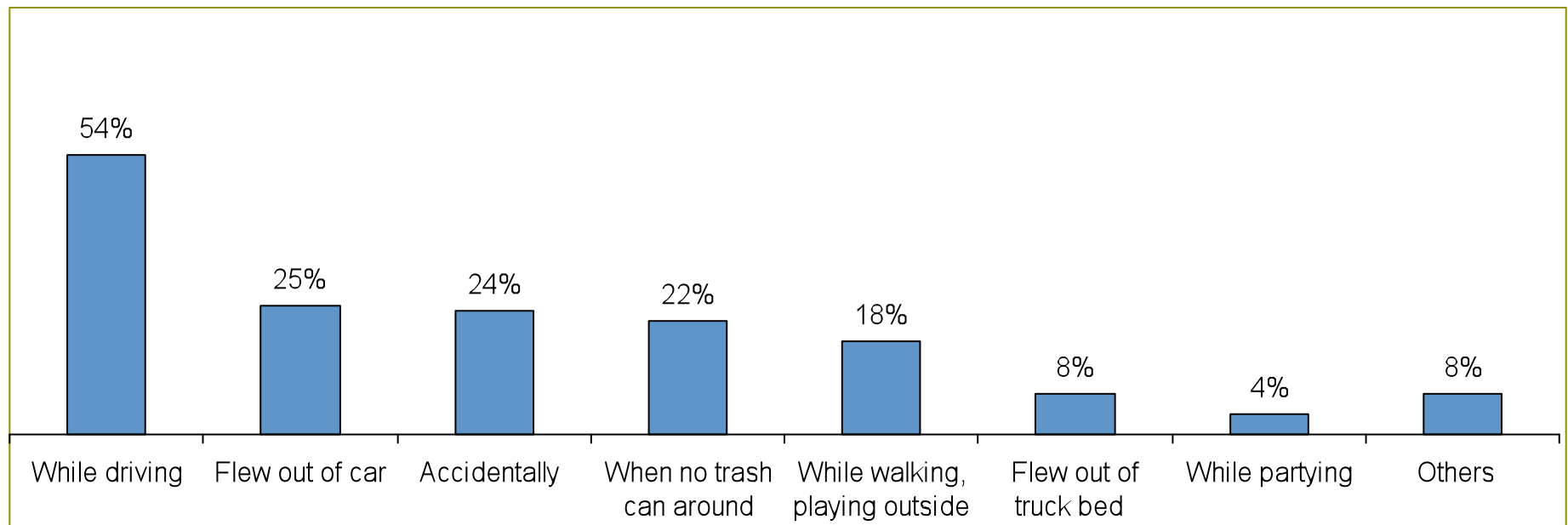
* Low Base

When Did They Litter These Items?

- Slightly over half the Active Litterers admit to have littered 'while driving.'
- One-fourth of the Active Litterers say the items 'flew out of car,' another 8% saying items 'flew out of truck bed.'
- 24% indicate that they littered 'accidentally,' while 22% say they littered 'when no trash can was around.'

Circumstances when littering happened in the past month

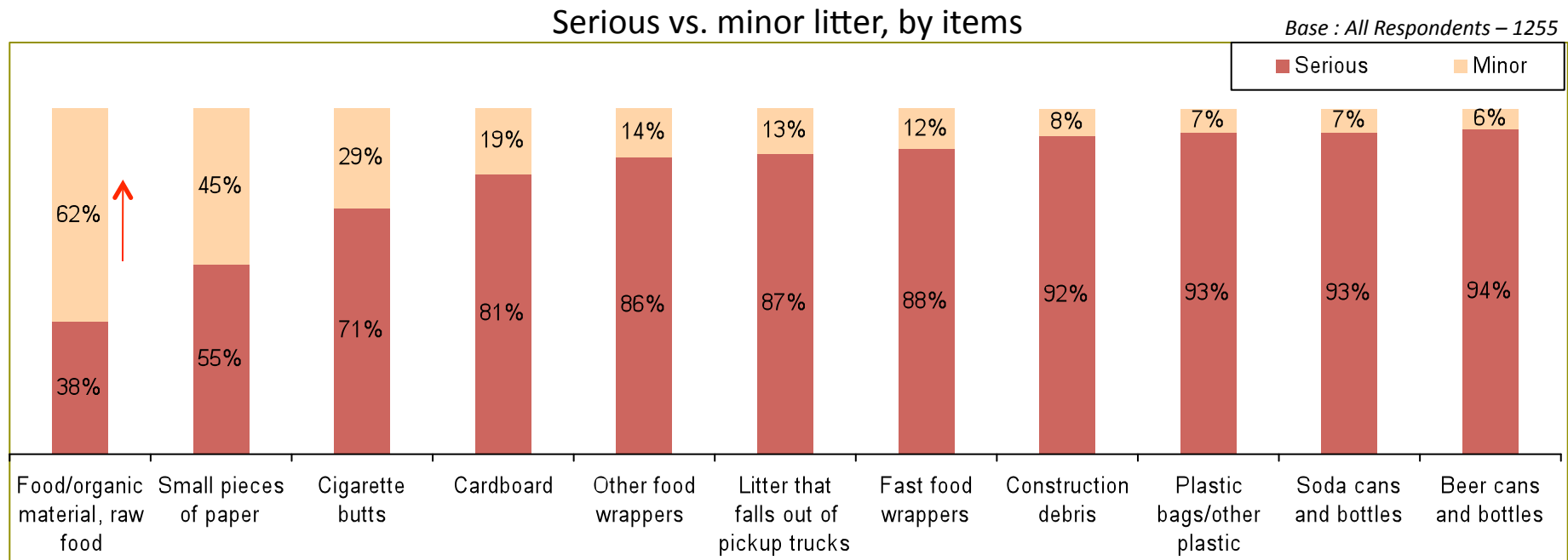
Base : Active Litterers - 526



D3. What were the circumstances when something like that happened in terms of where and what you were doing?

What Is Considered A Serious And A Minor Litter Problem?

- When asked which items were serious or minor litter problems, 62% selected ‘food/organic material’ as a minor litter item – significantly higher than those considering it to be a serious litter problem.
- A reasonably big 45% and 29% consider ‘small pieces of paper’ and ‘cigarette butts’ respectively to be minor litter problems. However, the % considering them to be serious litter is significantly higher at 55% and 71% respectively.
- All other items (incidentally those that were not littered by many in the past month) are considered to be serious litter by a large majority.



D7. Now I would like to ask you about litter in Texas. As you know, there are different opinions about what is and what is not litter, and also about what is serious and what is minor litter. Here are a few materials; state which of these do you think are a serious litter problem, and which of these do think are pretty minor? If there are others that you consider to be either serious or a minor litter problem, please indicate the same.

What Incentives Will Induce Texans To Stop Littering?

- When asked what could stop people from littering ‘fines’ and ‘strict law enforcement,’ followed by ‘more trash cans’ are cited as best avenues to control litter accumulation.
- 12% of the Active Litterers, believe that ‘none/nothing’ can incentivize to stop them from littering.

What could make people stop littering?

Base : Active Litterers – 526

The laws should be strict/There should be punishment for littering/Fines for littering	35%
There should be more trash cans/More regularly emptied trash cans	16%
Awareness/Educate/Mandatory community clean-up projects	10%
Make them feel ownership - provoke their conscience/Keep stressing personal responsibility	8%
More advertisements	3%
Others	9%
None/Nothing	12%

D6. In your own words, can you tell us what would it take to make you or other people stop littering? Please be as detailed and specific as possible. (Open End)

Litter Behavior: Summary (Slide 1 of 4)

- Nearly 70% of all Texans have littered 'accidentally' in the past, with about 30% admitting to have littered 'accidentally' in the past year.
- Using the same definition for Litterers and Recent Litterers as in the 2007 LA&B study, the incidence of Litterers stays unchanged at 74% in 2009, while the incidence of Recent Litterers had declined to 31% from 43% in 2007.
- With the inclusion of 2 additional litter causes, namely 'accidental litter' and 'pickup truck related litter' the incidence of Litterers in 2009 is at 87% and the incidence of Recent Litterers is at 41%.

Litter Behavior: Summary (Slide 2 of 4)

- 42% of all Texans admit to have littered in the past month (and were classified as Active Litterers).
 - Incidence of those littering 'small pieces of paper' and 'food/organic material, raw food' much higher as compared to other items.
 - Texans who litter 'small pieces of paper,' 'plastic bags/other plastic' and 'soda cans/bottles' tend to litter these items more often when they are alone, rather than when in a group.
 - About 20% of those who have littered in the past month claim to have done it 'accidentally at a generic level,' with another 18% mentioning 'driving-related accidental reasons.' 16% claim to have littered because they were 'lazy/careless.'
 - 'Fines,' 'stricter enforcement' and 'more trash cans' are as seen avenues to reduce litter behavior.

Litter Behavior: Summary (Slide 3 of 4)

- 42% of all Texans admit to have littered in the past month (and were classified as Active Litterers).
 - 54% of them admit to have littered ‘while driving.’ One-fourth say the items ‘flew out of car’ with another 8% saying items ‘flew out of truck bed.’
 - 24% of them indicate that they littered ‘accidentally,’ while 22% say they littered ‘when no trash can was around.’
 - The following items are littered significantly more in these situations:
 - While driving: ‘Small pieces of paper,’ ‘food/organic material’ & ‘cigarette butts’
 - Flew out of car & Accidental: ‘Small pieces of paper,’ ‘fast food & other food wrappers’ & ‘plastic bags’ (‘soda cans’ also come up for accidental)
 - When no trash can around: ‘Small pieces of paper,’ ‘food/organic material,’ ‘cigarette butts,’ ‘soda cans,’ ‘fast food & other food wrappers’
 - While walking, playing outside: ‘Small pieces of paper,’ ‘food/organic material,’ ‘soda & beer cans’
 - Partying: ‘Cigarette butts’ & ‘fast food wrappers.’

Litter Behavior: Summary (Slide 4 of 4)

- Significantly higher proportion (62%) of all Texans consider 'food/organic material' as minor litter item, than serious litter. All other items were considered as serious litter by a large majority.
 - A reasonably big group (45% and 29%) consider 'small pieces of paper' and 'cigarette butts' to be a minor litter problem respectively, though the percentage considering them to be serious litter is significantly higher at 55% and 71% respectively.
- Self Non-Litterers are more intolerant of litter, and are likely to draw the attention of people they see littering.
- Texans litter behavior is likely to change if they knew about government litter pickup costs/volumes – more than 70% of all Texans indicate that the knowledge of these things is 'very/somewhat likely' to impact their litter behavior.

Results

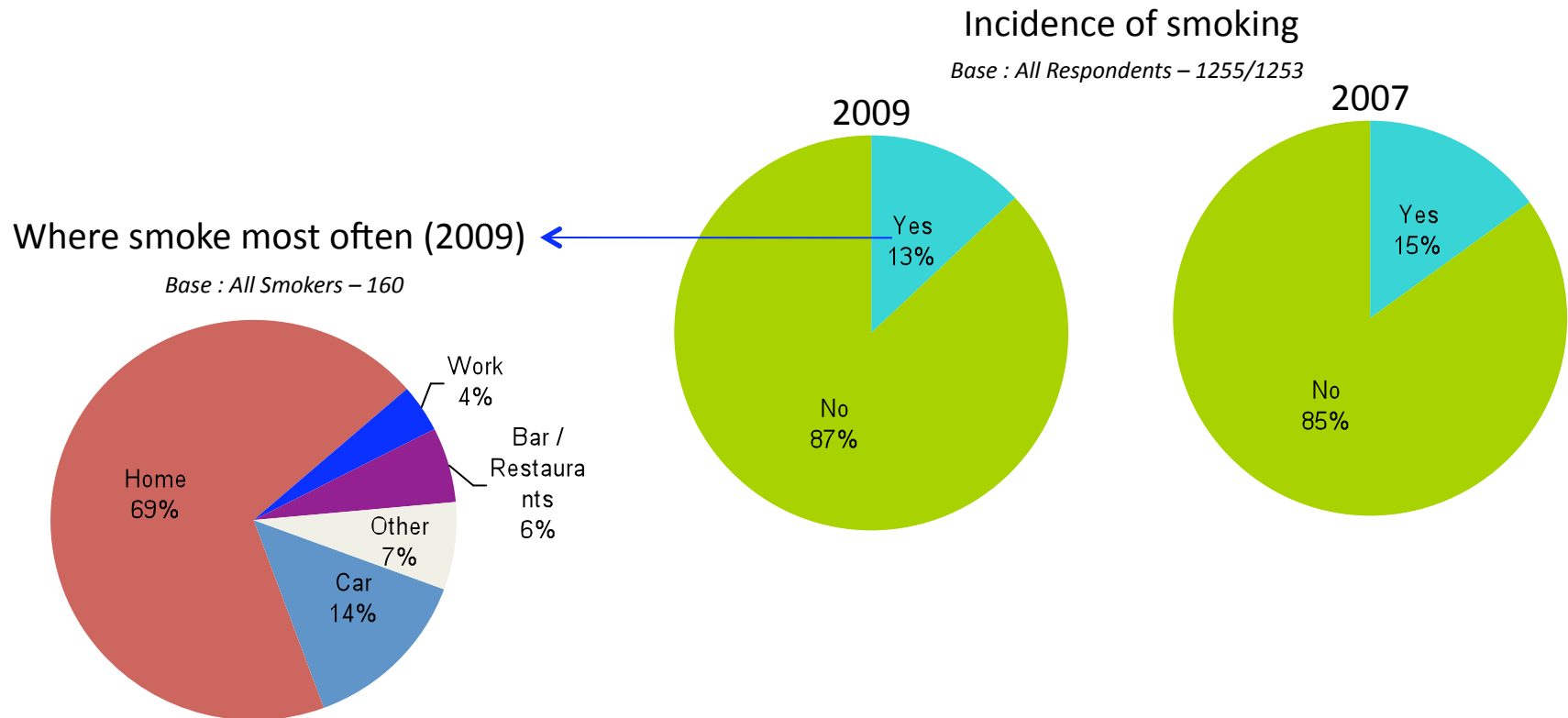
- Campaign awareness
- Litter behavior
- Understanding tobacco litter
- Attitudinal segmentation of Texans

Understanding Tobacco Litter: Topics Covered

- The following information was studied to understand what, if any, factors contribute to the disproportionate portion of the litter problem that comes from tobacco litter:
 - Incidence of smokers
 - Places of smoking
 - Tobacco litter disposal behavior
 - Attitudes to littering and perceptions of what is considered littering
 - Actions and messages to influence tobacco litter disposal behavior

What Is The Incidence Of Smoking, Where Do they Smoke?

- Incidence of smoking, currently at 13%, is directionally lower than the 15% of smokers present in 2007.
- Majority of smokers (69%) say they smoke most often at home. While 14% smoke most often when they are in their cars/vehicles.

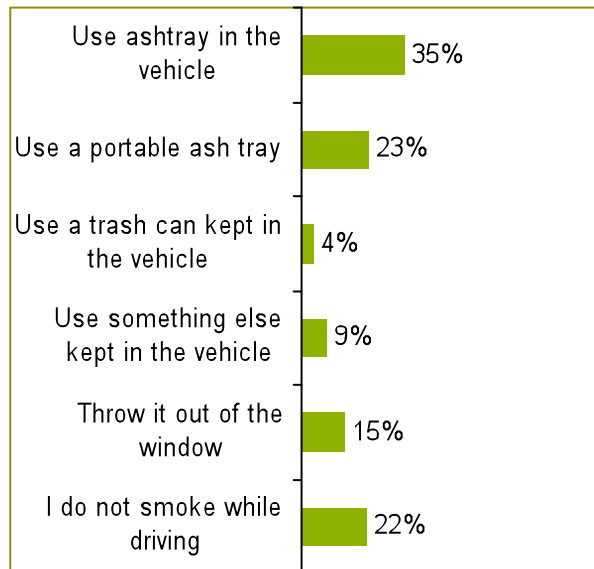


A6. Do you smoke?
E1. Where do you smoke most often?

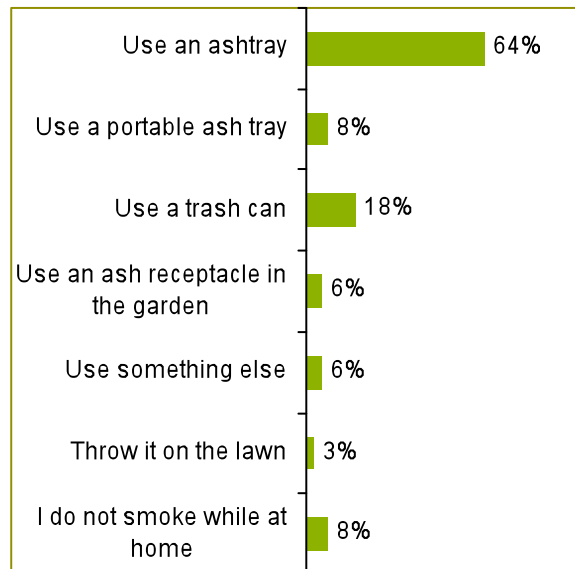
How Do Smokers Dispose Of Cigarette Butts?

- 22% of smokers don't smoke while driving. A larger proportion of the rest say they use an 'ashtray in the vehicle' or a 'portable ashtray' to dispose of their cigarette butts while driving. 15% of those who smoke while driving 'throw it out of the window.'
- Usage of ash tray is very high (64%), when smoking at home.
- 36% of smokers do not smoke while at/near workplace. The rest use 'ash receptacles,' 'trash can' and 'portable ash trays,' when smoking at/near workplace.

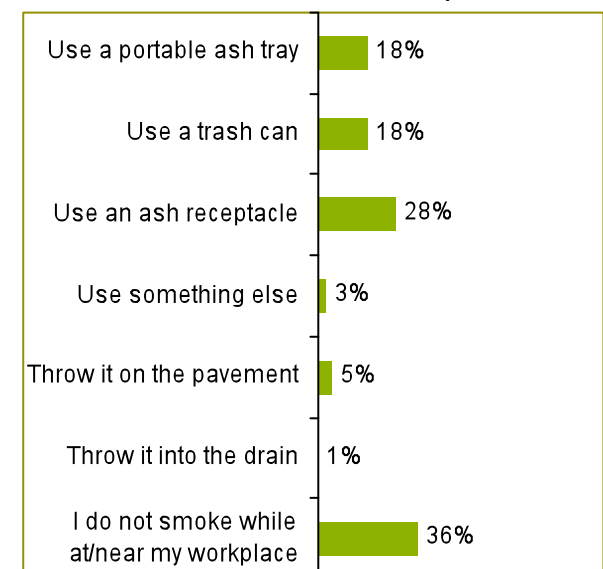
Methods of disposing Cigarette butts while driving



Methods of disposing Cigarette butts while at home



Methods of disposing Cigarette butts while at/near workplace

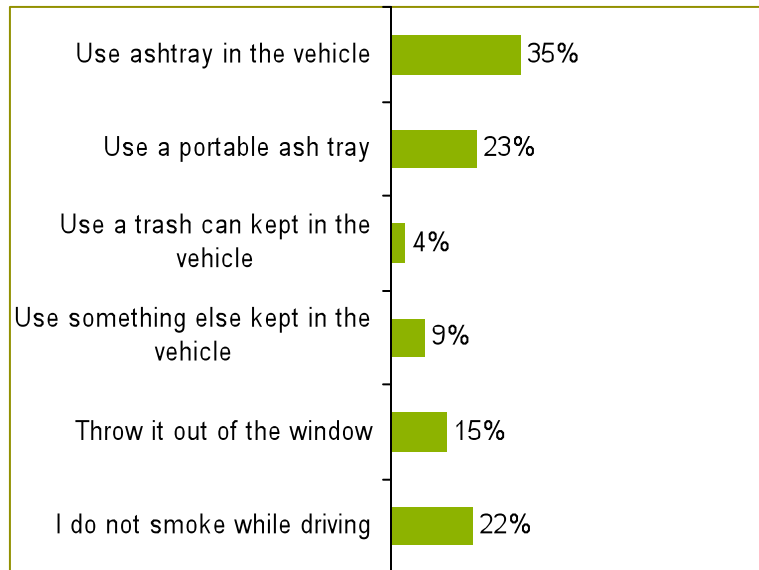


Base : All Smokers -160

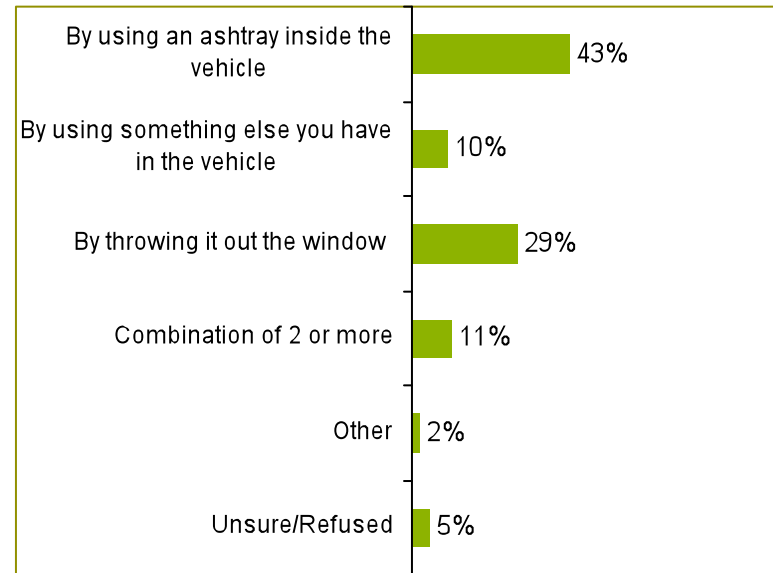
- E2. How do you usually dispose of your cigarette butts while driving?
 E3. How do you usually dispose of your cigarette butts while at home?
 E4. How do you usually dispose of your cigarette butts while smoking at/near your workplace?

Comparing How Smokers Dispose Of Cigarette Butts While In Car (Comparing 2009 vs. 2007)

Methods of disposing Cigarette butts while driving (2009)



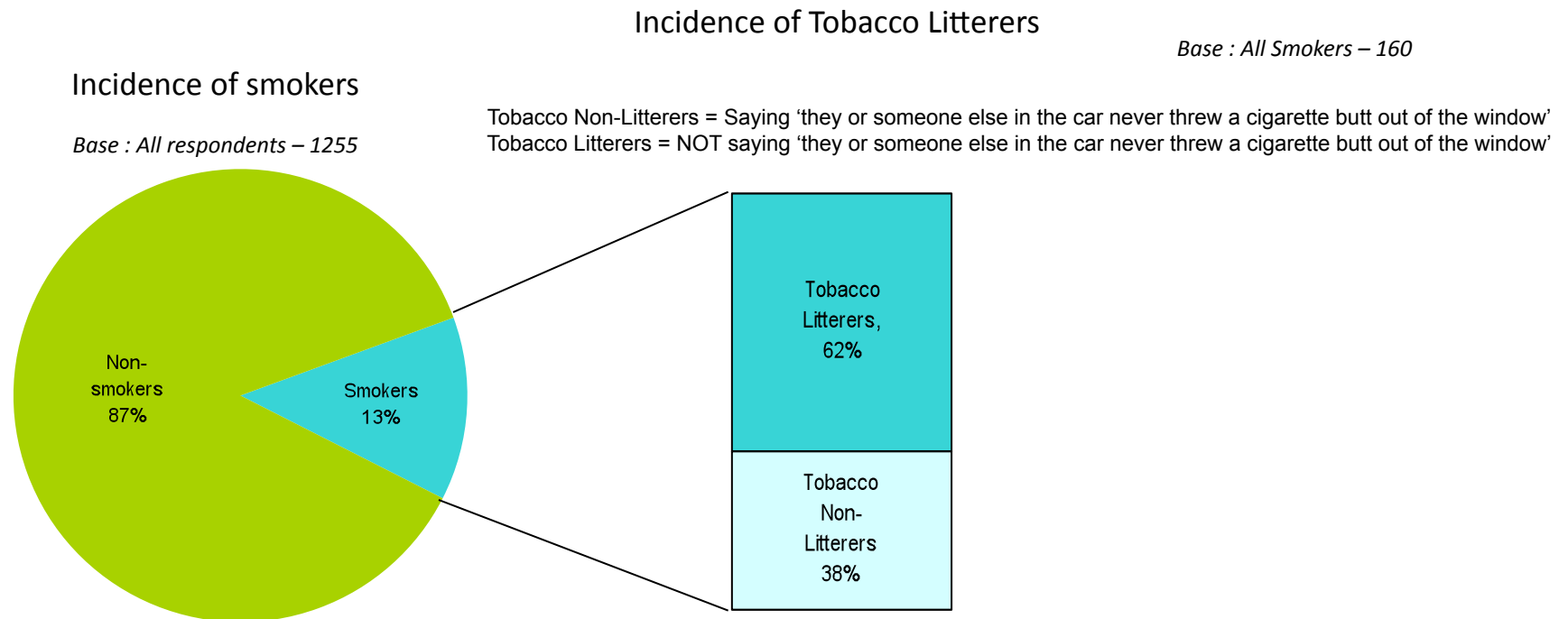
Methods of disposing Cigarette butts while driving (2007)



E2. How do you usually dispose of your cigarette butts while driving?
 In 2007 (Question 36) When you are in a vehicle, do you usually dispose of cigarette butts...(READ TOP-to-BOTTOM/BOTTOM-to-TOP)

What Is The Incidence Of Tobacco Litterers vs. Tobacco Non-Litterers?

- 62% of those who smoke indicated that 'rather than keep a cigarette butt in the car, they or someone in the vehicle they were in, threw the cigarette butt out the window.' They have been classified as Tobacco Litterers.



A6. Do you smoke?

D1. Please tell us if any of the following have happened. Our main purpose is to understand how it sometimes happens that people litter. For each of the following, tell us if it has never happened, it happened about 1 or more years ago, or between 3 and 12 months ago, or it happened in the past 3 months. (Rather than keep a cigarette butt in the car you, or someone in the vehicle you were in, threw the cigarette butt out the window)

Do Tobacco Litterers Otherwise Litter?

- When comparing Tobacco Litterers and Tobacco Non-Litterers, we find that those who litter cigarette butts, also tend to litter other items, more so than Tobacco Non-Litterers.

Whether any of the following happened.

Litter Statements	Tobacco Litterers (n=99)	Tobacco Non-Litterers (n=61)
You noticed that some trash fell out of a car/vehicle you were driving or riding in	62% ↑	36%
You noticed that some trash fell out of a pickup truck you were driving or riding in	50% ↑	31%
Someone in a vehicle you were in threw out trash in an area that already had lots of litter	50% ↑	15%
Someone in a vehicle you were in threw a can, bottle, or other litter out onto the side of the road	58% ↑	26%
Rather than keep an alcohol container in the car you, or someone in a vehicle you were in, threw out a can or bottle	37% ↑	7%
Rather than keep a cigarette butt in the car you, or someone in the vehicle you were in, threw the cigarette butt out the window	100% ↑	0%
You threw out a small item, like a candy wrapper, cigarette butt, a lottery ticket, or something like that	77% ↑	18%
You have never littered intentionally, but it's possible that you may have littered accidentally	85% ↑	61%

D1. Please tell us if any of the following have happened. Our main purpose is to understand how it sometimes happens that people litter. For each of the following, tell us if it has never happened, it happened about 1 or more years ago, or between 3 and 12 months ago, or it happened in the past 3 months.

What Are The Differences In Tobacco-Related Attitudes Between The Two Groups?

- Majority of the smokers believe that ‘there are way too many restrictions on smoking.’ Both Tobacco Litterers and Non-Litterers agree with the following:
 - ‘Cigarette butts are litter’
 - ‘Smokers who throw butts on the ground are acting irresponsibly’
 - ‘Would dispose butts more responsibly if there were more avenues to do so’
- More Tobacco Litterers throw cigarette butts out of the window while driving ‘out of habit.’

Attitudes Agree With (% Top 2 Box Scores: Completely/Somewhat Agree)

Attitudes	Tobacco Litterers	Tobacco Non-Litterers
<i>Base :</i>	99	61
Smokers who throw cigarette butts on the ground are acting irresponsibly	69%	77%
I would dispose of my cigarette butts more responsibly if there were avenues to do so	61%	54%
There are way too many restrictions on where one can smoke these days	54%	59%
I throw cigarette butts out of the window while driving out of habit	14% ↑	5%
I throw cigarette butts on the pavement or down a drain out of habit	9%	7%
Cigarette butts are not litter	8%	8%

- C1. Here are some statements about life, the environment and litter. Using a seven-point scale, where 1 = “disagree completely” and 7 = “agree completely,” please rate how much you agree with each of the following statements
- E5. Here are a few statements made by people who smoke. Using a seven-point scale where 1 = “disagree completely” and 7 = “agree completely,” please rate how much you agree with each of the following statements

What Are The Differences In Litter Related Attitudes Between The Two Groups?

- When compared to Tobacco Litterers, a significantly higher proportion of Tobacco Non-Litterers ‘take pride in not littering,’ consider ‘even a small piece of litter is a big problem’ and believe ‘people who litter are disgusting.’

Attitudes Agree With (% Top 2 Box Scores: Completely/Somewhat Agree)

Attitudes	Tobacco Litterers	Tobacco Non-Litterers
<i>Base :</i>	99	61
Litter that accumulates on our roadways is a poor reflection on us as Texans	80%	87%
I take pride in not littering	78%	93% ↑
Littering is a socially unacceptable behavior	73%	80%
Even a small piece of litter is a big problem	63%	75% ↑
I believe people who litter are disgusting	47%	77% ↑
If others litter, it is not my problem	14%	20%
Littering is OK, as long as it is not done intentionally	7%	13%

C1. Here are some statements about life, the environment and litter. Using a seven-point scale, where 1 = “disagree completely” and 7 = “agree completely,” please rate how much you agree with each of the following statements

What Will Make Smokers Stop Littering Cigarette Butts?

- While 11% believe there cannot be much done to stop them from littering cigarette butts, another 10% actually say that ‘giving up smoking’ is the way to stop littering butts.
- 12% indicated a need for ‘having bins specifically for cigarette butts.’

Methods to stop littering cigarette butts/packs

Base : All Smokers – 160

Having bins specifically for cigarette butts, much like there are for regular litter, at different points in a city	12%
Give up smoking	10%
Law for littering offense/should be penalty	6%
Trash bin outside of retail stores	4%
Carry a container with me in which to dispose of cigarette butts/Put them in a plastic bag/soda can in my car until find a trash bin	4%
Should take responsibility/effort to dispose the cigarette butts	3%
Others	6%
None/Nothing	11%
I do not litter	44%

E6. What would it take to make you stop littering your cigarette butts or cigarette packs? (Open End)

Tobacco-Related Litter Behavior: Summary (Slide 1 of 3)

- Incidence of smoking (currently at 13%) directionally lower than 2007 levels (15%).
 - A majority of smokers (69%) claim to smoke most often at home
 - 22% of smokers don't smoke while driving, while 14% smoke most often while driving
 - 36% of smokers do not smoke while at/near workplace. 4% smoke most often at/near workplace.

- While 'ashtray' is the most common method of disposing cigarette butts while smoking in the car and at home, 'using an ash receptacle' is the most common form of cigarette butt disposal while smoking at/near workplace.
 - 23% of smokers claim to use a 'portable ashtray' while driving
 - 15% admit that they throw butts out of the car window.

Tobacco-Related Litter Behavior: Summary (Slide 2 of 3)

- Majority of the smokers believe that ‘there are way too many restrictions on smoking.’

- Both Tobacco Litterers and Non-Litterers agree with the following:
 - ‘Cigarette butts are litter’
 - ‘Smokers who throw butts on the ground are acting irresponsibly’
 - ‘Would dispose butts more responsibly if there were more avenues to do so.’

Tobacco-Related Litter Behavior: Summary (Slide 3 of 3)

- 62% of those who smoke were classified as Tobacco Litterers (rather than keep a cigarette butt in the car they, or someone in the vehicle they were in, threw the cigarette butt out of the window).

- More Tobacco Litterers than Non-Litterers:
 - Tend to litter other items as well
 - Consider cigarette butts as minor litter
 - Throw cigarette butts 'out of the window while driving out of habit.'

- Tobacco Non-Litterers have stronger anti-litter attitudes than Tobacco Litterers:
 - 'Take pride in not littering'
 - Consider 'even a small piece of litter a big problem'
 - Believe 'people who litter are disgusting.'

Results

- Campaign awareness
- Litter behavior
- Understanding tobacco litter
- Attitudinal segmentation of Texans

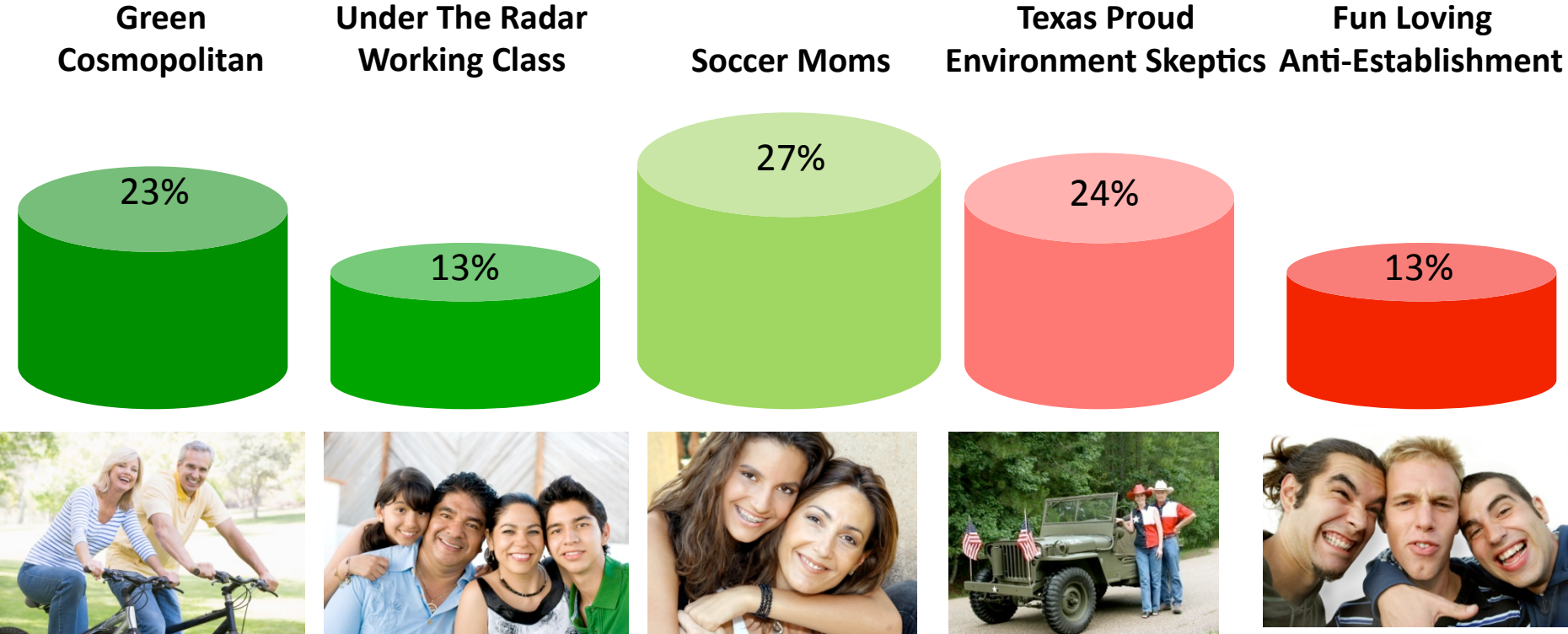
Segmentation

- A statistical segmentation was carried out based on respondents' attitudes and mind sets toward the environment, litter, laws and life in general. This part of the presentation delves into the following to unearth insights for future litter education strategies:
 - Broad overview of segmentation approach
 - Segments that emerge and their sizes
 - Defining attitudes of the segments and their lifestyle
 - Demographic profile of the segments
 - Their litter behavior.

Analysis Framework

- Step 1: Factor Analysis of 'Attitudes Toward Littering' & 'General Attitudes Toward Life.'
- Step 2: K-Means clustering (segmentation) iterations were attempted at multiple levels.
- Step 3: Data tabs were run for all segmentation solutions, and the best one was picked based on discrimination between the segments and intuitive sense.

5 Attitudinal Segments Emerged

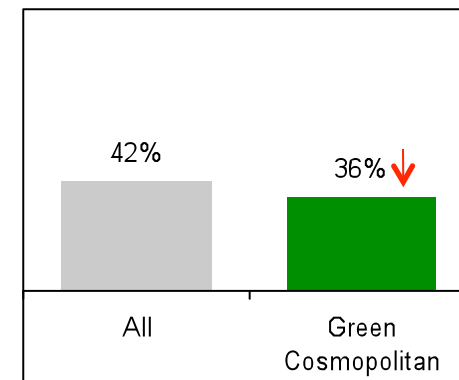
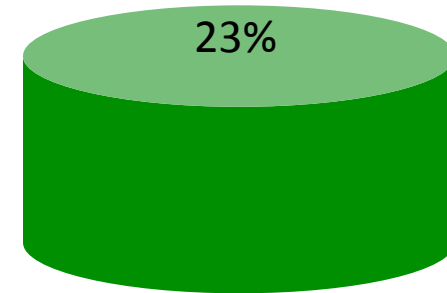


Base : All Respondents (n=1255)

Green Cosmopolitans: Defining Attitudes and Their Behavior

What they believe in

- I play an active role in preserving the environment
- I believe roadside litter is an important environmental issue
- I always make an attempt to use recycled products
- I always try to be “green” in terms of what I use and consume
- I believe people who litter are disgusting
- I do not have to teach my children not to litter
- Littering is a socially unacceptable behavior
- Even a small piece of litter is a big problem
- I take pride in not littering
- When it comes to health of my family, I believe in prevention rather than cure
- Littering is not OK, even if it is not done intentionally
- I don’t think the laws to prevent littering are enforced strictly
- I don’t think we have adequate laws to prevent littering
- If others litter, it is my problem
- I don’t believe environmental issues are blown out of proportion
- I am not proud (happy) of the work our State government does to keep Texas beautiful



% Active Litterers in the past month

Green Cosmopolitans: Their Profile

Demographics

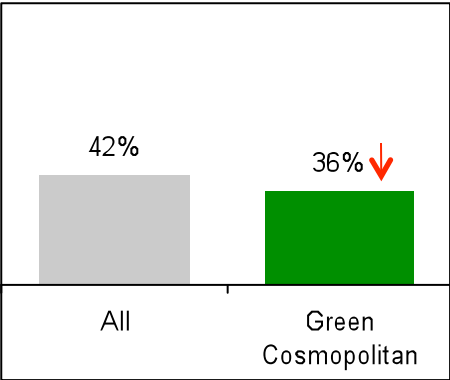
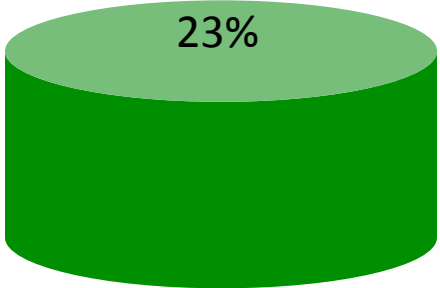
- High proportion of mid to old aged (45+ yr olds)
- High proportion of Whites
- High education levels
- Mid to high income levels
- High proportion of those who are retired
- High Internet usage

Lifestyle

High participation across all lifestyle activities, more so in biking, hiking, volunteer work for community, browsing book stores, visiting coffee shops, eating out, watching in-home entertainment, culinary pursuits, surfing online and working out.

Litter - related

- They are likely to draw attention of those who are littering
- They always have 'litterbag' or 'trash can' in their car
- High preference of Durable/Re-useable alternatives in vehicle to dispose litter
- Have asked their children not to litter
- Very likely to stop if their children asked them not to litter

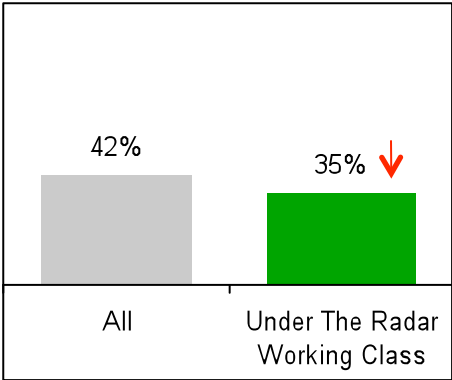
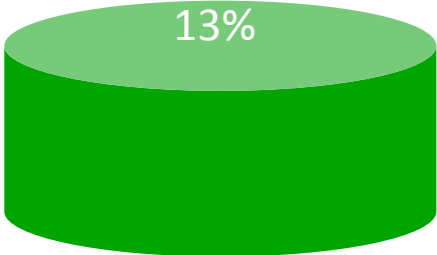


% Active Litterers in the past month

NOTE: Only segment differences that popped up, i.e., If the segment score deviates significantly (at 90% or 80% confidence level) from the overall sample are called out in this slide.

Young Families: Defining Attitudes and Their Behavior

What they believe in
I think the laws to prevent littering are enforced strictly
Littering is OK, as long as it is not done intentionally
If others litter, it is not my problem
I believe environmental issues are blown out of proportion
I do not have to teach my children not to litter



% Active Litterers in the past month

Young Families: Their Profile

Demographics

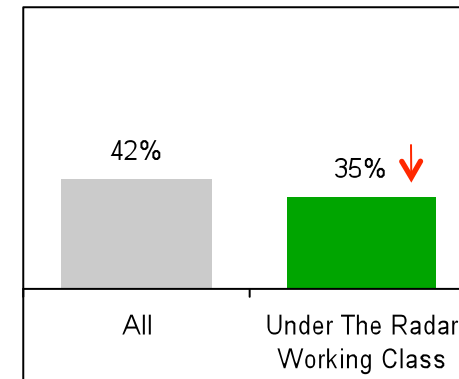
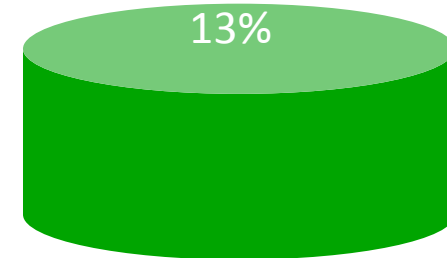
Higher proportion of Hispanics
 Low education levels
 Higher proportion of parents with kids of 0-11 yrs
 Higher incidence of those from Houston
 Low income levels

Lifestyle

They have low participation across all lifestyle activities

Litter - related

They have 'never' seen their parents litter
 Driving the most miles, with higher ownership of Van/Mini Van & Pickup trucks
 They always have 'litterbag' or 'trash can' in their car

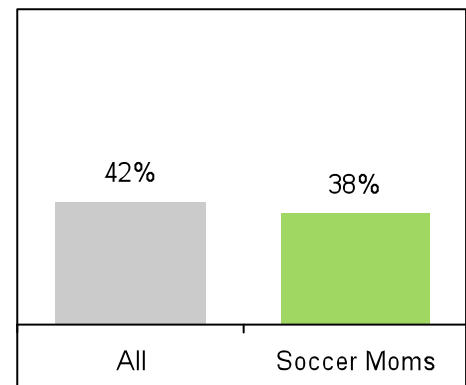
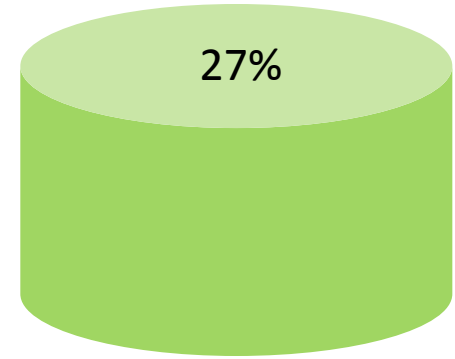


% Active Litterers in the past month

NOTE: Only segment differences that popped up, i.e., If the segment score deviates significantly (at 90% or 80% confidence level) from the overall sample are called out in this slide.

Working Moms: Defining Attitudes and Their Behavior

- What they believe in**
- I think the laws to prevent littering are enforced strictly
 - I think we have adequate laws to prevent littering
 - I am proud of the work our State government does to keep Texas beautiful
 - I always try to be “green” in terms of what I use and consume
 - I play an active role in preserving the environment
 - I always make an attempt to recycle products
 - If others litter, it is my problem
 - Littering is not OK, even if it is not done intentionally
 - I have to teach my children not to litter
 - I don't believe environmental issues are blown out of proportion



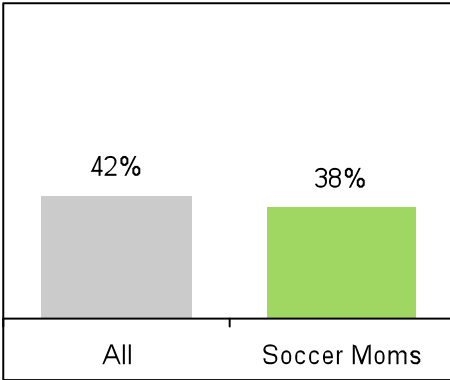
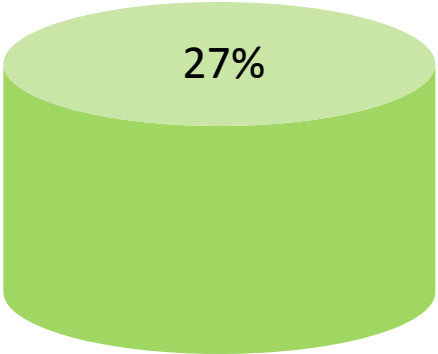
% Active Litterers in the past month

Working Moms: Their Profile

Demographics
Higher proportion of females
Higher proportion of those who are divorced
Working full-time
Low to mid income levels
Higher proportion of those with children

Lifestyle
Lifestyle activities is similar to overall sample

Litter – related
They are likely to draw attention of anyone littering
They have asked their children not to litter
They always have a ‘litterbag’ or ‘trash can’ in their car
All 3 messages tested (pertaining to Government pickup volumes/ costs) are more likely to influence them



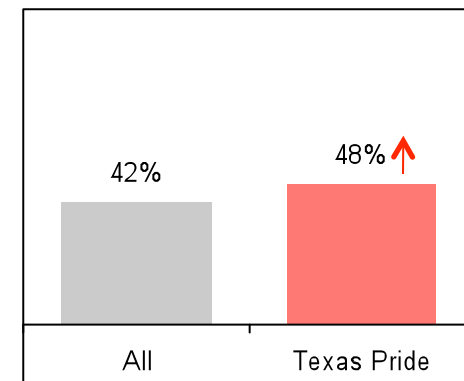
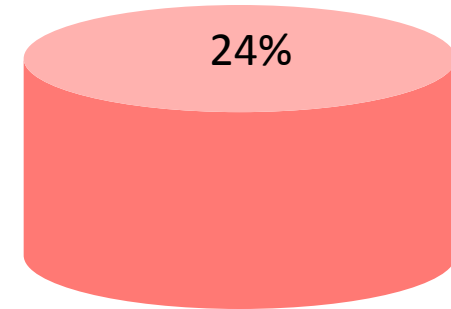
% Active Litterers in the past month

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Proud Environment Skeptics: Defining Attitudes and Their Behavior

What they believe in

- I believe environmental issues are blown out of proportion
- Smokers who throw cigarette butts on the ground are acting irresponsibly
- Litter that accumulates on our roadways is a poor reflection on us as Texans
- I take pride in all things Texas
- Littering is a socially unacceptable behavior
- I believe in following rules and regulations, even if it is difficult
- I take pride in not littering
- Littering is not OK, even if it is not done intentionally
- I don't try to be "green" in terms of what I use and consume
- I don't make an attempt to use recycled products
- I have to teach my children not to litter
- I don't play an active role in preserving the environment
- If others litter, it is my problem



% Active Litterers in the past month

Proud Environment Skeptics: Their Profile

Demographics

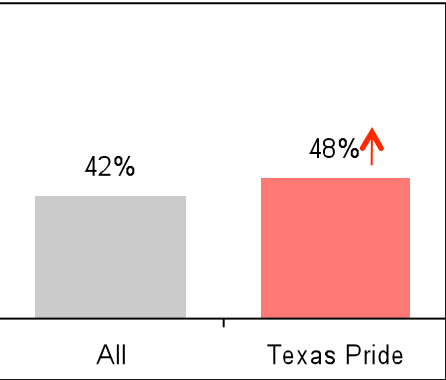
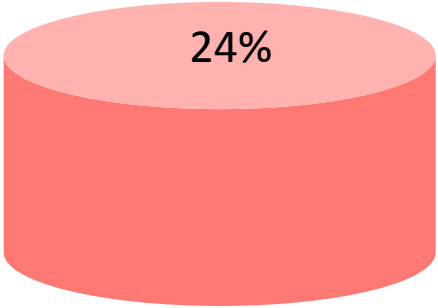
- High proportion of Whites
- Moderate education
- Relatively high income
- High proportion of those who are married
- High Internet usage

Lifestyle

Lifestyle activities include shopping, fixing up my home, eating out, church/religious activities and networking with online community

Litter - related

- They 'occasionally' have a 'litterbag' or 'trash can' in their vehicle
- They are more likely to use disposable alternatives in vehicle to dispose of litter
- Higher % believe that 'there are way too many restrictions on where one can smoke'
- They are **not likely** to draw attention to a stranger if they litter
- Have seen their children litter, and relatively higher proportion have not asked their children not to litter. Among those who have asked, they did it when they saw their child litter.
- Sometimes trash tends to accumulate in their truck bed.
- Relatively higher % say 'would dispose of my cigarette butts more responsibly if there were avenues to do so.'



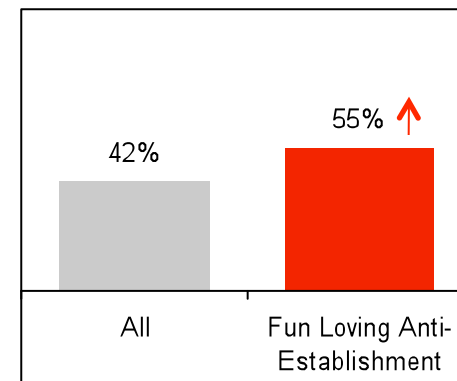
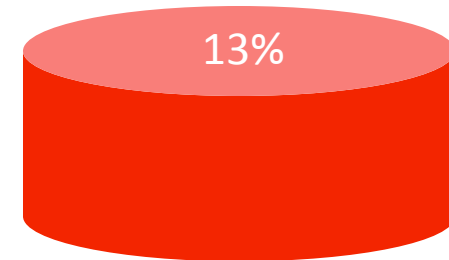
% Active Litterers in the past month

NOTE: Only segment differences that popped up, i.e., If the segment score deviates significantly (at 90% or 80% confidence level) from the overall sample are called out in this slide.

Fun Loving Anti-Establishment: Defining Attitudes and Their Behavior

What they believe in

- Littering is OK, as long as it is not done intentionally
- If others litter, it is not my problem
- I do not have to teach my children not to litter
- I believe environmental issues are blown out of proportion
- I seek adventure and take risks in life
- I am always pressed for time or in a rush
- I am relaxed and don't worry about if I'm running late
- Having fun is the whole point in life
- I think we have adequate laws to prevent littering
- I always opt for the convenient choice, even if it is more expensive or not the best
- I think the laws to prevent littering are enforced strictly
- I have a large circle of friends and spend time with them often
- Convenience is important to me
- A small piece of litter is not a big problem
- Don't think littering is a socially unacceptable behavior
- Don't think smokers who throw cigarette butts on the ground are acting irresponsibly
- Don't believe people who litter are disgusting



% Active Litterers in the past month

Fun Loving Anti-Establishment: Their Profile

Demographics

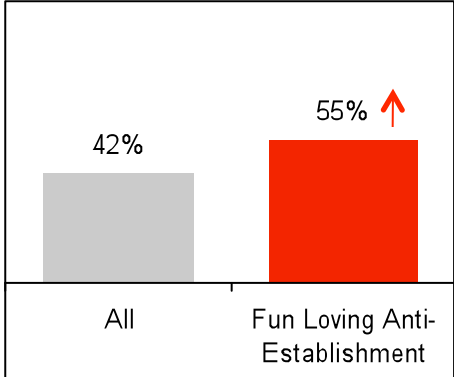
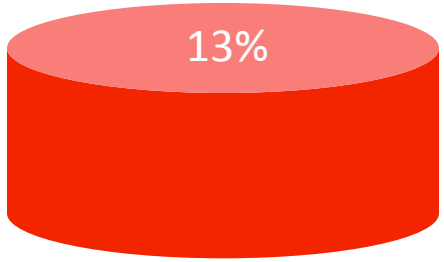
- High proportion of youngsters (16-34 yrs old)
- High proportion of singles
- High proportion of males
- High proportion of 'not employed' and students
- Low income households (Less than \$60k)
- High proportion of Hispanics

Lifestyle

Lifestyle activities include running, going to the movies and surfing online.

Litter - related

- Higher % indicate 'sometimes' trash accumulates in their car
- Higher % **never** have a 'litterbag' or a 'trash can' in their car and neither do they prefer to use alternatives in vehicle to dispose litter.
- Higher % have seen their parents litter occasionally.
- Higher % have **never** asked their children not to litter
- Higher % **not likely** to take any action if they spot anyone littering
- All 3 messages tested (pertaining to Government pickup volumes/costs) have the least influence on them
- Smokers in this segment believe nothing will make them stop littering



% Active Litterers in the past month

NOTE: Only segment differences that popped up, i.e., If the segment score deviates significantly (at 90% or 80% confidence level) from the overall sample are called out in this slide.