

Tennessee Litter Benchmark Research Report

Oct 4, 2022



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Research Structure



Research Objectives



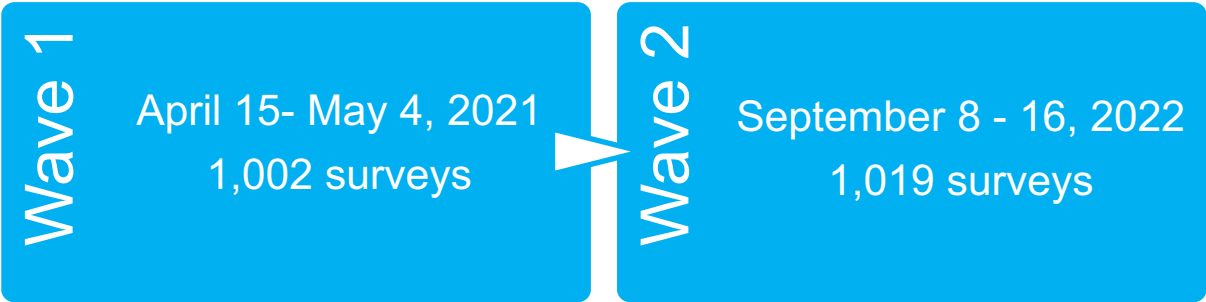
The primary objectives of this research include:

- Measuring change in awareness of litter prevention messaging from TDOT and other sources, including by media channel, compared to the benchmark wave
- Tracking changes in perceptions, attitudes, and behaviors around littering
- Measuring awareness and effectiveness of specific media spots
- Understanding the types of litter, occasions, and motivations (key drivers) in the decision to litter or not
- Profiling of key segments: age groups, key markets, smokers/non-smokers, littering frequency



Quantitative Research Design And Sampling

A statewide online survey was conducted in 2 waves among Tennessee adults and teens aged 16 and older. The survey length was 15 minutes (median survey length).

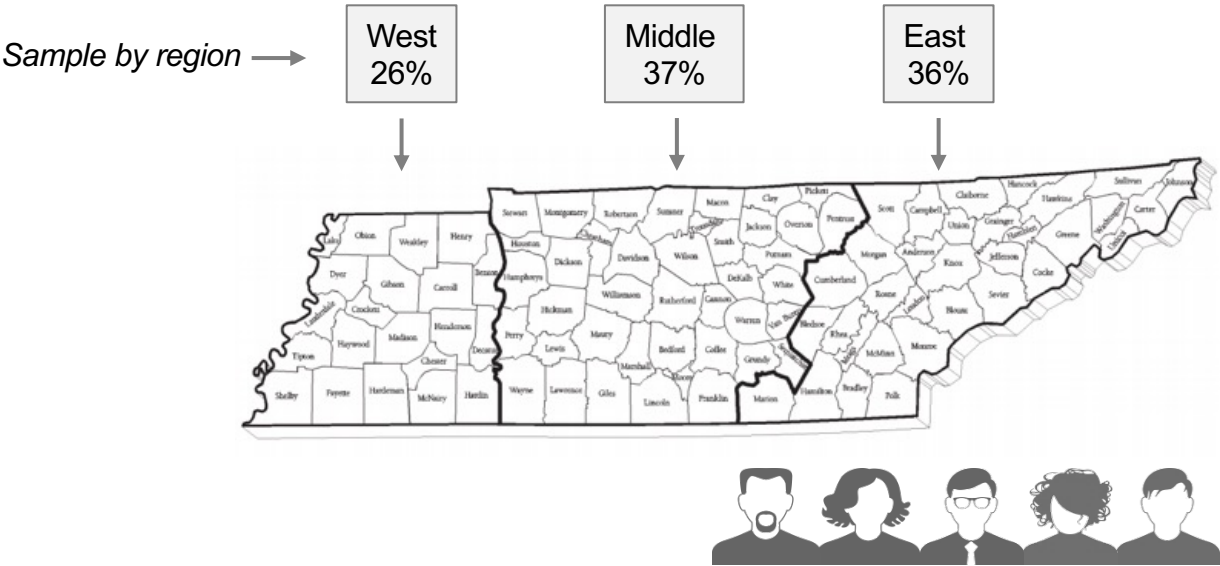


Sample Screening Qualifications:

- Aged 16 or older
- Tennessee resident



Not employed in a sensitive industry (the news media, a market research firm, an elected official, or actively involved with advertising and marketing)



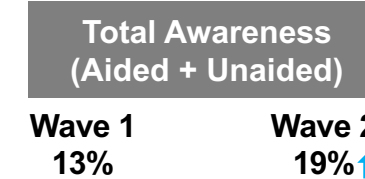
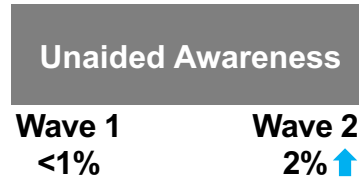
Management Summary



NTT Campaign Awareness And Impact Trends



- Awareness of the NTT campaign slogan has increased from the benchmark wave.



- On an unaided basis, more than 6 times as many Tennesseans typed out “Nobody Trashes Tennessee” when recalling slogans/programs to reduce littering or pollution.
- Unaided awareness of the slogan is low overall, but it has shown growth. Unaided recall of brands or slogans takes consistent promotion to build over time.
- When prompted with a list, nearly 1 in 5 Tennesseans indicate they have seen or heard the NTT slogan. This represents a notable, statistically significant increase from the benchmark.
- Total awareness is higher among men than women, showing the campaign is reaching a key target.
- The top NTT sources of awareness include TV ads, billboards, and street/roadway signs. Facebook remains the top social media source—especially among those aged 40+.
- Support of the program remains high at 96%, and continued support has increased from Wave 1 (96%, up from 93%).
- Most feel the campaign will have a positive impact on reducing litter, but the strength of expected impact has diminished. Fewer residents think it will have a “very positive” impact this wave, especially among older residents.
- NTT is associated with litter/cleanliness for a majority of residents, but there is room for a stronger association with program specifics.

Campaign Effectiveness And Recall Summary



- **Billboard awareness = 12%**
- **Effectiveness = 29% (top-2 box)**



- Digital ad awareness = 6%
- Effectiveness = 25% (top-2 box)
- **21% show strong interest in watching Ryan Silverfield on Talking Trash (27% among men)**



- Video awareness = 9%
- **Effectiveness = 46% (top-2 box)**

- The billboard had the highest awareness of the 3 stimuli and the digital ad the lowest.
 - Recall for all 3 was higher among men.
- The Talking Trash video is seen as the most effective, likely due to its format that allows for more content to be communicated.

Litter Behaviors And Attitudes



- Relative to other environmental issues, litter on roadways increased in importance to the 2nd most serious issue. Nearly half (46%) of Tennesseans consider it to be a “very serious” problem, comparable to the prior wave.
- 76% of Tennesseans believe littering is “against the law in all cases.” This is a modest increase from last year (73%).
 - African Americans are less likely to have this awareness of the litter laws, a potential target for additional media focus.
- Self-reported littering had a slight decrease from last year. 34% of these Tennesseans admitted to littering in the past month, a 3-percentage point decrease from last wave.
 - Incidence of littering by type has decreased across the board from the last wave, notably so for *large food wrappers* and *beer cans/bottles*.
 - The most common circumstances are when “driving/riding in a vehicle” (41%) and by “accident” (36%). About 2 in 3 said they littered when they were alone.
 - Preference remains highest for a “disposable bag” in the car to store their litter, but a “more durable alternative” has increased in preference over last year.
- The importance of *teaching children not to litter* is again the most-agreed-to statement; however, fewer strongly agree with the sentiment compared to the prior wave in addition to a decline in strong agreement for several other littering statements.

Littering Locations



- A minority (37%) said they have travelled on a scenic byway in the past year. Of the people that have travelled on the scenic byways, nearly half saw litter.
 - The Great Smoky Mountains and Natchez Trace were the most common individual roadways/areas mentioned as a favorite scenic drive.
 - However, the quality of the scenic views is high, with less than 10% indicating the views were not scenic (mostly neutral).
- More than half of Tennesseans (52%, top-2 box) said there was a serious or somewhat serious problem with litter on scenic byways.
 - People in the eastern region of Tennessee consider litter a more serious issue than those in the middle and western regions, as do white Tennesseans, compared to African Americans.
- Litter is most prevalent at cultural events, with 42% indicating there was “a lot of litter.” This rate is nearly twice as high as any other location. Fewer indicate the same level of litter issues at state parks, which have the same visitation incidence.

Volunteering

- Likelihood to and interest in volunteering to pick up litter in general and with Adopt-A-Highway is steady.
- Top barriers to volunteering remain *time constraints* and *health limitations*.
- The top motivations to spread the word about reducing littering include *seeing the litter/knowing the importance* of not littering and *seeing its impact*.
 - These motivations vary by demographic groups. Younger Tennesseans, litterers, and those in urban areas tend to be more motivated by seeing the impact of litter than their counterparts.

Nobody Trashes Tennessee

Awareness And Impact



Unaided Campaign/Slogan Awareness



- On an unaided basis, 37% of these Tennesseans mentioned *waste/littering/cleanup* litter campaigns or slogans, a 7-percentage point increase from last wave. Specially, *Nobody Trashes Tennessee* was mentioned by 2% this wave, an increase from the handful who answered it last wave.
- Fewer could recall no litter/pollution campaigns or slogans this wave, showing effectiveness of current campaign in raising awareness of the topic in general.

Unaided <u>General</u> Campaign And Program Awareness	Wave 2
Health Related (Net)	21%
News/updates/guidelines/safety about COVID-19	9%
COVID-19 vaccine/Get your COVID-19 vaccine/shot	6%
Safety On The Road/Safe Driving (Net)	17%
DUI/Don't drink and drive	6%
Seatbelt/Wear seatbelt	5%
Waste/Littering/Cleanup (Net)	4%
Being Green/Earth-friendly (Net)	3%
Other	4%
Do not recall any	51%

Unaided <u>Litter</u> Campaign/Slogan Awareness	Wave 1	Wave 2
Waste/Littering/Cleanup (Net)	30%	37%
Reduce Waste/Better Waste Control (Subnet)	8%	8%
Recycling (Sub-Subnet)	7%	8%
Reduce, Reuse, Recycle/RRR	4%	5%
Keep Clean Ads/Slogans (Subnet)	3%	5%
Don't be a litterbug	3%	3%
Do not litter/Please don't litter	3%	3%
Put Trash/Litter In The Trash Can/Proper Place (Subnet)	2%	3%
Nobody Trashes Tennessee	0.3%	2%
Safety On The Road/Safe Driving (Net)	12%	15%
DUI/Drinking And Driving (Subnet)	3%	6%
Pollution (Net)	11%	12%
Give a Hoot, Don't Pollute (from The Ballad Of Woodsy Owl)	8%	8%
Being Green/Earth-friendly (Net)	8%	9%
Protecting Forests (Net)	4%	6%
Smokey The Bear Campaign (Subnet)	4%	5%
Gun Laws/Rights (Net)	--	5%
Keep It Beautiful (Net)	4%	4%
Do not recall any	39%	31%

Q1. What public service campaigns do you recall seeing or hearing in the past couple of months? Q2. When you think of slogans or programs to reduce littering or pollution, which ones come to mind?.
Base: Total Wave 1 (n=1002); Total Wave 2 (n=1019)
Source: Banner 3, Tables 19-20; Showing top mentions.

NTT Unaided Awareness – Demographic Breakdown



- 2% of the total population was able to recall NTT on an unaided basis.
- Higher unaided awareness was seen among those aged 26-39, those in Nashville and Jackson, those in the Middle Tennessee region, smokers, and those in rural areas.

		Gender		Age			Ethnicity			Market					
Total		Male (A)	Female (B)	16-25 (C)	26-39 (D)	40+ (E)	White (F)	Black (G)	All Other* (H)	Nashville (K)	Memphis (L)	Knoxville (M)	Chattan- ooga (N)	Jackson (O)	Tri- Cities (P)
Nobody Trashes Tennessee	2%	2%	1%	2%	4%	1%	2%	2%	1%	3%	1%	2%	0%	3%	1%

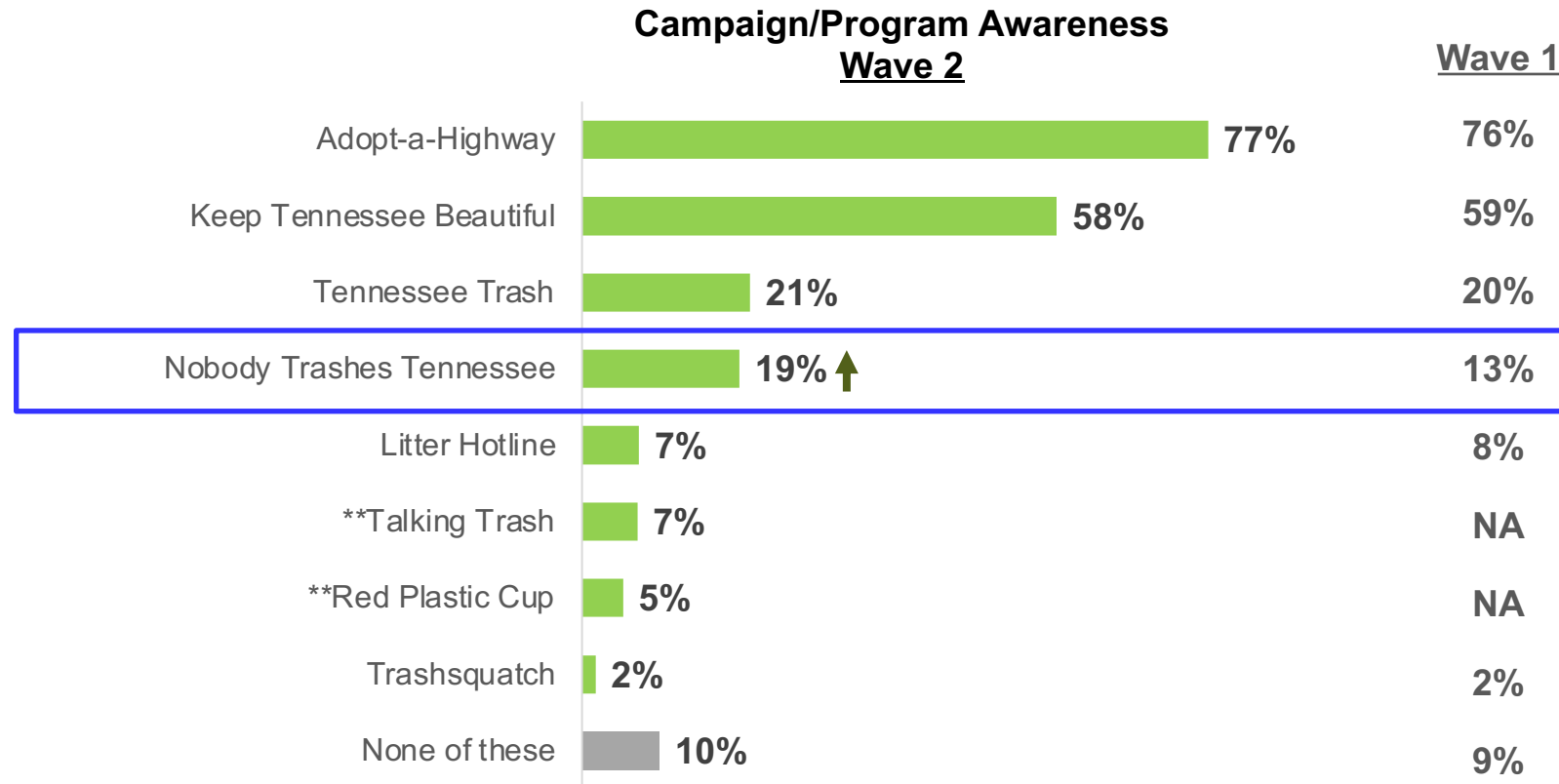
		Region			Litter Behavior		Smoker		Area Type		
Total		Eastern (R)	Middle (S)	Western (T)	Litterer (U)	Non- Litterer (V)	Smoker (W)	Non- Smoker (X)	Urban (Y)	Suburban (Z)	Rural (AA)
Nobody Trashes Tennessee	2%	1%	3%	1%	2%	2%	3%	2%	1%	1%	3%

Box indicates a high (140%+) index to total. *Small Base Size
Q2. When you think of slogans or programs to reduce littering or pollution, which ones come to mind?
Base: Total Wave 2 (n=1019)
Source: Banner 1, Table 20

Aided Campaign Awareness



- Awareness has remained consistent for all campaigns except for NTT, which saw a statistically significant uptick since the last wave.



**New This Wave

Q4. Which of these litter-prevention slogans, programs or characters have you ever seen or heard of?

Base: Wave 2 Total (n=1019), Wave 1 Total (n=1002)

Source: Banner 1 & 3 Table 35

↑↓ Significantly higher/lower than the prior wave at the 90% significant level

NTT Aided Awareness – Demographic Breakdown



- While 19% of the total population was aware of the NTT slogan on an aided basis, those in Jackson and the Tri-Cities had a recall rate about 1.5 times that of the average Tennessean.
- Awareness was also higher among men than women, and higher in the Middle Tennessee region than the Eastern region.

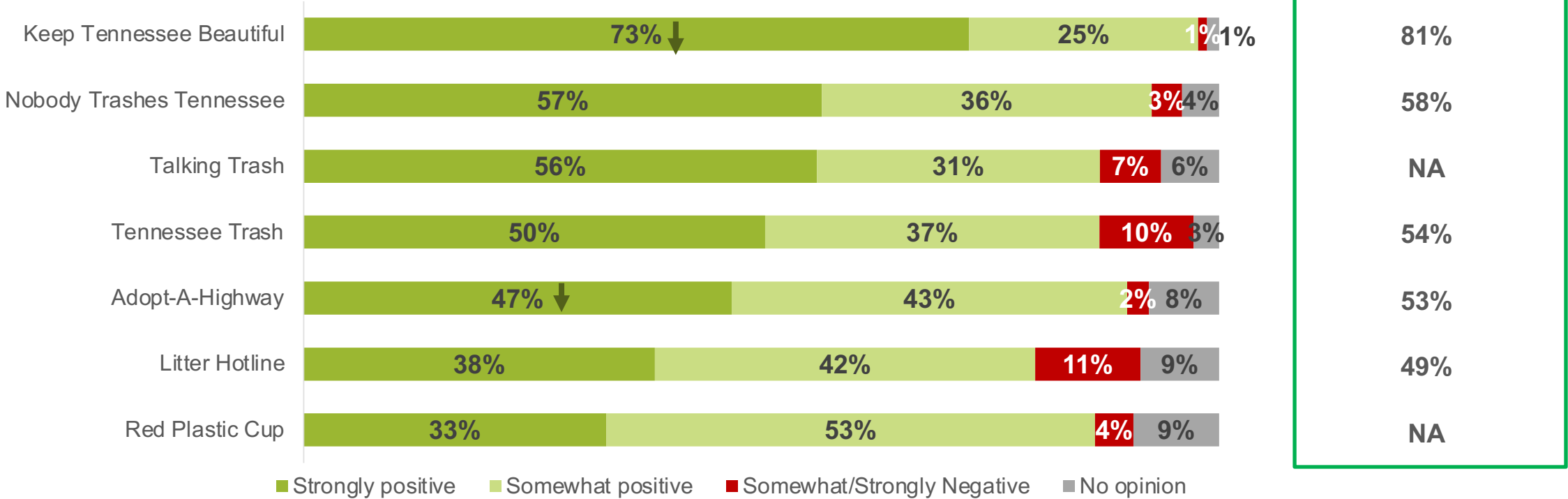
		Gender		Age			Ethnicity			Market					
Total		Male (A)	Female (B)	16-25 (C)	26-39 (D)	40+ (E)	White (F)	Black (G)	All Other* (H)	Nashville (K)	Memphis (L)	Knoxville (M)	Chattanooga (N)	Jackson (O)	Tri-Cities (P)
Nobody Trashes Tennessee	19%	22% ^B	16%	17%	23%	18%	20%	20%	12%	23% ^{LMN}	12%	15%	12%	31% ^{LMN}	28% ^{LMN}

		Region			Litter Behavior		Smoker		Area Type		
Total		Eastern (R)	Middle (S)	Western (T)	Litterer (U)	Non-Litterer (V)	Smoker (W)	Non-Smoker (X)	Urban (Y)	Suburban (Z)	Rural (AA)
Nobody Trashes Tennessee	19%	17%	23% ^R	17%	20%	19%	21%	19%	22%	18%	19%

AB/CDE/FGH/KLMNOP/RST/UV/WX/YZ AA indicate a statistically significant difference between groups at the 90% confidence level. *Small Base Size Q2. When you think of slogans or programs to reduce littering or pollution, which ones come to mind?
Base: Total Wave 2 (n=1019)
Source: Banner 1, Table 34

Campaign Opinions

- Keep Tennessee Beautiful and Adopt-A-Highway have seen a drop in opinion from the prior wave while NTT has held steady (top-box).



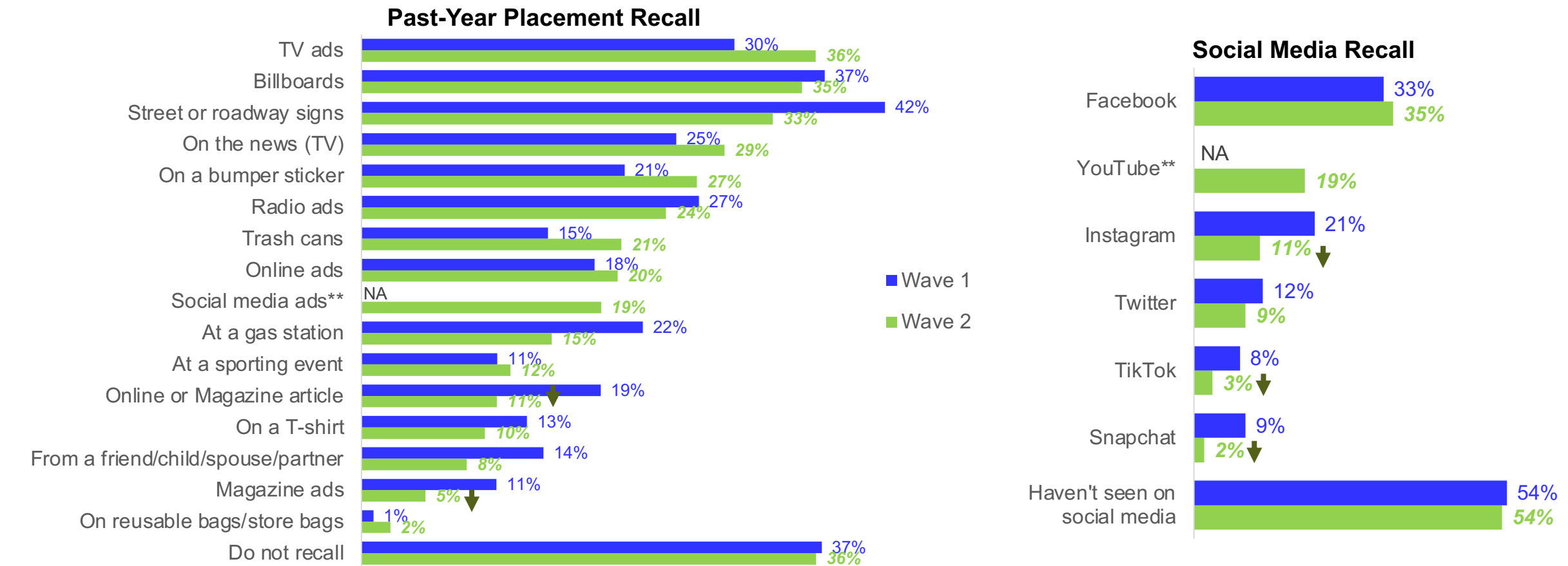
Q5. What is your opinion of each of these litter-prevention slogans, programs or characters?
Base: Adopt-a-Highway (n=808); Keep Tennessee Beautiful (n=615); Tennessee Trash (n=222); Nobody Trashes Tennessee (n=197); *Litter Hotline (n=65)
Source: Banner 1 & 3, Tables 43-46

↑↓ Significantly higher/lower than the prior wave at the 90% significant level (Strongly Positive)

Nobody Trashes Tennessee Placement Recall



- TV ads rose to the top-most cited location to see or hear the slogan, with a 6-percentage-point increase from the prior wave among those aware of the slogan.
- Facebook is, by far, the most-often-recalled social media placement. YouTube has the next highest placement recall. Instagram, TikTok, and Snapchat dipped in social media placement recall, compared to the prior wave.



**New This Wave
Q7/Q7A. In the past year or so, have you seen, read, or heard the slogan "Nobody Trashes Tennessee" from any of the following? Q8. From which social media sources to do you recall seeing the slogan "Nobody Trashes Tennessee?"
Base: Aware of NTT (n=197)
Source: Banner 1 & 3, Tables 49-51

↑↓ Significantly higher/lower than the prior wave at the 90% significant level

Nobody Trashes Tennessee Placement Recall—By Subgroup



- Compared to older residents, those 26 to 39 years old were far more likely to recall seeing the slogan *on street or roadway signs, on radio ads, online ads, and billboards*.
- For several placements, men were more likely than women to recall seeing NTT.

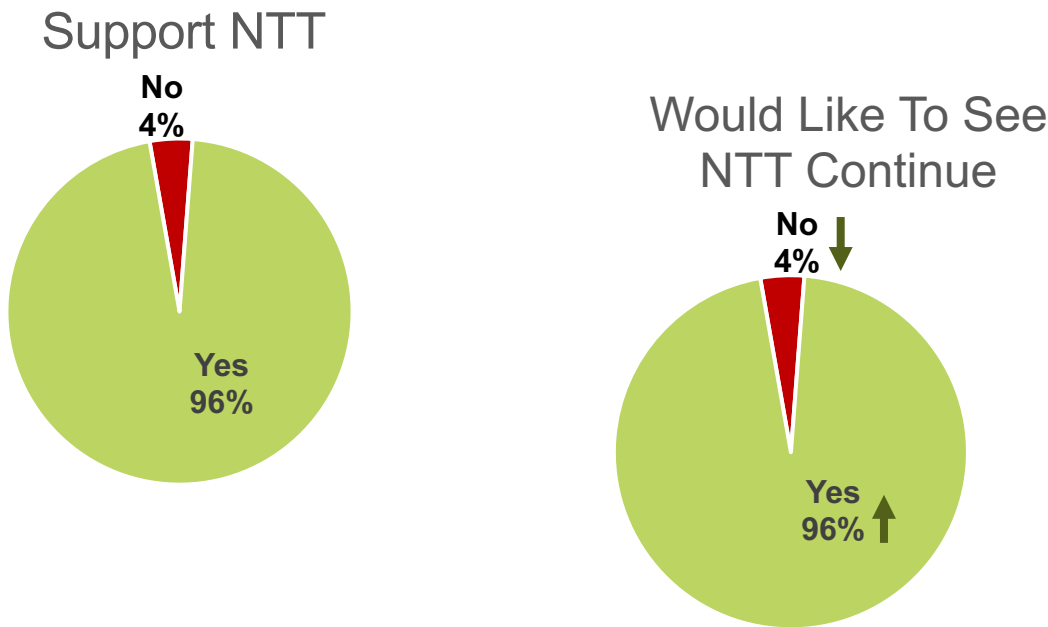
Wave 2 Details	Total Aware of NTT	Male (A)	Female (B)	16-25** (C)	26-39* (D)	40+ (E)
TV ads	36%	45% ^B	27%	15%	30%	45% ^{CD}
Billboards	35%	41% ^B	28%	39%	44% ^E	29%
Street or roadway signs	33%	34%	31%	18%	52% ^{CE}	25%
On the news (TV)	29%	35% ^B	22%	9%	33% ^C	32% ^C
On a bumper sticker	27%	34% ^B	18%	36%	25%	25%
Radio ads	24%	24%	23%	22%	37% ^E	17%
Trash cans	21%	21%	19%	20%	26%	17%
Online ads	20%	28% ^B	11%	19%	31% ^E	14%
Social media ads	19%	23%	14%	14%	27%	16%
At a gas station	15%	18%	11%	5%	19% ^C	15%
At a sporting event	12%	16% ^B	7%	9%	12%	12%
Online or magazine article	11%	13%	8%	4%	12%	12%
On a T-shirt	10%	10%	10%	5%	14%	8%
From a friend/child/spouse/partner	8%	8%	9%	9%	9%	8%
Magazine ads	5%	6%	4%	0%	1%	9% ^{CD}
On reusable bags/store bags	2%	3%	2%	5%	0%	3% ^D

AB/CDE indicate a statistically significant difference between groups at the 90% confidence level. *Small Base Size; **Very Small Base Size
Q7/Q7A. In the past year or so, have you seen, read, or heard the slogan "Nobody Trashes Tennessee" from any of the following?
Base: Aware of NTT (n=197), Male (n=85), Female (n=107), 16-25 (n=18), 26-39 (n=61), 40+ (n=118)
Source: Banner 1; 49-50

Support And Continuation Of NTT



- Overall support for NTT is overwhelming: 96% support it, and 96% would like to see it continue. The latter represents a notable increase from Wave 1 (93%).
- The main reasons for not supporting the campaign are not liking the name and feeling that it won't be effective.



Reasons For <u>Not</u> Wanting NTT To Continue*	
Unappealing (Net)	38%
Dislike the name/It should have a better slogan/name	25%
All other comments about being unappealing	10%
Not Effective/No Results (Net)	27%
People do not follow it/listen to it/do not take it seriously enough	15%
Not effective/Not working/May not be effective	14%
It is not enforced/The law needs to enforce it/does nothing when people litter	4%
It does not sound familiar/Never heard it before/Lack of awareness	19%
It does not relate/connect to littering/trash	6%
Littering is not a big problem/Not many people litter/There are bigger problems to address than littering	5%
Money/It costs money/Money should be spent on other causes/important issues	4%
Other/No reason	16%

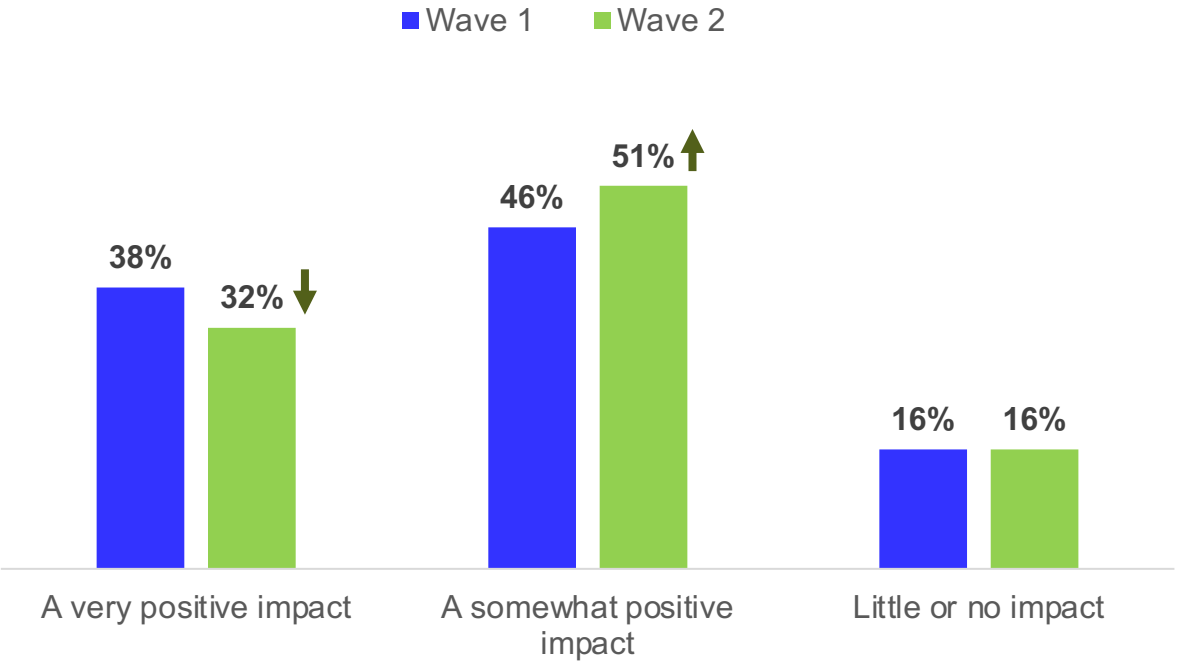
Q9. Overall, do you support the "Nobody Trashes Tennessee" litter-prevention campaign?
Q10. Just based on your own feelings, would you like to see the "Nobody Trashes Tennessee" litter-prevention campaign continue?
Q10A. Why do you feel the "Nobody Trashes Tennessee" campaign should not continue?
Base: Total (n=1019); Do not support continuation of NTT (n=46)
*Caution: Small Base Size
Source: Banner 1, Tables 52-54

Significantly higher/lower than the prior wave at the 90% significant level

NTT Impact On Reducing Litter



- 84% of total respondents of both waves said NTT has had either a “very positive” impact or a “somewhat positive” impact on reducing litter. However, the strength of belief has softened from the prior wave, with half indicating only a “somewhat positive” impact.
- Similar responses were seen across genders and ethnicities; skepticism was highest among older Tennesseans.



Wave 2 Detail	16-25 (C)	26-39 (D)	40+ (E)
A very positive impact	35%	37%	29%
A somewhat positive impact	54%	50%	52%
Little or no impact	11%	14%	19% ^C

↑↓ Significantly higher/lower than the prior wave at the 90% significant level

CDE indicate a statistically significant difference between groups at the 90% confidence level.
Q22. In terms of reducing litter in Tennessee, do you think the "Nobody Trashes Tennessee" campaign has had...?
Base: Total (n=1019), 16-25 (n=114), 26-39 (n=255), 40+ (n=650)
Source: Banner 1 & 3, Table 143

Nobody Trashes Tennessee Meaning



- The vast majority indicate that NTT relates to *litter or cleanliness*, indicating the program resonates with the topic. However, fewer mentioned “stopped littering” this wave compared to the prior wave.

"Nobody Trashes Tennessee" Meaning	Wave 1	Wave 2
Litter/Cleanliness In Tennessee (Net)	78%	72%
Do not litter/Stop littering/Do not throw your trash on the ground/Keep your trash to yourself/No matter who you are/where you come from you should not litter/Do not trash/litter Tennessee	47%	38%
Do not litter on the/Tennessee highways/streets/Nobody should throw trash out of the window/from your car	10%	11%
<i>Keep Tennessee Clean (Subnet)</i>	10%	8%
Keep it clean/Keep Tennessee clean/free of litter/Everybody should keep it clean	9%	7%
Pick up/Clean up after yourself/Throw trash away in the proper receptacles/We all need to pick up after ourselves/dispose properly of trash	7%	8%
Keep Tennessee beautiful/Tennessee is beautiful/Everybody should keep Tennessee beautiful	6%	6%
<i>There Is No Littering Problem In Tennessee (Subnet)</i>	4%	6%
It claims that Tennessee is clean/does not have a littering problem/people in Tennessee do not litter	3%	4%
Anti-litter campaign/No littering/A Tennessee anti-litter campaign	3%	3%
Follow The Laws (Net)	24%	22%
Abide by the law/rules of Tennessee/Obey the law/Obey the law or you will be fined/punished	11%	9%
Littering is not acceptable in Tennessee/We do not put up with littering here/Littering is not tolerated/People that litter are not welcome	6%	7%
Be a good/educated citizen/Do your part/everyone needs to do their part/work together to keep Tennessee great	4%	3%
Tennessee Culture/People (Net)	7%	7%
We are a proud state/care about Tennessee/Pride in our state	3%	4%
Negative Comments About The Statement/Slogan (Net)	5%	6%
Positive Comments About The Statement/Slogan (Net)	3%	5%

Shows mentions of 3% or greater.
Q6. In your own words, please describe what the slogan "Nobody Trashes Tennessee" means to you.
Base: Total Wave 1 (n=1002); Total Wave 2 (n=1019)
Source: Banner 3, Table 48

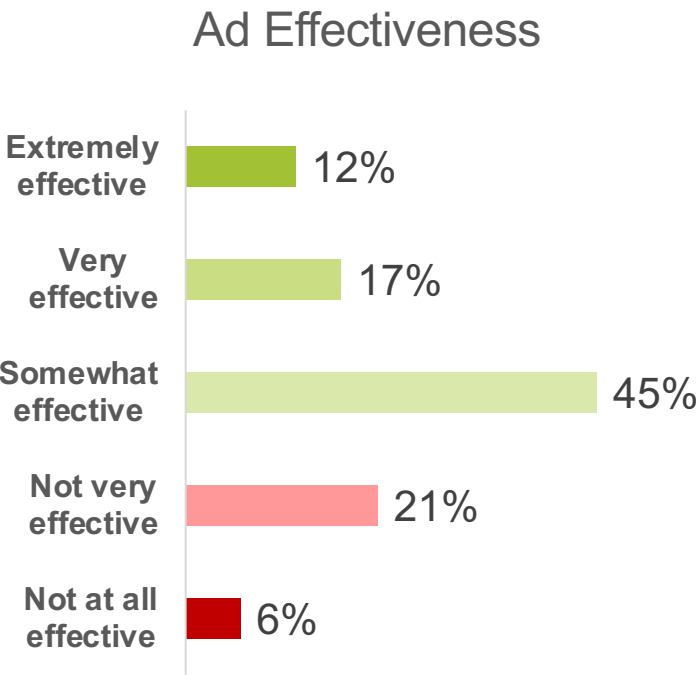
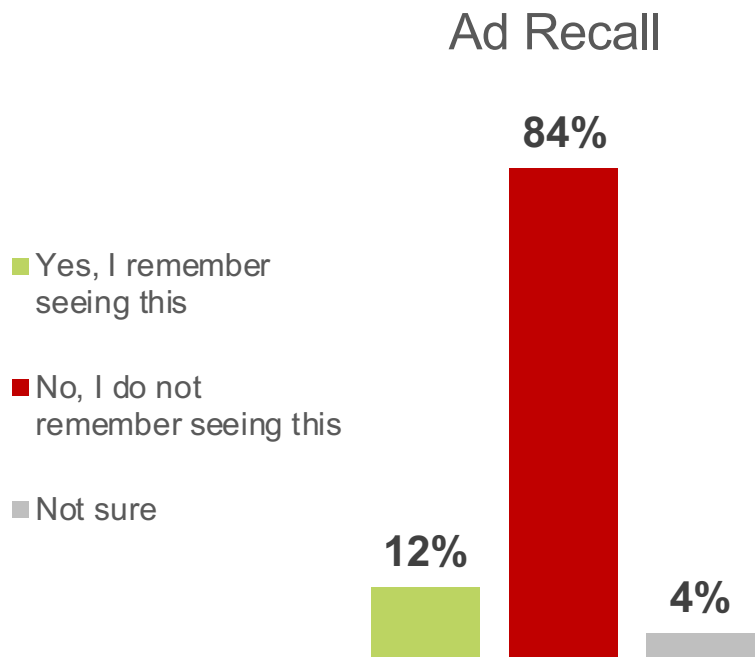
Campaign Awareness



Stimulus 1: Recall And Effectiveness



- 12% recall seeing “Red Plastic Cup” billboard, the highest of the 3 stimuli tested.
- Many are “on the fence” about the ad’s effectiveness. However, it received twice as many “extremely effective” ratings as “not at all effective” ratings.



Q24G. Have you seen this advertising material before today?
Q24H. How effective do you think this advertising is in motivating you to do something about the litter problem?
Base: Total (n=1019)
Source: Banner 1, Tables 205-206,

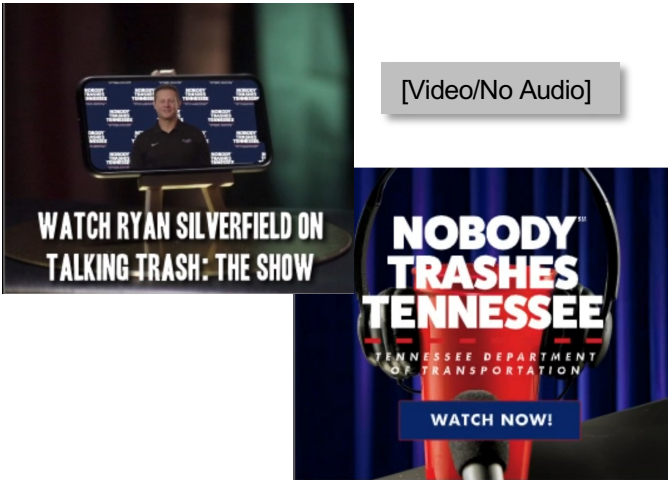
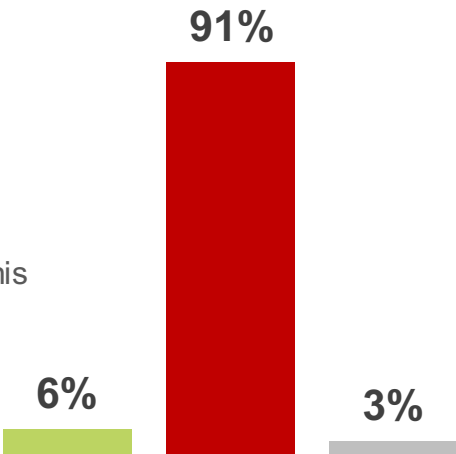
Stimulus 2: Recall, Effectiveness, And Interest



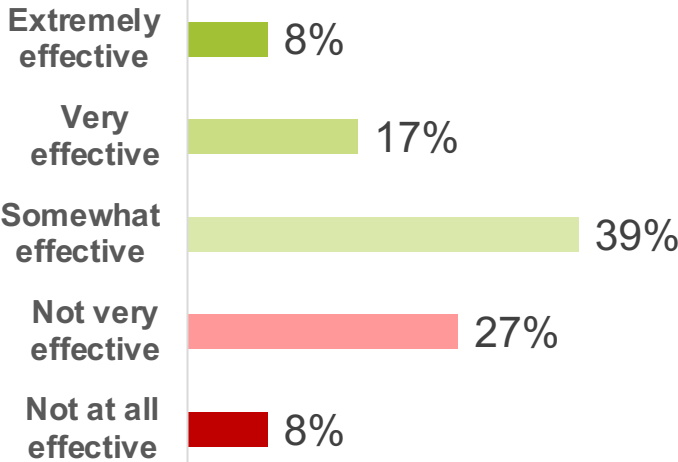
- Only 6% of Tennesseans recall seeing this media before, the lowest of the 3 stimuli shown. Ad recall was higher among men and litterers.
- More than 50% of the respondents are at least “somewhat” interested in watching Ryan Silverfield on Talking Trash: The Show. Stronger interest is shown by 21% (top-2 box).
 - Interest was higher among males and those aged 26-39 years old.
- Men also said the ad was more effective in motivating them to do something about the problem.

Ad Recall

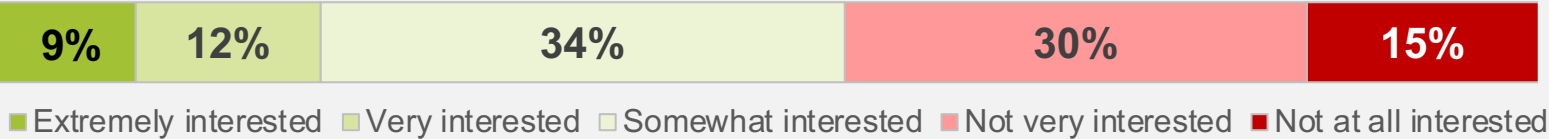
- Yes, I remember seeing this
- No, I do not remember seeing this
- Not sure



Ad Effectiveness



Interest In Watching The Show



Q25I. Have you seen this advertising material before today? Q25J. How effective do you think this advertising is in motivating you to do something about the litter problem?
Q25JJ. How interested would you be in watching Ryan Silverfield on Talking Trash: The Show?
Base: Total (n=1019)
Source: Banner 1, Tables 207-209

Stimulus 3: Recall And Effectiveness



- Nearly 1 in 10 Tennesseans recall seeing this video.
- This stimuli is also seen as being more effective, likely due to its format and detail.



Q25K. Have you seen this advertising material before today?
Q25L. How effective do you think this advertising is in motivating you to do something about the litter problem?
Base: Total (n=1019)
Source: Banner 1, Tables 210, 211

Stimuli Recall And Effectiveness—By Demographic



	Total	Male (A)	Female (B)	16-25 (C)	26-39 (D)	40+ (E)	Litterer (F)	Non-Litterer (G)
Recall Seeing Ad	12%	16%B	7%	19%E	13%E	8%	19%G	8%
Effectiveness (Top-2 box)	29%	34%B	24%	26%	27%	31%	31%	28%



Recall Seeing Ad	6%	8%B	3%	8%	7%E	4%	11%G	3%
Effectiveness (Top-2 box)	25%	29%B	22%	23%	30%E	24%	28%	24%
Ryan Silverman Interest (Top-2 box)	21%	27%B	14%	15%	25%C	20%	23%	19%



Recall Seeing Ad	9%	14%B	4%	14%E	11%E	7%	15%G	6%
Effectiveness (Top-2 box)	46%	47%	45%	44%	48%	46%	49%	44%

AB/CDE/FG indicate a statistically significant difference between groups at the 90% confidence level.
Q24G//K. Have you seen this advertising material before today? Q24H/J/L. How effective do you think this advertising is in motivating you to do something about the litter problem?
Q25JJ. How interested would you be in watching Ryan Silverfield on Talking Trash: The Show?
Base: Total (n=1019), Male (n=395), Female (n=613), 16-25 (n=114), 26-39 (n=255), 40+ (n=650), Litterer (n=314), Non-Litterer (n=705).
Source: Banner 1, Tables 205,206,207,208,209,210,211

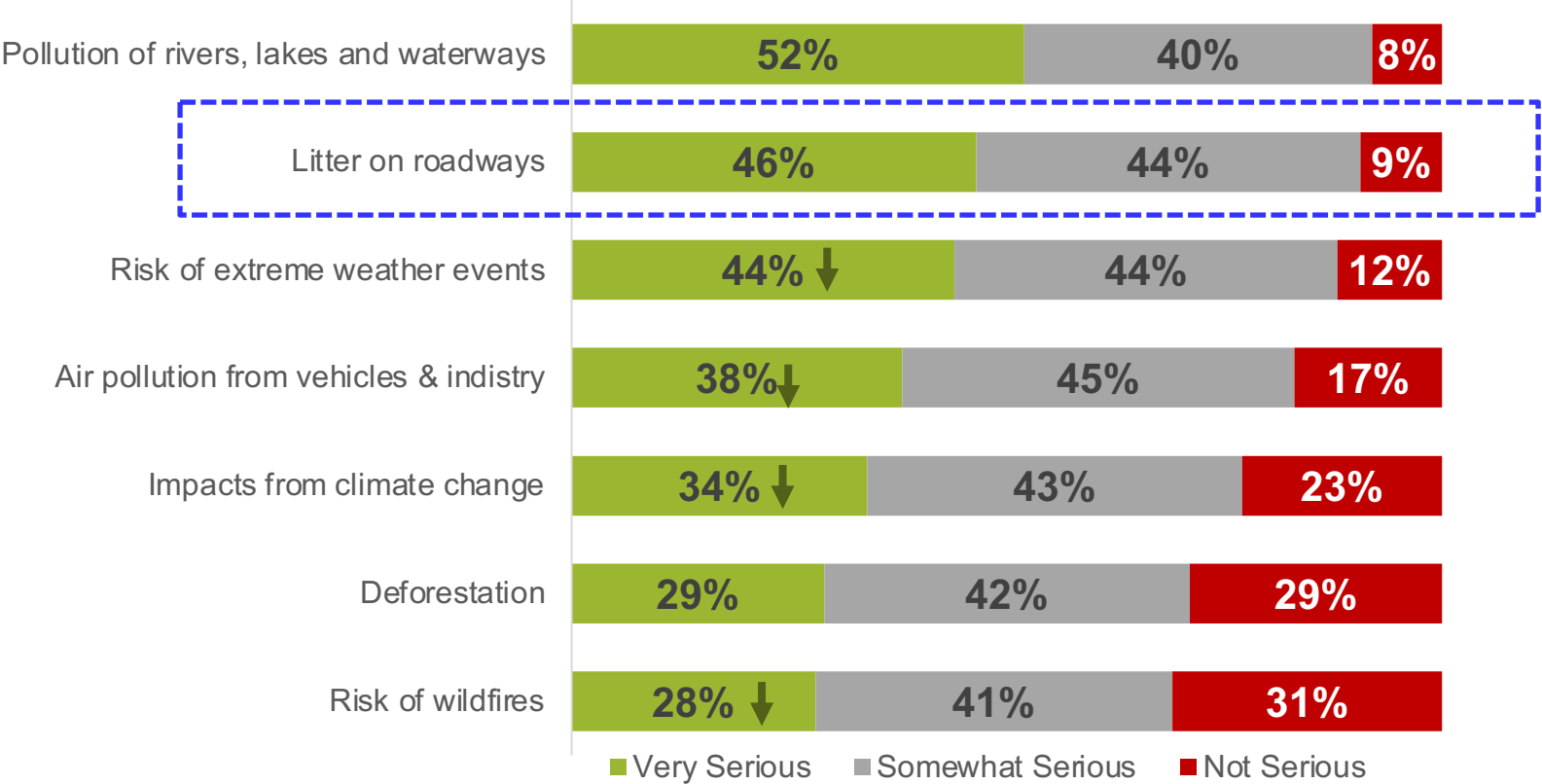
Littering Attitudes And Behaviors



Environmental Problem Seriousness



- Litter on roadways has shifted up in environmental seriousness from the prior wave, up to second place from third (top-box level).
- The *risk of extreme weather events*, *impacts from climate change*, and *risk of wildfires* have all declined perceptions of being “very serious” compared to the prior year.



Litter on roadways is “very serious” to more younger Tennesseans (16-39) than older (40+).

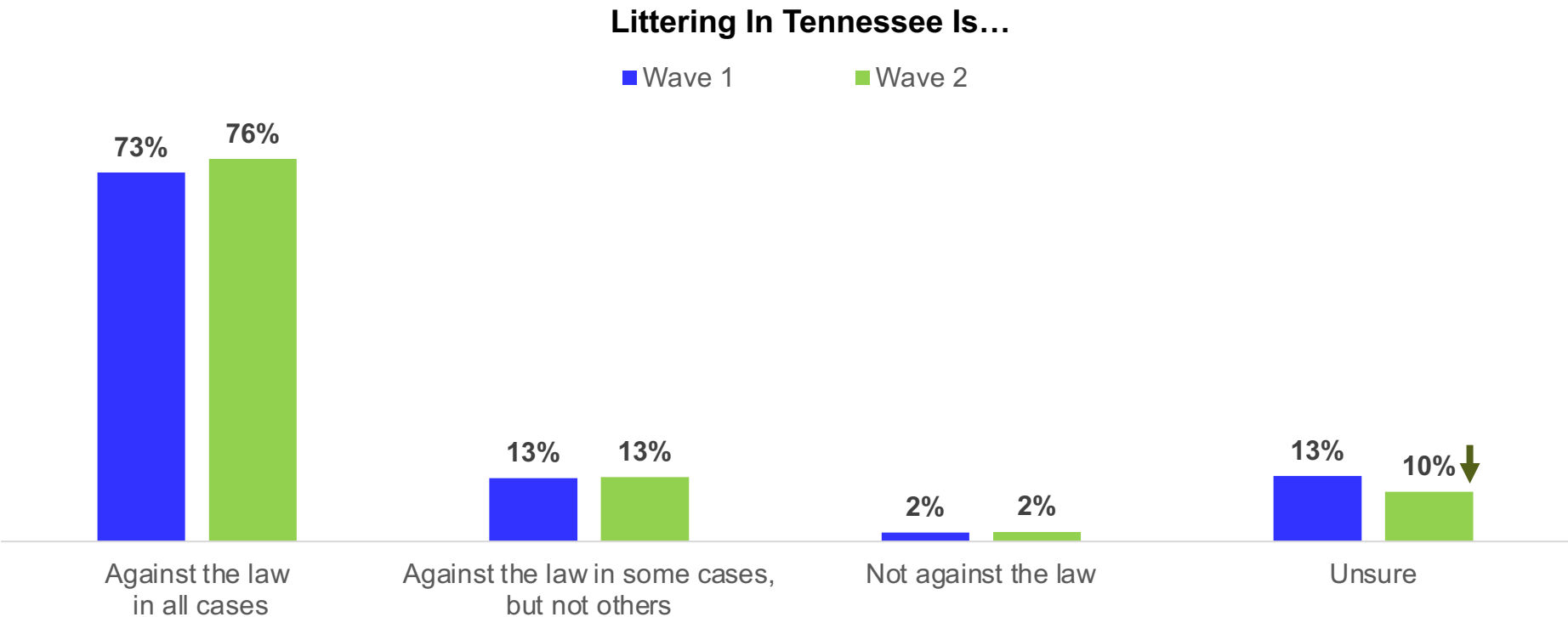
Q3. How serious of a problem do you think each of these issues is in Tennessee?
Base: Total (n=1019)
Source: Banner 1 & 3, Table 21-27

↑↓ Significantly higher/lower than the prior wave at the 90% significant level (Very Serious)

Knowledge Of Littering Laws



- Most Tennesseans believe littering is *against the law in all cases* (top-box level), showing a slight (3%) increase from the last wave.
- More respondents gave a response this wave, and fewer were “unsure,” indicating a knowledge shift among residents.



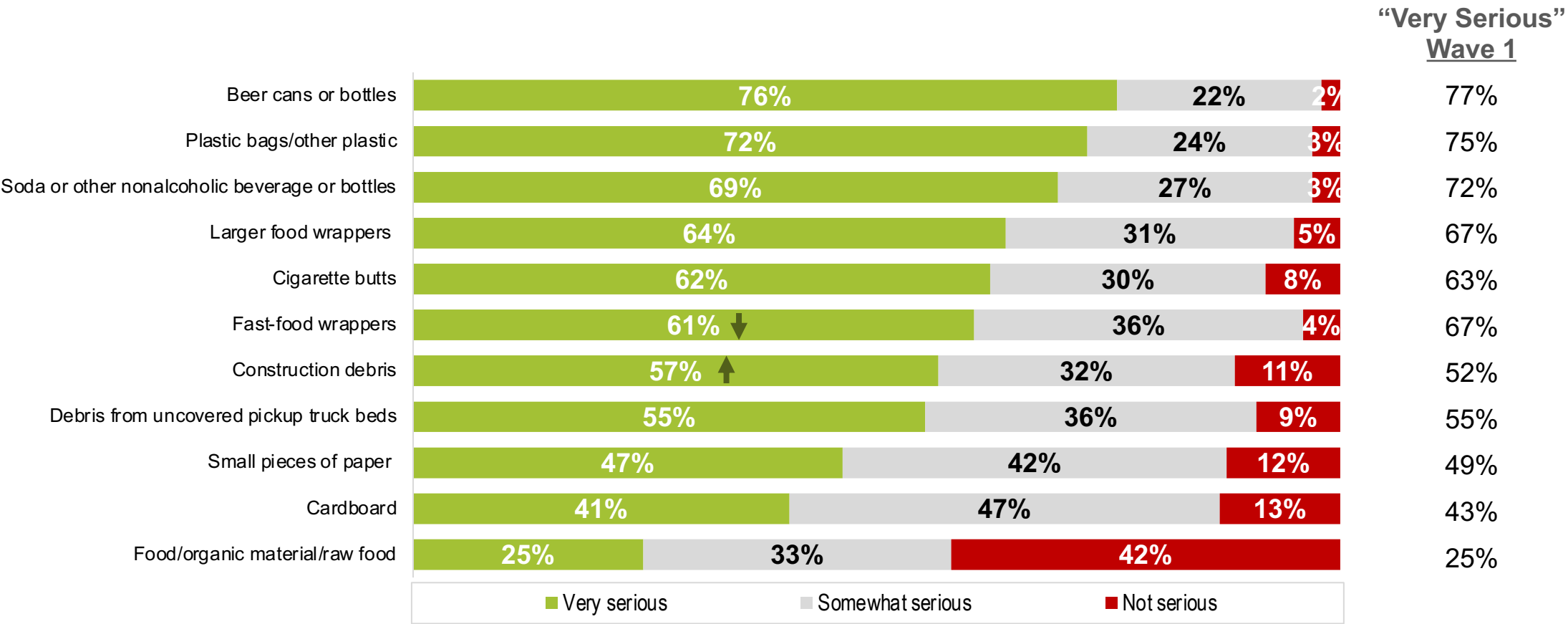
Q12. To the best of your knowledge, is littering in Tennessee...?
Base: Total Wave 1 (n=1002); Total Wave 2 (n=1019)
Source: Banner 3, Table 57

↑↓ Significantly higher/lower than the prior wave at the 90% significant level

Seriousness Of Litter Items



- Beer cans and bottles, plastic bags/other plastic, and soda/nonalcoholic beverages or bottles are seen as the most serious forms of litter.
- Fewer indicate fast-food wrappers are “very serious” and more say construction debris is “very serious” this year versus the prior wave.



Q13. How serious do you think each of these items is, in terms of litter?
Base: Total Wave 1 (n=1002); Total Wave 2 (n=1019)
Source: Banner 3, Tables 58-68

↑↓ Significantly higher/lower than the prior wave at the 90% significant level (Very Serious)

Knowledge Of Littering Laws And Seriousness Of Items

By Subgroup



- The perception of littering being *against the law in all cases* increases slightly with age.
- More of the 26–39-year-old segment perceives each litter item to be *very serious* than the older segment (significant for all except for beer cans/bottles).
- More females rated many items as being a *very serious* issue compared to men.

Wave 2 Detail	Total	Male (A)	Female (B)	16-25 (C)	26-39 (D)	40+ (E)	White (F)	Black (G)	All Other* (H)
Litter Laws Awareness									
Against the law in all cases	76%	75%	76%	71%	76%	77%	78% ^G	64%	75%
Against the law in some cases, but not others	13%	15% ^B	10%	16%	14%	11%	11%	22% ^{FH}	10%
Not against the law	2%	2%	2%	1%	1%	2%	2% ^H	1%	0%
Unsure	10%	8%	12% ^A	11%	9%	10%	9%	13%	15%
"Very Serious"									
Beer Cans Or Bottles	76%	74%	77%	79%	78%	73%	75%	76%	77%
Plastic Bags/Other Plastic	72%	69%	75% ^A	73%	79% ^E	69%	73%	69%	76%
Soda Or Other Nonalcoholic Beverage Or Bottles	69%	65%	74% ^A	68%	74% ^E	68%	69%	68%	75%
Larger Food Wrappers	64%	63%	66%	68%	70% ^E	61%	64%	63%	67%
Cigarette Butts	62%	60%	64%	67% ^E	67% ^E	58%	61%	66%	59%
Fast-Food Wrappers	61%	58%	63%	58%	67% ^{CE}	59%	62%	55%	63%
Construction Debris	57%	54%	60% ^A	65% ^E	66% ^E	51%	55%	62%	68% ^F
Debris From Uncovered Pickup Truck Beds	55%	49%	61% ^A	57%	61% ^E	52%	55%	53%	56%
Small Pieces Of Paper	47%	44%	49%	42%	54% ^E	45%	46%	53%	39%
Cardboard	41%	38%	43% ^A	40%	50% ^{CE}	37%	40%	48% ^F	31%
Food/Organic Material/Raw Food	25%	27%	23%	32% ^E	28% ^E	22%	21%	42% ^{FH}	28%

AB/CDE/FGH indicate a statistically significant difference between groups at the 90% confidence level. *Small Base Size.

Q12. To the best of your knowledge, is littering in Tennessee...?

Q13. How serious do you think each of these items is, in terms of litter?

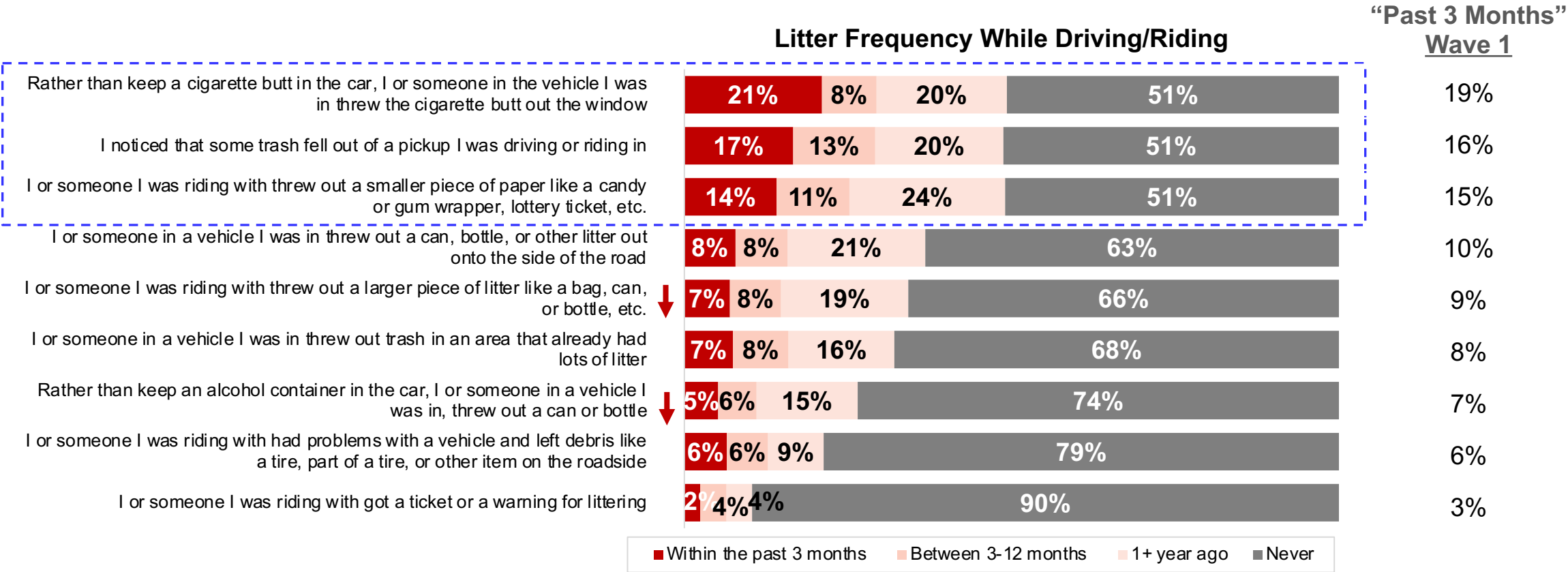
Base: Total (n=1019), Male (n=395), Female (n=613), 16-25 (n=114), 26-39 (n=255), 40+ (n=650), White (n=856), Black (n=109), *All Other (n=54).

Source: Banner 1, Tables 57-68

Frequency Of Littering Incidents (Self Or Others)



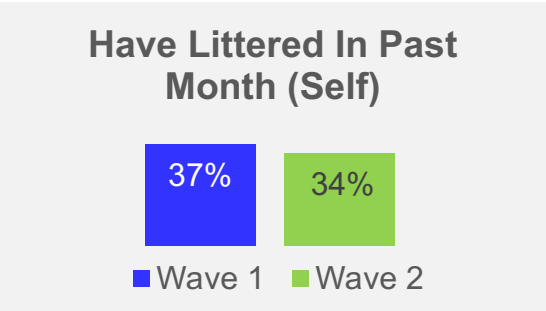
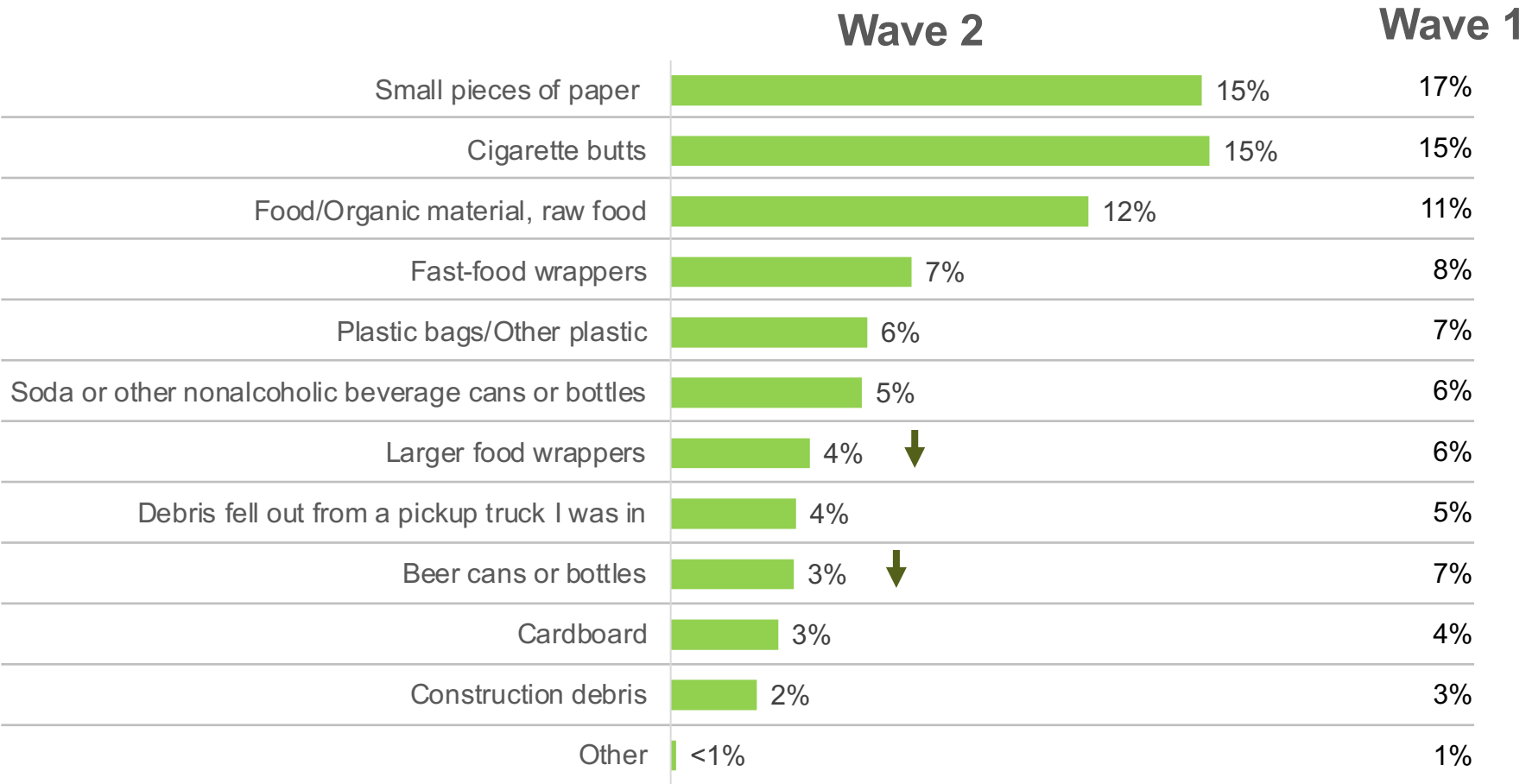
- As seen last wave, the most frequent littering incident reported in the past 3 months is *throwing a cigarette butt out of a vehicle* followed by *trash falling out of a pickup*.
- Fewer report recent incidence of littering *larger pieces of paper* and *alcohol cans/bottles*.



Q14. For each of the following, please indicate how often, if ever, it has happened.
Base: Total Wave 1 (n=1002); Total Wave 2 (n=1019)
Source Banner 1, Tables 75-83

↑↓ Significantly higher/lower than the prior wave at the 90% significant level (Within the past 3 months)

Past-Month Littering Incidence (Self)



- Personal incidence of past-month littering has decreased across the board from the last wave, notably so for *large food wrappers* and *beer cans/bottles*.
- Significantly more men than women said they littered in the past month in nearly all categories. One exception is *cigarettes*, where littering between the sexes is the same at 15%.

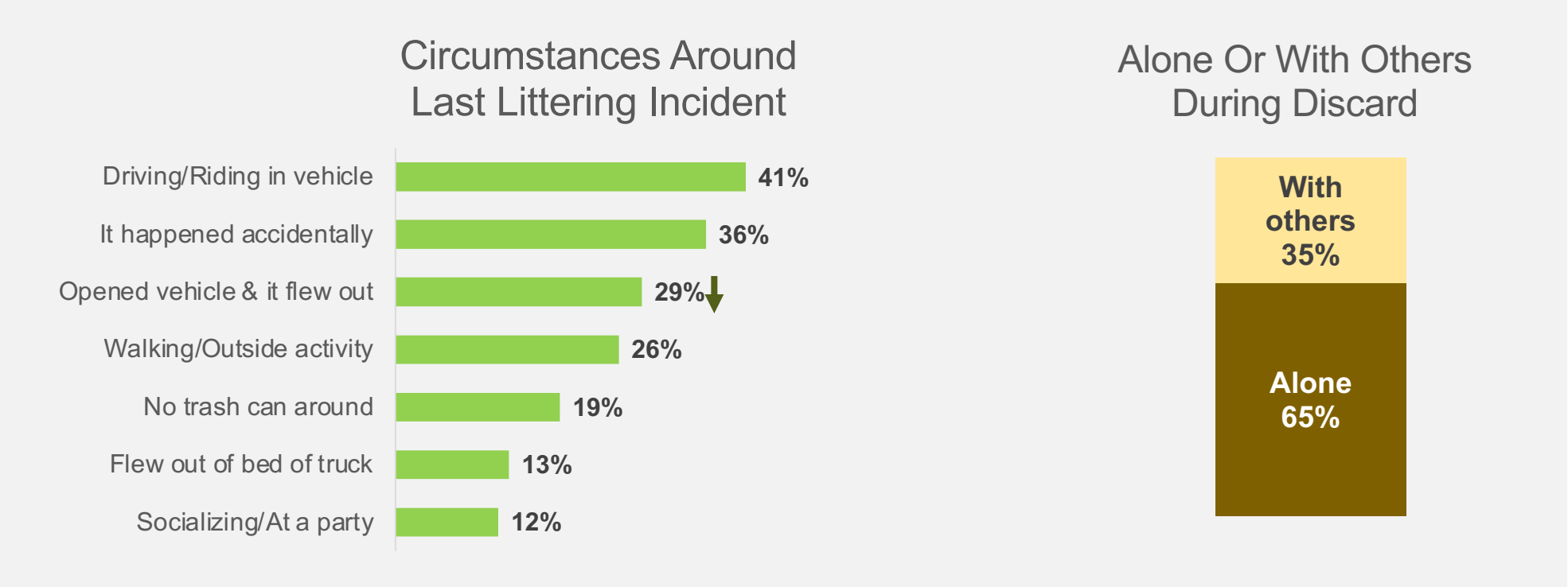
↑↓ Significantly higher/lower than the prior wave at the 90% significant level

Q15. Please indicate if you, yourself discarded the following items as litter in the past month either by accident or because you were just careless, distracted, or in a hurry.
Base: Total Wave 1 (n=1002); Total Wave 2 (n=1019)
Source: Banners 1 & 3, Table 90

Litter Circumstances



- 65% of the people littered when they were alone, similarly as high in the prior wave.
 - More women (44%) than men (27%) were *with others* when they littered.
- Driving/Riding in a vehicle* was the top circumstance when littering happened. This was the case in both the waves.
 - Fewer report *litter flying out of the car when they opened a window or door* this wave than last.



Q16. As best as you can recall, please indicate if the following circumstances apply to the last time you discarded an item as litter.
Q17. When you discarded the most recent item as litter, were you...?
Base: Aware Of At Least One Of The Listed Circumstances (n=307)
Source: Banner 1 & 3, Table 91-92

↑↓ Significantly higher/lower than the prior wave at the 90% significant level

Litter Disposal Preference In A Vehicle



- Half of Tennesseans prefer disposable alternatives to dispose of trash in their vehicles.
- A smaller share prefer a more durable alternative; however, this preference has increased over the prior wave.



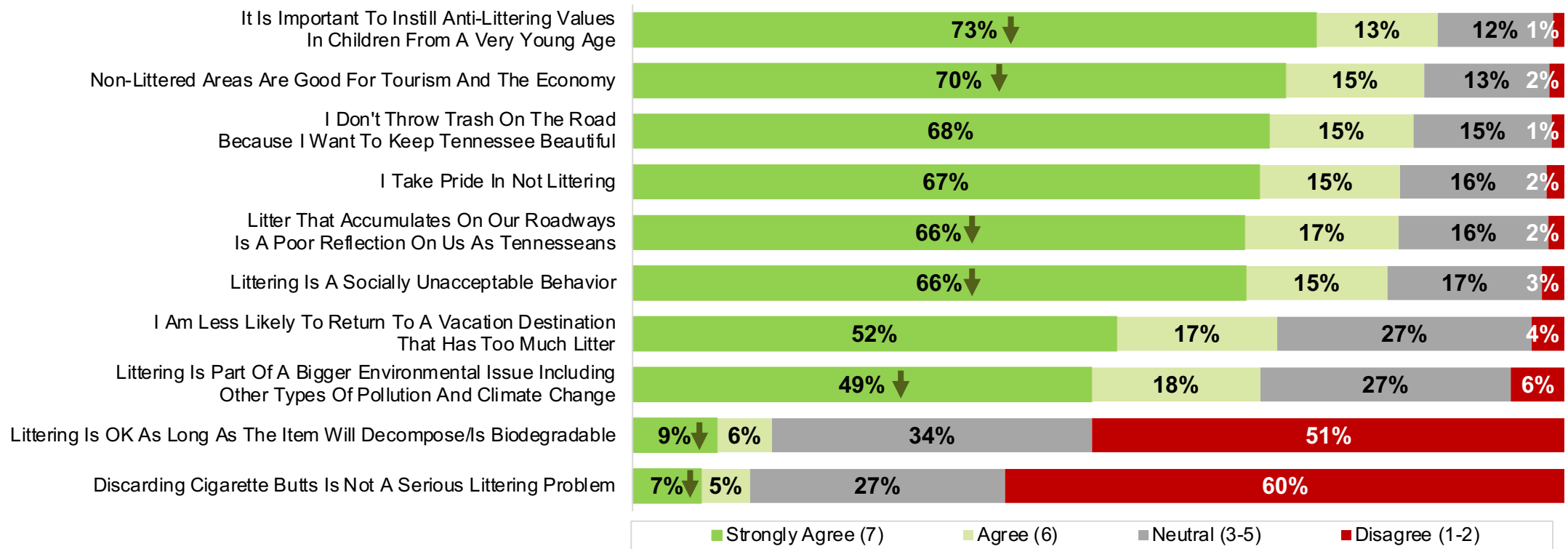
Q18. Which of these would you prefer to use in your vehicle to dispose of litter?
Base: Total (n=1019)
Source: Banner 1 & 3, Table 93

↑↓ Significantly higher/lower than the prior wave at the 90% significant level

Agreement With Statements About Littering

- The importance of *teaching children not to litter* is again the most-agreed-to statement; however, fewer strongly agree with the sentiment compared to the prior wave.
- Most of the statements declined in strong agreement this wave.

Statement Agreement



Q19. Please rate how much you agree or disagree with each of the following statements.
Base: Total (n=1019)
Source: Banner 3, Tables 94-103

↑↓ Significantly higher/lower than the prior wave at the 90% significant level (Strongly Agree)

Agreement With Statements About Littering

By Subgroup



- Women, those in the *older segment (40+)*, and those *other than African-Americans* are more likely to strongly agree with the many of these statements, compared to their counterparts.

"Strongly Agree"	Total	Male (A)	Female (B)	16-25 (C)	26-39 (D)	40+ (E)	White (F)	Black (G)	All Other* (H)
It Is Important To Instill Anti-Littering Values In Children From A Very Young Age	73%	66%	81% ^A	61%	72% ^C	77% ^C	74% ^G	66%	78%
Non-Littered Areas Are Good For Tourism And The Economy	70%	66%	75% ^A	59%	69% ^C	74% ^C	72% ^G	58%	76% ^G
I Don't Throw Trash On The Road Because I Want To Keep Tennessee Beautiful	68%	64%	72% ^A	56%	63%	74% ^{CD}	71% ^G	53%	77% ^G
I Take Pride In Not Littering	67%	62%	72% ^A	59%	65%	71% ^C	68% ^G	58%	80% ^{FG}
Litter That Accumulates On Our Roadways Is A Poor Reflection On Us As Tennesseans	66%	60%	71% ^A	60%	62%	69% ^{CD}	67% ^G	53%	83% ^{FG}
Littering Is A Socially Unacceptable Behavior	66%	62%	69% ^A	54%	64%	70% ^{CD}	68% ^G	53%	76% ^G
I Am Less Likely To Return To A Vacation Destination That Has Too Much Litter	52%	49%	55%	48%	51%	53%	52%	45%	69% ^{FG}
Littering Is Part Of A Bigger Environmental Issue Including Other Types Of Pollution And Climate Change	49%	45%	53% ^A	55%	50%	47%	48%	52%	58%
Littering Is OK As Long As The Item Will Decompose/Is Biodegradable	9%	10%	8%	14% ^E	11% ^E	7%	9%	9%	14%
Discarding Cigarette Butts Is Not A Serious Littering Problem	7%	9% ^B	6%	10%	7%	7%	8%	7%	7%

AB/CDE/FGH indicate a statistically significant difference between groups at the 90% confidence level. *Small Base Size.

Q19. Please rate how much you agree or disagree with each of the following statements. You may use any point on the scale. Remember to read each statement carefully before answering.

Base: Total (n=1019), Male (n=395), Female (n=613), 16-25 (n=114), 26-39 (n=255), 40+ (n=650), White (n=856), Black (n=109), *All Other (n=54).

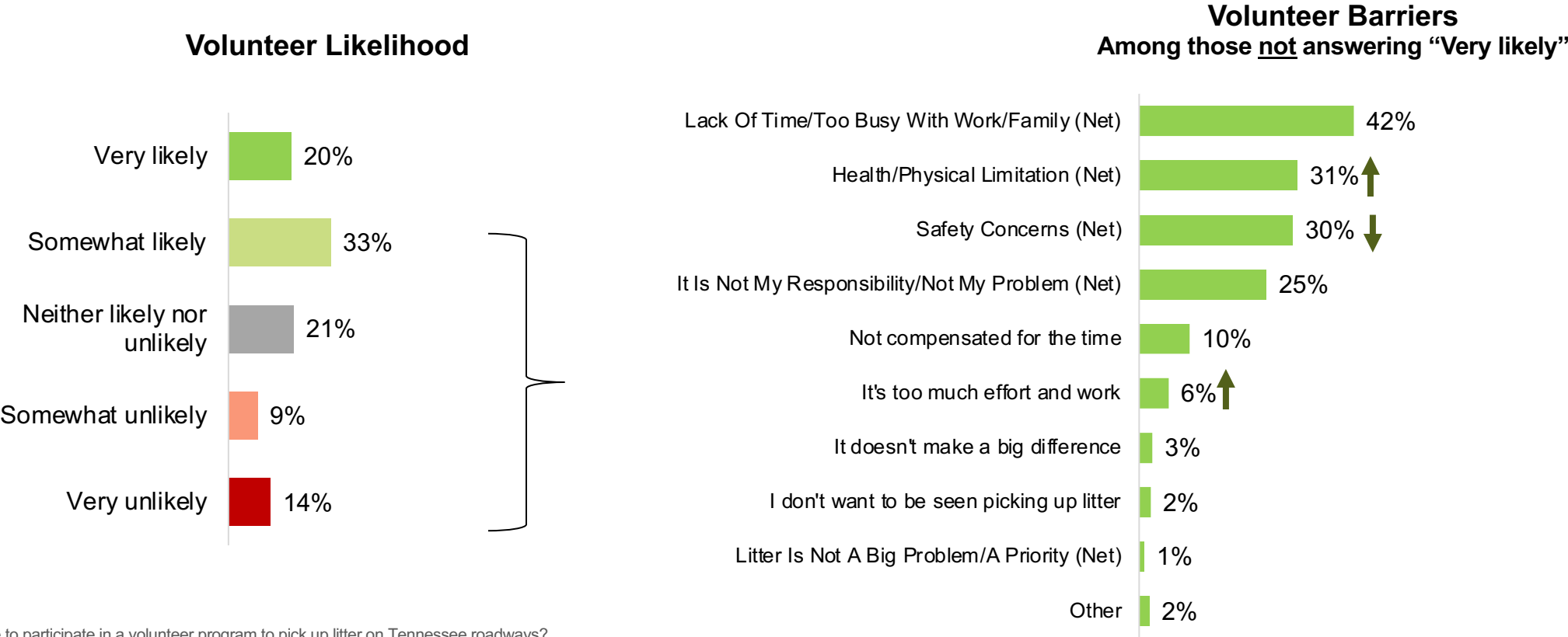
Source: Banner 1, Table 105

Volunteering



Likelihood To Volunteer To Pick Up Litter/Volunteering Barriers

- 1 in 5 Tennesseans indicate they are “very likely” to volunteer. The likelihood across the spectrum is comparable to the prior wave.
 - This strong likelihood to volunteer is especially high among men and Hispanics.
- Lack of time* was cited as the #1 barrier to volunteering in each wave. *Safety concerns* has dropped as a barrier, while *health/physical limitations* and *too much effort and work* have increased from the prior wave.

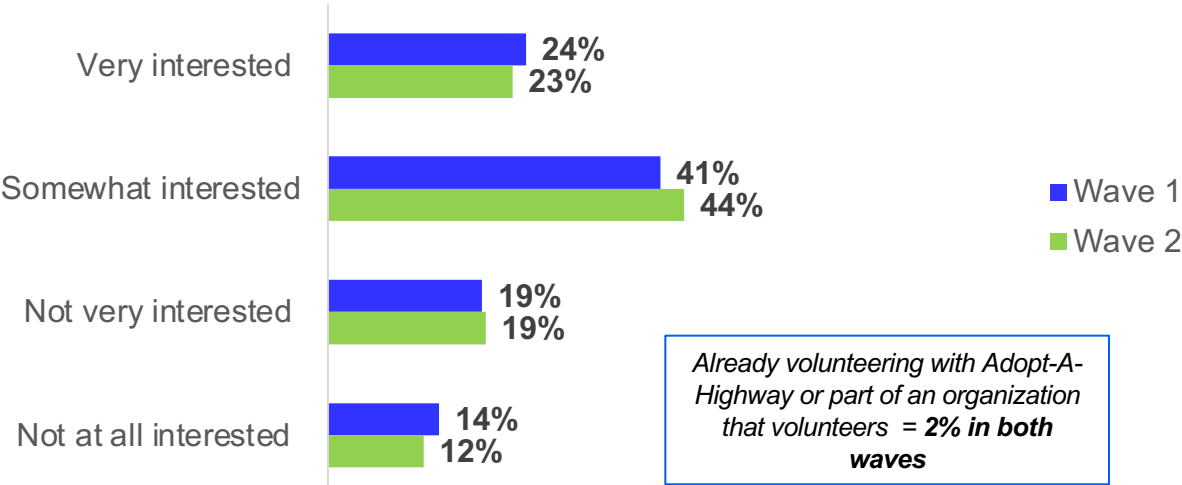


Q11. How likely would you be to participate in a volunteer program to pick up litter on Tennessee roadways?
Q11A. Which of these are reasons for you not being more likely to volunteer to pick up litter on roadways?
Base: Total (n=1019); Base 2: Somewhat Likely To Very Unlikely To Volunteer (n=813)
Source: Banner 3, Table 55-56,

↑↓ Significantly higher/lower than the prior wave at the 90% significant level

Adopt-A-Highway Volunteer Interest

- Interest in Adopt-A-Highway is similar between the 2 waves.
- Significantly more *older* Tennesseans and *males* are “not at all interested” in volunteering for the program, compared to their counterparts.



Similar to picking up litter in general, *health limitations* and *time constraints* are the top **barriers** to volunteering with Adopt-A-Highway.

Wave 2 Detail		Male (A)	Female (B)	16-25 (C)	26-39 (D)	40+ (E)	White (F)	Black (G)	All Other* (H)
	Total								
Very interested	23%	27%	19%	27%	24%	21%	21%	25%	38% ^F
Somewhat interested	44%	41% ^B	46%	38%	49%	43%	43%	51% ^H	33%
Not very interested	19%	15%	23% ^A	22%	17%	20%	20%	15%	18%
Not at all interested	12%	14% ^B	9%	10%	9%	14% ^D	13%	9%	8%

AB/CDE/FGH indicate a statistically significant difference between groups at the 90% confidence level. *Small Base Size
Q23. How interested would you be in volunteering for the program or being part of an organization that sponsors a roadway or volunteers as a group? Q24. What barriers exist for you in taking part in the Adopt-a-Highway program?
Base: Total (n=1019), Male (n=395), Female (n=613), 16-25 (n=114), 26-39 (n=255), 40+ (n=650), White (n=856), Black (n=109), *All Other (n=54).
Source: Banner 1 & 3, Tables 144-145

Motivators To Spread The Word About Reducing Litter



- The top motivations to spread the word about reducing littering include *seeing the litter/**knowing the importance* of not littering and *seeing its impact*.
- These motivations vary by demographic groups. *Seeing litter/Knowing the importance* has a greater impact on older Tennesseans, while younger residents tend to be more motivated by *seeing the impact of litter*. *Seeing the impact of littering* is also more motivating among litterers and those in urban and suburban areas.

	Total	Age 16-25	Age 26-39	Age 40+	Litterer	Non-Litterer	Urban	Suburban	Rural
What Would Motivate Me/What I Would Tell Others (Net)	80%	89%	86%	75%	84%	79%	85%	81%	76%
<i>Seeing The Litter/Knowing The importance Of Not Littering (Subnet)</i>	22%	17%	18%	25%	22%	22%	24%	21%	21%
Do not litter/Keep it clean/Put trash where it belongs	12%	9%	13%	12%	12%	11%	17%	9%	11%
Seeing the litter/litter pile up	5%	4%	2%	7%	4%	6%	4%	6%	5%
Seeing someone litter	3%	4%	2%	3%	3%	3%	2%	5%	3%
<i>The Impacts Of Littering (Subnet)</i>	18%	25%	24%	13%	21%	16%	22%	19%	13%
It affects animals/wildlife	8%	13%	12%	4%	11%	7%	6%	9%	7%
It affects the community/environment	3%	5%	4%	2%	2%	3%	6%	2%	2%
<i>Pride/Respect (Subnet)</i>	12%	11%	10%	13%	11%	12%	10%	12%	12%
Pride/Have pride in the city/state/environment/Keep it clean/beautiful	9%	8%	6%	10%	7%	9%	7%	9%	10%
<i>Rewards/Incentives (Subnet)</i>	6%	11%	6%	5%	8%	5%	8%	7%	4%
Money/Cash reward	3%	5%	2%	2%	3%	2%	1%	4%	2%
A reward/incentive/compensation/prize (unspecified)	2%	5%	3%	1%	4%	1%	4%	1%	2%
<i>Campaigns/Advertisements (Subnet)</i>	5%	2%	8%	5%	5%	5%	3%	7%	6%
<i>Shame (Subnet)</i>	5%	7%	5%	4%	4%	6%	5%	6%	5%
Shame them/Tell them it is inappropriate/No excuse to litter	4%	5%	5%	2%	3%	4%	3%	4%	3%
<i>More Penalties/Punishments (Subnet)</i>	5%	7%	3%	5%	4%	5%	3%	6%	5%
<i>If I Knew More/Had More Information (Subnet)</i>	3%	5%	6%	2%	3%	3%	3%	4%	2%
<i>Seeing Others Take Action (Subnet)</i>	3%	7%	2%	2%	3%	3%	5%	1%	4%
I already tell people not to litter/No motivation needed	6%	5%	5%	7%	4%	7%	7%	5%	7%
Nothing/It should just come naturally	5%	3%	4%	6%	4%	5%	5%	4%	5%
Don't know	7%	3%	4%	9%	6%	7%	2%	8%	10%

Q24E. Please think about spreading the word to reduce litter along roadways. What would motivate you to tell others to reduce littering behaviors?
Base: Total (n=1019); 16-25 (n=114), 26-39 (n=255), 40+ (n=650), Litterer (n=314), Non-Litterer (n=705), Urban (n=214), Suburban (n=415), Rural (n=390).
Source: Banner 1, Table 238 (Question added in Wave 2) Showing responses of 5% or more for any group.

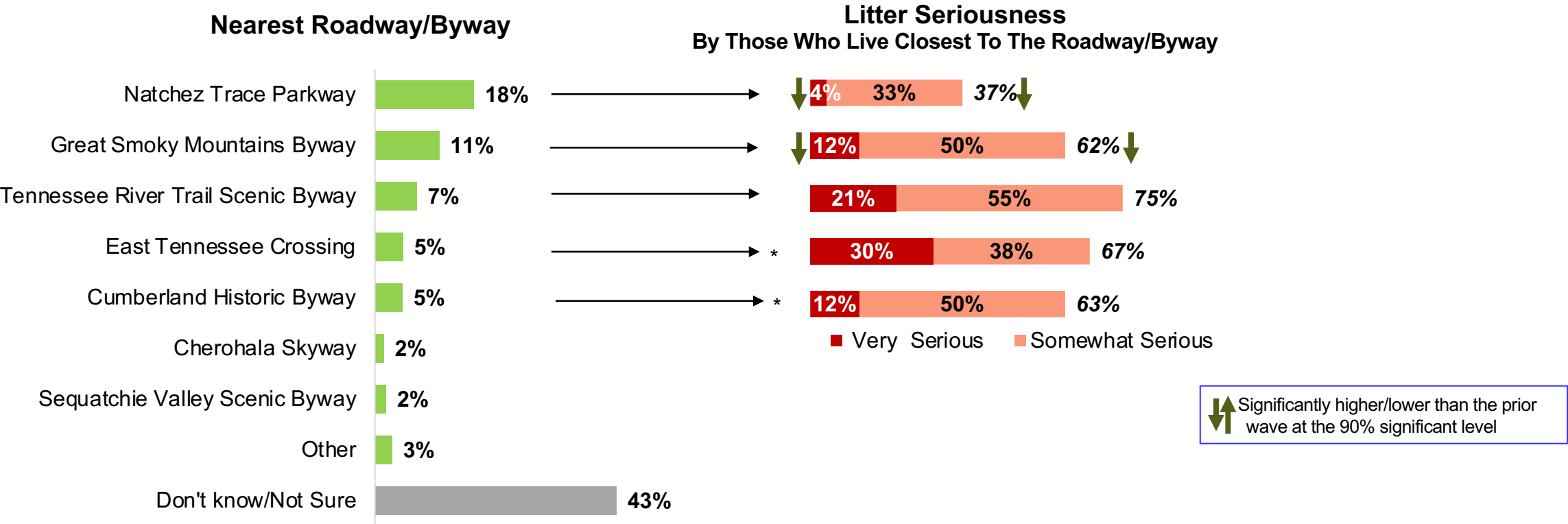
Littering Locations



Litter Seriousness On Nearest Scenic Roadway



- Natchez Trace Parkway is considered to have the least serious litter problem; however, 37% of those who live close to it say the litter there is at least *somewhat serious* (top-2 box).

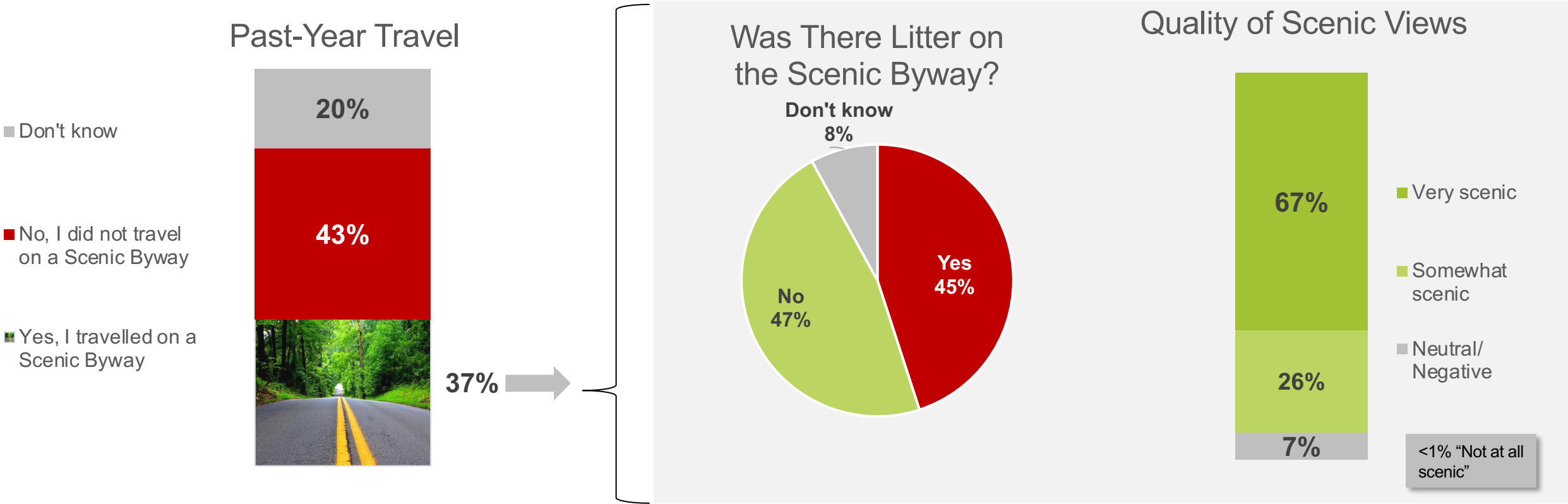


*Small Base Size
Q24A. To the best of your knowledge, which one of these scenic roadways and byways do you live nearest to?
Q24B. How serious of a problem is litter on the nearest scenic roadway and byway?
Base Total: (n=1019), Natchez Trace Parkway (n=180), Great Smoky Mountains Byway (n=117), Tennessee River Trail Scenic Byway (n=76), East Tennessee Crossing (n=51), Cumberland Historic Byway (n=50)
Source: Banners 1 & 3, Tables 146-160

Scenic Byways – Past-Year Travel



- A minority of residents (37%) have driven on a scenic byway in the past year. Roughly half of them indicated they saw litter on these roads.
- Most indicate the drives still have “very scenic” views.



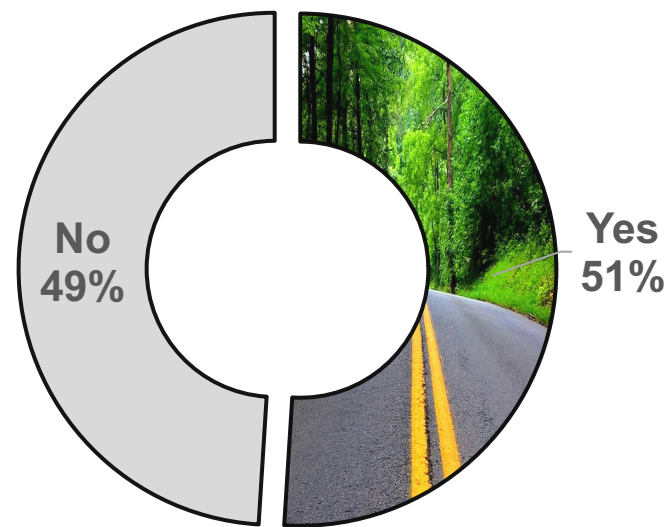
Q24J. In the past year, have you travelled on a Scenic Byway in Tennessee?
Q24K. Was the roadside of any of the Scenic Byways you travelled on in the past year dirty or littered?
Q24L. How would you rate the scenic views that you saw while travelling on the Scenic Byway?
Base: Total (n=1019), Travelling On Scenic Byway In Past Year (n=372)
Source: Banner 1; Tables 200- 202 (Questions added in Wave 2)

- Usage of scenic byways is highest among 26- to 39-year-olds and respondents from the Eastern region.
- Significantly more males (51%) than females (38%) tend to notice the litter on scenic byways.

Scenic Byways – Favorite Scenic Drive

- Half (51%) of all respondents said they have a favorite scenic drive, with 18% of total providing a name or area.
- The *Great Smoky Mountains* and *Natchez Trace* were the most common individual roadways/areas mentioned.

Have A Favorite Scenic Drive



- 18% of total entered their favorite drive
- 33% couldn't recall the roadway name

Favorite Scenic Drives	
Yes, it is on or near _____:	18%
Tennessee (Subnet)	3%
Gatlinburg	2%
All other mentions of Tennessee	1%
Smoky Mountains (Subnet)	3%
Great Smoky Mountains	3%
All other mentions of Smoky Mountains	1%
Natchez Trace (Subnet)	3%
Natchez Trace/Natchez Trace Parkway	3%
All other mentions of Natchez Trace	<1%
Blue Ridge Parkway	1%
Cades Cove	1%
Cherohala Skyway	1%
Foothills Parkway	1%
Other	7%

Q24M. Do you have a favorite scenic drive in Tennessee? If yes, click "Yes" and in the space please type the name of the roadway or a community that is adjacent to the scenic drive.
Base: Total (n=1019)
Source: Banner 1, Table 203 (Question added in Wave 2)

Seriousness Of Litter Issues On Scenic Byways

- More than half of Tennesseans (52%, top-2 box) said there was a *serious* or *somewhat serious* problem with litter on scenic byways.
- People in the eastern region of Tennessee consider litter a more serious issue than those in the middle and western regions, as do white Tennesseans, compared to African Americans.



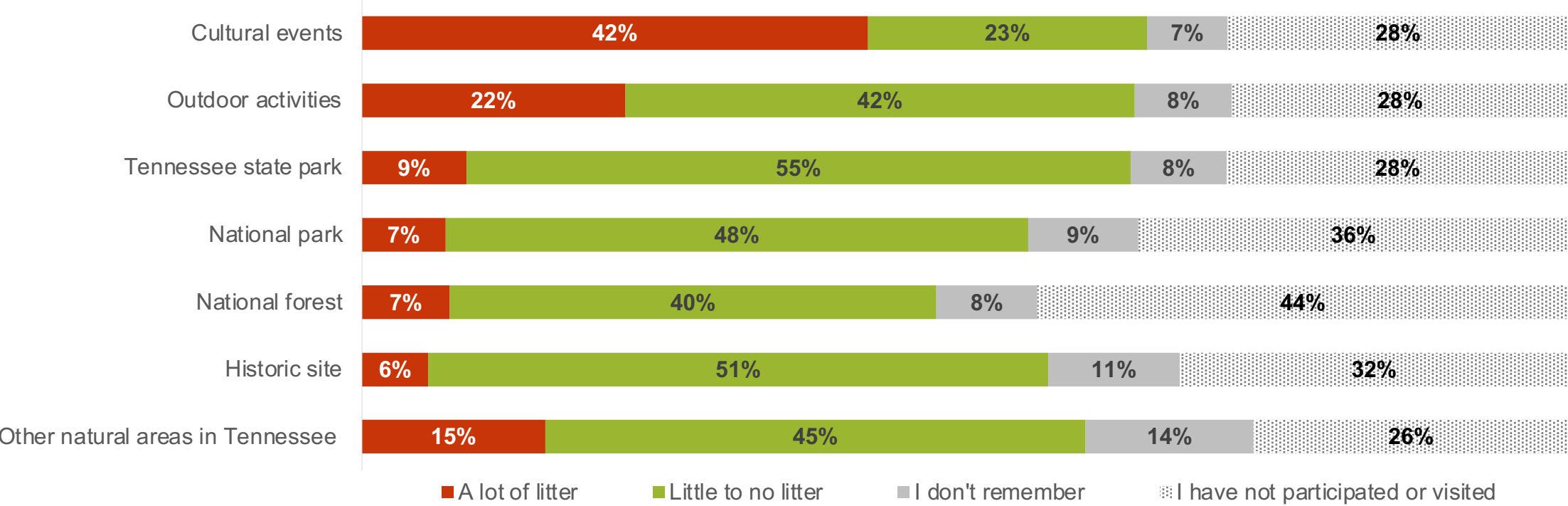
	Male (A)	Female (B)	16-25 (C)	26-39 (D)	40+ (E)	White (F)	Black (G)	Other* (H)	Eastern (R)	Middle (S)	Western (T)
Somewhat serious/ Serious Problem	53%	50%	46%	52%	53%	56%G	37%	45%	60%ST	46%	49%
Neutral	34%	38%	43%	35%	35%	34%	42%	46%	29%	41%R	39%R
Not a serious problem/Not at all	12%	12%	11%	14%	12%	10%	21%FH	9%	11%	13%	13%

AB/CDE/FGH/RST indicate a statistically significant difference between groups at the 90% confidence level. *Small Base Sizes
Q24N. How would you rate the litter issues on the Scenic Byways of Tennessee? Would you say...?
Base: Total (n=1019), Male (n=395), Female (n=613), 16-25 (n=114), 26-39 (n=255), 40+ (n=650), White (n=856), Black (n=109), *All Other (n=54), Eastern (n=398), Middle (n=401), Western (n=220).
Source: Banner 1, Table 204 (Question added in Wave 2)

Litter At Events Or Locations

- Litter is most prevalent at *cultural events*, with 42% indicating there was “a lot of litter.” This rate is nearly twice as high as any other location.
- Far fewer indicate the same level of litter issues at *state parks* which have the same visitation incidence.

Amount Of Litter Encountered—By Location



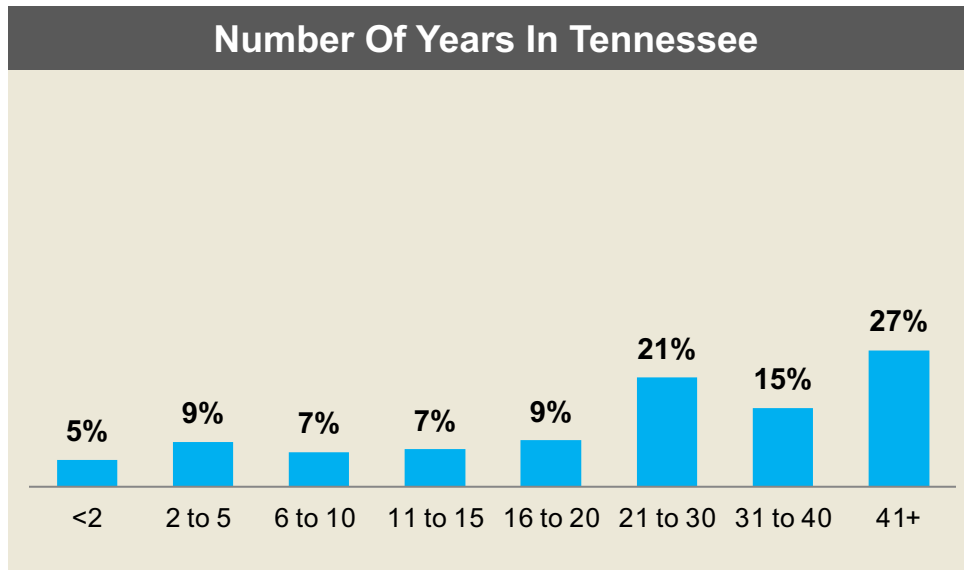
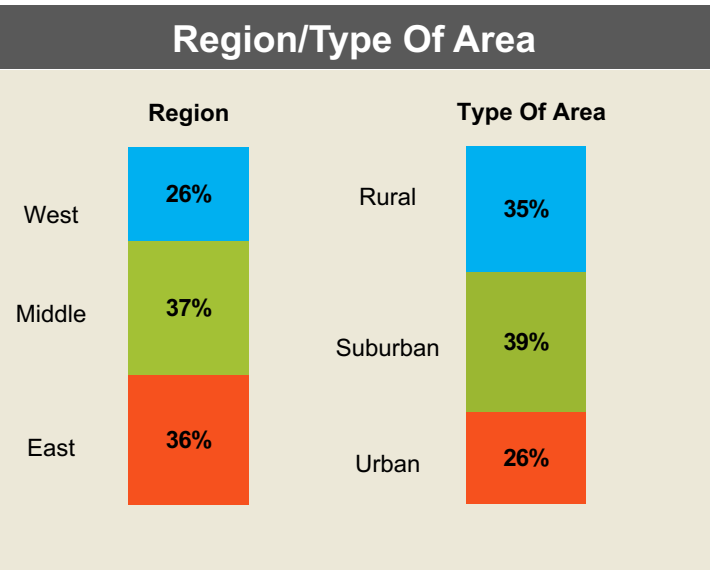
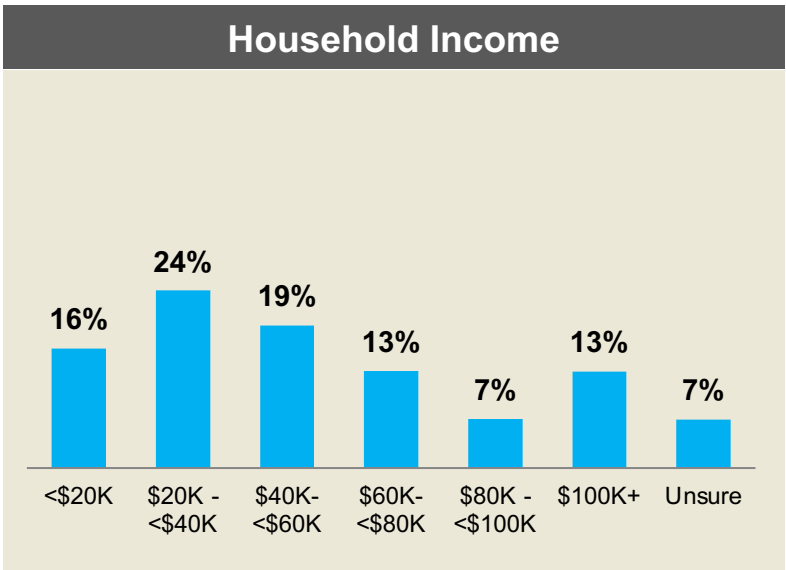
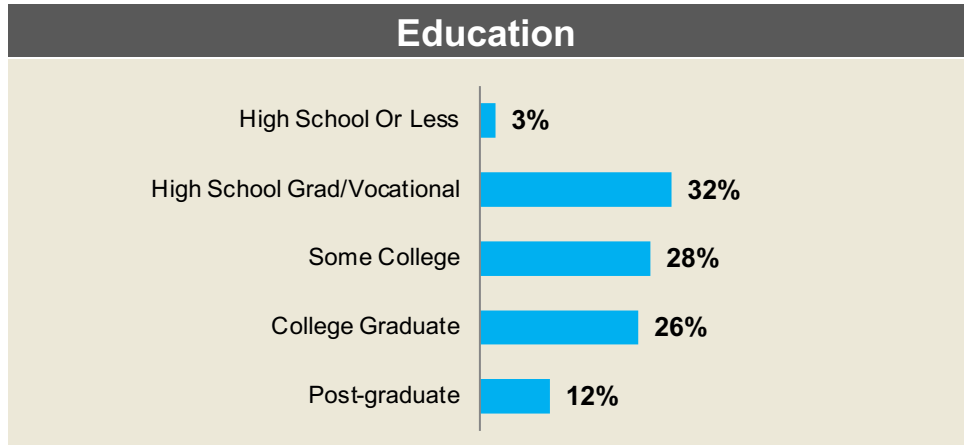
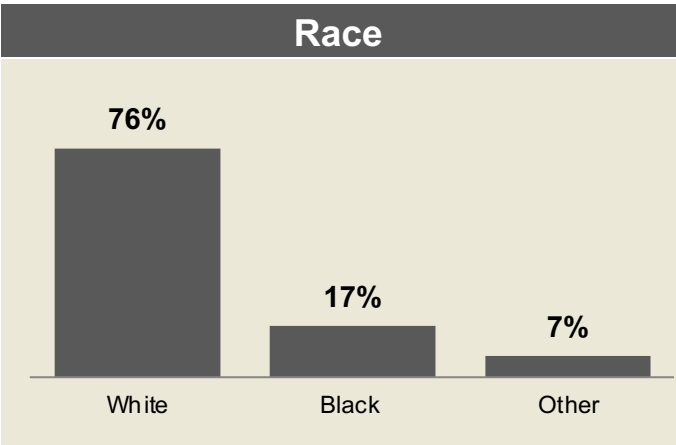
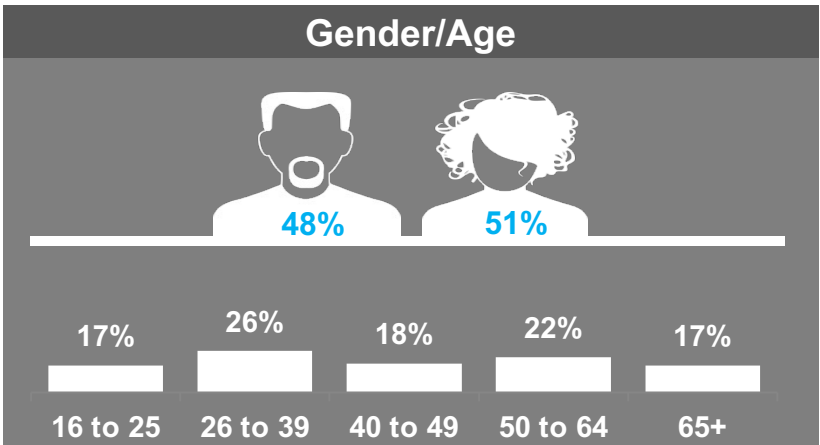
Q24O. For the following question, please consider each of the activities, events or parks listed and indicate the litter situation you've encountered at each one.
Base: Total (n=1019)
Source: Banner 1, Tables 227-233

Wave 2

Respondent Profiles And Behaviors



Respondent Profiles

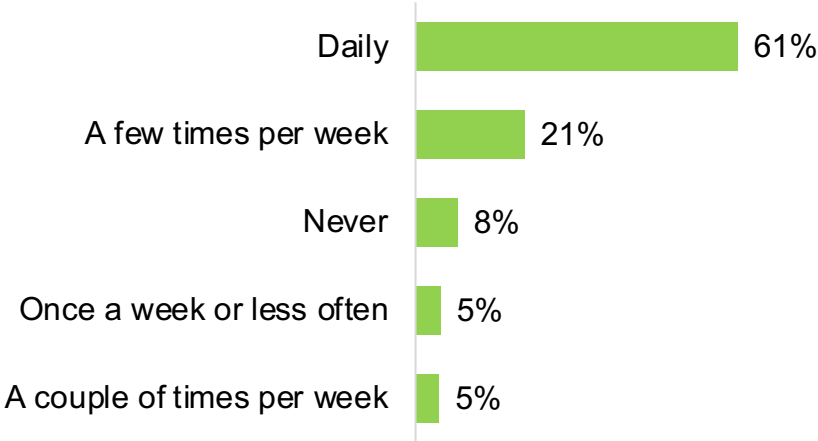


Base: Total (n=1019)
Source: Banner 1, Tables 3, 10, 11, 15, 163, 164, 180, 181

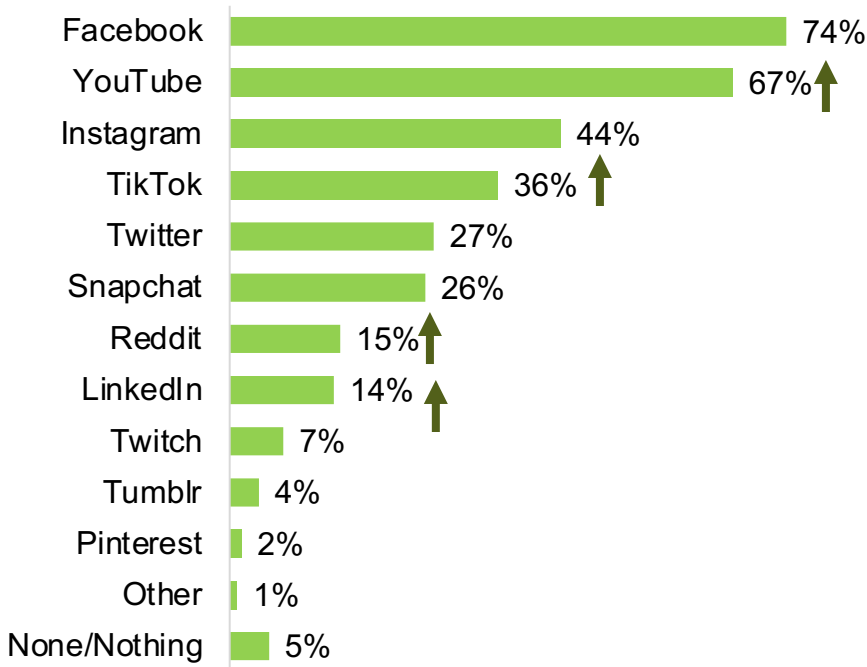
Driving Frequency And Social Media Usage



Driving Frequency



Social Media Sites Visited At Least Once A Week



S7. How often do you drive a vehicle, under normal circumstances?
Q26. Which of these social media sites do you visit at least once a week?
Base: Total (n=1019)
Source: Banner 1, Tables 18 and 161

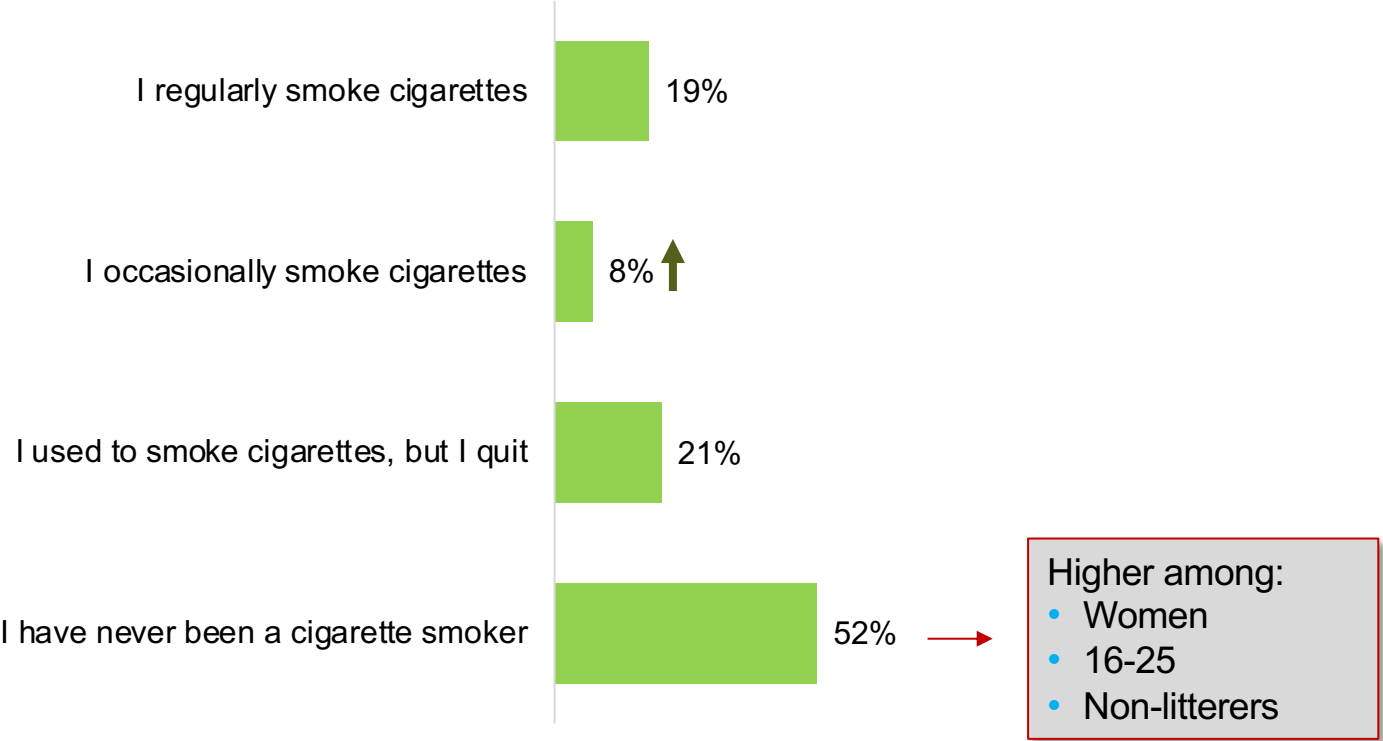
Social Media Usage—By Subgroup



	Total	Male (A)	Female (B)	16-25 (C)	26-39 (D)	40+ (E)	White (F)	Black (G)	All Other* (H)
Facebook	74%	67%	82% ^A	51%	79% ^C	79% ^C	77% ^G	64%	66%
Instagram	44%	43%	45%	69% ^{DE}	54% ^E	32%	43%	53% ^F	40%
YouTube	67%	70%	64%	83% ^{DE}	73% ^E	60%	64%	76% ^F	79% ^F
TikTok	36%	30%	41% ^A	63% ^{DE}	47% ^E	23%	35%	37%	43%
Twitter	27%	34% ^B	20%	38% ^E	31% ^E	22%	24%	38% ^F	39% ^F
Snapchat	26%	24%	27%	60% ^{DE}	37% ^E	11%	27%	23%	29%
Reddit	15%	19% ^B	9%	23% ^E	24% ^E	8%	15%	12%	23%
LinkedIn	14%	14%	13%	10%	15%	14%	14%	13%	18%
Twitch	7%	12% ^B	1%	16% ^E	11% ^E	3%	7%	8%	10%
Tumblr	4%	5% ^B	2%	5%	6%	3%	4%	3%	5%
Pinterest	2%	1%	2%	1%	<1%	2% ^D	2% ^G	0%	1%
Other	1%	2%	<1%	1%	0%	1% ^D	1% ^H	1%	0%
None/Nothing	5%	8% ^B	3%	2%	1%	8% ^{CD}	5%	7%	2%

AB/CDE/FGH indicate a statistically significant difference between groups at the 90% confidence level. *Caution: Small base size.
Q26. Which of these social media sites do you visit at least once a week.
Base: Total (n=1019), Male (n=395), Female (n=613), 16-25 (n=114), 26-39 (n=255), 40+ (n=650), White (n=856), Black (n=109), *All Other (n=54).
Source: Banner 1, Table 161

Smoking History



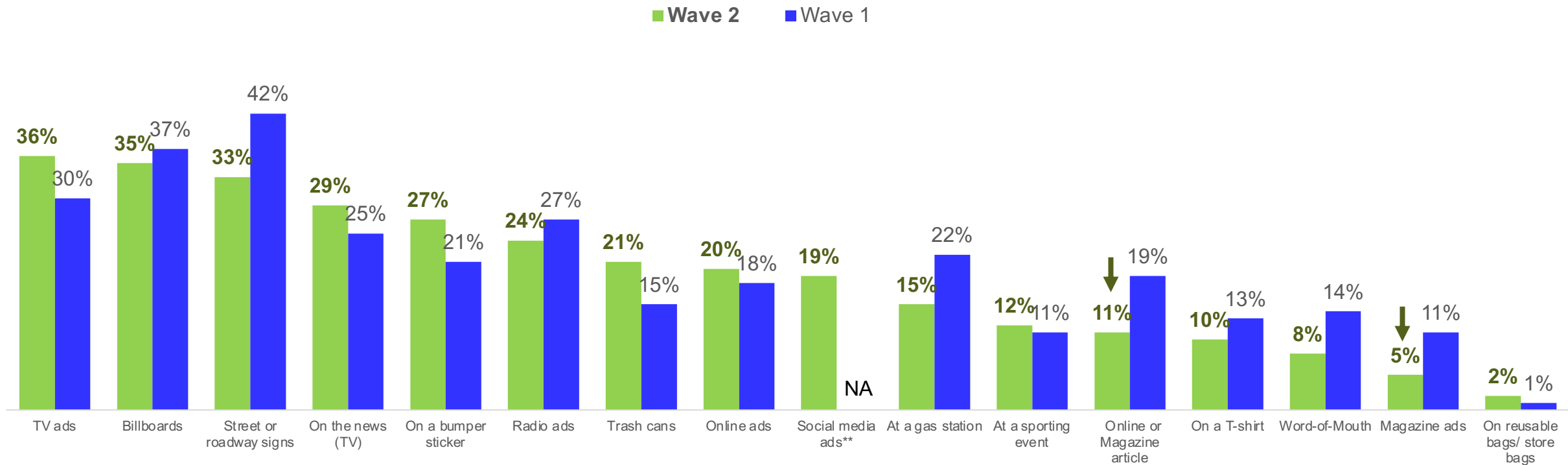
Q27. Which best describes you when it comes to smoking cigarettes?
Base: Total (n=1019)
Source: Banner 1, Table 162

Nobody Trashes Tennessee Placement Recall



- *TV ads* rose to the top-most cited location to see or hear the slogan, with a 6-percentage-point increase from the prior wave among those aware of the slogan.
- Fewer recall seeing the slogan in *articles* and *magazine ads* compared to the prior wave.

Past-Year Placement Recall



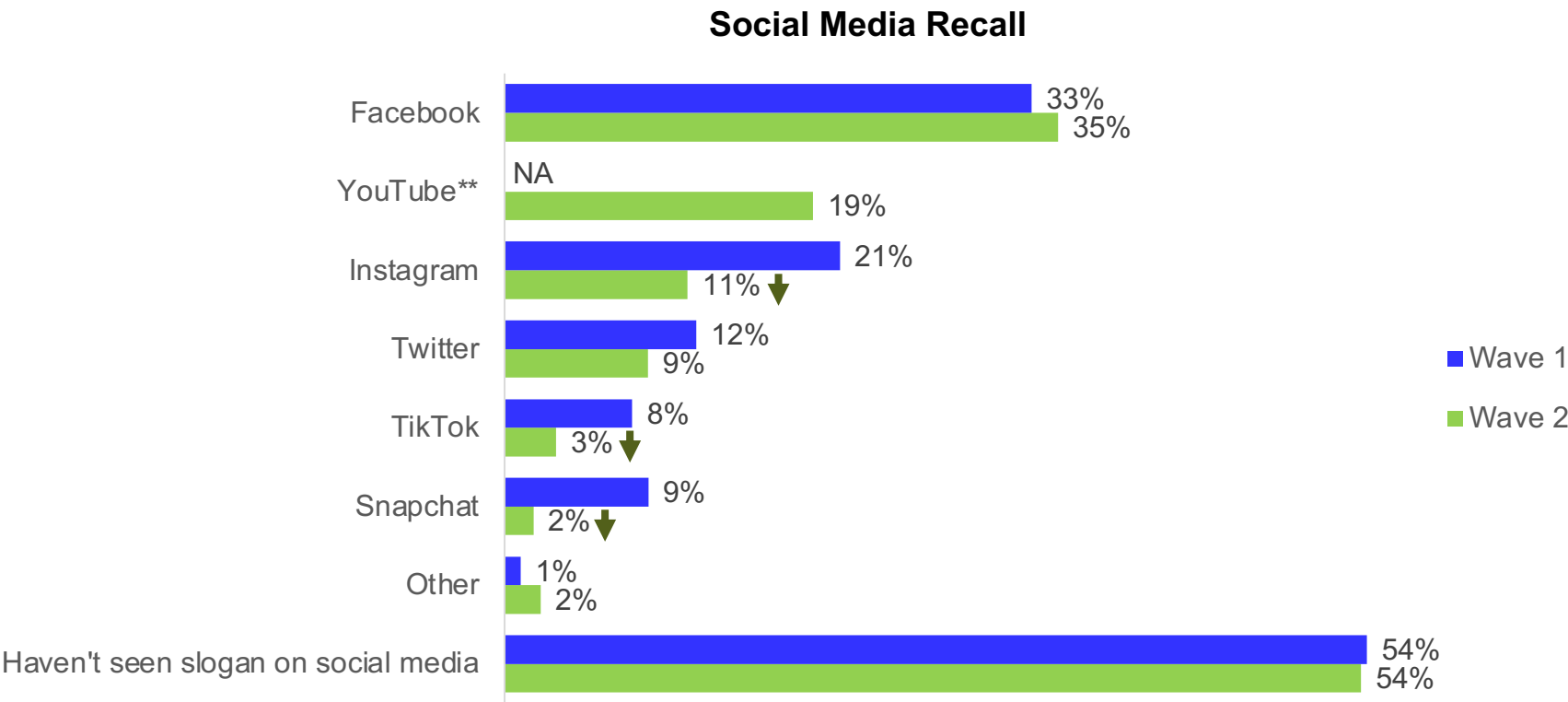
**New This Wave
Q7/Q7A. In the past year or so, have you seen, read, or heard the slogan "Nobody Trashes Tennessee" from any of the following?
Base: Aware of NTT; Wave 1 (n=130); Wave 2 (n=197)
Source: Banner 3, Tables 49-50

↑↓ Significantly higher/lower than the prior wave at the 90% significant level

Nobody Trashes Tennessee Placement Recall – Cont.



- Facebook is, by far, the most-often-recalled social media placement. 48% of those between 26 and 39 years of age who are aware of the slogan have seen it there.
- Instagram, TikTok, and Snapchat dipped in social media placement recall, compared to the prior wave.



**New This Wave
Q8. From which social media sources to do you recall seeing the slogan "Nobody Trashes Tennessee?"
Base: Aware of NTT; Wave 1 (n=130); Wave 2 (n=197)
Source: Banner 3, Table 51

↕ Significantly higher/lower than the prior wave at the 90% significant level