

# Don't Mess with Texas Litter Prevention Research Executive Summary

## Background

The Texas Department of Transportation (TxDOT) fielded a litter prevention study in 2009 (a follow-up to a 2007 research study) to measure the effectiveness of the Don't Mess with Texas campaign's litter prevention program for elementary-age children, known as the Litter Force. The goal of the Litter Force program is to prevent Texas children from becoming litterers.

In 2007, TxDOT launched the Litter Force pilot program and research was conducted to establish a baseline of students' knowledge, attitudes, opinions, and behaviors regarding littering and Don't Mess with Texas. Using this pilot group (students that received the Litter Force program in first grade) and a control group (students that did not receive the Litter Force program in first grade), TxDOT tracked how students' attitudes and knowledge changed over time (from first grade to third grade), and how those changes differ between grades and between pilot and control groups.

- The sample size of first graders from the 2007 study was 1,248 with a margin of error of  $\pm 3.2\%$  among the 963 pilot group respondents and  $\pm 5.9\%$  among the 285 control group respondents.
- The sample size of third graders from the 2009 study was 1,139 with a margin of error of  $\pm 3.4\%$  among the 851 pilot group respondents and  $\pm 5.9\%$  among the 288 control group respondents.

Baselice & Associates, Inc. (Baselice) conducted the 2007 and 2009 prevention studies. Findings were also compared to the adult 2009 Litter Attitudes & Behavior Study (LA&B) conducted by Stadia Marketing. For a complete LA&B research summary, go here: ([http://dontmesswithtexas.org/wp-content/uploads/2010/04/TxDOT\\_2009\\_LA&BExecSummary.pdf](http://dontmesswithtexas.org/wp-content/uploads/2010/04/TxDOT_2009_LA&BExecSummary.pdf))

## Topline

Findings reveal that third-graders growing up with the Don't Mess with Texas campaign are less likely to develop the littering habits of earlier generations. Students in the pilot group are also more likely to:

- Be aware of Don't Mess with Texas and understand its meaning,
- Understand what litter is and be aware of the issue, and
- Communicate litter prevention to their family and encourage use of a litterbag.

## Detailed Findings

### Campaign Awareness

- Don't Mess with Texas awareness increased in the pilot group. The percentage of students who have heard of Don't Mess with Texas increased from 53% in first grade to 85% in third grade, while awareness in the control group decreased from 62% to 50%.

### Q: Have you heard of Don't Mess with Texas?

Yes	Pilot	Control
1 <sup>st</sup> Grade:	53%	62%
3 <sup>rd</sup> Grade:	85%	50%
No	Pilot	Control
1 <sup>st</sup> Grade:	47%	37%
3 <sup>rd</sup> Grade:	8%	25%

Meaning of Don't Mess with Texas

- More students in the pilot group (88%) than adults statewide (82%) know what Don't Mess with Texas means (LA&B).
- Knowledge that Don't Mess with Texas means "don't litter" (or to students, "Don't drop trash on the ground") has dramatically increased from 51% in first grade to 88% in third grade. There was only a 15-percentage point increase in the control group compared to 37 percentage points in the pilot group.

**Q: Which best describes what "Don't Mess with Texas" means?**

Don't drop trash on the ground	Pilot	Control
1 <sup>st</sup> Grade:	51%	59%
3 <sup>rd</sup> Grade:	88%	74%

Litter Education & Awareness

- The study suggests more pilot students know what litter means. Between first and third grade, there 16-point increase in the percentage of students who know what litter means in the pilot group when compared to only a three-point increase with the control group.

**Q: Do you know what the word litter means?**

Yes	Pilot	Control
1 <sup>st</sup> Grade:	73%	84%
3 <sup>rd</sup> Grade:	89%	87%
No		
No	Pilot	Control
1 <sup>st</sup> Grade:	25%	14%
3 <sup>rd</sup> Grade:	5%	10%

- The study also suggests pilot students are more likely to notice litter communication. More pilot students in third grade (75%) reported having seen or heard something recently about littering compared to when they were in first grade (62%).

**Q: Have you seen or heard anything recently about not littering?**

Yes	Pilot	Control
1 <sup>st</sup> Grade:	62%	72%
3 <sup>rd</sup> Grade:	75%	73%
No		
No	Pilot	Control
1 <sup>st</sup> Grade:	37%	27%
3 <sup>rd</sup> Grade:	14%	16%

Litter Behavior

- The study suggests pilot students are more likely to notice litter. There is a greater increase in the percentage of third grade students who are noticing littering in the pilot group when compared to the control group (11% increase compared to a 6% increase).

**Q: Did you notice that some litter fell out of a car or truck you were riding in?**

Yes	Pilot	Control
1 <sup>st</sup> Grade:	39%	43%
3 <sup>rd</sup> Grade:	50%	49%
No	Pilot	Control
1 <sup>st</sup> Grade:	60%	56%
3 <sup>rd</sup> Grade:	39%	40%

- The Litter Force program is curbing the increase of littering behavior in students. Both groups of students are more likely to admit to throwing litter on the road when they are in third grade. However, the percentage of kids in the control market who admit to littering more than doubled over the two-year period, while the pilot remained relatively the same. This holds true whether students are in the car or on the playground.
- Twenty-six percent of third-graders admit to littering while in the car, compared to 65 percent of the state's worst litterers, ages 16-24. (2009 LA&B)

**Q: While you were in a car or truck, you threw litter out onto the side of the road.**

Yes	Pilot	Control
1 <sup>st</sup> Grade:	22%	11%
3 <sup>rd</sup> Grade:	26%	26%
No	Pilot	Control
1 <sup>st</sup> Grade:	77%	88%
3 <sup>rd</sup> Grade:	70%	68%

**Q: While walking, playing, or at school you dropped a candy wrapper, can, food bag or something like that on the ground.**

Yes	Pilot	Control
1 <sup>st</sup> Grade:	23%	15%
3 <sup>rd</sup> Grade:	29%	33%
No	Pilot	Control
1 <sup>st</sup> Grade:	76%	83%
3 <sup>rd</sup> Grade:	63%	58%

**Communicating About Litter Prevention**

- Pilot students are more likely to have told their family to not litter. There are major differences between the pilot and control groups' willingness to tell someone not to litter. In the pilot group, willingness increased 12 percentage points, whereas in the control condition, willingness decreased 4 percentage points.
- Ninety-three percent of Texas parents said they'd stop littering if their children asked them not to. However, among Texas parents, just 15 percent say their children have asked them to not litter. (LA&B)
- Research indicates that the incidence of littering is significantly higher among Texans who saw their parents littering. Among active adult litterers, 57 percent had seen their parents litter, while just 37 percent did not. (LA&B)

**Q: Have you ever told anyone in your family to not litter?**

<b>Yes</b>	<b>Pilot</b>	<b>Control</b>
1 <sup>st</sup> Grade:	57%	65%
3 <sup>rd</sup> Grade:	69%	61%
<b>No</b>		
1 <sup>st</sup> Grade:	43%	33%
3 <sup>rd</sup> Grade:	23%	29%

- The study suggests pilot students are more likely to tell their parents to put a litterbag in their vehicle. When compared to the control group, students who saw the Litter Force in first grade show a greater increase in willingness to tell their parents to put a litterbag in their car (9% increase compared with no change in the control group).

**Q: Would you tell your parents to put a litterbag in your car or truck?**

<b>Yes</b>	<b>Pilot</b>	<b>Control</b>
1 <sup>st</sup> Grade:	64%	69%
3 <sup>rd</sup> Grade:	73%	69%
<b>No</b>		
1 <sup>st</sup> Grade:	35%	30%
3 <sup>rd</sup> Grade:	20%	23%