2016 RESEARCH
Timeline

April 2016
- Attitudes & Behavior Study
- Visible Litter Study
- Focus Groups

June 2017
- Campaign Formulation
- Campaign Launch
VISIBLE LITTER STUDY
Roadway Classifications

Interstates

U.S. Highways

State Highways

Local Roads
Questions to Answer

**Litter Quantity**

- Total Litter = Edge + Meander
- Form a rate of litter per mile
- Cigarettes & brand names

**Litter Characterization**

- Litter type and category?
- Negligent vs. deliberate litter
- Statewide number

Where possible, compare to 2006 Visible Litter Study
STUDY RESULTS
Litter per Mile by Category

Composition Results (All Samples, Litter per Mile – Weighted)

- Drink Containers/Bottles: 42%
- Napkins/Paper Bags/Tissues: 5%
- Miscellaneous Paper: 5%
- Other: 12%
- Caps, Cups, Lids 7 Tabs: 7%
- Newspapers/Ads: 7%
- Miscellaneous Plastic: 9%
- Food & Tobacco Packaging: 0%
- Vehicle Debris & Packaging: 3%
- Wood & Yard Debris: 5%

Department of Transportation
Comparison of Estimated Litter Items per Mile by Roadway Classification

- **Interstates**
  - 2006: 10,018
  - 2016: 17,383

- **State Highways**
  - 2006: 5,657
  - 2016: 2,376

- **U.S. Highways**
  - 2006: 5,069
  - 2016: 4,811

- **Local Roads**
  - 2006: 2,286
  - 2016: 973
Deliberate vs. Negligent Litter

2016 TN Statewide Litter Study - Comparison of Contribution by Litter Type by Roadway Classification

- **Interstates**
  - Deliberate: 22.2%
  - Negligent: 77.8%

- **State Highways**
  - Deliberate: 44.0%
  - Negligent: 56.0%

- **U.S. Highways**
  - Deliberate: 37.8%
  - Negligent: 62.2%

- **Local Roads**
  - Deliberate: 42.1%
  - Negligent: 57.9%
Snapshot: Interstate Litter

Top 2 Categories

Negligent:
Vehicle Debris & Packaging (41.76%), Miscellaneous Paper (11.68%)

Deliberate:
Snack Food Packaging (5.93%), Cups, Lids, Straws (5.03%)
Applying Research to Campaign

KEEP OUR ROADWAYS CLEAR

LITTER ISN'T CONVENIENT

LITTER HAPPENS FAST

KEEP OUR ROADWAYS CLEAR

NOBODY TRASHES TENNESSEE

TDOT Department of Transportation
Applying Research to Campaign
Cigarette Butts by Survey Site

2016 TN Statewide Litter Study - Average # of Cigarette Butts by Site by Roadway Classification

- **INTERSTATES**: 23
- **STATE HIGHWAYS**: 10
- **U.S. HIGHWAYS**: 18
- **LOCAL ROADS**: 3
Cigarette Butts 2006 vs. 2016

TN Statewide Litter Study - Average # of Cigarette Butts by Site by Roadway Classification

- Interstates: 2006 - Avg. Cigs (25); 2016 - Avg. Cigs (23)
- State Highways: 2006 - Avg. Cigs (10); 2016 - Avg. Cigs (9)
- U.S. Highways: 2006 - Avg. Cigs (15); 2016 - Avg. Cigs (14)
- Local Roads: 2006 - Avg. Cigs (5); 2016 - Avg. Cigs (4)
ECONOMETRICS
Use of 94 primary (on site) and secondary (nearby conditions) data points to determine which factors result in significantly more or less litter.
Litter is More Likely if... (All Roads)

Within 3 miles of a rest area ↑ 187%
Nearby damaged buildings ↑ 68%
Close proximity to an on/exit ramp ↑ 46%
Within 1 mile of a convenience store* ↑ 7%
Presence of graffiti ↑ 279%

*Increases 7% per convenience store.
Applying Litter to Campaign

KEEP OUR ROADWAYS CLEAR

NOBODY TRASHES TENNESSEE
Litter is Less Likely if... (All Roads)

- Tennessee Scenic Highway: ↓ 20%
- Construction or work zone: ↓ 58%
- % of householders moved in 1990’s: ↓ 22%
- Ag/fish/forest emp. per 1,000 residents: ↓ 100%
- Proximity to welcome sign: ↓ 42%
FOCUS GROUPS
Outcomes

- Misunderstanding litter and consequences
- Passionate about their community & Tennessee
- Shocked at severity of the litter issue
- Our target demographic is...
Applying Research to Campaign

SACKS BELONG ON THE FIELD.

IT COSTS $15 MILLION EVERY YEAR TO CLEAN UP TENNESSEE ROADS.

LITTER’S BAD, NO BONES ABOUT IT.

CLEANING UP TENNESSEE ROADS COSTS $15 MILLION EVERY YEAR.

Tennessee Department of Transportation
Applying Research to Campaign
Applying Research to Campaign

COULD YOU TRASH A VIEW LIKE THIS?

https://nobodysmashestennessee.com/
Applying Research to Campaign

Memphis Grizzlies hosting 2018 draft party at FedEx Forum
Updated: Jun 13, 2018 - 7:22 AM
TAKEAWAYS
Please Remember

- TDOT spends $15 million dollars annually on litter pickup
- At any time, 100,000,000 pieces of litter are on TN roadsides
- Reduction of 43% from 2006 Visible Litter Study