

Illegal Dumping in Pennsylvania: A Decade of Discovery

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Nestor Resources, Inc.

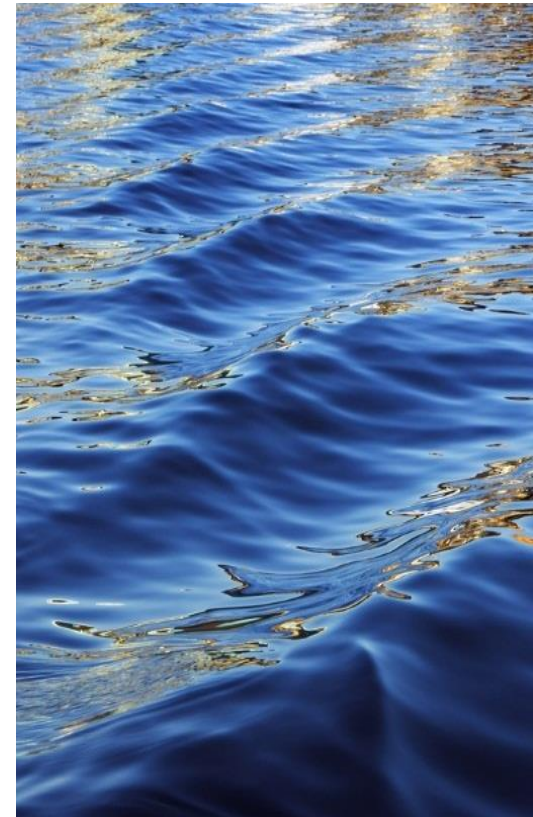
16th Annual
Joint Fall Conference
September 3, 2014
Harrisburg, PA



KEEP
PENNSYLVANIA
Beautiful



Nestor Resources, Inc.



Background



*"The activist is not the man
who says the river is dirty.
The activist is the man who
cleans up the river."*

Ross Perot

Entrepreneur and Businessman

Keep Pennsylvania Beautiful Strategic Plan

- Create Awareness and Reduce Illegal Dumping in PA

Statewide Illegal Dump Surveys

- 10 Years to Survey 67 Counties
- Assess and Document Results

Educate and Advocate

- State, County, Local Officials
- Citizens

Address and Diminish the Problem

- Cleanups
- Resource Allocation
- Public Policies

2013 ILLEGAL DUMP SURVEILLANCE SUPPORT PILOT PROGRAM



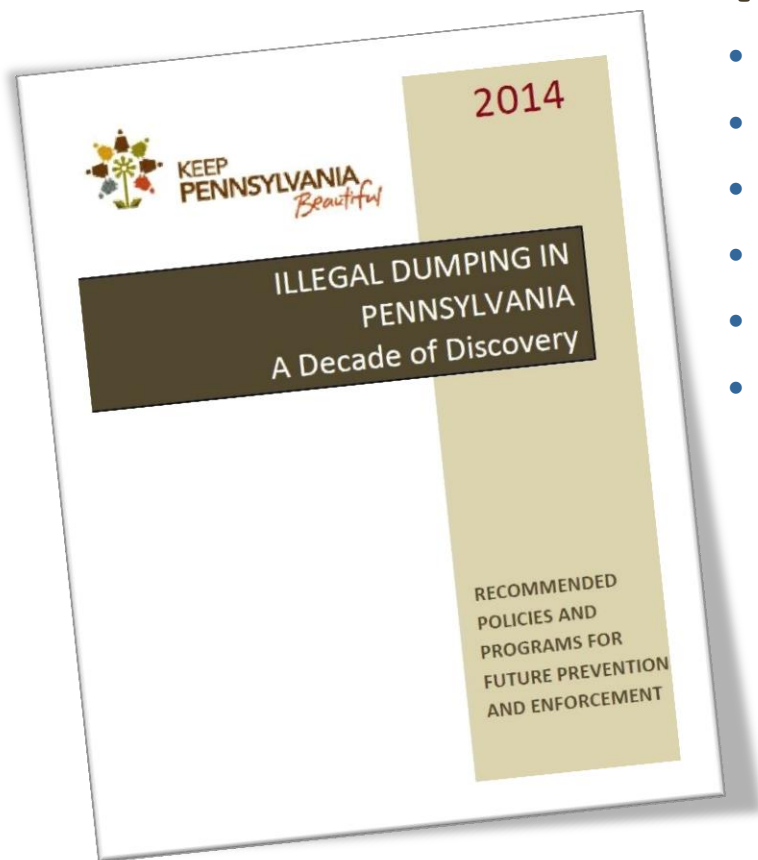
Able to capture clear license plate photos, even at night.

THE CYCLICAL DILEMMA

- Dump sites encourage more dumping.
- Cleaning up the sites absolves the dumper of responsibility.
- Cleanups must occur to reduce the impact on the environment.
- Cleanups are ineffective in and of themselves.
- Mechanisms to prevent and deter illegal dumping are critical.



NOW WHAT?



To review the report:

<http://www.keppabeautiful.org/>

WHAT'S IN THE REPORT:

- EXTENT AND IMPACT OF ILLEGAL DUMPING
- AFFECT OF MUNICIPAL WASTE MANAGEMENT PRACTICES
- EFFECTIVENESS OF REGULATORY AND ENFORCEMENT POWERS
- DEMOGRAPHIC PROFILE AND WASTE/RECYCLING STATISTICS
- PUBLIC AWARENESS AND STAKEHOLDER PARTICIPATION
- CONCLUSIONS AND RECOMMENDATIONS

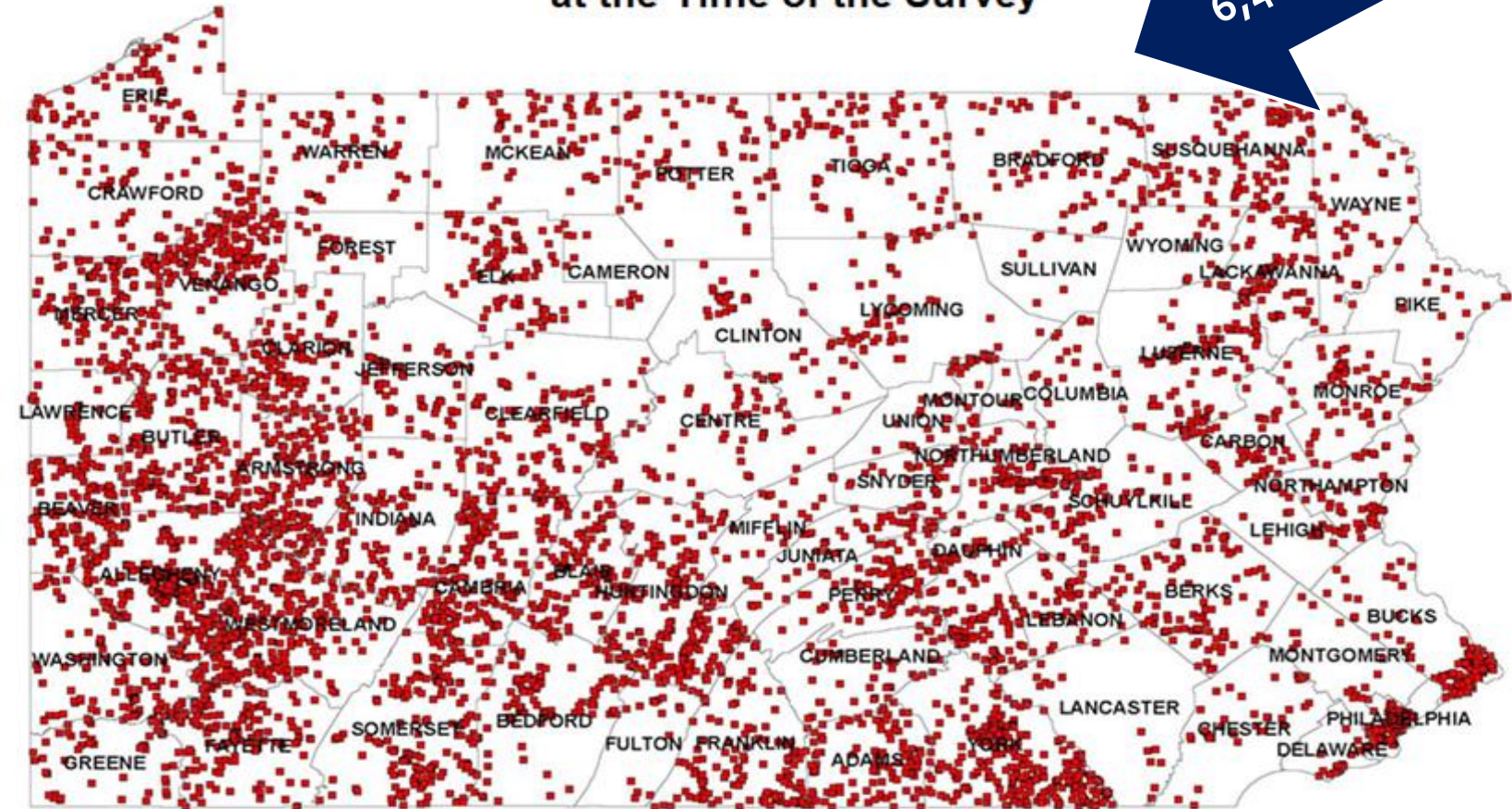
EXCERPTS FOR TODAY'S DISCUSSION

- TOOLS, RESOURCES, APPROACH, CRITERIA
- REDEFINING ILLEGAL DUMPING
- FINDINGS AND CORRELATIONS
- CURRENT CONDITIONS
- LEGAL AND REGULATORY IMPACT
- STAKEHOLDER PERCEPTIONS
- RECOMMENDATIONS
- THE CALL TO ACTION
- COMMENTS/QUESTIONS

Made Possible through Funding From PADEP and The Richard King Mellon Foundation

Pennsylvania Illegal Dumpsites by County at the Time of the Survey

6,487 Sites Identified



■ Illegal Dumpsites as of June 2013

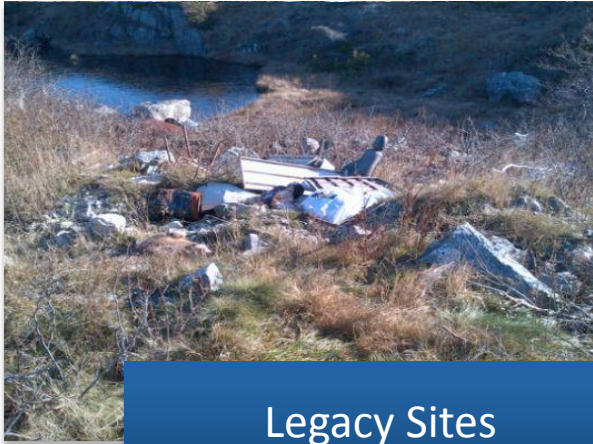
0 12.5 25 50 75 100 Miles



© 2013 Keep Pennsylvania Beautiful
Map Prepared by Caesar deChicchis
UCSUR, University of Pittsburgh

Illegal Dumping

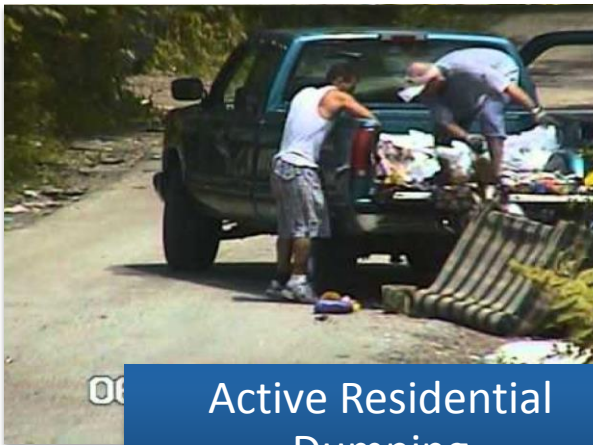
Common Label...Distinct Issues



Legacy Sites



Active Commercial
Dumping

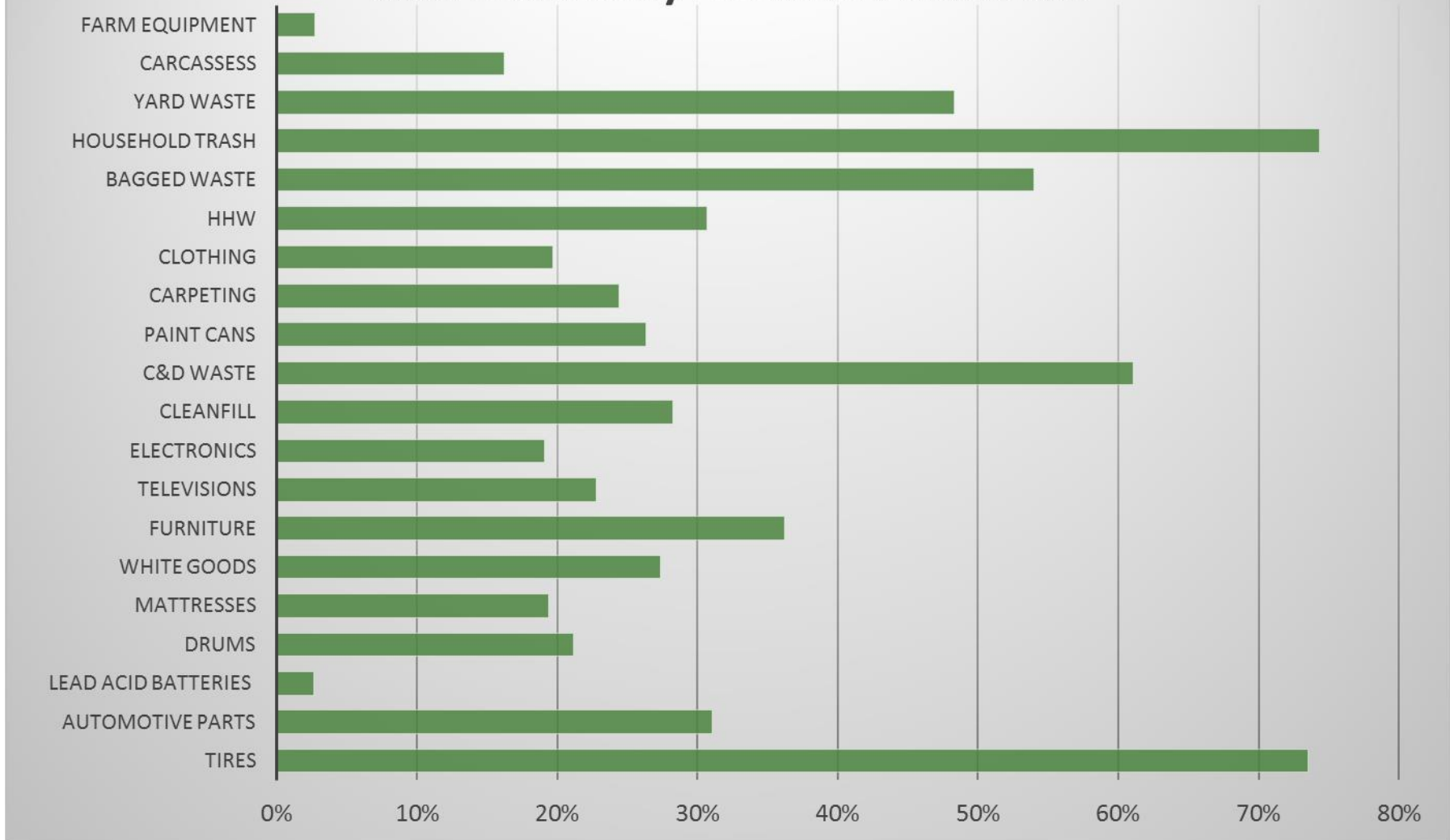


Active Residential
Dumping



Theft of Service
Public & Private

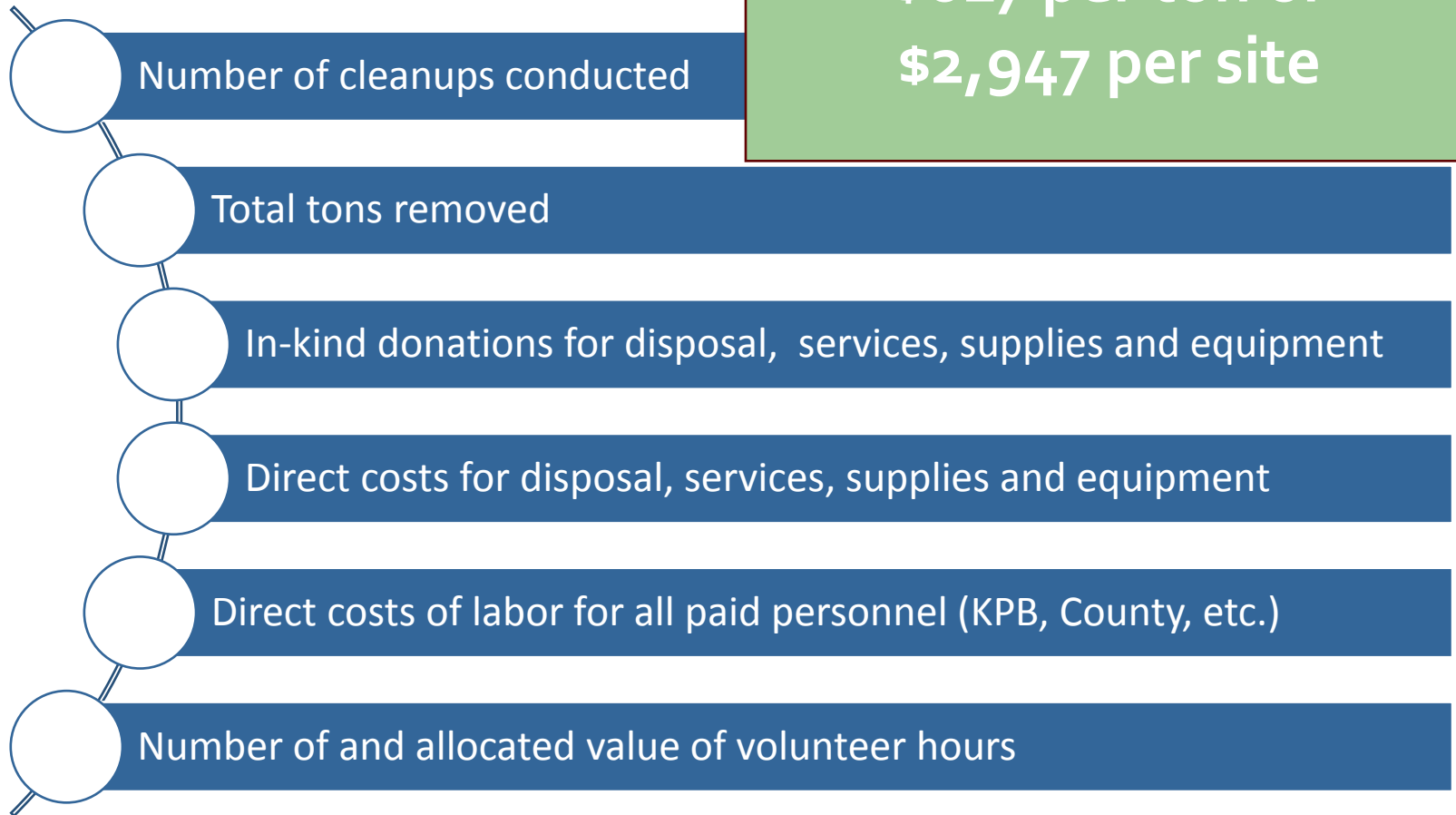
Percentage of Active Illegal Dump Sites with Commonly Discarded Materials



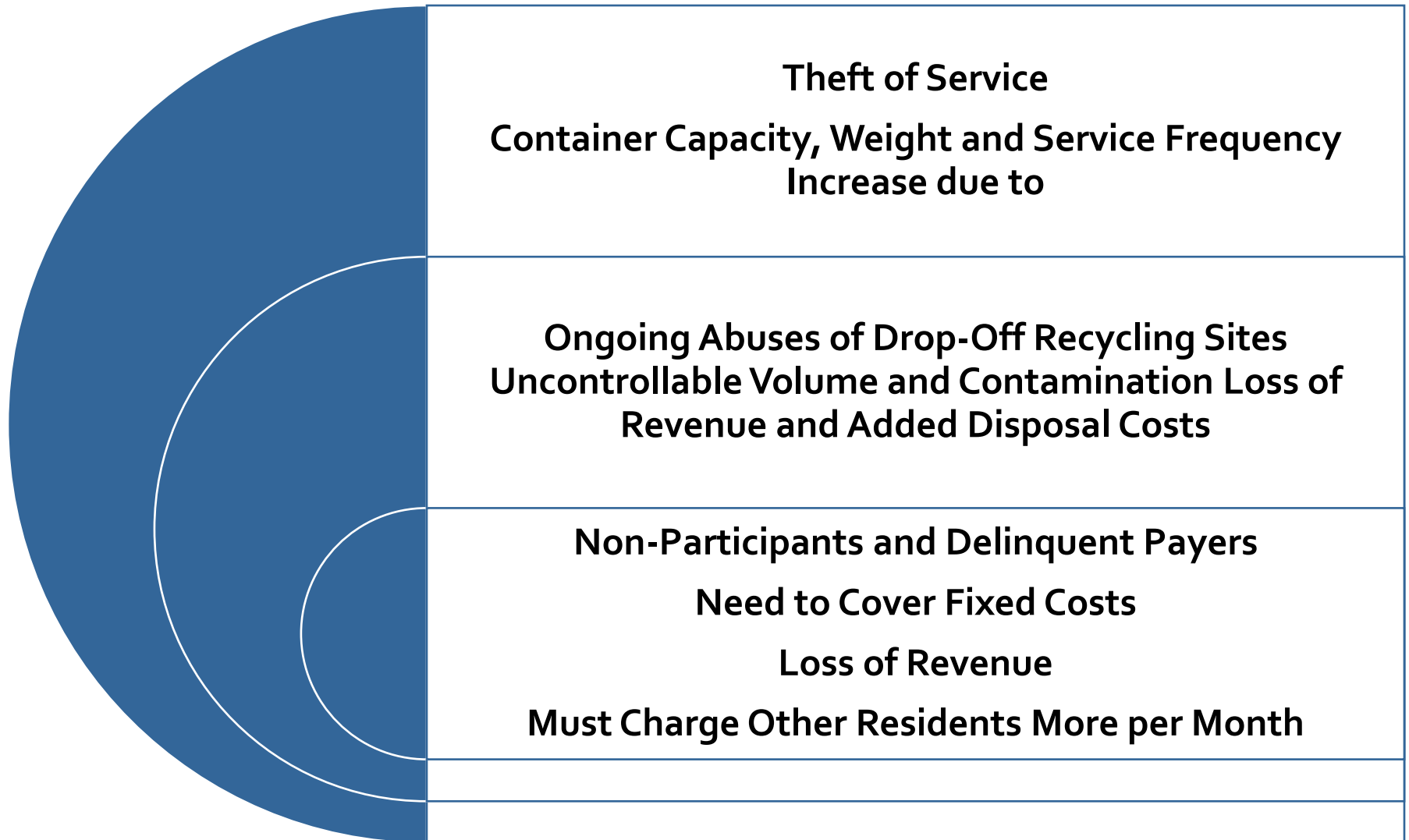
Bagged Waste, Carpeting, Paint Cans, were part of construction/demo waste also

Local Resources Necessary to Remediate Illegal Dump Sites based on:

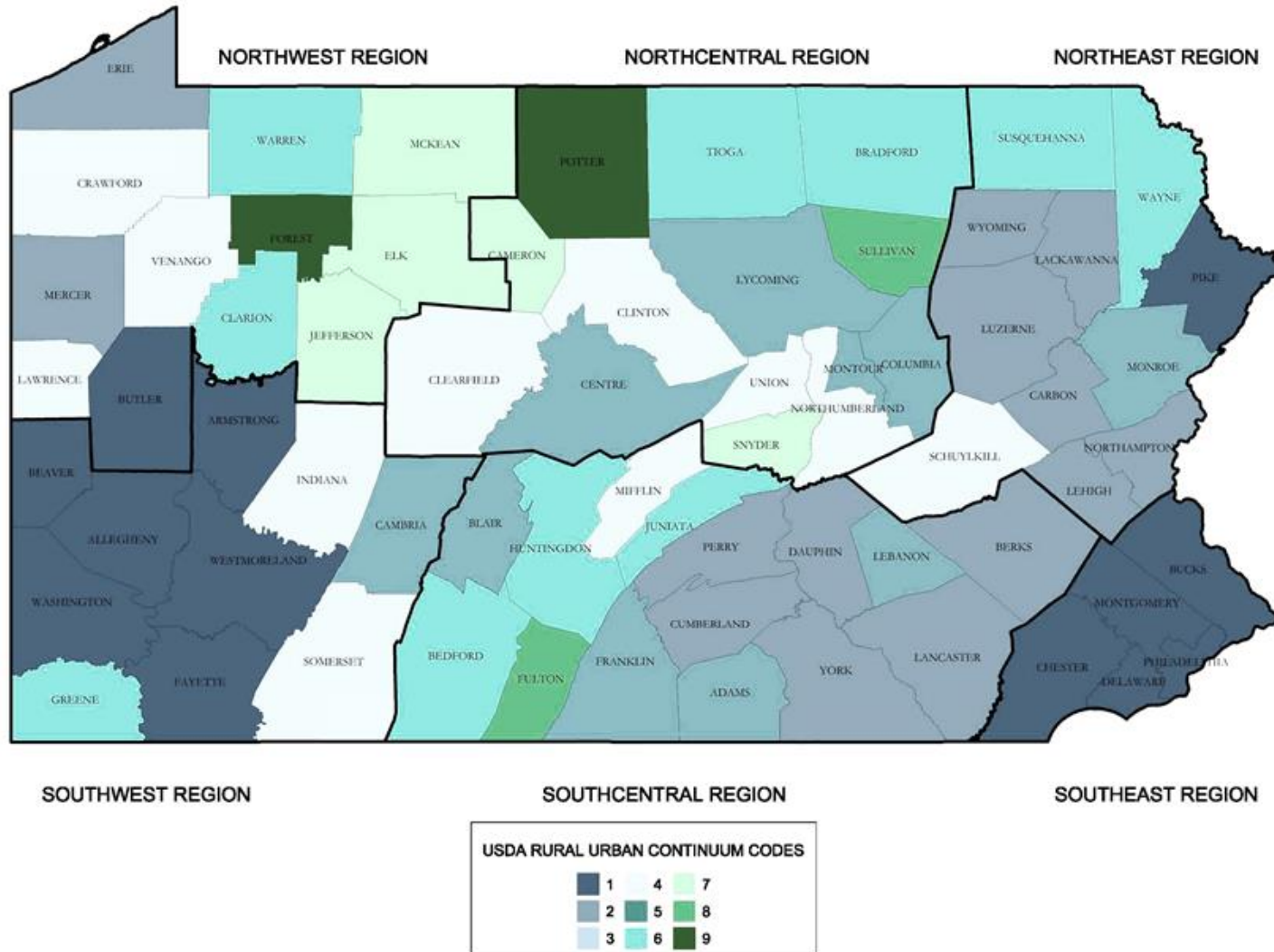
Average Cleanup Costs
\$617 per ton or
\$2,947 per site



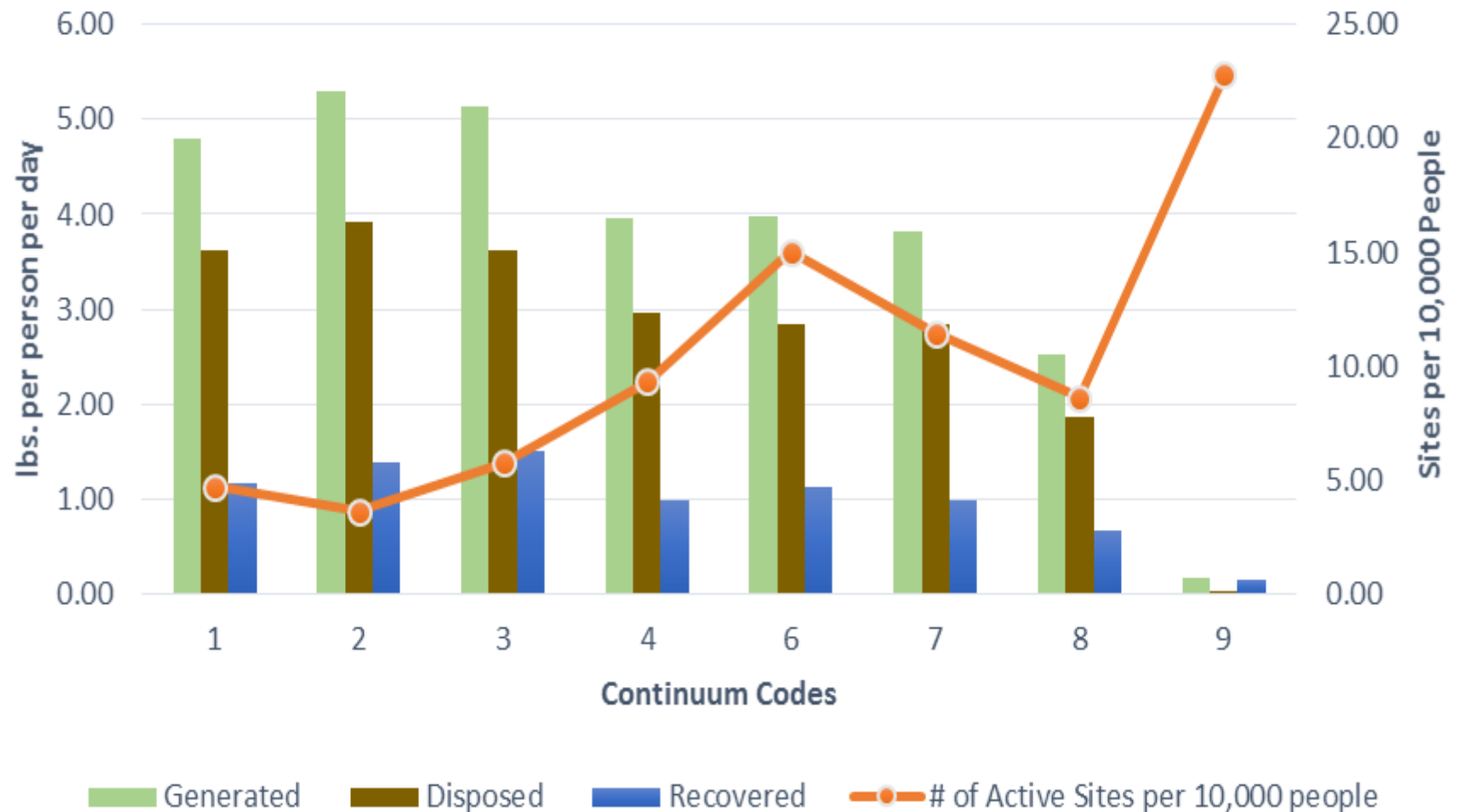
Implicit Costs of Illegal Dumping



Geographic and Demographic Commonalities Examined 100's of Combinations

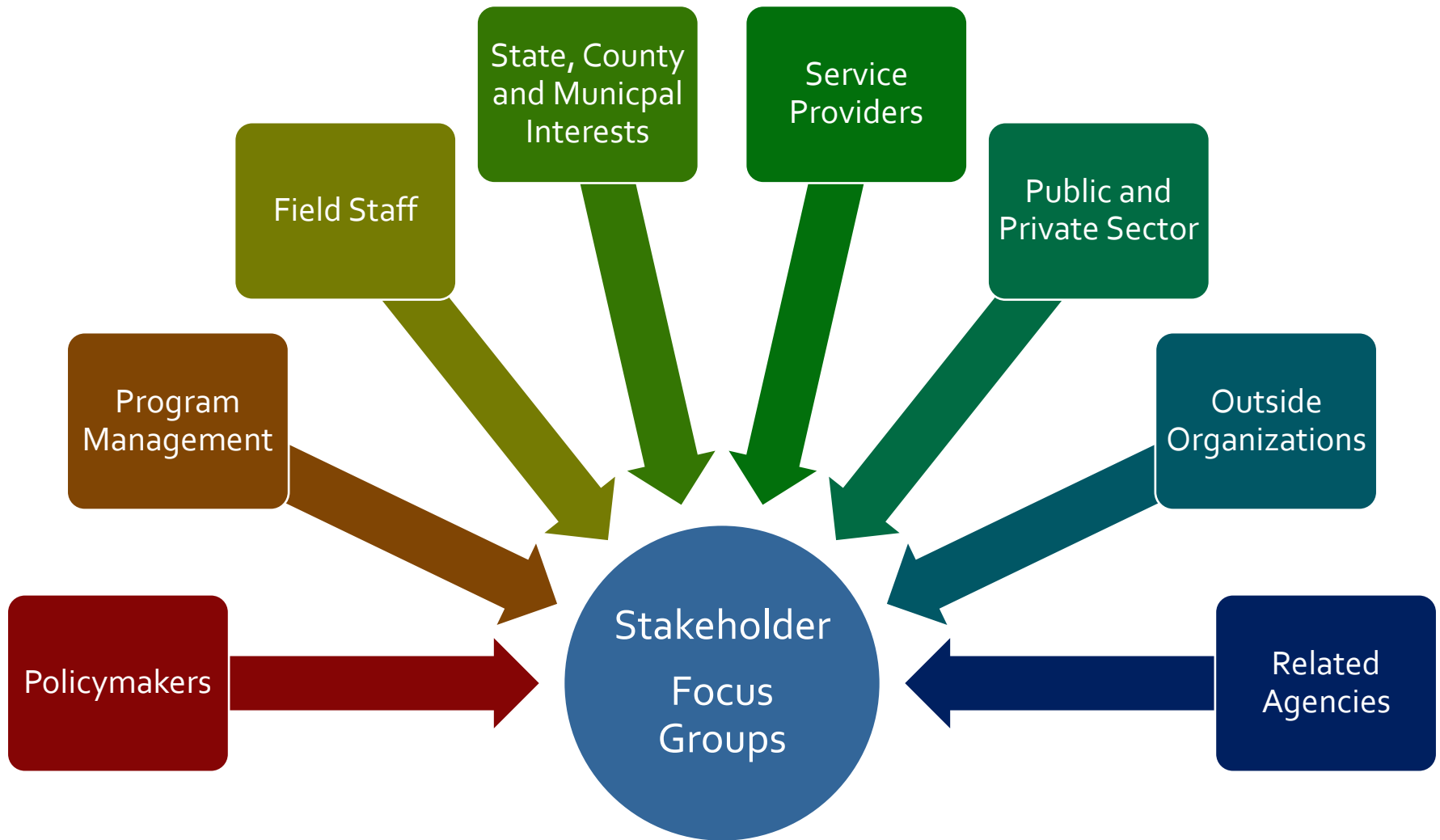


Active Dump Sites vs. Waste Generated, Disposed and Recycled



2011 USEPA lb/per/day = MSW Generated 4.40 MSW Disposed = 2.93 Recovered = 1.53

CATEGORIES OF STAKEHOLDER PARTICIPANTS



Fall 2013 Penn State Poll

Center for Survey Research
located at the Penn State
University campus in
Harrisburg

Organization /Agency Uses

Tracks public policy issues,
general attitudes, awareness,
and knowledge and measures
public satisfaction

STATEWIDE PHONE SURVEY

Survey Question Design

Keep Pennsylvania Beautiful
and Nestor Resources, Inc., in
conjunction with PSU

Statistical Validation

95% chance or better,
if all PA households are
surveyed, the results will not
differ by more than 4.0 points.

Scorecard for the Recommendations





Laws and Enforcement

Findings and Suggested Modifications



FINDINGS- ENFORCEMENT AND PENALTIES

- Currently focus on Enforcement more than Prevention.
- Proof, beyond a reasonable doubt, necessary for convictions.
- Responsibility for enforcement actions in PA is inconsistent.
- Disposal bans and restricted access as a form of enforcement, creates illegal dumping without alternative measures available.
- Lack of local resources for enforcement and remediation.
- Penalties are disproportionately low vs. legal disposal and remediation.
- Revocation of Act 90 authorization does not put hauler out of business

Focus Groups Feedback on Laws & Enforcement

Transporter Issues

Regulations for consistent interpretation/enforcement of WTSP/CDRA

Registration fees low entrance barrier for irresponsible tire haulers

Ineffective tracking and monitoring system for waste tires

Need authority at county level to track & monitor all transporters

Manifested tire loads could reduce illegal dumping

Disposal Issues

Enforcement of WTSP at disposal facility prompts illegal dumping

Unintended consequence of CDRA is illegal dumping

Hold salvage yards accountable for accepting CDRA “parts”

CDRA Landfill ban 100% exceeds manufacturers’ coverage 85%

Flow Control inflates costs/complicates logistics in border counties

Phone Survey Feedback on Laws & Enforcement

Appropriate Punishment For Illegal Dumping

Respondents favored the following:

69.6% = Clean Up Illegally Disposed Of Waste

30.4% = Jail Time

50% = Community Service And Fines Of Varying Amounts

Appropriate Use of Fines

91.8% believe fines from illegal dumping should go for site cleanup.

Entity Responsible For Use Of Fines From Illegal Dump Sites

Respondents indicated:

Municipalities (35.2%)

Counties (26.1%)

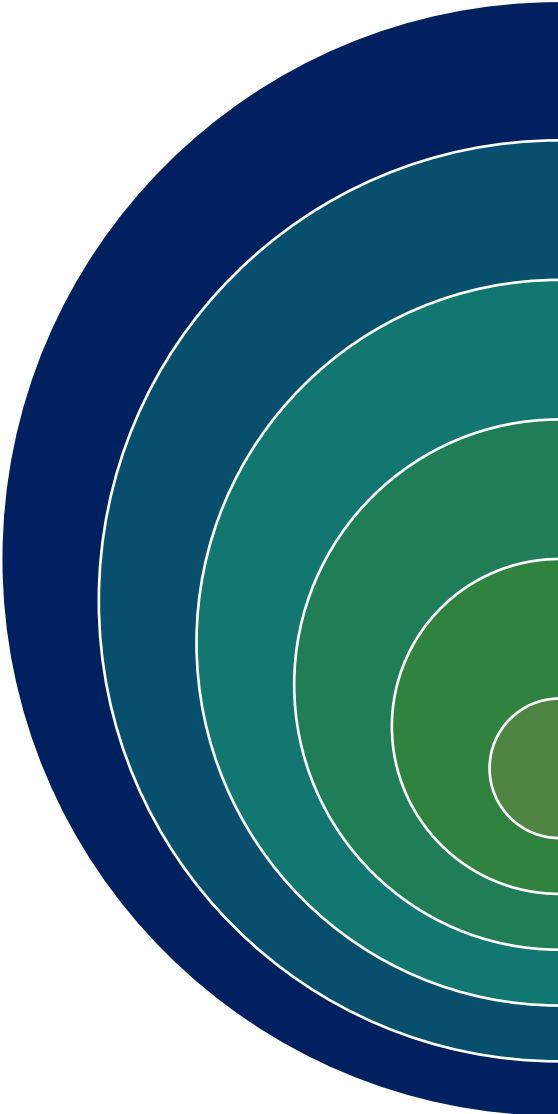
State (30.6%)

Regulating Small Haulers And Contractors

86.0% favor licensing/regulation of building contractors, remodelers, roofers, and junk haulers to ensure proper waste management

Women (91.9%) & Men (79.7%) Northeast Region (93.3%).

RECOMMENDATIONS FOR ENFORCEMENT



| |
|---|
| Expand the use of surveillance cameras at illegal dumping sites throughout Pennsylvania. |
| Create a Joint Code Enforcement Officer Program to support local governments. |
| Revoke transporter licenses and authorizations and require forfeiture of equipment for certain violations. |
| Establish an Environmental Law Court Day or assign a Dedicated District Justice to expedite cases. |
| Establish an Expert Witness Bureau to assist in the prosecution of suspected illegal dumping. |
| Establish fines that significantly outweigh the avoided cost of disposal. Devote fines to cleanups. |
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Waste and Recycling Collection Practices

Findings & Recommendations

Municipal Waste Service Offerings Inconsistencies & Inequities

2,562 Pennsylvania municipalities.

Each may have their own variations of service and bidding requirements. (OR NONE AT ALL)

This makes waste management & recycling more complex, less efficient, and often costlier.

Unclear expectations, and lack of education contribute to poor participation, contamination and illegal dumping.



Some Areas in Pennsylvania Are Not Suited for Curbside Collection Why Not Substitute Practical Alternatives?



SAMPLE CONVENIENCE CENTER LAYOUT

Other Configurations



Repurposing a Car Wash



Secure Off-loading and Storage



Redevelopment of Brownfield Site



Fenced Area Next to Municipal Offices

Phone Survey Feedback on Collection Services

Curbside Collection

86.7% of Pennsylvanians surveyed have curbside trash collection

LOWEST - North Central (64%)

HIGHEST - Southeast (92.2%) and Southwest (93.7%)

Recycling

What would prompt them to increase recycling?

MOST INFLUENTIAL

Having items collected at the curb

LEAST INFLUENTIAL

A mandate to recycle

More information about the benefits of recycling

Phone Survey Feedback on Bulky Waste Collection Services

Bulky Items, Appliances, Tires, Furnishings, Etc.

41.5% not included with their household waste service

LOWEST AVAILABILITY North Central = 73.5% Northwest = 56.5%

58.5% collection included with their household waste service

Items Accepted Where Service Is Available

49.6% - Household Furnishings

28.7% - Large Appliances

25.4% - Roofing/Remodeling Waste

9.7% - Tires

Service Frequency Where Service Is Available

50.8%% at least monthly and many weekly. (NCR only 9.4%)

28 % must call ahead to schedule pickup.

62.1% in the North Central region only once/ twice a year

Phone Survey Feedback on Alternative Collection Services

Alternatives to Curbside Collection

87.8% would use a convenience center, if available, to take household trash, recyclables, and other materials.

DISTANCE

Those willing to drive more than 11 miles

36.8% who earn > \$75,000

24.8% who earn > \$75,000

Those willing to drive more than 15 miles.

10.8% overall with no demographic differences

CONSUMER FEES FOR DISPOSAL OF BULKY ITEMS

47.4% favor a fee paid when the item is returned or collected

Fee paid at the time of the original purchase preferred by:

* < age 24, * households incomes < \$20,000, * Southeast overall

A statewide law is needed to ensure for all, regardless of the municipality, universal access to waste & recycling collection and/or outlets



Shift focus of county municipal waste planning from disposal capacity to coordinate and demonstrate how local municipalities will plan for and attain universal access.

HOW DO WE ENSURE RESIDENTIAL ACCESS TO SERVICES?

Expand waste & recycling curbside collection to the greatest extent possible.

Allow for staffed convenient drop-off facilities in lieu of curbside.

Promote municipal contracts to control costs and provide uniform services.

Provide for collection of tires, bulk items and appliances at curbside or at convenient facilities.

Institute a subsidy for waste & recycling collection for eligible low income households.

RECOMMENDATIONS TO DETER COMMERCIAL DUMPING

Require proof of disposal with local building, demolition, and prior to local occupancy permits.

Expand waste transporter authorization to include small contractors, remodelers, and roofers.

Require waste tire transporters to submit logs.

Require manifests for loads of tires for transporters, processors and retailers.

RECOMMENDATIONS TO INCREASE AWARENESS

Implement a statewide multi-media education campaign on proper waste management.

Establish an Environmental Law Training Program for Enforcement Officers and Justices.

Create a series of seminars for local officials on effective ordinances and collection contracts.

Institute the use of crime scene tape at illegal dumping sites to signify it is a criminal activity.

Install barriers at illegal dumping “hot spots” to prevent entry and show it is monitored.

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**"GOOD LAWS MAKE IT EASIER TO DO
RIGHT AND HARDER TO DO WRONG."**

WILLIAM EWART GLADSTONE

THANK YOU

QUESTIONS/COMMENTS?

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