

Louisiana Litter Research 2023



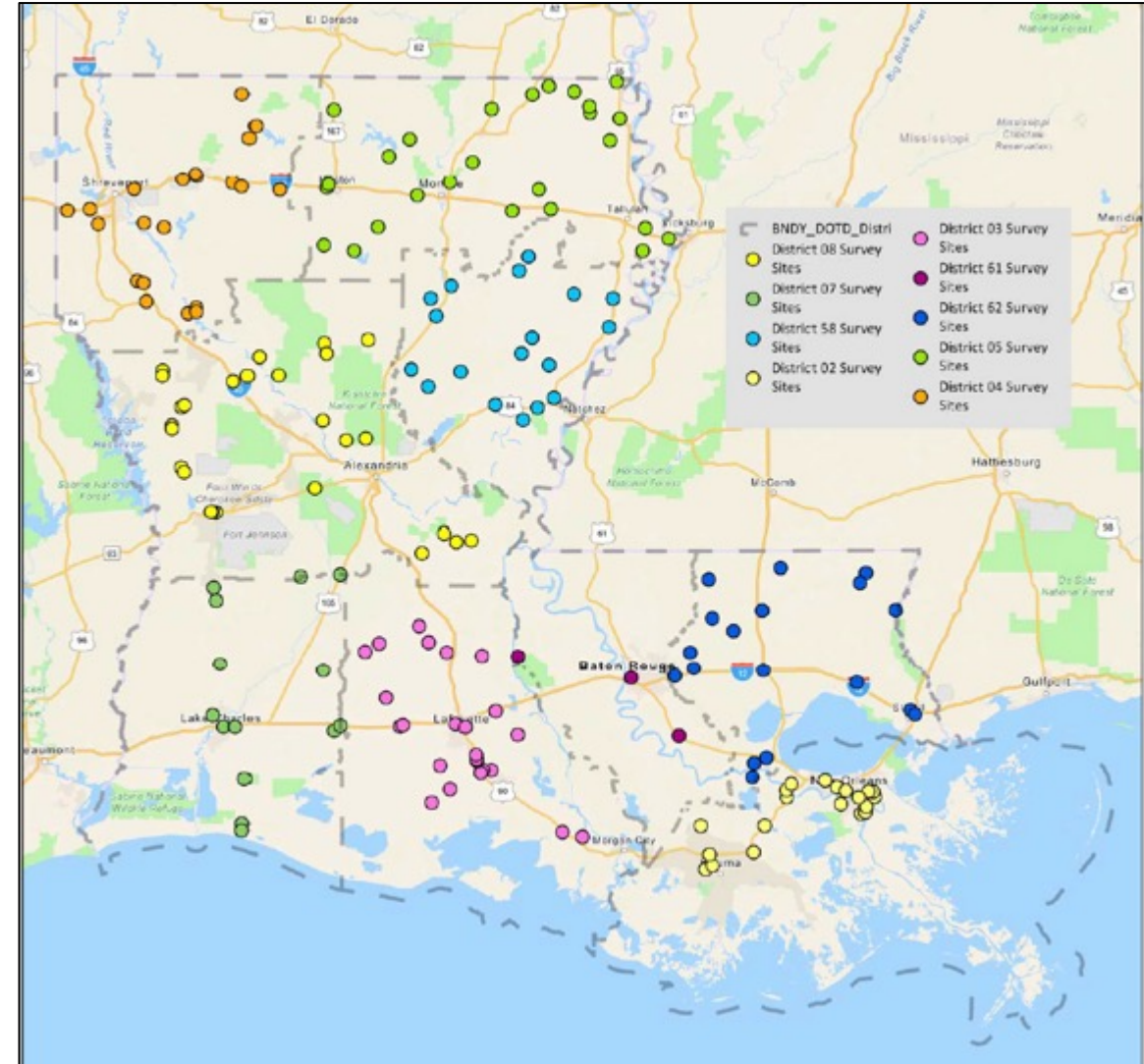
Carson Consulting



Roadway Litter Survey

Methodology

- Site Selection Criteria
 - Interstate, US Highway, State Route
 - Rural, Suburban, and Urban
- 137 Sites = 616,500 Square Feet
 - 300' by 15' - Visible Litter
 - 15' by 15' (3) - Micro Litter
- Litter – Intentional or Unintentional
 - Category, Item, and Packaging
 - Site Conditions



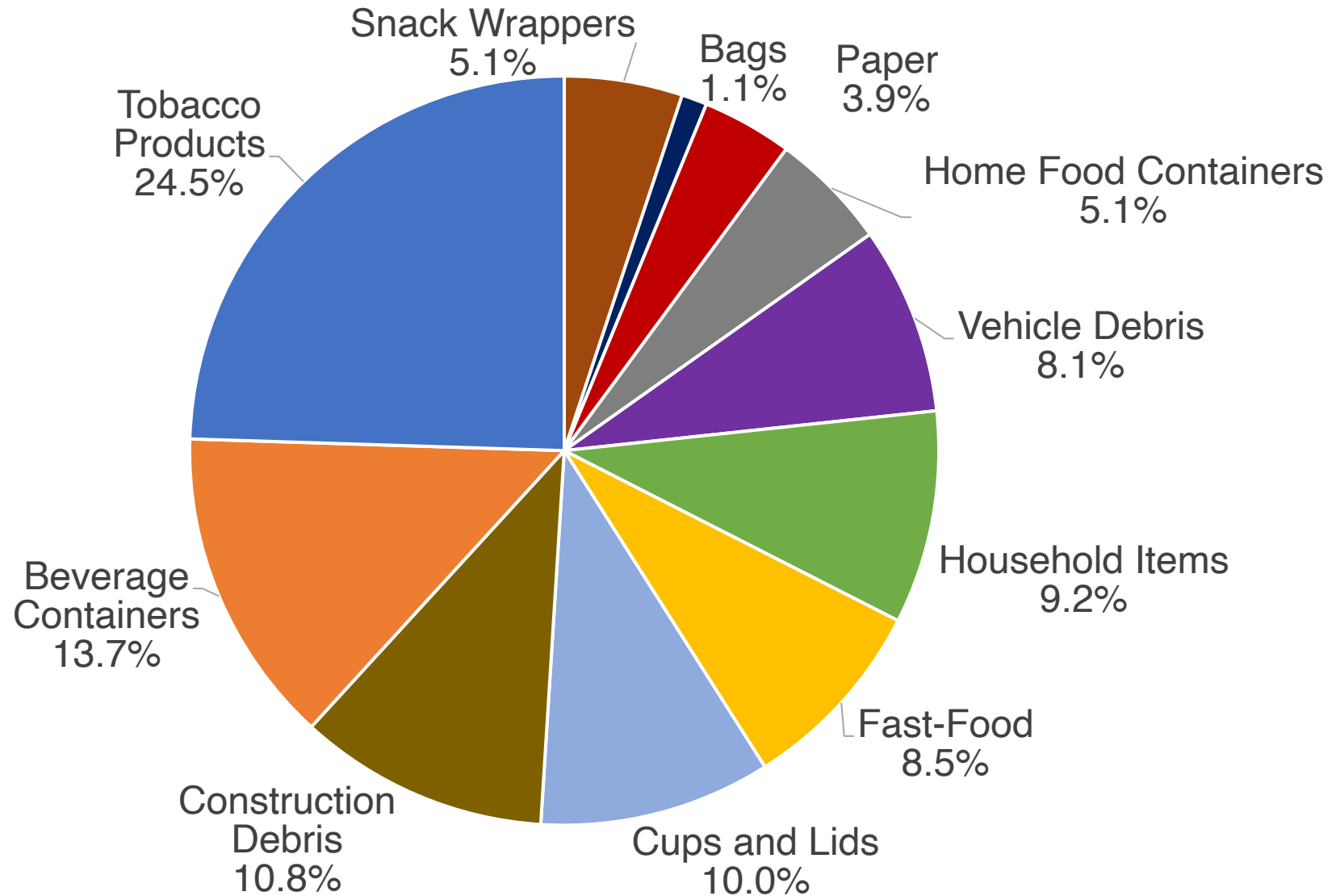
143.8

Million Pieces of Litter



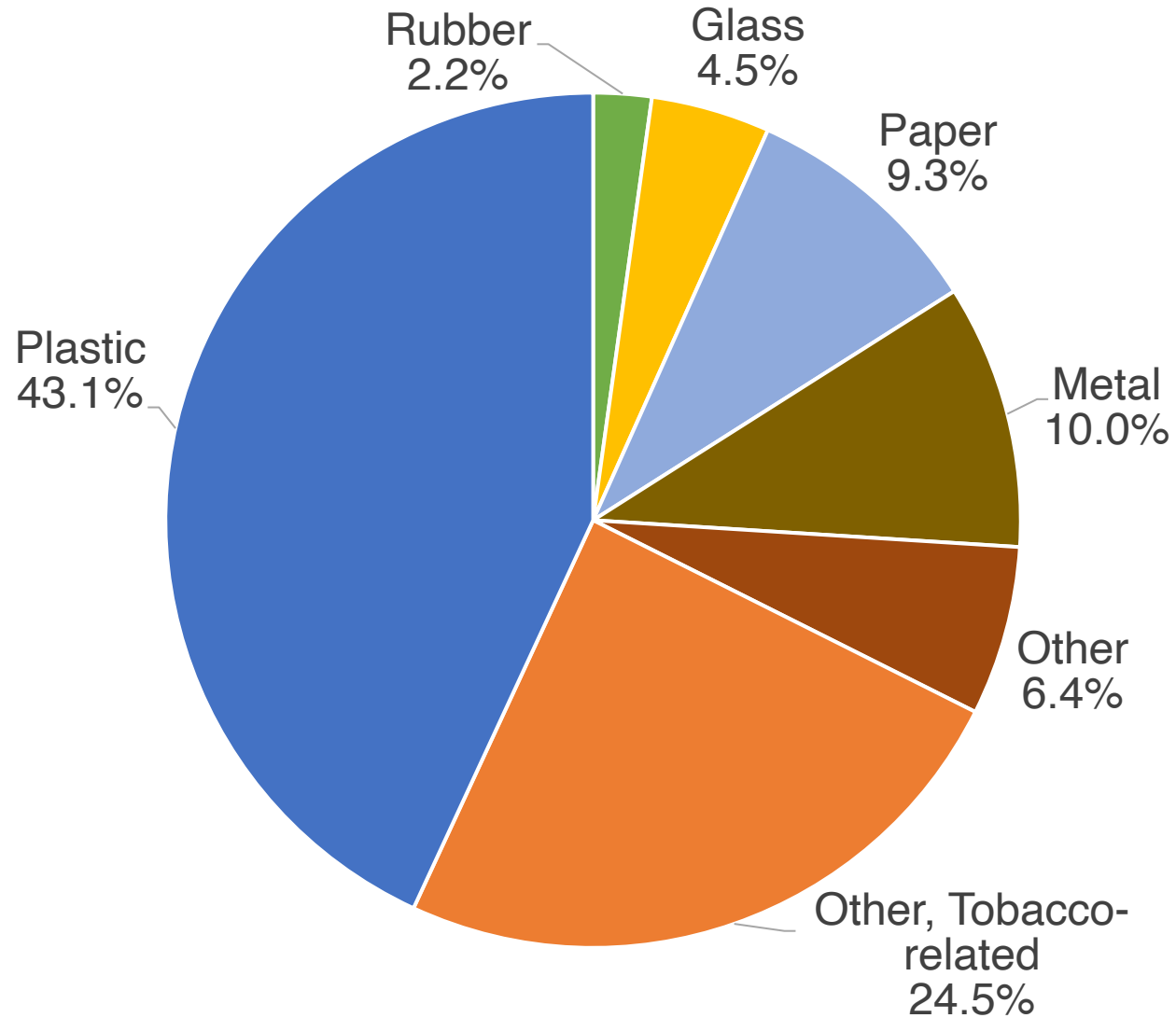
Category	Item	Material
Bags	Fast-food, retail, trash, and leaves	paper, plastic, cloth
Beverage Containers	Beer, soda, sports, energy, water, wine/liquor, juice, tea	metal, plastic, glass, composite
Construction Debris	Shingles, lumber/wood, electrical, drywall, foam insulation, industrial rags, tarps	metal, plastic, polystyrene foam, composite, wood
Cups and Lids	Cups for hot or cold drinks, lids straws, wrappers	paper, plastic, polystyrene foam
Fast-Food	Boxes, clamshells, trays, plates, utensils, napkins, utensils, napkins	composite, paper, foil, plastic, polystyrene
Home Food Containers	Food jars, cans, bottles, and lids	composite, glass, metal, plastic, polystyrene foam
Household Items	Clothing, hygiene items, appliances and packaging of items used at home	composite, cloth, metal, plastic, polystyrene foam,
Paper	Non-food/beverage paper, e.g., newspapers, magazines, flyers, lottery tickets, business, school, receipts, packaging, paperboard, corrugated boxes	paper
Snack Wrappers	Sweet snacks (candy, cakes), salty snacks (chips, crackers), gum	paper, plastic, composite
Tobacco	Cigarette or cigar butts, lighters, matches, boxes, wrapping, pouches and other packaging. Each was separately classified	tobacco, plastic, metal, composite
Vehicle Debris	Automobile parts from accidents, car maintenance debris, tires and tire debris	tire, rubber, metal

Aggregate Litter by Category

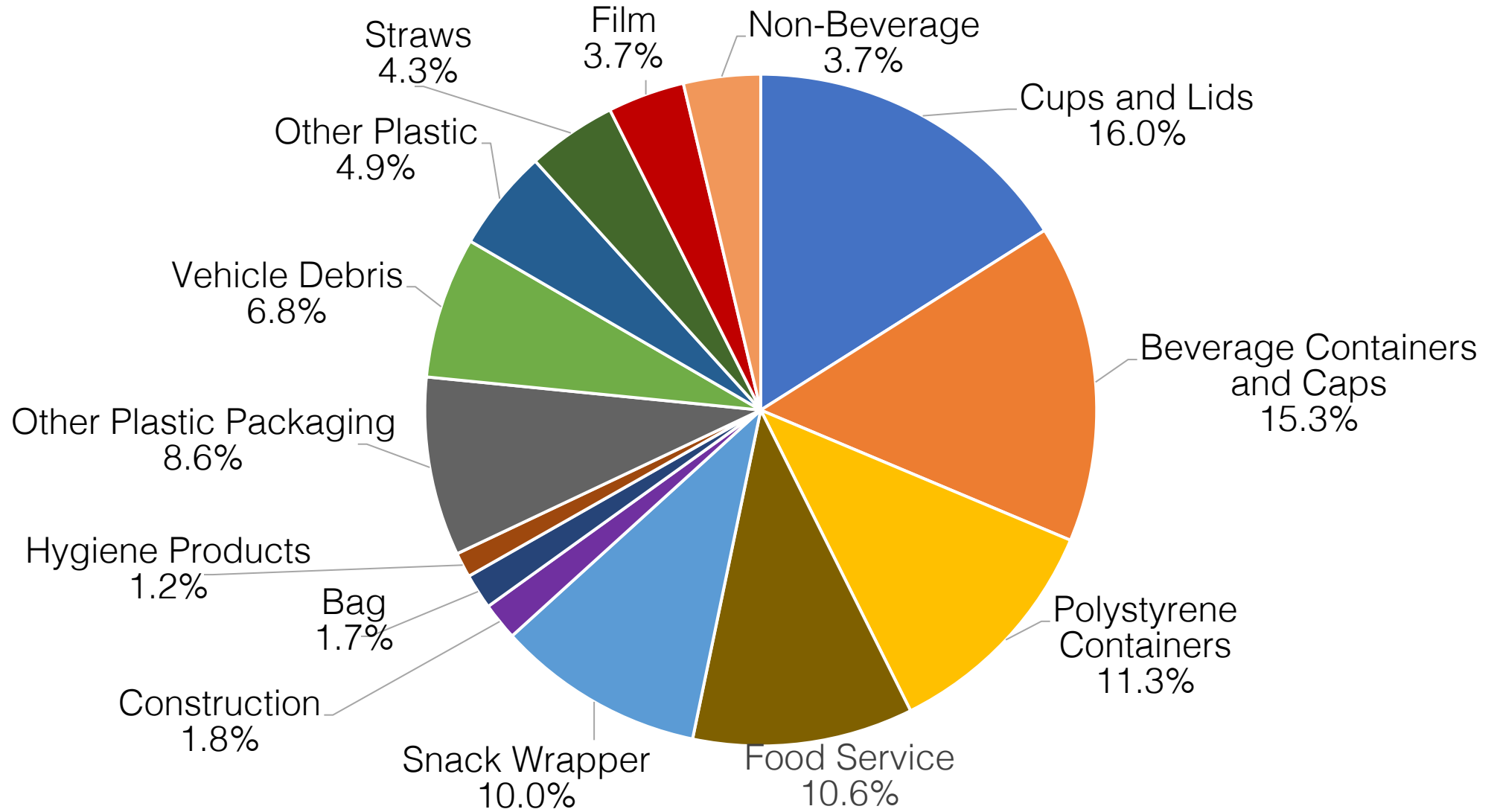


Aggregate: Combination of Visible and Micro Litter

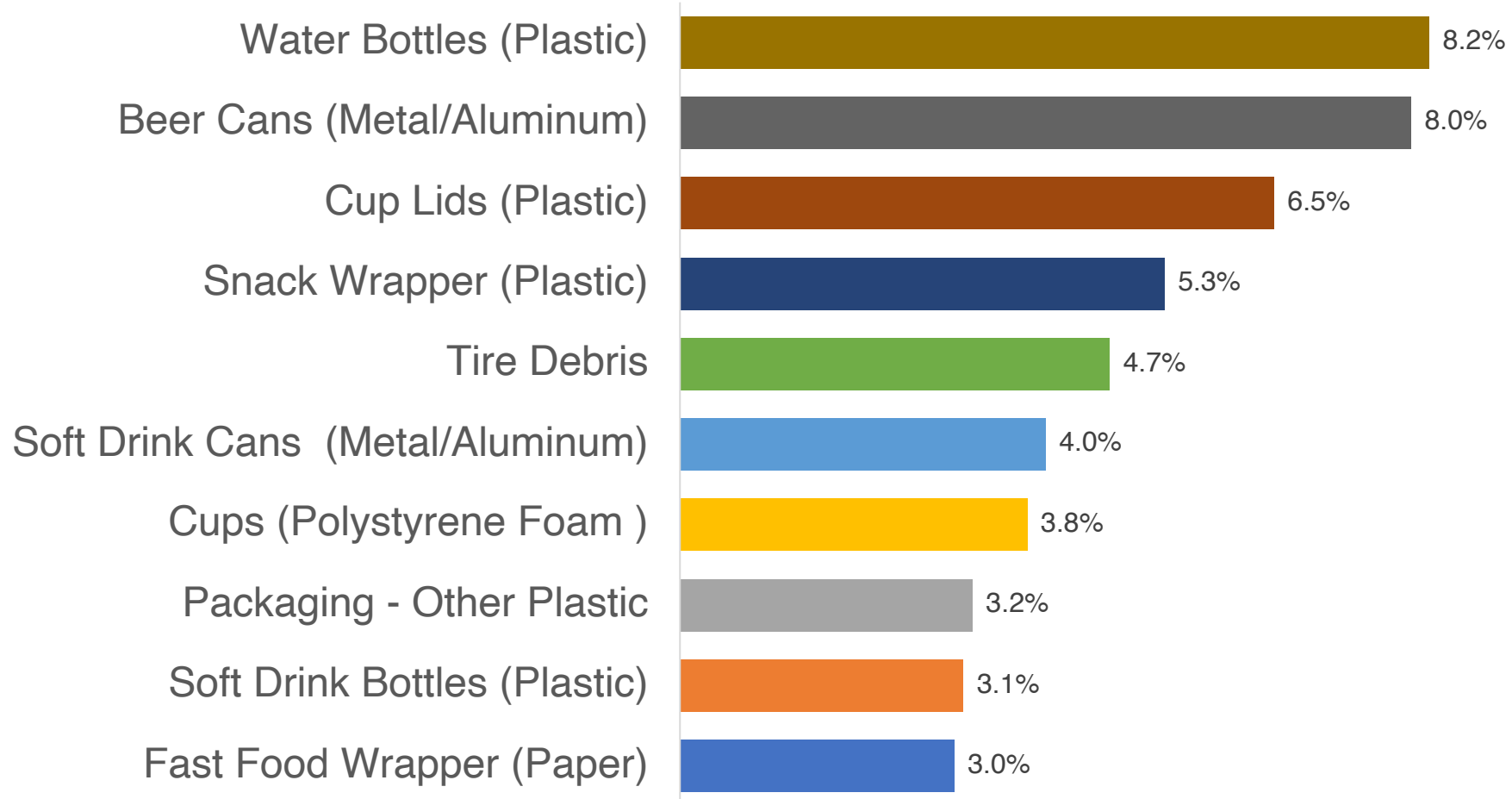
Aggregate Litter by Packaging Material



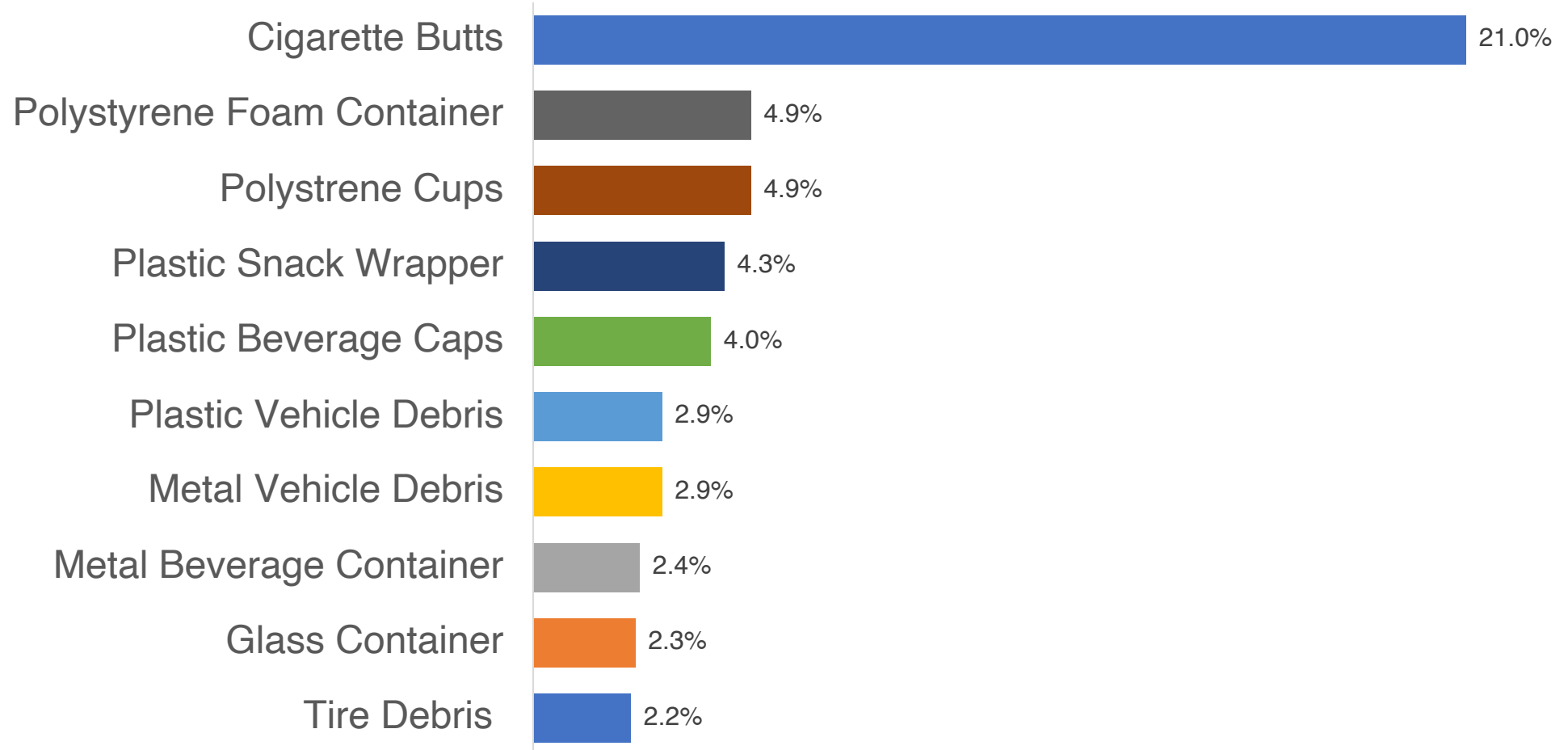
Plastic Items in Aggregate Litter



Top 10 Visible Litter Items



Top 10 Micro Litter Items



Litter by Roadway Type

Roadway Type	Average # Items Per Mile	Road Miles within State	Total # Litter Items
Interstates	10,178	944	9,604,551
US Highways	7,697	2,285	17,585,224
State Routes	8,811	13,244	116,683,356
Total	-	16,472	143,873,132

Sites with Highest Visible Litter

Litter Rank	Parish	District	Roadway
1	Bossier	4	I-20
2	Lincoln	5	US 80
3	Avoyelles	8	LA 115
4	Allen	7	US 165
5	Jefferson	2	LA 18
6	Bossier	4	US 71
7	Acadia	3	US 90
8	Washington	62	LA 21
9	Orleans	2	I-10
10	East Baton Rouge	61	LA 67

Sites with Highest Micro Litter

Micro Litter Rank	Parish	District	Roadway
1	Livingston	62	US 190
2	Washington	62	LA 21
3	East Baton Rouge	61	US 61
4	Orleans	2	I-10
5	Livingston	62	I-12
6	Avoyelles	8	LA 115
7	Union	5	US 167
8	Livingston	62	LA 1024
9	Bossier	4	I-20
10	Concordia	58	US 84

Roadways and Litter Across Road Types

- Interstates - higher volumes and variety of users
- Tobacco category - most prevalent on all roads
- Beverage containers - a pattern similar across all roadways
- Household items and beverage cups - less common on US highways
- Construction debris - more common on interstates
- Foam Coolers - higher than in other states



Proximity Indicators

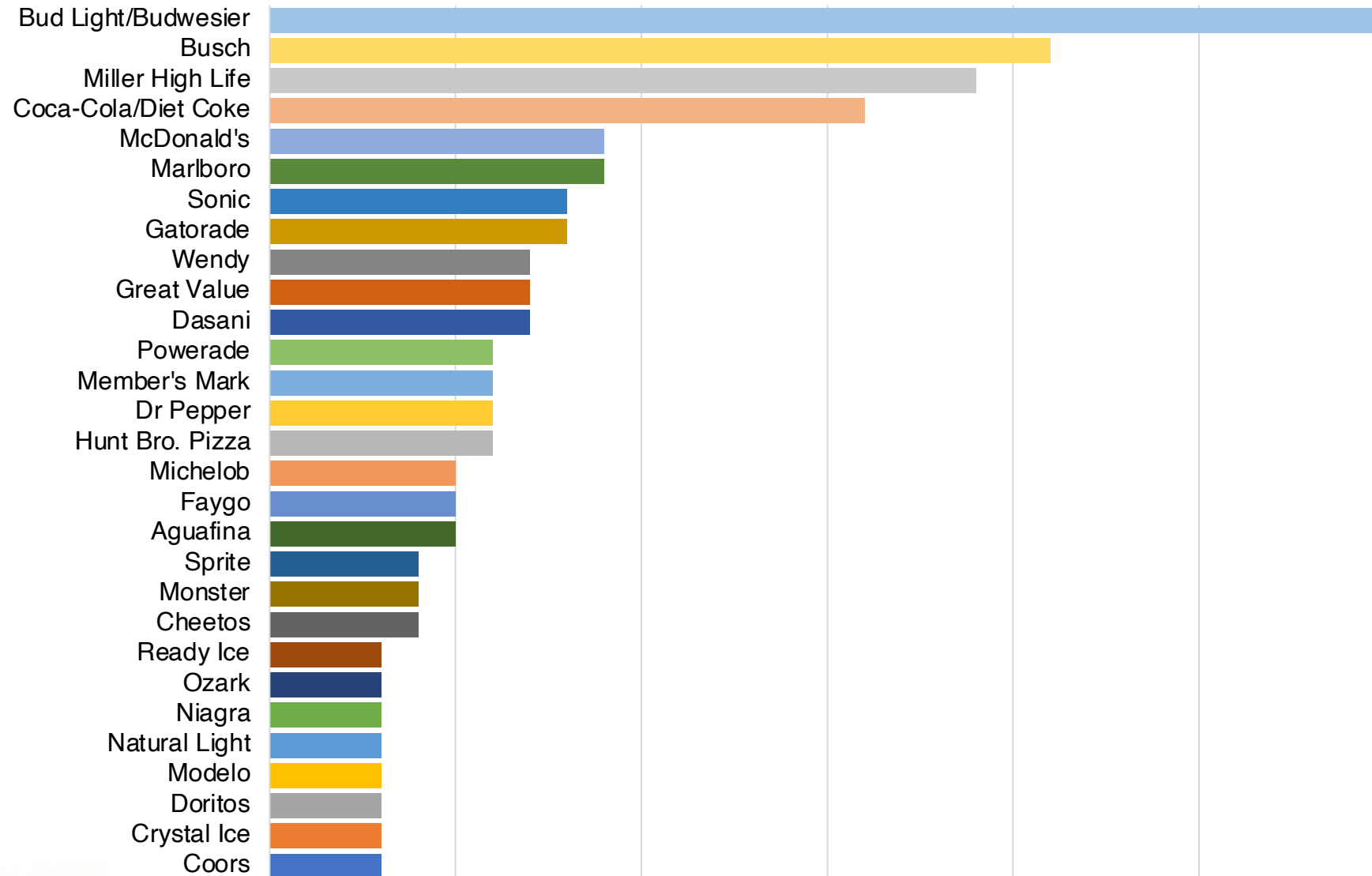
- Beautification efforts reduce litter
 - Sites without beautification - approximately 38 percent more litter
- Convenience Stores
 - Higher Bags and Micro Litter
- Drainage and Utilities
 - Beverage Containers
- Solid Waste Facilities
- Fast Food and Commercial Sites
 - Beverage cups and fast food items





Context and Perceptive

Top Brands Identified



Brands and Companies



Bud Light, Budweiser, Busch, Corona,
Michelob Ultra, Modelo, Natural Light



Coca-Cola, Diet Coke, Dasani,
Monster, Powerade, Sprite



Aquafina, Gatorade, Pepsi,
Doritos, Cheetos

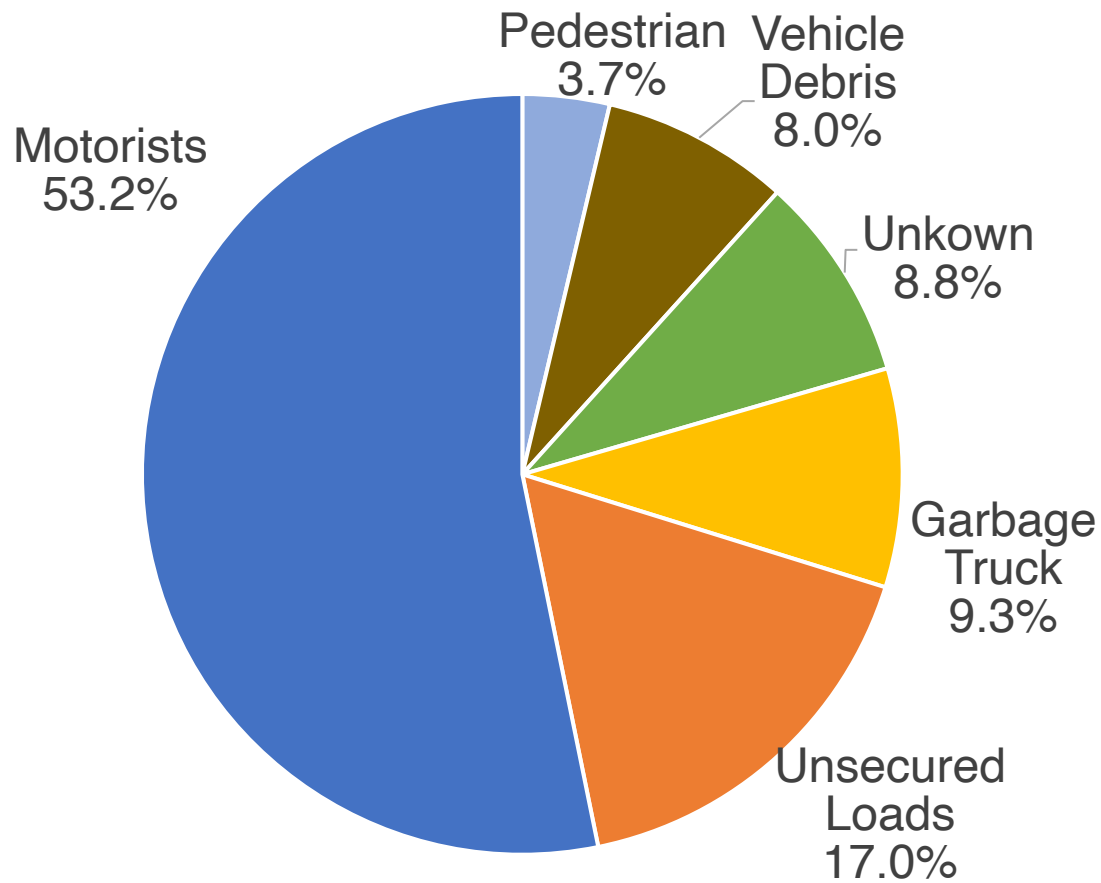


Great Value (Walmart),
Niagara, Member's Mark (Sam's)

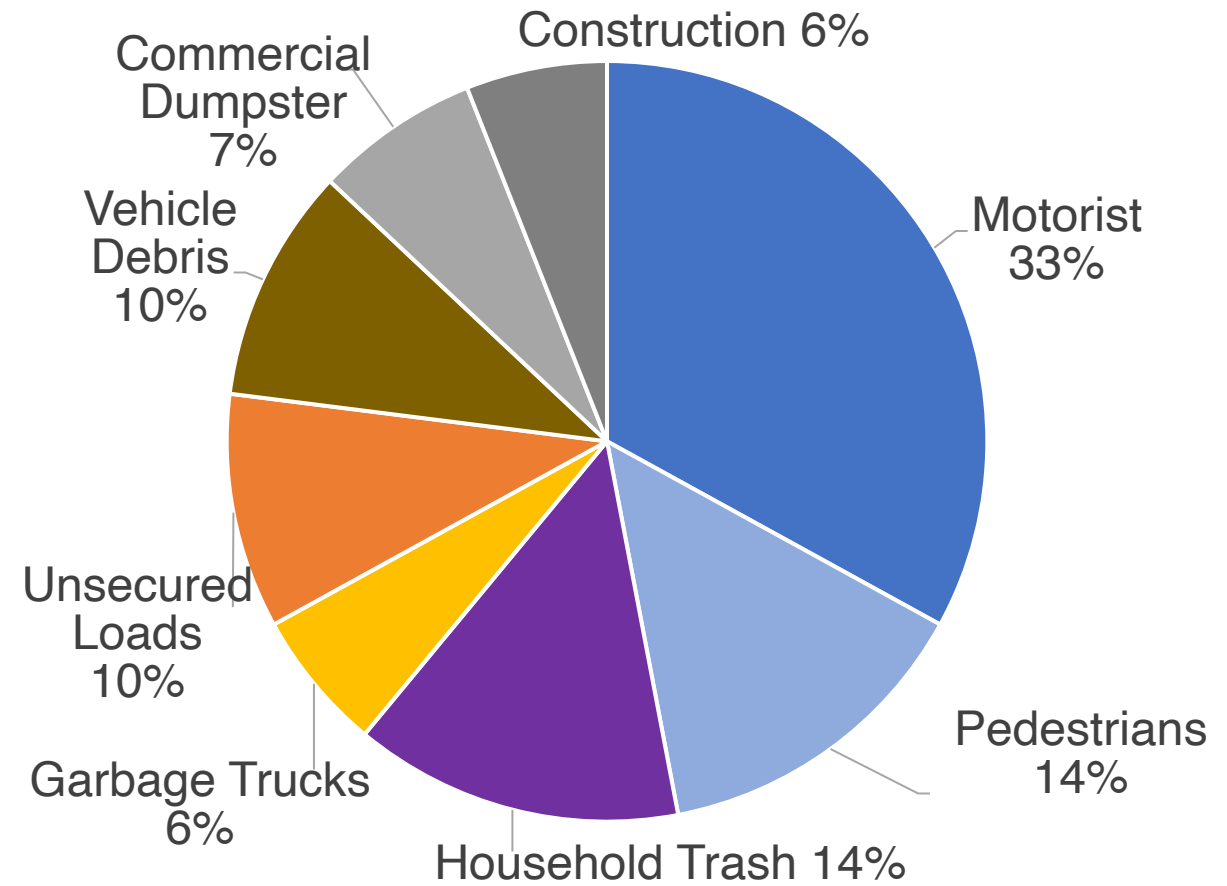


Litter Sources Identified

Visible Litter Survey



Public Attitude Survey



Targeting the Problem



Partnering to Address the Problem



\$1,164,149 Community Improvement Grants

- **Greener Grounds Grant: \$141,133**
 - 25 organizations
 - 15 parishes
- **Healthy Communities Grant: \$193,066**
 - 31 organizations
 - 16 parishes
- **Community Affiliate Grants: \$42,980**
 - \$29,473 for cleanup supplies
 - \$13,507 for programs
- **University Affiliate Grants: \$39,644**
 - 8 universities
- **Trash Receptacle Grants: \$615,000**
 - 899 receptacles
 - 90 organizations
 - 40 parishes
- **Beautification Grants: \$152,000**
 - 39 organizations
 - 24 parishes

Recommendations

- Align the litter removal process with litter conditions
- Develop new systems to ensure litter removal prior to mowing
- Promote adoption programs to build awareness and supplement removal
- Encourage beautification
- Create prevention messaging for beverages and fast food at points of sale
- Encourage the enforcement of uncovered loads
- Expand effective residential and commercial waste management and recycling practices

The background features a large, semi-transparent globe centered on the page. Overlaid on the globe are several faint icons: a checkmark in the top-left and bottom-right quadrants, and a survey form with a pencil in the center. The text 'Public Attitude Survey' is prominently displayed in the middle of the globe.

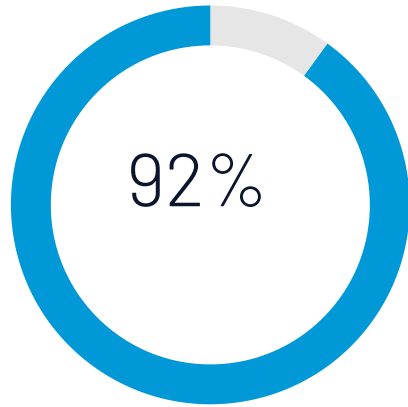
Public Attitude Survey

Methodology

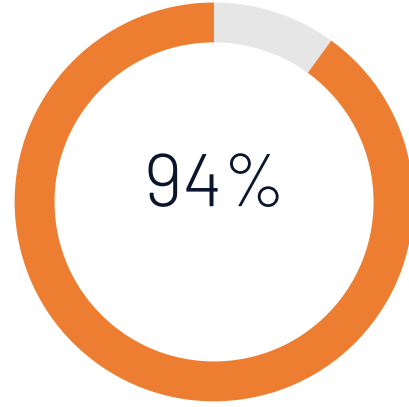
- 43 Questions
- Web-Based Survey
- Target Audience
 - Louisiana Resident
 - U.S. Census data
 - Northern, Central, Acadiana, Greater New Orleans, or Florida Parishes/Baton Rouge
- 537 Louisianans (+/- 4 % margin of error)



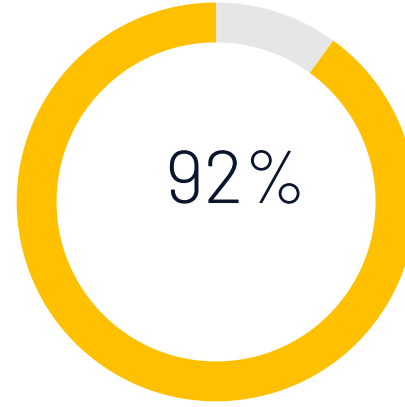
Public Attitude about Litter



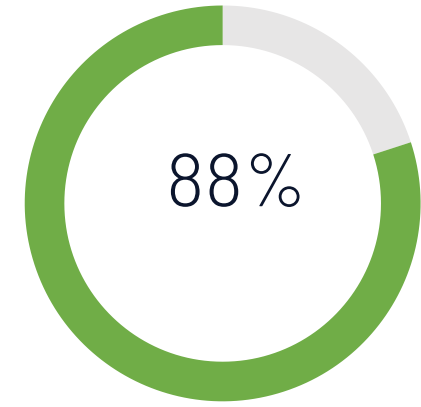
Litter is
a Problem



Contributes
to Flooding



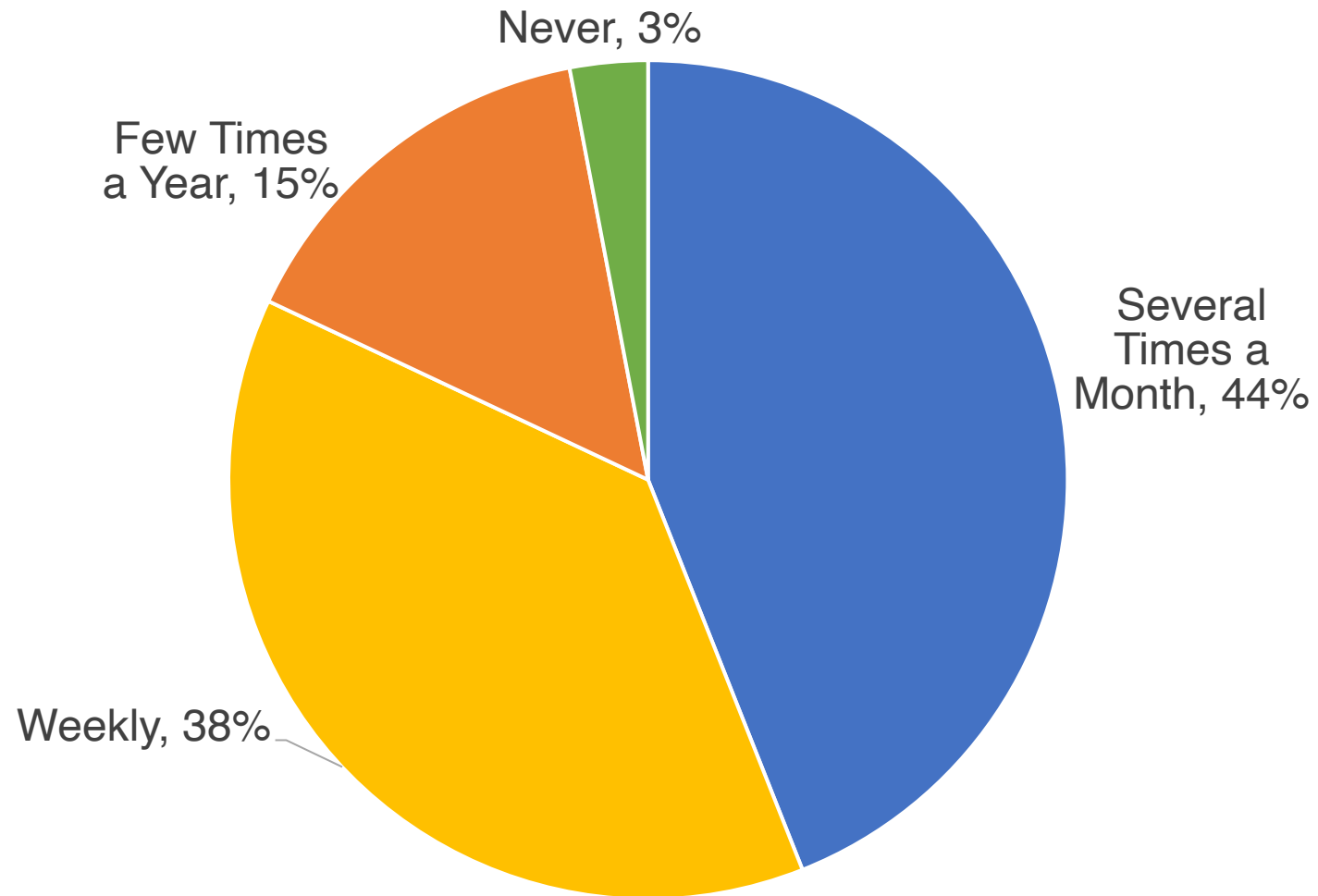
Negatively
Impacts
Tourism



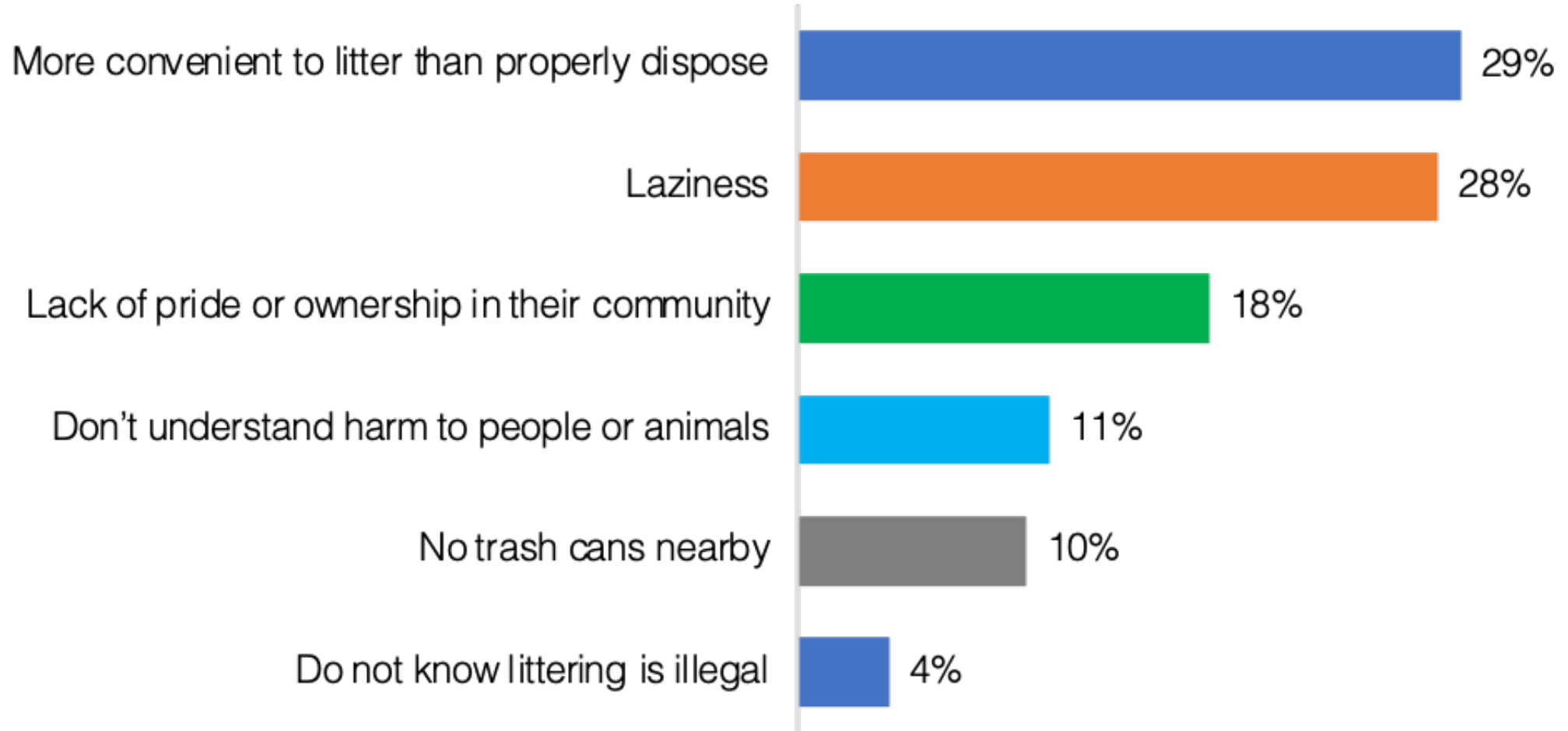
Decreases
Business
Revenues

Littering Behaviors

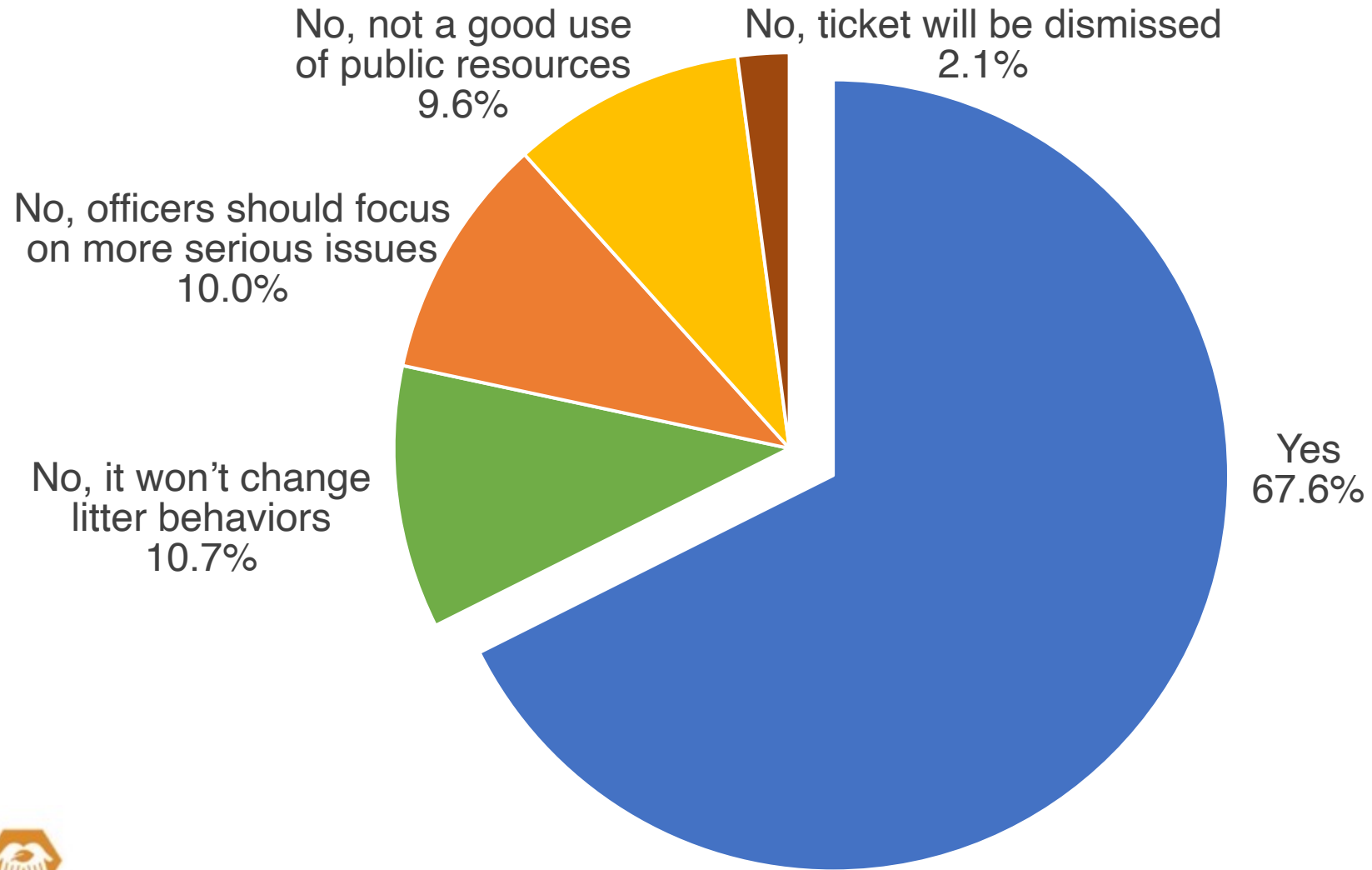
Frequency of Observed Littering in the Past Year



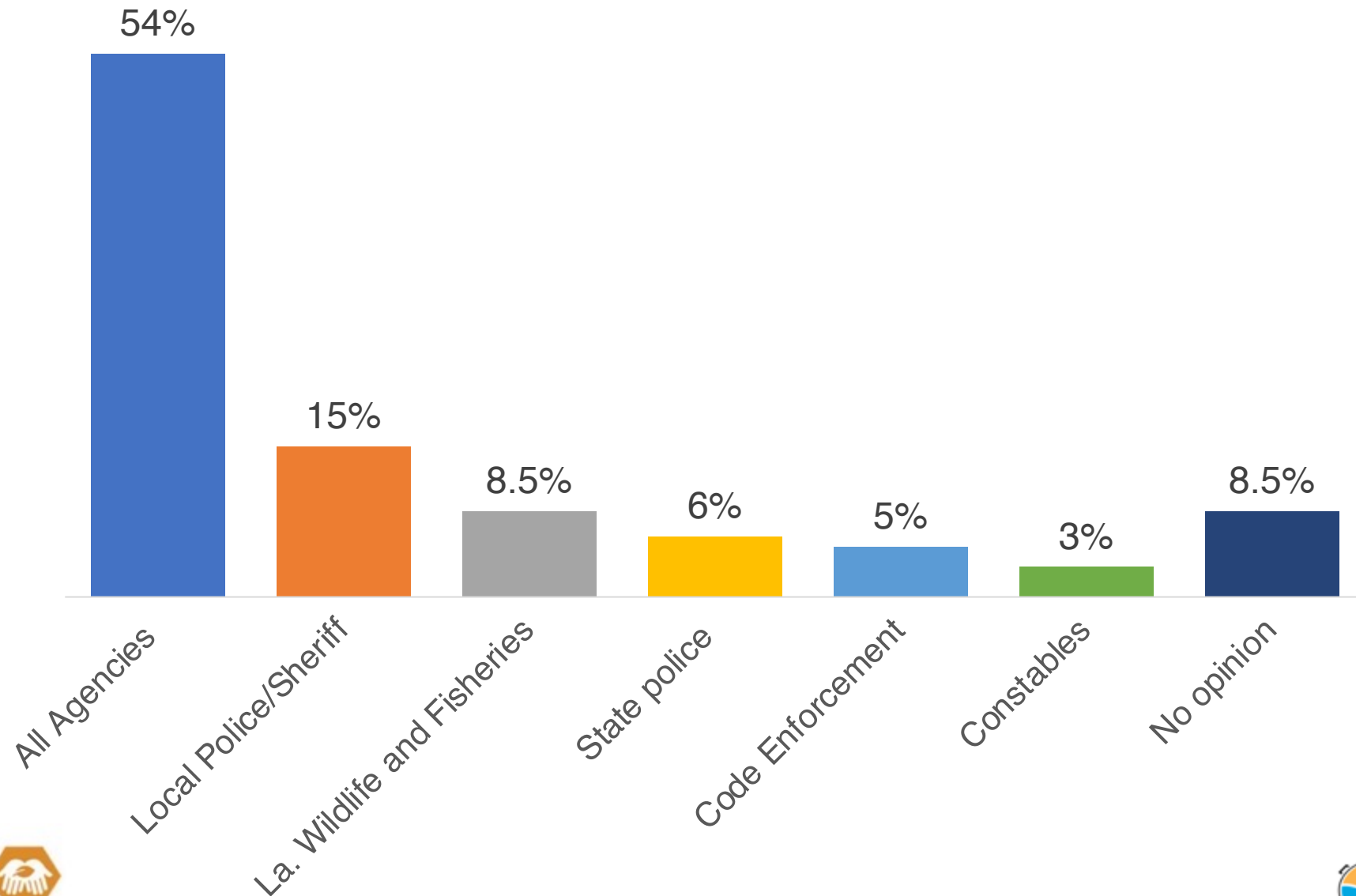
Why Do People Litter



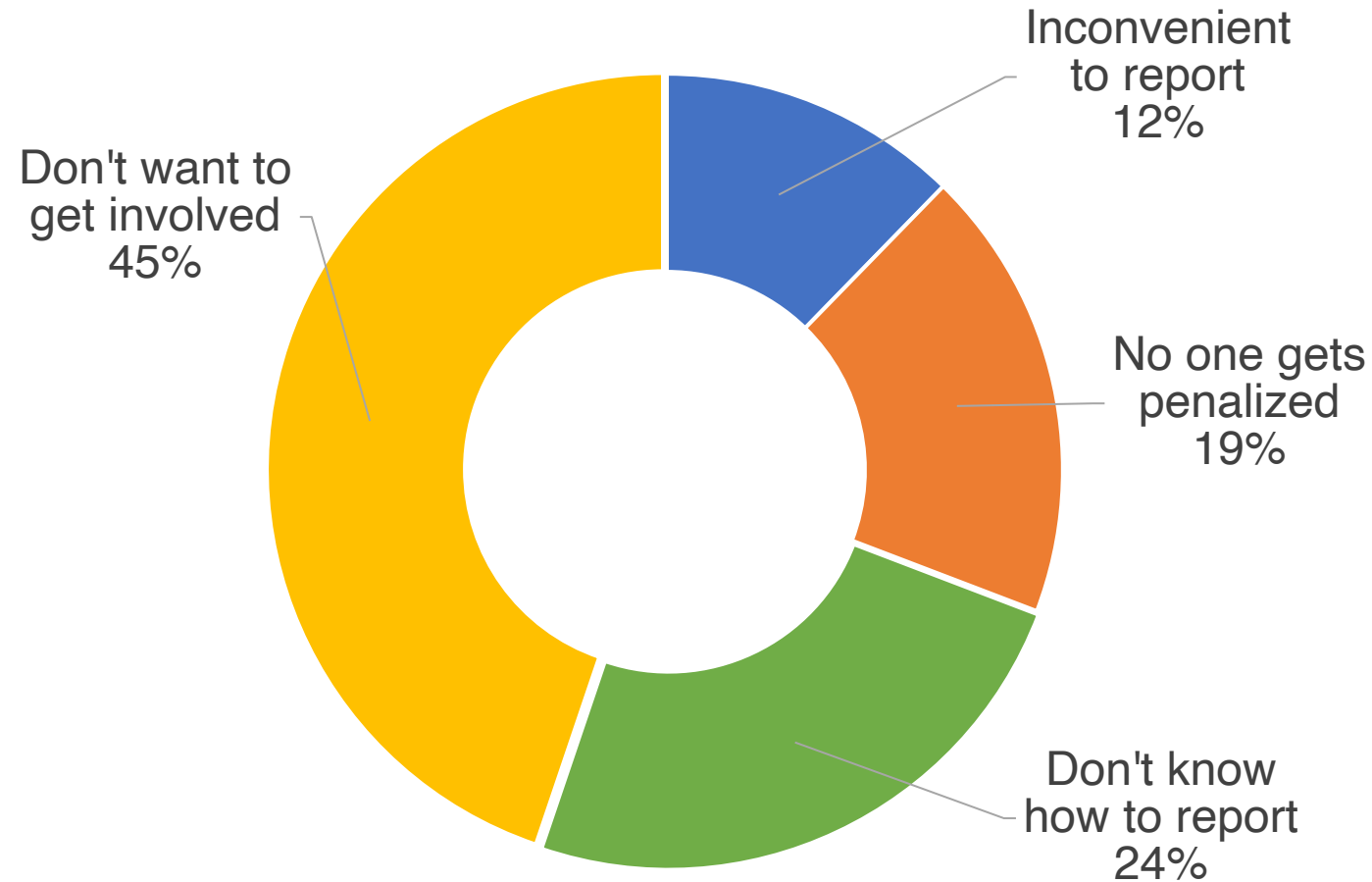
Litter Law Enforcement



Which Enforcement Entity Should Be Responsible?



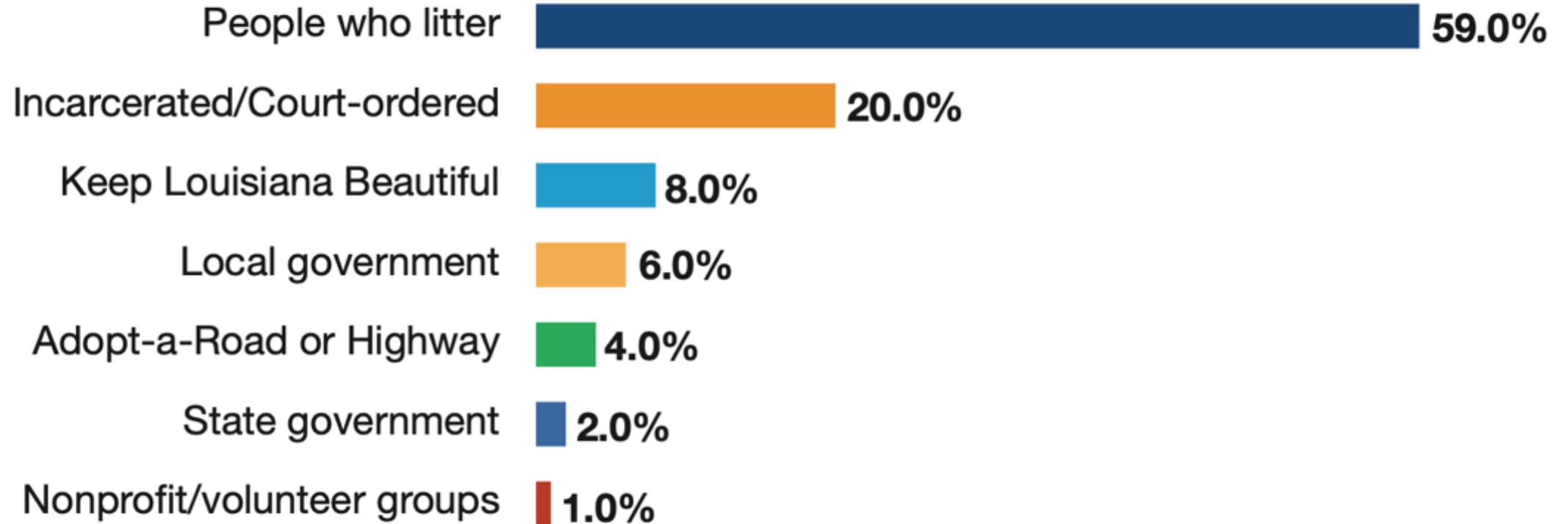
Opinion: Why People Don't Report?



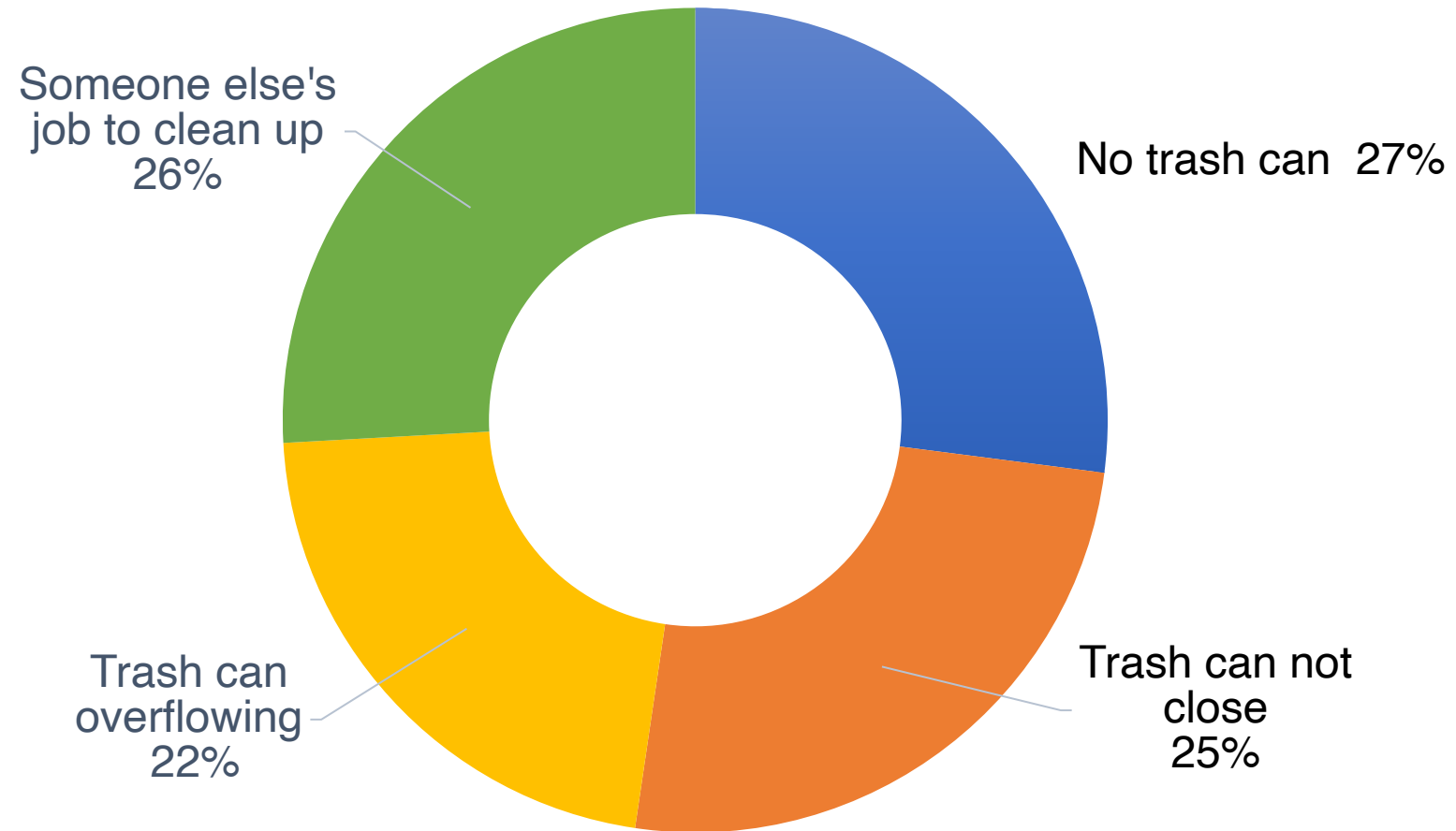


68% surveyed responded
they **do not** know how to report littering

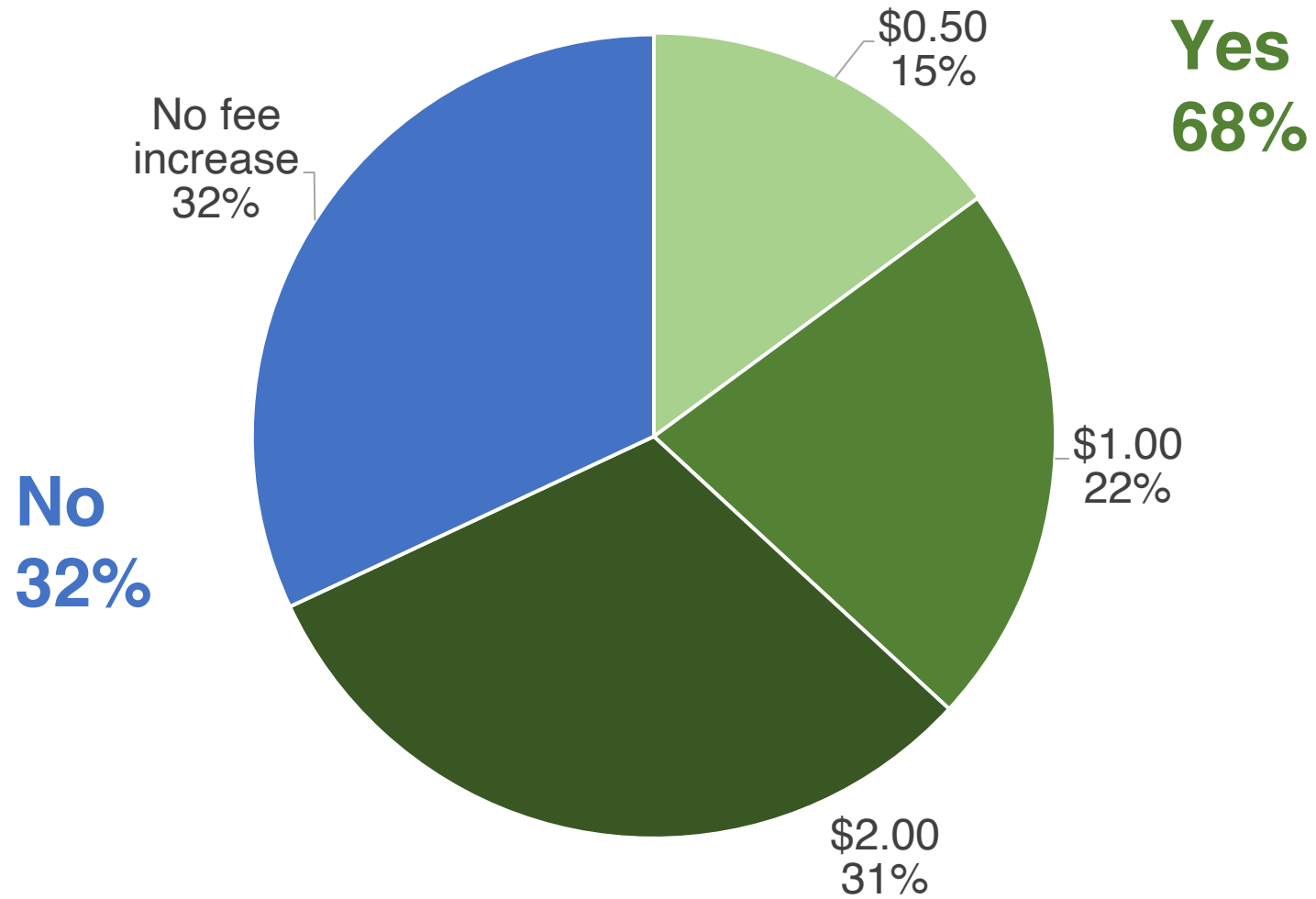
Who is Responsible for Cleanup



Why People Litter at Outdoor Events



Support New Funding For Litter Programs



Plan to Address Litter at Outdoor Events



- KLB and French Quarter Festivals, Inc.
 - Provide practical ways event organizers can plan to manage and reduce waste
 - Prevent litter at large outdoor events
 - Identify ways to increase recycling
- KLB large event grants

Recommendations

- Increase awareness of litter's economic and environmental impacts
- Install receptacles in public spaces and public events
- Conduct annual evaluations of programs to ensure litter prevention
- Encourage affiliates to conduct public attitude surveys to determine local needs
- Improve reporting via hotline and other technologies
- Promote enforcement efforts and support officers, prosecutors, and judges in enforcing litter laws

The background features a large, semi-transparent globe centered on the page. Overlaid on the globe is a trash can icon with a diagonal slash through it, indicating prohibition or a ban on littering. In the bottom right corner of the globe, there is a checkmark icon, suggesting a positive outcome or a goal achieved. The entire scene is set against a solid blue background.

Litter Cost Study

Methodology

- Invitation to cities, parishes, sheriffs, and state agencies
 - Lt. Governor's letter, emails, and calls
 - January-May 2023
- Collector forms and data request
 - Labor, equipment, supplies, disposal, educational efforts, and volunteer recruitment for cleanups



State Agencies

Office of the Lieutenant Governor - Department of Culture, Recreation and Tourism
Departments of Transportation and Development
Wildlife and Fisheries
Environmental Quality
Public Safety and Corrections
State Police

Local Government

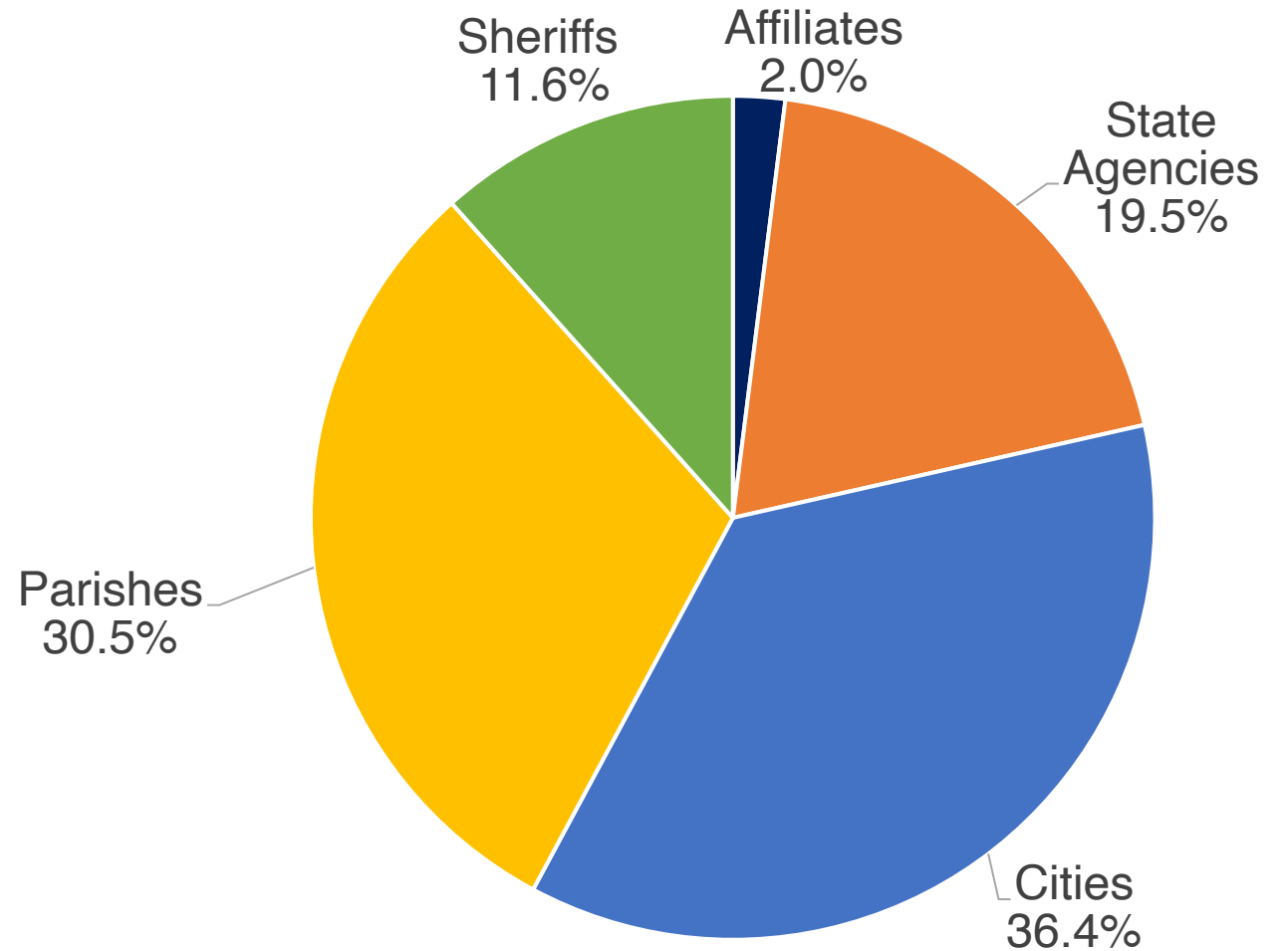
Abbeville	Catahoula Parish	Lafayette Sheriff	Slidell
Abita Springs	DeRidder	Lake Providence	St. John the Baptist Parish
Alexandria	DeSoto Parish	Lincoln Parish	St. Mary Parish
Ascension Parish	Donaldsonville	Monroe	St. Tammany Parish
Ascension Sheriff	E. Baton Rouge Parish	Morehouse Sheriff	Tangipahoa Parish
Assumption Parish	Evangeline Sheriff	Natchitoches	Tensas Parish
Baton Rouge	Grant Sheriff	New Orleans	Tensas Sheriff
Beauregard Sheriff	Gretna	Orleans Parish	Terrebonne Parish
Bossier Sheriff	Iberville Sheriff	Ouachita Parish	Terrebonne Sheriff Walker
Caddo Parish	Jefferson Parish	Ouachita Sheriff	W. Baton Rouge Sheriff
Calcasieu Parish	Jefferson Parish	Plaquemines Sheriff	West Feliciana Parish
Cameron Sheriff	Lafayette Parish	Shreveport	

\$91.4 Million



Litter Cost Estimate by Entity

Category	Estimated Costs
Municipal	\$33,257,355
Parishes	\$27,921,413
State Agencies	\$17,800,010
Sheriffs	\$10,610,546
Affiliates	\$1,820,250
Total	\$91,409,573

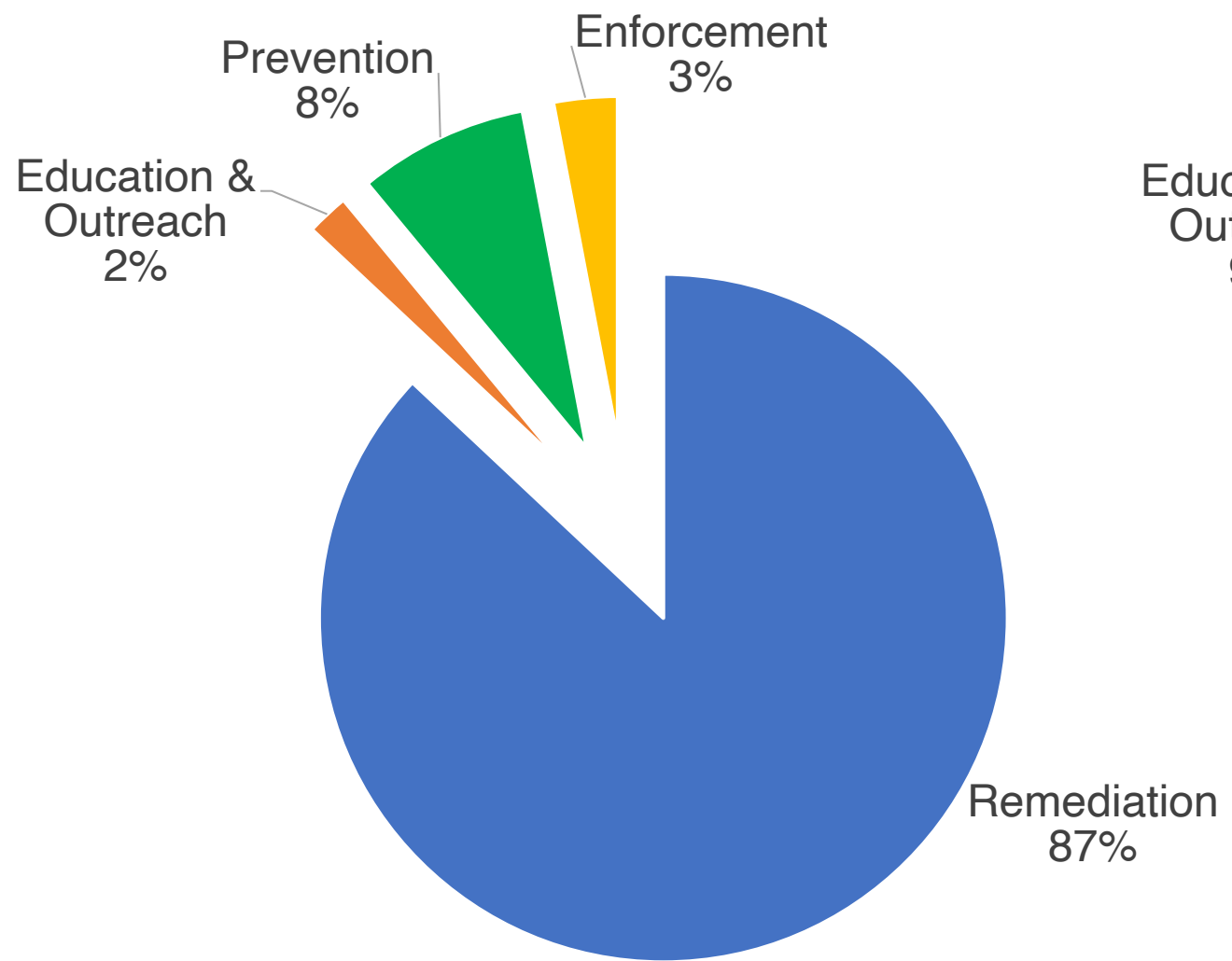


Cost Categories

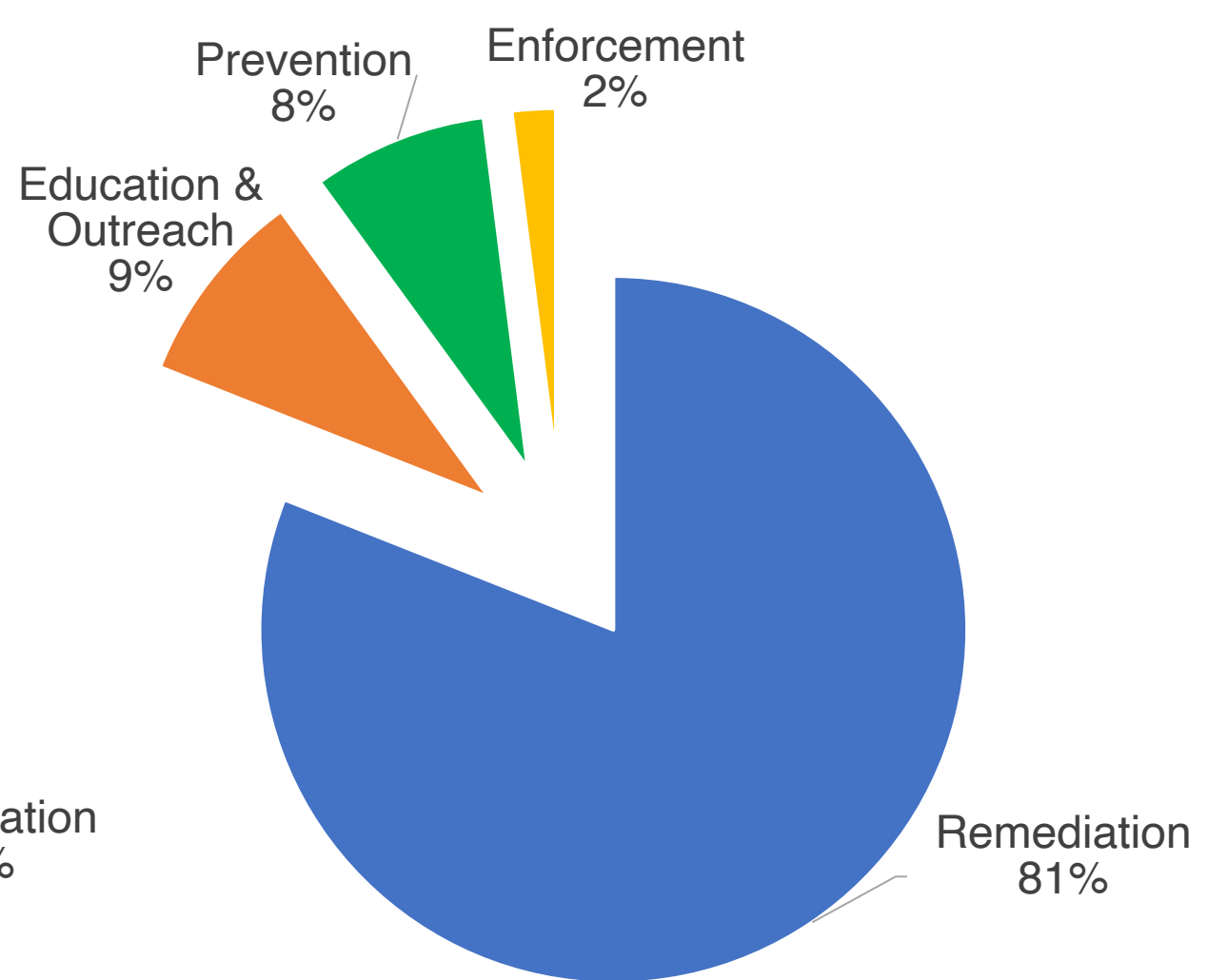
Prevention	<ul style="list-style-type: none">● Maintaining public space containers● Conducting collection events● Distributing prevention tool
Education & Outreach	<ul style="list-style-type: none">● Engaging K-12 education● Conducting awareness campaigns● Offering workshops or demonstrations
Remediation	<ul style="list-style-type: none">● Conducting cleanups with staff and litter crews● Supervising court-ordered workers● Managing contractors● Organizing volunteer-based events
Enforcement	<ul style="list-style-type: none">● Issuing litter or illegal dumping tickets● Investigating● Managing or referring cases to other jurisdictions

Estimate by Expense Category

Local Government



State Agency



Recommendations

- Implement state agency reporting and coding of litter expenditures
- Create data collection system for local government jurisdictions
- Report expenditures to the Governor or Lieutenant Governor's Office
- Develop messaging on hidden but actual costs associated with litter and illegal dumping remediation **versus** prevention and education
- Focus on prevention activities to change littering behavior and promote a culture of cleanliness
- Conduct cost studies for businesses, education, and nonprofits

Thank you



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