



## LOCAL GOVERNMENT CASE STUDY:

# Illegal Disposal

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As of summer 2001, 25 communities in North Carolina were operating PAYT garbage collection programs. Of this population set, pilot programs and counties serving several municipalities were intentionally excluded from the study. This was done in an effort to examine only fully operational programs in single communities that could recognize illegal disposal problems. Communities operating hybrid programs, which are incentive or penalty-based, were also eliminated to avoid introducing other influencing factors on household behavior. Since the data set was reduced to 19, it was feasible to survey each community by mailing out a questionnaire and providing assistance by telephone. Two types of surveys were developed: one for municipalities operating curbside collection and one for counties maintaining drop-off convenience facilities. Each survey contained questions on specific aspects of the PAYT program, illegal disposal issues, and community demographics. (A combined sample survey can be found at the end of this document.) The surveys were mailed and completed between July and September 2001. The refusal rate was four out of 19 or 21 percent, thus limiting the sample size to 15 communities, which are:

**Counties:** Alamance, Catawba, Gaston, Onslow, Randolph, Rowan, Scotland, Transylvania, Union, Wilkes and Yadkin.

**Municipalities:** Dover, Hendersonville, Turkey and Wilmington.

*Note: Given the constraints of the size and type of data available and the manner with which it was collected, it was not possible to determine causation between implementing a PAYT program and experiencing increased illegal disposal problems. However, the respondents' answers are still valuable in that they reflect common trends found in communities operating unit-based waste disposal programs.*

### **Observations from the Eleven Counties Operating PAYT Garbage Collection Programs**

All counties provided at least one, but on average, six convenience centers for residents to dispose of garbage properly. In addition, a variety of recyclables were accepted at every drop-off center. To address the issue of bulky waste such as furniture or mattresses, the majority of counties charged residents extra for this type of waste. More than 73 percent of the counties had an illegal disposal ordinance and dedicated enforcement staff to address potential problems.

### **Specific Findings Concerning Illegal Disposal in Counties**

- Seventy-three percent of the counties indicated that illegal disposal was a problem prior to implementing a PAYT program. Eighteen percent did not know if illegal dumping was a previous concern since the plan was in place before current administrators were hired.
- Eighty-two percent of the counties stated that no general increase in illegal disposal since beginning a PAYT program. However, Onslow and Union counties (where illegal dumping was already a problem) both saw increases in illegal disposal in general, on the roadsides, and in commercial dumpsters. The types of waste these two communities saw most often was bagged garbage, bulky waste and white goods.

- Eighteen percent of the counties (Alamance and Transylvania), were aware of an increase in “waste-shifting,” or illegal disposal of waste in neighboring towns. It should be noted, however, that this type of illegal disposal is difficult to determine.

Even though illegal dumping was a problem before implementing PAYT programs, and most counties had ordinances and enforcement staff available, only 36 percent of the counties organized site cleanups; even fewer issued citations or fines. Interestingly, though Onslow County offered the most number of convenience sites to residents, issued over 100 citations, and fined many individuals for illegal disposal of waste, it was one of the few counties to experience an increase in illegal dumping.

### **Observations From The Municipalities Operating PAYT Garbage Collection Programs**

*Note: Of the four responses from municipalities operating PAYT garbage collection programs, only three cities provided useful data.*

All municipalities provided curbside garbage and recycling collections at least once a week. The cities of Hendersonville and Wilmington offered curbside trash collection once a week as well. Since all communities collected recyclables curbside, no city maintained a drop-off recycling facility. Only the largest municipality, the city of Wilmington, had both an illegal disposal ordinance and dedicated enforcement staff.

### **Specific Findings Concerning Illegal Disposal in Municipalities**

- Two out of three cities, Dover and Hendersonville, indicated that illegal disposal was not a problem prior to implementing a PAYT garbage collection program. In contrast, the city of Wilmington stated that this was a previous concern. However, since implementing PAYT, none of these cities experienced an increase in illegal disposal in general.
- One out of three cities, the city of Dover, stated a noticeable increase in roadside illegal dumping after implementing a unit-based pricing program.
- In all of the municipalities, government officials were not aware of problems such as disposing of waste in commercial dumpsters or in neighboring towns.

Only one municipality, the city of Dover, conducted site clean-ups to properly dispose of garbage and trash found in unpermitted areas. None of the survey respondents were aware of their government issuing citations or fines to hold offenders accountable.

### **Conclusion**

Findings from all surveys indicate that communities operating PAYT garbage collection programs typically have not seen an increase in illegal garbage disposal. More importantly, the two counties that did see a general increase (as well as a specific rise in roadside dumping and the misuse of commercial dumpsters) were already experiencing problems before the PAYT program was implemented. It should also be noted that in most counties, an additional charge for bulky waste disposal existed, and that this was a common type of waste found in unpermitted areas. Finally, almost all the communities had an illegal disposal ordinance and most employed enforcement staff, yet relatively few citations or fines were issued. These results from North Carolina communities suggest that PAYT garbage collection programs do not promote illegal disposal. Government administrators who wish to decrease illegal dumping should look to use such tools as educational campaigns, site controls that require locks on commercial dumpsters, and targeted enforcement.

### **[Combined Sample Survey](#)**