



# LOUISIANA **LITTER RESEARCH**

AUGUST 2023

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## **LITTER COST STUDY RESULTS**

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The Litter Cost Study estimates what litter costs Louisiana taxpayers by measuring local government and state agency expenditures on litter cleanup, abatement, and enforcement. While efforts were made to obtain cost data from a statistically representative sample of local and state agencies, entities, and jurisdictions, the costs presented in this report should be viewed as estimates. The respondents in the study's sample locations, selected for population size and geographic diversity, provided data via survey forms and interviews conducted by the Project Team between January and May 2023. The Team employed data collection methods and formulas used in similar studies. A conservative cost estimate was then computed, based on the assumption that litter-related expenditures reported by respondents and interviewees were comparable to those made by other local government entities in Louisiana.

## METHODOLOGY

In 2010, Keep Louisiana Beautiful (KLB) released its first report on the estimated amount of taxpayer funds spent on litter and illegal dumping remediation efforts statewide. The 2010 study collected data from 41 governmental entities via questionnaires and interviews. Based on the data, the researchers generated a per capita for all municipalities and a per capita for all parishes and sheriff's offices. They also added the Department of Transportation and Development's clean-up expenses.

The report calculated that municipal governments, parish governments, sheriff's departments, and state agencies in Louisiana spent an estimated \$39,957,773 to collect and dispose of litter, enforce litter laws, adjudicate litter violations, and conduct anti-litter public information and education programs on an annual basis

In 2023, KLB embarked on a follow-up report duplicating the methodology relating to litter and illegal abatement, prevention, remediation, education, and enforcement. A Project Team, consisting of Carson Consulting and Tetra Tech, BAS, worked with KLB to develop a representative sample based on jurisdiction type, population, and geographic diversity. The Project Team identified 42 local government entities (see Figure 4-1) based on government type, geographic location, and population to



collect direct and indirect litter and illegal dump expenditures incurred over the past budget year or 12-month period. Additionally, six state agencies with direct involvement or responsibilities related to litter and illegal dumping were identified. Municipalities, parishes, sheriff's offices, and state agencies were all asked to identify the expenditures incurred across various departments, such as public works, solid waste, transportation, police, code enforcement, or other departments that may incur litter and illegal dumping clean-up costs.

Like the 2010 study, municipalities were identified in three (3) distinct population categories, which included the following sizes: Large (>50k), Medium (10-50k), and Small (<10k). The study identified three (3) distinct population categories for parishes and sheriff's offices, based on the 2010 study, including the following sizes: Large (>200k), Medium (100-200k), and Small (<100k).

**Figure 4-1: Jurisdictions Initially Surveyed**



Note: C=Cities, P=Parishes, and S=Sheriff's Office

To initiate the 2023 data collection process, a letter from Lt. Governor William H. Nungesser's office was sent to the highest elected official in each jurisdiction requesting their participation. The Project Team sent a follow-up email to these officials in January 2023. Since it was unlikely that each jurisdiction and their departments have specific budget lines for litter and illegal dumping costs, the Project Team provided data collector forms to assist in gathering information. One form was a Word document similar to the 2010 study tool, and the second was an Excel spreadsheet designed to generate the cost estimate based on information entered by the jurisdiction. The data request included labor expenditures, equipment and maintenance expenses, supplies, disposal fees, social media expenditures, educational efforts, and volunteer recruitment for cleanups and related programs. State agencies, including the Office of the Lieutenant Governor - Department of Culture, Recreation and Tourism (DCRT), Departments of Transportation and Development (DOTD), Wildlife and Fisheries (LDWF), Environmental Quality (LDEQ), Public Safety and Corrections (DPS&C), and State Police (LSP) received a similar inquiry form to collect data. From January to May 2023, the Project Team followed up with contacts via email and telephone interviews to assist the entities in providing the requested expenditures, see Appendix 8 for participating entities.

Once the Project Team secured completed responses from a representative sample size, the expenditures were grouped by population size and scaled to determine the estimated total cost for all entities statewide. Three different methodologies were used in this study than those used in the 2010 study. First, the municipal and parish per capita were determined by each population range rather than one per capita by jurisdiction type. The researcher concluded that separating by population more accurately accounts for possible expenditures. Second, when applicable, populations were decreased, including for consolidated governments. Third, the researchers reported parish and sheriff costs but adjusted them to reduce possible duplication of efforts and to include expenses that represented the different roles of the two entities. Based on these methodologies, the local jurisdictions' estimates are considered conservative. The state agency estimates are reported as totals provided by each entity, except for state police, which provided more generalized information.

## ESTIMATED LITTER COSTS

The total Louisiana litter cost for prevention, education and outreach, remediation, and enforcement on an annual basis was estimated to be \$91,409,573. This amount does not include the expenditures of businesses, universities, or other entities; therefore, the actual cost is likely much higher. This estimate represents an expenditure increase of nearly 65 percent since the 2010 study, which projected total costs to be \$40 million — or roughly \$55.7 million when adjusted for the Consumer Price Index. Results for each category are shown in Table 4.1 and presented in the next section by descending numerical value, with the highest costs listed first.

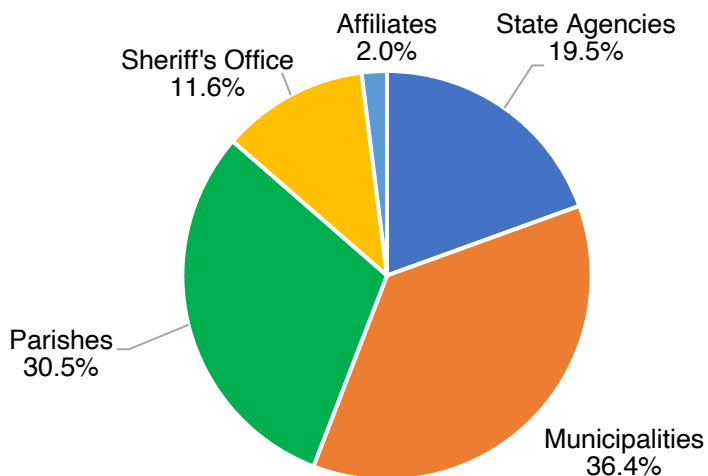
**2023 ESTIMATE**  
**\$91,409,573**  
**PER YEAR**

**Table 4-1: Litter Costs by Jurisdiction**

Category	Estimated Costs	# of Entities	% of Total Costs
Municipal	\$33,257,355	304	36.4%
Parishes	\$27,921,413	64	30.5%
State Agencies	\$17,800,010	6	19.5%
Sheriffs	\$10,610,546	64	11.6%
Affiliates	\$1,820,250	-	2.0%
TOTAL:	\$91,409,573	-	100.0%

Local jurisdictions bear over 80 percent of the costs of addressing litter. Municipalities have the highest overall costs, followed by parish governments. Sheriff's office costs represent a smaller (11.6%), but significant, portion of overall expenditure. Affiliate costs, which accounts for two percent of total costs, include volunteer hours to conduct cleanups and public education efforts that would otherwise need to be undertaken by government entities. Therefore, the Project Team incorporated this cost into its estimates.

**Figure 4-2: Litter Costs Expenditures by Jurisdictions**



### Municipalities

In Louisiana, there are 304 municipalities, such as cities, towns, and villages, ranging in population from approximately 12 to 384,000. This study categorized costs into three (3) distinct population groups, Large (>50k), Medium (10-50k), and Small (<10k). Table 4-2 shows that 15 municipalities provided estimated litter and illegal dumping expenditures. Municipalities spent an estimated \$33,257,355 managing litter and illegal dumping.

**Table 4-2: Responding Municipal Entities and Cost Estimates Based on Population**

Type	Large (>50k)	Medium (10-50k)	Small (<10k)	Total
Municipalities Reporting	3	7	5	15
Average Per Capita	\$17.89	\$7.50	\$13.83	\$15.39
Municipal Costs	\$22,424,021	\$3,916,631	\$6,916,702	\$33,257,355

The reported costs were used to estimate a per capita amount within the three population categories. Before determining the overall municipal cost, the Project Team removed overlapping populations for jurisdictions within consolidated government or other situations where a duplication appeared possible. The per capita for each municipal population category was then applied to reach the municipal cost estimate.

## Parishes

Louisiana is divided into 64 Parishes, ranging in population from approximately 4,000 to 453,000. For comparison, the Project Team used the same three distinct population categories as the 2010 study: Large (>200k), Medium (100-200k), and Small (<100k). In 2023, 16 parishes provided their estimated expenditures (see Table 4-3) including costs for removal by staff or litter crews. Parishes spent an estimated \$27,921,413 managing litter and illegal dumping. The parish cost total was computed with a similar method used to compute the municipal costs, by adjusting to reduce duplication, as to avoid double counting any municipal population within specific government structures. Additionally, if a sheriff's office costs indicated a financial agreement with a parish regarding litter and illegal dumping costs, the populations were adjusted to reduce duplication. The Project Team subsequently calculated a per capita cost for each parish population category, then applied it to reach the parish cost estimate.

**Table 4-3: Responding Parishes and Cost Estimates Based on Population**

Type	Large (>200k)	Medium (100-200k)	Small (<100k)	Total
Parishes Reporting	6	3	7	16
Average Per Capita	\$4.58	\$6.42	\$7.78	\$6.20
Parish Costs	\$10,462,471	\$5,936,669	\$11,522,273	\$27,921,413

## Sheriff's Office

There are 64 sheriff departments within Louisiana, with the same population as the parishes. Because many parishes utilize sheriff departments for their anti-litter and illegal dumping enforcement efforts and as their primary funding source, the 2010 study combined the sheriff and parish expenditures into one total. In 2023, it was determined that these sheriff's expenditures should be shown as its own category. In some parishes, sheriff departments are partially responsible for tackling litter including management of litter crews. Project Team made efforts to reduce duplication by verifying consolidated government operations and identifying partnerships between the parish and sheriff's office. Sheriff departments spent an estimated \$10,610,546.



**Table 4-4: Responding Sheriff's Offices and Cost Estimates Based on Population**

Type	Large (>100k)	Medium (10-50k)	Small (<10k)	Total
Sheriff Reporting	5	7	3	15
Average Per Capita	\$1.04	\$4.72	\$12.88	\$2.29
Sheriff Totals	\$3,364,602	\$6,652,345	\$351,330	\$10,610,546

## Affiliates

Over 40 KLB Community Affiliates are located throughout the state. This study includes data from 34 affiliates. These affiliates organize cleanups to inspire volunteers and partners to make a difference in their communities. Their reported costs included the donated volunteer time that would otherwise be reflected in government labor costs and disposal expenditures. Affiliates spent an estimated \$1,820,250 in FY 21-22. The data only includes costs associated with activities not duplicated in data reported by other entities.

## State Agencies

State agencies reported an estimated \$17,800,010 in litter and dumping clean-up expenditures (see Table 4-5). The reported costs included direct and contracted costs for roadway litter removal, enforcement, training, and program management. The costs also included grants awarded to local government entities, which were removed from local jurisdictions to reduce duplications. Within Louisiana, six state agencies manage and remediate litter and illegal dumping throughout the state. These agencies were contacted by the Lt. Governor's Office and the Project Team to better understand their roles in litter and illegal dumping remediation and prevention efforts and to determine their most recent litter-related expenditures.

**Table 4-5: Responding State Agencies and Cost Estimate**

Agency Name	Cost Estimate
DOTD	\$13,078,184
DCRT	\$4,250,367
LDEQ	\$129,749
LDWF	\$248,391
DPS&C	\$56,852
LSP*	\$36,467
TOTAL	\$17,800,010

*Note: State police estimated based on salary scale provided by LSP.*

A summary of each state agency and its estimated expenditures are provided below in descending numerical value:

- **Department of Transportation and Development (DOTD)** is responsible for cleaning litter along the state's rights-of-way, funding and overseeing the roadway litter removal and mowing contracts, funding for Project Cleanup under the Department of Corrections, the state Adopt-a-Road Program, street sweeping, municipal agreements, sheriff's office agreements, and in-house removal expenditures across the state.
- **Department of Culture, Recreation & Tourism (DCRT)** manages the contract with the state's anti-litter and beautification nonprofit, oversees the Governor's Task Force on Statewide Litter Abatement and Beautification, provides grants for government entities, and organizes litter enforcement initiatives and training. Keep Louisiana Beautiful (KLB), funded partially through state funds generated by a driver's license fee, provides tools and resources to prevent litter, reduce waste, increase recycling, and protect natural resources. KLB coordinates statewide projects, e.g., Love the Boot Week, the Let It Shine public awareness campaign, and youth education, and manages a community and university affiliates network.
- **Louisiana Department of Wildlife and Fisheries (LDWF)** conducts litter enforcement and operates the state's anti-litter hotline, 888.LITRBUG, which allows motorists and others to report litter and illegal dumping violations.
- **Louisiana Department of Environmental Quality (LDEQ)** staff are involved in education and enforcement efforts. Inspectors in the Surveillance and Emergency Response Divisions investigate, on average, 150 reports of illegal dumping per year. DEQ's Small Business Assistance Program and its Nonpoint Source Pollution staff regularly perform public education and outreach endeavors using an Enviroscape model to encourage litter prevention.
- **The Department of Public Safety and Corrections (DPS&C)** has an Interagency Cooperative Endeavor Agreement with the Department of Transportation and Development (DOTD) provide litter labor crews and security for the purpose of removing litter from highway.

- **Louisiana State Police (LSP)** enforces state litter laws and regulations for unsecured, spilling, or leaking loads.

## ESTIMATED LITTER COSTS BY CATEGORY

The Study survey tool asked responders to identify litter and illegal dumping prevention, education and outreach, remediation, and enforcement expenses. The Project Team analyzed the responses and conducted follow-ups to clarify which category was appropriate. Table 4-6 describes each category which includes the related labor costs, supplies, landfill or disposal fees, and other resources to implement or manage each category.

**Table 4-6: Litter and Illegal Dumping Cost Categories**

<b>Prevention</b>	<ul style="list-style-type: none"> <li>● maintaining public space litter containers</li> <li>● conducting collection events to encourage proper disposal of waste</li> <li>● distributing promotional items, such as litter bags</li> </ul>
<b>Education and Outreach</b>	<ul style="list-style-type: none"> <li>● engaging youth in K-12 education</li> <li>● creating and implementing public awareness campaigns</li> <li>● offering workshops or hands-on demonstrations</li> </ul>
<b>Remediation</b>	<ul style="list-style-type: none"> <li>● conducting daily cleanups with government staff and litter crews</li> <li>● supervising court-ordered worker litter and debris removal activities</li> <li>● managing contractors</li> <li>● organizing volunteer-based events</li> </ul>
<b>Enforcement</b>	<ul style="list-style-type: none"> <li>● issuing litter or illegal dumping tickets</li> <li>● investigating dump sites</li> <li>● managing or referring litter or illegal cases to other jurisdictions</li> </ul>

Figure 4-3 shows the cost distribution by categories by local government entities. Based on the responses from local jurisdictions and state agencies the categories the results are likely applicable across all types of jurisdictions and population sizes. Local government expends 87%, including removing litter from roadways and public spaces. Prevention activities accounted for only 8 percent of the analyzed costs. Enforcement activities may deter littering and illegal dumping, but results showed these activities accounted for only 3 percent of expenditures. Education and outreach to inform the public or youth accounted for only 2 percent. Overall, local jurisdictions spend seven times more to remove litter and trash from public spaces than they spend on preventing it from being generated.

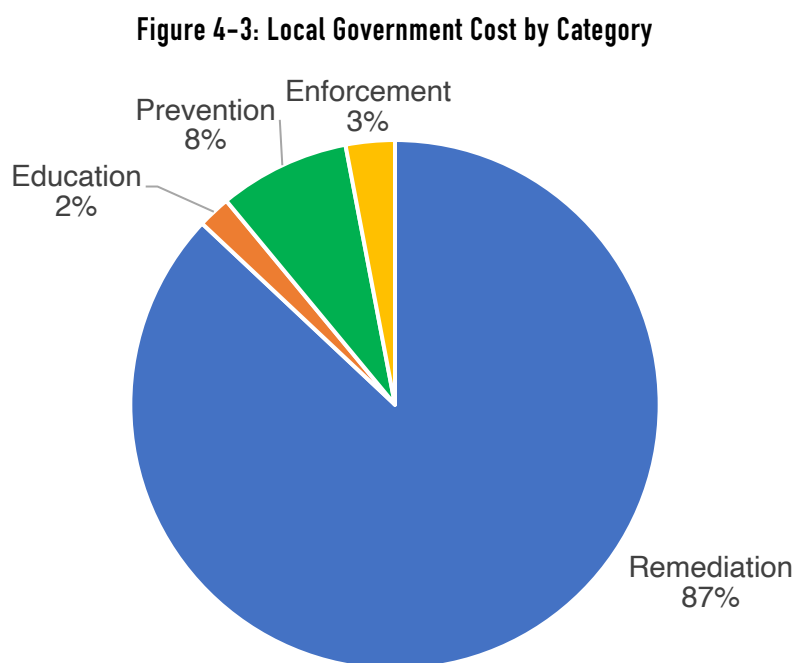
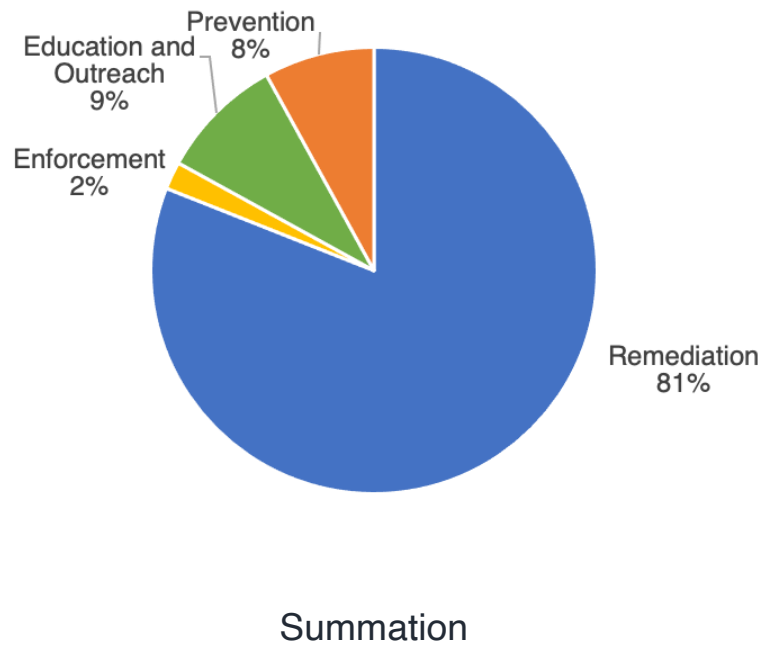


Figure 4-4 shows the cost distribution by categories by state agencies. State agencies expend 81 percent of their funding on remediation including removing litter from roadways and public spaces. Prevention activities made up 8 percent of total state spending, and enforcement made up 2 percent. The education category, 9 percent of total spending, included state-wide public awareness activities and youth programs. Even at the state-level, the expenses for litter remediation far exceed spending on litter prevention.

**Figure 4-4: State Agency Cost by Category**

The Litter Cost Study documented the approximate costs associated with litter and illegal dumping, which have a significant financial impact. Still, litter-related expenditures are not routinely budgeted as a line item, and are therefore difficult to determine. For example, litter-related activities are often considered part of an employee's daily job duties, but it is challenging to determine the actual time each employee expended on such activities. In addition, although the Project Team requested each jurisdiction surveyed collect data from all departments, the responses were primarily from public works, solid waste, and parks which is a limitation of the study, and likely resulted in a lower estimate of the total costs and the distribution of the expenditures by category.



## LITTER COST STUDY KEY FINDINGS

- **The annual cost of litter in Louisiana is over \$91 million.** **2023 ESTIMATE \$91,409,573 PER YEAR**  
This is a conservative estimate, based on government expenditures.
- Local governments bear over 80 percent of the cost of dealing with litter and illegal dumping issues. **7X MORE IN COST TO REMOVE**
- Expenditures overwhelmingly focus on remediation or cleanup versus prevention. Local jurisdictions spend seven times more to remove litter and trash from public spaces than they spend on preventing it from being generated.
- Most entities do not have a budget line item for litter and illegal dumping expenditures, making it challenging to account for all costs associated with all department(s).

## RECOMMENDATIONS

- Report litter expenditures to the Governor or Lieutenant Governor’s Office annually.
- Create a consistent data collection system across all local government jurisdictions and state agencies, which could be part of existing state reporting or a requirement for state funding or grants related to litter prevention.
- Develop messaging on litter costs for local elected officials to better understand the hidden, but actual, costs associated with litter and illegal dumping remediation versus prevention and education.
- Conduct future litter cost studies and consider examining the following business costs, K-12 and higher education costs, and expenditures by nonprofits and organizations focused on litter and illegal dumping.
- Encourage increased funding for prevention activities, including the installation of infrastructure, youth education, general public outreach, enforcement, and other activities to change littering behavior and promote a culture of cleanliness.



## APPENDIX 7: LITTER COST LETTER

December 12, 2022

The Honorable Adrian Perkins  
Mayor  
City of Shreveport  
P.O. Box 31109  
Shreveport, LA 71130

Dear Mayor Perkins:

As part of efforts to address the litter problem in Louisiana, we need your help to estimate how much public money is spent each year. In 2010, a litter cost study conducted for Keep Louisiana Beautiful showed over \$40 million annually is spent to address litter, defined as trash or recyclables that are abandoned or disposed of improperly. Your jurisdiction has been selected by the researchers for inclusion in the sampling process to determine the statewide cost.

We want to estimate the amount agencies like yours spend on litter-related activities, including litter collection and disposal, litter enforcement, anti-litter education and public information, and litter adjudication. Between December 2022 and March 2023, researchers will collect data via surveys and interviews to determine the estimated current actual costs to taxpayers. From our past experience, we realize that there is probably no such thing in any government agency as a budget line item for litter; however, we do know that, indeed, public funds are expended and personnel and equipment resources are assigned to litter collection, disposal, and enforcement. Data collection may include estimating:

- Annual personnel costs included but are not limited to, government personnel performing cleanup or enforcement or supervising workers and contract employees
- Hours provided by non-paid workers, including community volunteers, prisoners and inmates, and people performing mandatory community service
- Cost for operating equipment including but not limited to a vehicle to transport litter crews; vehicle and trailer to carry litter collected; litter barrels and trash receptacles; gloves, vests, garbage bags, pickup sticks, and other equipment
- Disposal cost at a landfill or disposal center for litter collected

We understand the information you provide will be your best estimates of such costs so we want to work with you to determine the applicable departments and personnel to include in the process. We request you confirm your participation by contacting Dr. Cecile Carson at [carson@cdcarson.com](mailto:carson@cdcarson.com) or (940)230-6035 by December 22, 2022. If we don't hear back from you by that date, we will follow up with you directly to determine your participation.

Thank you for your participation in this important research project. If I can be of assistance to you in any way, please don't hesitate to call.

Sincerely,

  
Billy Nungesser  
Lieutenant Governor

WHN/jt

## APPENDIX 8: LITTER COST PARTICIPANTS

### Local Government

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

### State Government

Office of the Lieutenant Governor - Department of Culture, Recreation and Tourism (DCRT)

Departments of Transportation and Development (DOTD)

Wildlife and Fisheries (LDWF)

Environmental Quality (LDEQ)

Public Safety and Corrections (DPS&C)

State Police (LSP)

## FOR MORE INFORMATION



Susan Russell

Executive Director

985-778-0067

[srussell@keeplouisianabeautiful.org](mailto:srussell@keeplouisianabeautiful.org)

[www.keeplouisianabeautiful.org](http://www.keeplouisianabeautiful.org)



Dr. Cecile Carson

Chief Executive Officer

940.230.6035.

[carson@cdcarson.com](mailto:carson@cdcarson.com)

[www.cdcarson.com](http://www.cdcarson.com)