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MEMORANDUM

TO: Commission Members

FROM: Cliff Lippard

Executive Director ()

DATE: 21 January 2022

SUBJECT: Comprehensive Litter Review—Update

The Commission at its June 2021 meeting directed staff to conduct a comprehensive study of litter in Tennessee to include

- research on the effects of littering and illegal waste dumping on the environment, economy, and overall quality of life in the state;
- analysis of the current funding, costs, and convenience of properly disposing of solid waste in Tennessee;
- identification of best practices from Tennessee and a review of other states; and
- recommendations for changes warranted to reduce littering and its effects in Tennessee.

The Commission determined that the study would not focus on policies that impose deposits on bottles or bans on plastic bags, which have been adopted in other states. At its September 2021 meeting, the Commission heard from a panel of stakeholders on issues relating to litter and illegal dumping.

This update memo provides a preliminary overview of staff findings regarding the status quo for litter issues in Tennessee; policies, programs, and laws adopted to reduce litter in the state; feedback from stakeholders; and an initial review of other states' laws. There is general agreement that although there has been progress in confronting litter and illegal dumping in Tennessee, litter and illegal dumping remain a problem, and there are differences of opinion about how to further address this problem moving forward.

Although roadside litter has decreased, litter and illegal dumping continue to be a problem.

Litter is a problem not only in Tennessee but also nationwide. According to the 2020 Keep America Beautiful (KAB) national litter study, there are an estimated 50 billion pieces of litter along US roadways and waterways, which is an average of 152 pieces of litter for every US resident.¹ The study found that the top three categories of litter on the nation's roadways were miscellaneous plastic (34.7%), cigarette butts (24.1%), and miscellaneous paper (18.3%). Since the previous KAB study in 2009, litter is estimated to have decreased nationwide by 54%. In Tennessee, according to the Department of Transportation's (TDOT) 2016 visible litter study, roadside litter has decreased in the state by 53% compared to the results of TDOT's 2006 study.² Even so, at any given time, there are an estimated 100,000,000 pieces of litter on Tennessee roadsides. The 2016 study found that the top three types of litter per mile on the state's roadways are vehicle debris (42%), miscellaneous paper (12%), and food and tobacco packaging (10%). Drink containers and bottles were approximately 5% of roadside litter.

Illegal dumping, including waste tires, continues to be an issue across the state. The Commission's 2020 report Closing Gaps in Tennessee's Waste Tire Program and Giving Local Governments More Flexibility to Prevent Illegal Tire Dumping addresses the issue of waste tires and illegal dumping and makes several recommendations. The report noted that over the last ten years, "TDEC [Tennessee Department of Environment and Conservation] has received and investigated nearly 800 complaints of illegal dumping that included tires, with 89 of the state's 95 counties having at least one complaint reported. . . . In 2019 alone, the department received 101 complaints concerning tires and issued 49 notices of violation in 28 separate counties." In 2021, TDEC 's Solid Waste Management Data Viewer showed 339 complaints of illegal dumping, 79 complaints about tires, and 146 notices of violation issued for both illegal dumping and tires in 54 separate counties.³ Commission staff continue to compile and analyze waste tire data and will update this and other information presented in the 2020 report for the litter study, including the revenue generated from tire pre-disposal fees and how it is used—\$1 per new tire goes to the county where it was sold, and \$0.25 per new tire goes to the state's solid waste management fund. Additionally, staff will update data on a separate environmental fee—\$5 for each new vehicle sold with four tires, which goes to

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¹ Keep America Beautiful. May 2021. 2020 National Litter Study, Summary Report.

² EnviroMedia Social Marketing, LLC. 2016. 2016 Tennessee Statewide Litter Study, Final Report.

³ Data retrieved January 6, 2022 from https://www.tn.gov/environment/about-tdec/tdecdataviewers.html.

the Tire Environmental Act Program to fund grants for projects creating or supporting beneficial end uses for waste tires.⁴

Tennessee has policies, programs, and laws for managing and reducing solid waste, litter, and illegal dumping.

The three main components of the state's efforts to manage and reduce solid waste, litter, and illegal dumping are the Solid Waste Management Act of 1991; litter prevention, pickup, and education programs including TDOT and Keep Tennessee Beautiful programs; and criminal littering and covered load laws. Although each of these components is intended to reduce littering and illegal dumping, they were established, have evolved, and are managed separately.

The Solid Waste Management Act of 1991 established a policy to reduce and minimize the need for solid waste treatment and disposal "through source reduction, reuse, composting, recycling, and other methods" and to "promote markets for and engage in the purchase of goods made from recovered materials and goods which are recyclable." The solid waste management fund, managed by TDEC, was created to support programs and activities that help implement the policy including technical and solid waste planning assistance for local governments, grants to improve recycling facilities and equipment, collection of household hazardous waste, and landfill cleanup. Its two main revenue sources are the already-mentioned tire pre-disposal fee—\$0.25 per new tire—and the tipping surcharge at Class I landfills for everyday trash discarded by the public—\$0.90 per ton. For fiscal years 2017-18, 2018-19, and 2019-20, the average annual combined revenue from these sources into the fund was \$7.9 million.

The 1991 Act required counties to create single-county or multi-county solid waste regions, each with a board and advisory committee, to plan and comply with the state's solid waste reduction and recycling goals. Currently, there are 57 single-county solid

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⁴ Tennessee Department of Environment and Conservation "Tire Environmental Act Program (TEAP)." August 31, 2021. https://www.tn.gov/environment/program-areas/opsp-policy-and-sustainable-practices/community-programs-and-services/tire-environmental-act-program--teap-.html.

⁵ Public Chapter 451, Acts of 1991; Tennessee Code Annotated, Section 68-211-801 et seq.

⁶ Tennessee Advisory Commission on Intergovernmental Relations. 2020. *Closing Gaps in Tennessee's Waste Tire Program and Giving Local Governments More Flexibility to Prevent Illegal Tire Dumping.*

waste regions and nine multi-county regions covering all 95 counties.⁷ Counties manage solid waste differently, but each county is required to provide at least one convenience center where residents can bring their waste and recycling but can provide a higher level of service such as curbside collection. In addition, counties are responsible for providing a location to dispose of waste tires, which could be at the convenience center or another designated site in the county. The private sector also plays a key role in solid waste management through technology development and innovation and often through partnerships with local governments, such as local governments partnering with recycling companies to process recyclable materials.

As part of its responsibility to maintain state roads in Tennessee, TDOT provides litter prevention, pickup, and education programs, including contracted pickup along roadways, litter grants, and special litter projects. In fiscal year 2019-20, TDOT allocated approximately \$19 million for these activities. Of this amount, approximately \$9.8 million was spent on contracted pickup along roadways and \$305,000 for special litter projects, including the adopt-a-highway, litter hotline, and Nobody Trashes Tennessee programs. The remaining \$8.8 million was allocated for the state's litter grant program, established in the early 1980s to help reduce litter throughout Tennessee and managed by the TDOT Highway Beautification Office. The program is funded by revenue generated from a portion of beer and soft drink taxes, and although TDOT must use the funds on efforts to prevent and remove litter, it retains discretion on how to use them.¹⁰ A portion of the program funds are available to all 95 counties as litter grants each year, calculated for each county using a formula based on population and road miles—but each county must apply annually for the funds. During the last three fiscal years, a total of \$5.5 million was reserved for counties each year. Counties may use grant funds to pay for a variety of programs and activities to address litter and are reimbursed for expenses; the program requires 20% to 35% of the total grant amount to be budgeted for litter prevention education. Through its programs and activities, the litter grant program has removed an average of 11,237 tons of litter each year between 2016 and 2020.

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⁷ Tennessee Department of Environment and Conservation "Municipal Solid Waste Planning Regions." August 11, 2020. https://www.tn.gov/content/dam/tn/environment/solid-waste/documents/materials-management/recovered-materials/sw_mm_rm_municipal-sw-planning-regions.pdf.

⁸ Memorandum from Shawn Bible, transportation manager II, TDOT Highway Beautification Office, to BJ Doughty, deputy commissioner, TDOT Office of Community Relations, July 8, 2020.

⁹ Tennessee Code Annotated, Section 54-1-401 et seq.

¹⁰ Tennessee Department of Transportation. March 31, 2021. *Annual Litter Grant Report;* Tennessee Code Annotated, Sections 57-5-201 and 67-4-402.

Each county conducts litter pickup and manages its litter grant differently. For example, many sheriffs' departments manage litter pickup primarily with inmates, while other counties primarily recruit volunteers. Because litter grant funds often don't cover the entire cost of litter pickup, counties can, and often do, also use other funding sources, like the county general fund, to help pay for litter pickup. Some counties work with their local Keep Tennessee Beautiful (KTnB) affiliate, while others partner with other local non-profit organizations or businesses. Sheriffs' and mayors' offices and solid waste departments are the county agencies that most commonly receive the grant funds, but other entities can also receive and manage the grants, such as highway departments and local KTnB affiliates. Table 1 shows the various entities in counties that receive and manage the litter grants.

Table 1. Entities that Receive County Litter Grant Funds

County Agency or Other Entity	Number of Counties*	
Sheriff's Department	60	
Mayor's Office	34	
Solid Waste Department	31	
KTnB Affiliate	14	
Finance Department	11	
Highway Department	4	
Development District	3	
Public Works Department	2	
Emergency Management Agency	2	

^{*}The total number of counties is greater than 95 because 62 counties use more than one agency to administer their county litter grant. Of the 33 counties that use only one agency, the most common is the sheriff's department.

Source: Email received from Mike McClanahan, transportation manager, TDOT Highway Beautification Office, September 17, 2021.

Some counties don't spend their full grant allocation each year. Table 2 shows budgeted and unspent funds by grant line item for all 95 counties combined for the last five fiscal years. There are a variety of reasons counties do not use all the allocated funds, and any litter grant funds that are not spent remain in the TDOT litter grant fund, carry-over each year, and accumulate over time. Every few years, TDOT distributes these additional funds in the form of competitive grants to local or state government entities or non-profit organizations to implement community-based

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¹¹ Tennessee Code Annotated, Section 41-2-123.

projects that address litter and illegal dumping. The most recent round of competitive grants closed in December 2020, awarding \$1,975,354 to 15 recipients across the state for projects ranging from improving litter and covered-load law enforcement to cleaning up streams and educating the public about the effects of litter on water quality.¹²

Table 2. Budgeted and Unspent Litter Grant Funds by Line Item Fiscal Years 2016-17 through 2020-21

Litter Grant Line Item	Budgeted	Unspent	Portion of Budgeted Amount that was Unspent
Salaries and Benefits	\$ 15,843,009	\$ 1,919,778	12.1%
Direct Costs (e.g. equipment and supplies)	2,749,403	813,966	29.6%
Education	7,901,588	1,113,927	14.1%
Total Grant Amount	\$ 26,494,000	\$ 3,847,671	14.5%

Note: Litter grant activities and spending decreased during the last two fiscal years because of the COVID-19 pandemic.

Source: Email received from Mike McClanahan, transportation manager, TDOT Highway Beautification Office, September 17, 2021.

Keep Tennessee Beautiful (KTnB), Tennessee's Keep America Beautiful affiliate, receives a portion of the \$8.8 million in TDOT litter grant funding each year. KTnB is a non-profit organization housed at the University of Memphis that "provides expertise in litter prevention education, litter law enforcement, community enhancement through beautification and volunteer recruitment and management." In fiscal year 2019-20, KTnB received approximately \$1.3 million. The organization uses the funding to work with 33 local affiliates, recruit new affiliates, and conduct many education, training, cleanup, and outreach activities across the state. In 2021, for example, through its 33 affiliates statewide, KTnB helped facilitate 1,182 events, clean or improve 208 public spaces, and educate 9,176 youth.

In addition to providing solid waste management and litter prevention programs, state law criminalizes intentional and unintentional littering. The levels of offense and fines are based on the amount of litter, either by weight or volume, and the number of

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¹² Tennessee Department of Transportation. March 31, 2021. Annual Litter Grant Report.

¹³ Ibid.

¹⁴ Email received from Edmond McDavis III, affiliate services & training coordinator, Keep Tennessee Beautiful, October 27, 2021.

offenses.¹⁵ The minimum offense is mitigated criminal littering for littering up to five pounds or 7.5 cubic feet in volume, which is a Class C misdemeanor punishable by a \$50 fine and possible community service removing litter or working in a recycling center. As the amount of litter increases, the penalties increase up to \$4,000 and mandatory community service for first offenses and more for second and third convictions. A violation of the state's covered load—or tarping—law is a Class B misdemeanor, and the court may also impose any of the penalties for mitigated criminal littering.¹⁶ The Tennessee Highway Patrol has a special unit to enforce litter control laws,¹⁷ but any law enforcement officer in the state can enforce state litter laws. Commission staff are working to clarify issues regarding enforcement of litter laws.

Commission staff continue to research litter and illegal dumping issues and interview stakeholders both in Tennessee and other states.

Commission staff have interviewed stakeholders including state agency officials involved with preventing and cleaning up litter and illegal dumping and managing solid waste including waste tires; local government representatives and solid waste managers; recycling industry representatives; and representatives from other groups including nonprofit organizations. Although there is some disagreement about how to best address the issues, they all agree that litter and illegal dumping remain problems across the state. Overall, most stakeholders in Tennessee agree that education, community engagement, and partnerships are critical, and they emphasize education of young people in schools about litter and waste. But those interviewed also highlight the importance of educating the general public and key stakeholders such as law enforcement officers, judges, and prosecutors to support enforcement of Tennessee's existing litter laws. Some stakeholders also say the litter laws should be reviewed and possibly strengthened. In addition, to discourage littering and illegal dumping, people need a place to properly and conveniently dispose of waste. For example, adding convenience centers or more days and longer hours for existing centers could help, especially in rural areas. There is general agreement that a coordinated, multi-faceted approach and partnerships between government and the private sector are needed, and more funding would help.

Although details of other states' litter laws vary, 49 states have statewide laws that impose penalties for littering. Montana is the only state that grants this authority

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¹⁵ Tennessee Code Annotated, Section 39-14-501 et seq.

¹⁶ Tennessee Code Annotated, Section 39-14-507.

¹⁷ Tennessee Code Annotated, Section 4-7-301 et seq.

exclusively to local governments, and it sets a cap on fees that local governments can charge. Including Tennessee, at least 18 states impose penalties for criminal littering based on the amount of litter, and 26 states increase the penalty for subsequent convictions. Every state has some form of a statute requiring the contents of vehicles to be secured or covered. States use a variety of funding mechanisms for litter control, including fees for license plates and for disposal of solid waste, grants, fines, appropriations, and container deposits. Seven, including Tennessee, impose a tax or fee on manufacturers, wholesalers, or retailers of certain consumer products. Commission staff continue to review and summarize other states' laws.

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