

2019- 2020

LOCAL GOVERNMENT ILLEGAL WASTE REPORT

Local government response
to illegal dumping

INSIGHTS FROM OUR
ANNUAL ILLEGAL WASTE SURVEY





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Executive summary

When researching the problem of illegal waste in Victoria it became clear that there was no robust data.

To support the work of the Litter Enforcement Officer Network, robust data was required and it was decided that Keep Victoria Beautiful, as an independent organisation would develop a survey to collect data from all 79 Victorian councils on illegal waste.

This survey was funded by Keep Victoria Beautiful to provide robust and reliable statewide data that will drive improved state government policy and support the Litter Enforcement Officer Network.

The Annual Illegal Waste Survey was developed to understand the scale and impacts of illegal waste in Victoria.

The survey found that illegal waste is destructive to the environment and can be hazardous to wildlife. Councils reported injury to wildlife and contamination, but most councils do not monitor the environmental impact of illegal waste. Incidental exposure, contamination and fire hazard puts communities at risk when incidents of illegal waste occur, with councils reporting harm to community members occurring.

In addition to social and environmental impacts, illegal waste cost Victorian councils \$88,967,000 in 2019-20. This cost is primarily spread over the northern, western and southeastern regions, with many councils experiencing higher costs per incident because of their internal relationships and processes for responding to illegal waste. A better response using 'educational enforcement' was seen by councils that emphasised the importance of investigating illegal waste.

Officers reported an increase in illegal waste reports and community complaints from 2018-19. Specifically increased dumping of hard rubbish on nature strips, green waste, mattresses and construction waste.

Metropolitan councils generally have the lowest number of illegal waste incidents per capita but higher costs per incident, whereas interface councils, northwestern and western regional councils experience the opposite.

Councils reported the top five challenges in responding to illegal waste as organisational processes, volumes of illegal waste, dumped green waste, a lack of resources and a lack of time. Most of these were seen as key limiting factors that needed to be addressed before improving elsewhere.

Finally, councils were able to request support to assist them in reducing illegal waste. Council requests were broadly about providing more advocacy, collateral, education, financing, networking, and training.

Background

Keep Victoria Beautiful

Keep Victoria Beautiful is one of Australia’s oldest environmental groups, with a rich history in community reward and recognition.

We are standing tall and independent, combating litter and illegal dumping using 50 years of experience and growing research to help Victorian residents and land managers protect our beautiful State.

We organise the most sought-after awards recognising and inspiring community leadership and action. The universally known and long-standing Tidy Towns – Sustainable Communities, and its metropolitan cousin, Sustainable Cities have had thousands of entrants over the years.

Our Stationeers program delivers the beautification of railway stations through strong community action in partnerships with Metro, Vic Track, PTV and V/Line.

Additionally, working with VicRoads, we boost the many groups who make our roadsides brighter through the Adopt a Roadside program.

We will continue over 50 years of Dame Phyllis Frost inspired action helping Victorians face our most pressing environmental problems.

Litter Enforcement Officer Network

VISION

LEON works to see respected and skilled enforcement officers working against litter and illegal dumping in the State of Victoria.

LEON works to see land managers take unified action in preventing and enforcing litter and illegal dumping in the State of Victoria.

We achieve our vision by focusing on:

- + upskilling authorised officers
- + determining and driving best practice
- + increasing state of knowledge
- + encouraging strong enforcement relationships between land managers

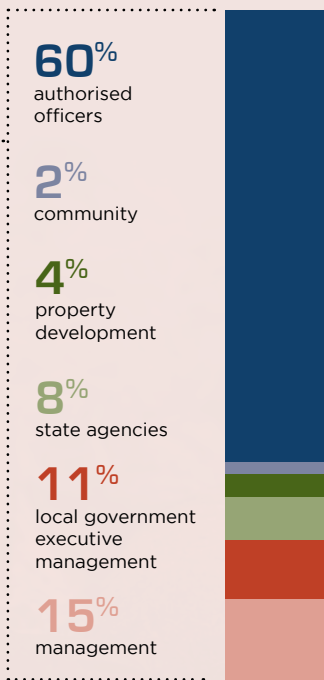
LEON undertakes meetings, advocacy, training, research and develops resources.

In 2021:

LEON has **460+** members

from **130+** Organisations

Include EPA Victoria, Parks Victoria, Department of Transport, Regional Roads Victoria, VicRoads, Metro, V-Line, PTV, VicTrack, Neighbourhood Watch, Melbourne Water, DELWP, Sustainability Victoria, WRRGs, Charitable stores, Property Developers, Water catchment Authorities



LEON engaged **17,370 people** in Australia



LEON listened to the impacts of illegal waste on over **160 land managers** in Victoria



LEON advocated for the needs of **84 organisations** in Victoria



LEON presented on illegal waste best practice at **8 events**, including the National Waste Conference 2021



LEON trained over **800 waste enforcement officers**



Annual Illegal Waste Survey

Need for this survey

When researching the problem of illegal dumping in Victoria it became clear that:

- + There was no robust data on illegal waste in Victoria
- + Any existing data could not be confirmed
- + The cost to all land managers of illegal dumping comes from many areas
- + No state government department or agency was collecting data
- + Local government had operational data but this needed to be aggregated to understand the true scope of illegal waste in Victoria

To support the work of LEON, robust data was required and it was decided that Keep Victoria Beautiful, as an independent organisation would develop a survey to collect data from all 79 Victorian councils on illegal waste.

This would be used to:

- + Inform LEON work and support members
- + Inform LEON training development
- + Inform local government that participated in the survey
- + Inform state government as to local government priorities
- + Broadly inform Victorian stakeholders of the impacts of illegal waste

This survey was funded by Keep Victoria Beautiful to provide robust and reliable statewide data to drive improved state government policy and support the Litter Enforcement Officer Network.



Survey design

The Annual Illegal Waste Survey was developed to understand the impacts of illegal waste on local government.

The survey specifically looked at:

- + Challenges local government face
- + Challenges authorised officers face
- + Response
- + Education
- + Infrastructure
- + Incidents
- + Enforcement
- + Collection
- + Disposal
- + Internal / external working relationship
- + Impact on:
 - Environment
 - Community
 - Wildlife
- + How local governments could be supported better

The survey was backed up with LEON research and information on best practices in Victoria, with the recognition that there is no 'one size fits all' when it comes to illegal waste response at local government level.

Survey methodology

Step 1

Emails were sent to all Victorian local governments asking them to participate in the survey. Typically, a Local Laws or Waste Coordinator would arrange the survey.

Step 2

Surveys were carried out using a virtual interview from November - February 2021 to gather data. The survey specifically collected information relating to the 2019-20 financial year.

Step 3

This survey was conducted over Zoom. Some respondents then provided further information after the survey, needing to refer to local government systems or obtain advice from others in local government.

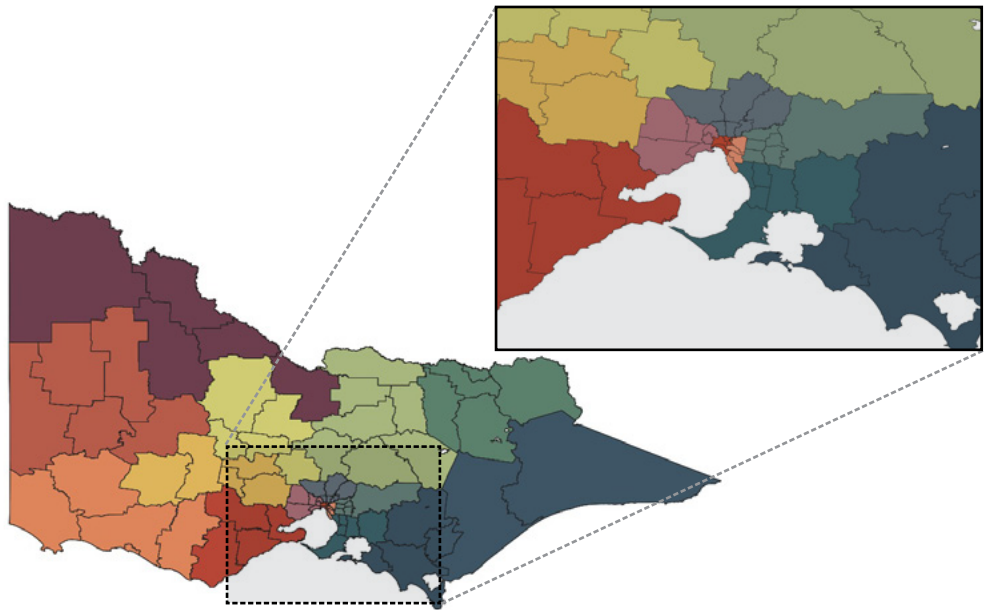
Outcomes for councils

Councils receive an impartial summary of the results, providing insight into statewide costs of illegal waste and how other councils are approaching the issue. This data also allows LEON to advocate to state government and the public to raise awareness of the cost burden of illegal waste on local government. Finally, survey information is used to plan upcoming resources and training to support Litter Enforcement Officers in local government.

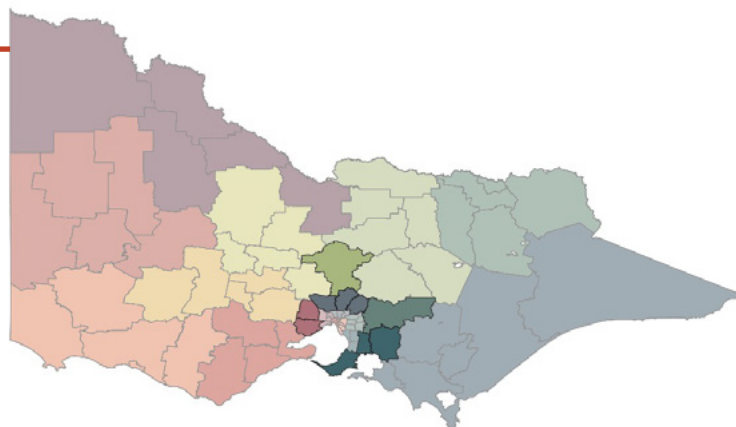
Data use and privacy

KVB and LEON adhere to the Victorian Privacy and Data Protection Act 2014. Council names are stored separately to survey data and survey data will always be presented as an aggregate. LEON uses regional clusters of Councils to communicate aggregated regional data. The regions are as follows:

- Eastern metropolitan region
- Western metropolitan region
- Inner metropolitan region
- Inner South East metropolitan region
- Central Highlands region
- Gippsland region
- Great South Coast region
- Wimmera Southern Mallee region
- Hume East region
- Hume West region
- Loddon Mallee South region
- Geelong region
- Loddon Mallee North region
- Northern metropolitan region
- Southern metropolitan region

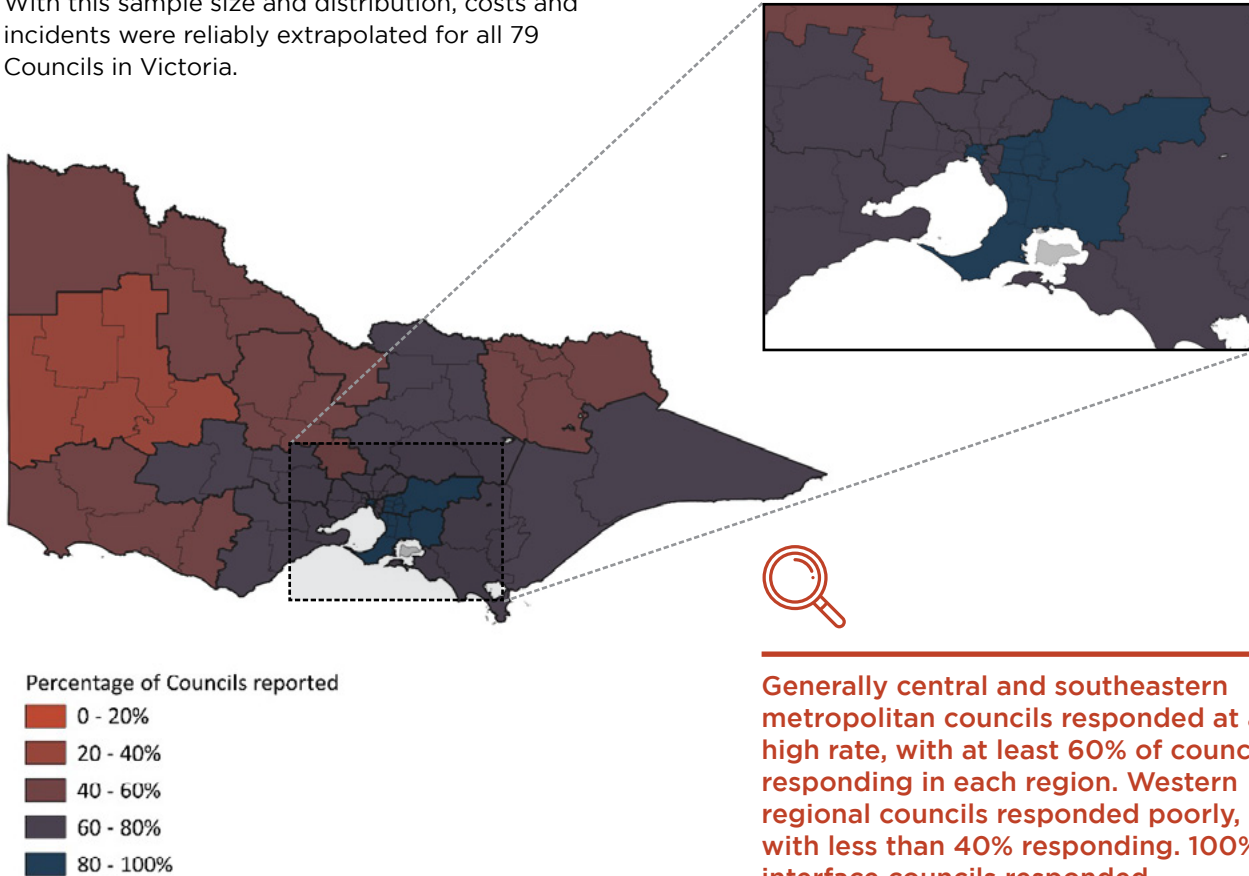


In addition, interface councils are assessed as a region to help understand illegal waste from the perspective of these councils who share similar geographical and socio-economic factors along growth corridors.



Response distribution

53 out of the 79 Victorian Councils participated and there was a balanced response from both metropolitan and regional local governments. With this sample size and distribution, costs and incidents were reliably extrapolated for all 79 Councils in Victoria.



Illegal waste in Victoria

The scale of illegal waste in Victoria



330,000
reported incidents
of illegal waste¹



56 incidents per
1,000 residents²



\$88,967,000
total cost³



Average cost of
\$270
per incident

1. Illegal waste = litter or illegal dumping, does not consider volume of material

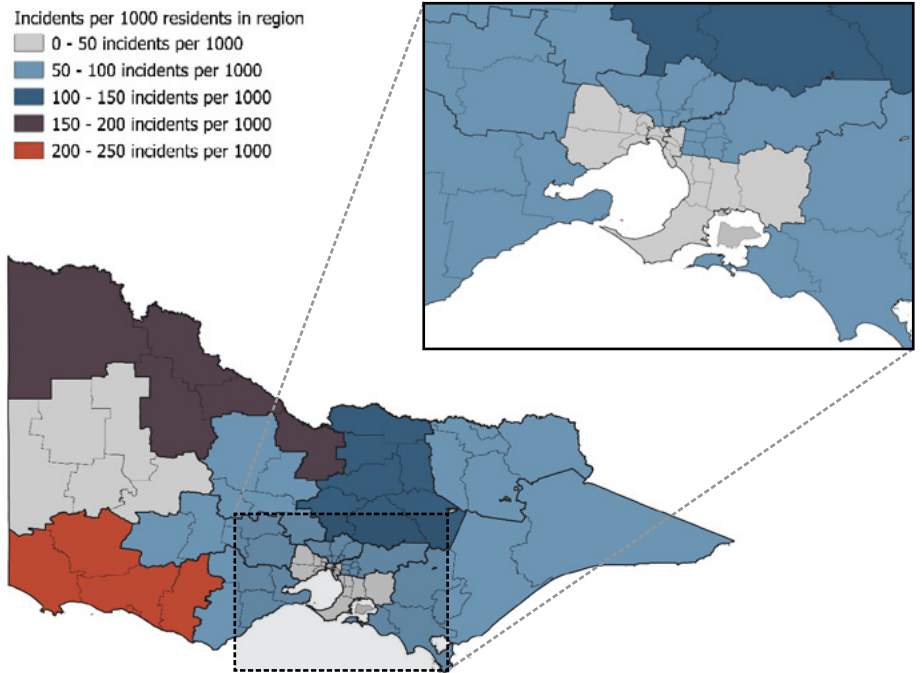
2. based on population data from ABS

Incidents per 1,000 residents was used as a measure as it allows for closer comparison between regional and metropolitan local and accounts for population change.

3. total cost is cost to Local governments including education, enforcement, collection and disposal.

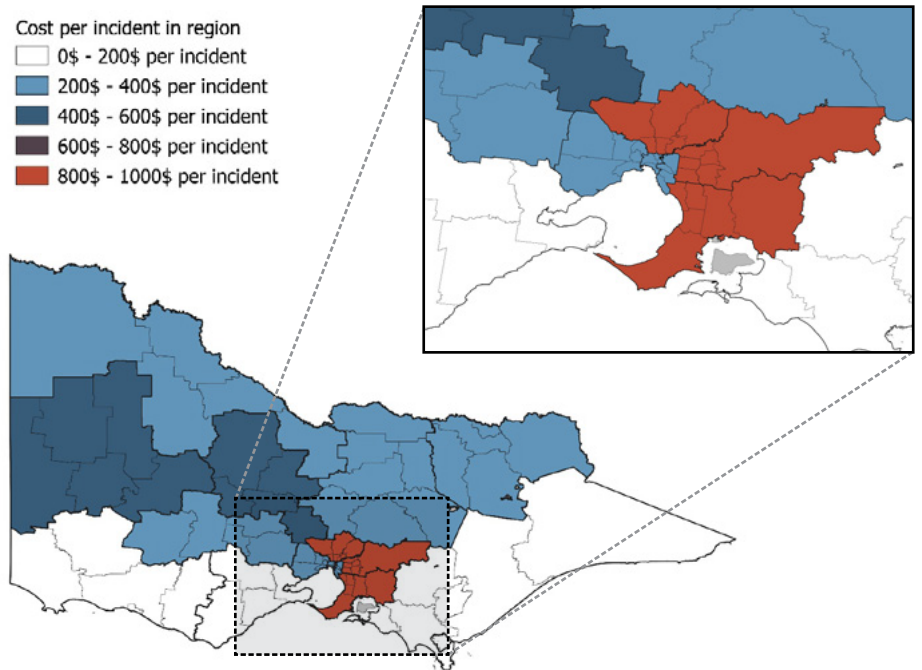
Average illegal waste incidents per 1000 residents (regions)

Metropolitan councils generally have the lowest number of illegal waste incidents per 1000 residents, particularly in the central and southeast with less than 50 incidents per 1000 residents. Western metropolitan councils experienced more incidents per 1000 residents, with northwestern and western regional councils experiencing the highest amount. Interface Councils experienced a higher incident per 1000 residents (114 incidents per 1000 residents) on average compared to other regions.



Average cost per incident (regions)

Central and southeastern metropolitan councils have varying costs per incident, with some regions having average costs of over \$800 per incident of illegal waste. High costs are also seen in central western regional councils, with most other regions experiencing lower costs per incident.



Trends in Illegal Waste

	NUMBER OF COUNCILS REPORTING TREND	TREND (increasing / decreasing)
Reports of illegal waste	12 ●●●●●●●●●●●●	↑
Time spent investigating	7 ●●●●●●●	↑
Hard rubbish	6 ●●●●●●	↑
Littering	5 ●●●●●	↑
Commercial operators dumping	5 ●●●●●	↑
Mattress dumping	4 ●●●●	↑
Construction waste dumping	4 ●●●●	↑
Contaminated soil dumping	3 ●●●	↑
Unlicensed operators dumping	2 ●●	↑
Green waste dumping	2 ●●	↑
Community complaints	2 ●●	↑
Rogue charity bin operations	2 ●●	↑
Dumping in MUDs/DHHS housing	2 ●●	↑
CALD engagement barriers	2 ●●	↑
Dumping in bushland	1 ●	↑

Officers reported an increase in illegal waste reports and community complaints, with specific issues of increased dumping of hard rubbish on nature strips, green waste, mattresses, and construction waste. Officers also reported increased littering.

Emerging issues include increased dumping of contaminated soil, increased activity of rogue operators (construction and charity bins) and the amount of time officers are spending to investigate increasing incidence.

Local governments and illegal waste

This survey collected information on how local government responds to illegal waste, including the processes used, how resources are allocated and the barriers faced by Councils or their staff.



Local government resources when responding to illegal waste

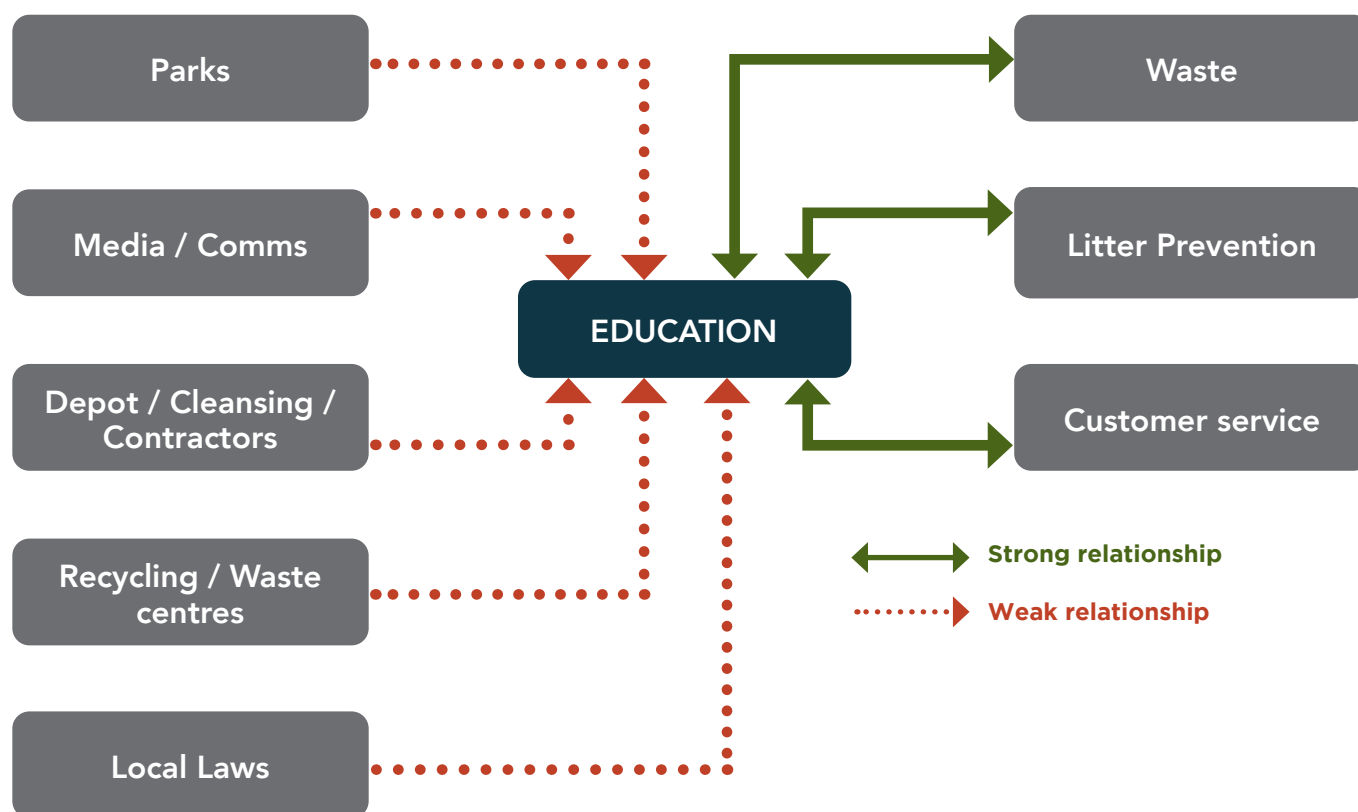
Education

Staffing

 The average number of staff working in illegal waste education for each council was 3.

Generally, education staff had strong internal links with Waste, Litter Prevention (dedicated teams), Customer service, Sustainability and Marketing teams within Council. However, education staff had weak internal links to Parks, Media and Communications, Depot / Cleansing / Contractors, Recycling / Waste centres and Local Laws teams.

Average total time spent working on illegal waste was 0.3 FTE with a total cost of \$85,000 per annum.



Infrastructure

Staffing



Average number of staff working in this area: 0

Average cost of illegal waste infrastructure was \$270,000 per annum. Officers indicated they strongly believed these systems have a significant impact on reducing illegal waste incidence but could not provide robust data to demonstrate this. This lack of measurement and reporting is likely due to the lack of staff committed to managing infrastructure to reduce illegal waste.

Resources

Despite the high annual expenditure on infrastructure to reduce illegal waste, no council employed a dedicated staff member to manage this infrastructure.

The most commonly used illegal waste infrastructure included:

- + Charity bins¹
- + Community recycling stations¹
- + Clothing bins¹
- + Bollards²
- + Boulders²
- + Chemical drop off¹

Less commonly used illegal waste infrastructure included:

- + Bins
- + Bollard cameras
- + Community skip bins
- + Cigarette butt bins
- + Gates

Infrastructure and community partners

This probed if local government works with others on illegal waste infrastructure.

25% of Councils partner with other providers of infrastructure including charity bins, community recycling stations, clothing bins and chemical drop offs³.

Note:

1. Recycling collection services that can be targeted for illegal waste dumping
2. Infrastructure to discourage illegal waste dumping or provide appropriate disposal options which reduced illegal waste
3. In Victoria Chemical Drop off services are run by Sustainability Victoria in partnership with local governments. Called Detox your home the events are held at locations around Victoria.

Those that do partner with others had an average of 22 incidents per 1,000 residents. Their average cost per incident was \$240.



22 incidents per 1,000 residents²



average cost of \$240 per incident

Those that did not partner with others had an average of 46 incidents per 1,000 residents. Their average cost per incident was \$952.



46 incidents per 1,000 residents²



average cost of \$952 per incident

Enforcement

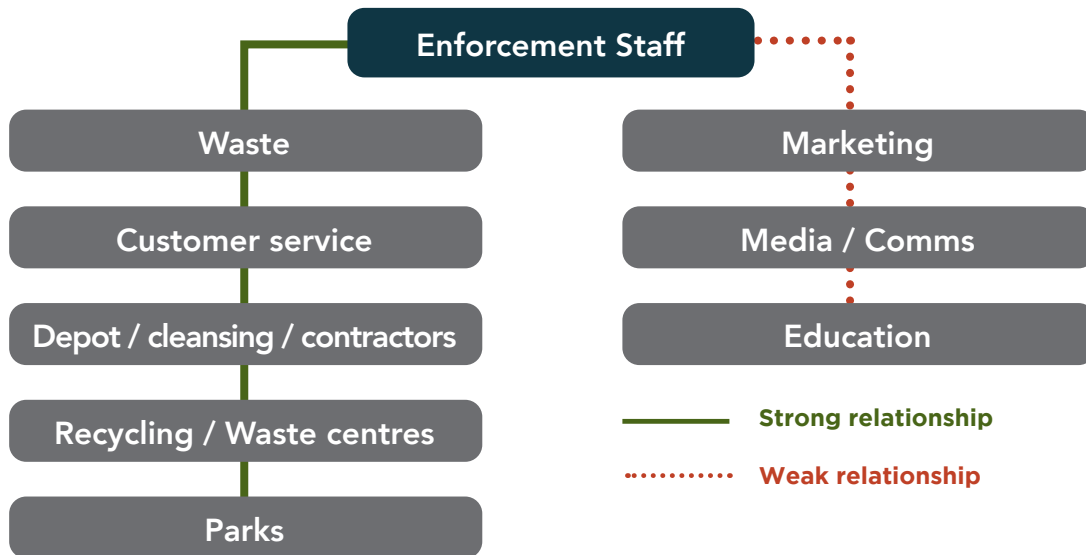
Staffing

Average number of staff working in enforcement: 5



Generally, enforcement staff had strong internal links to Waste, Customer service, Depot / Cleansing / Contractors, Recycling / Waste centre and Parks teams in council. However, enforcement staff had weak internal links with Marketing, Media and Communications and Education teams.

Average total staff time spent on enforcement of illegal waste was 0.25 FTE with a total cost of \$135,000 per annum.



Illegal waste incidents

The average council experienced 4100 illegal waste incidents in the 2019-20 financial year. 60% of these incidents were removed by council, maximising the average cost of \$270 per incidents and minimizing cost recovery to an average of 7% (\$20 per incident).



Illegal waste enforcement

The average council issued 96 infringement and referred 2 incidents to the Magistrate court. This is less than 2.5% of all incidents.

Top 3 Infringements

- + 45ZI (request for information) 32%
- + 45E (deposit of litter generally) 27%
- + 45ZB (litter abatement notice) 12%

Barriers to enforcement

Top 5 challenges local government face when enforcing illegal waste

- + Lack of time
- + Internal processes are restrictive
- + Management attitude – illegal waste not important or there is a PR risk
- + Lack of training
- + Insufficient investigation knowledge

Top 5 personal concerns authorised officers have when enforcing illegal waste

- + Authority and delegation not clear
- + DHHS challenge to deal with
- + Safety – personal safety when dealing with public
- + Lack of training
- + Low understanding of their powers as an authorised officer



Collection and disposal

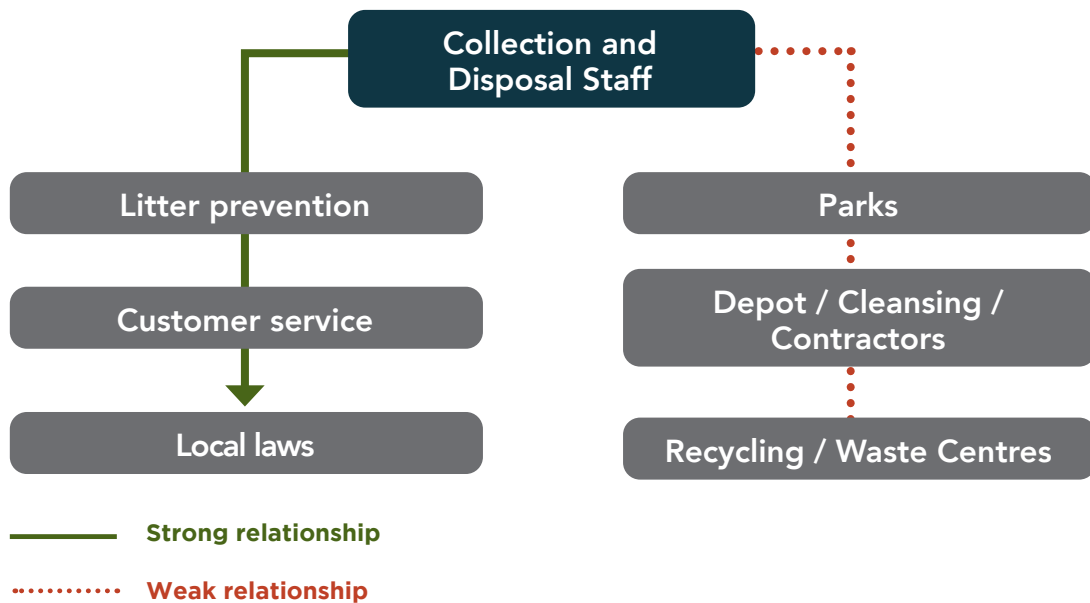
Staffing



Average number of staff working in collection and disposal: 3

Generally, collection and disposal staff had strong internal links to Litter prevention, Customer Service and Local Laws teams working in Council. However, collection and disposal staff had weak internal links to Parks, Depot/Cleansing/contractors, and Recycling/waste centres in Council.

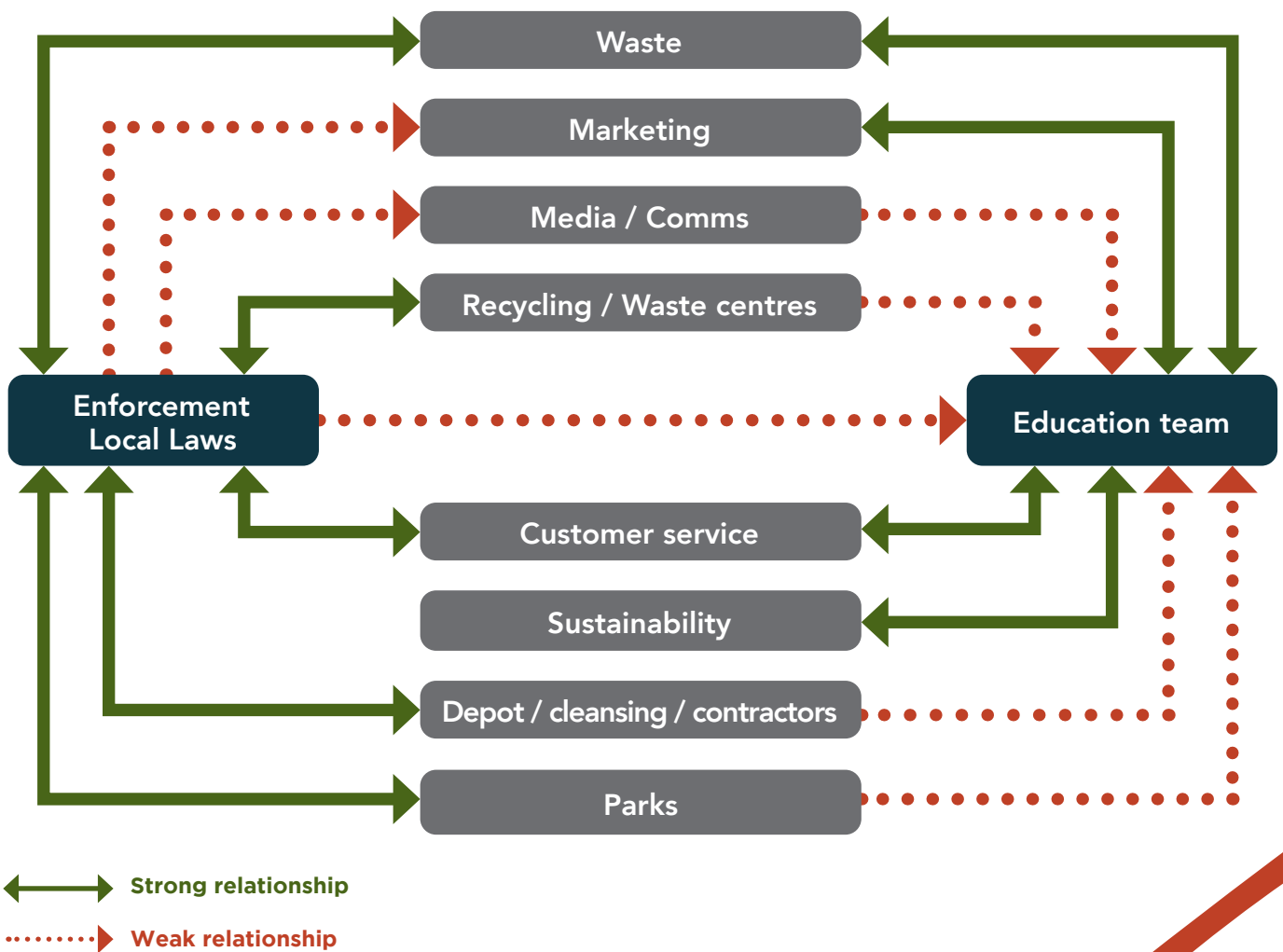
Average total time spent collecting and disposing of illegal waste was 0.4 FTE, with a total cost of \$755,000 per annum including disposal.



Council internal relationships

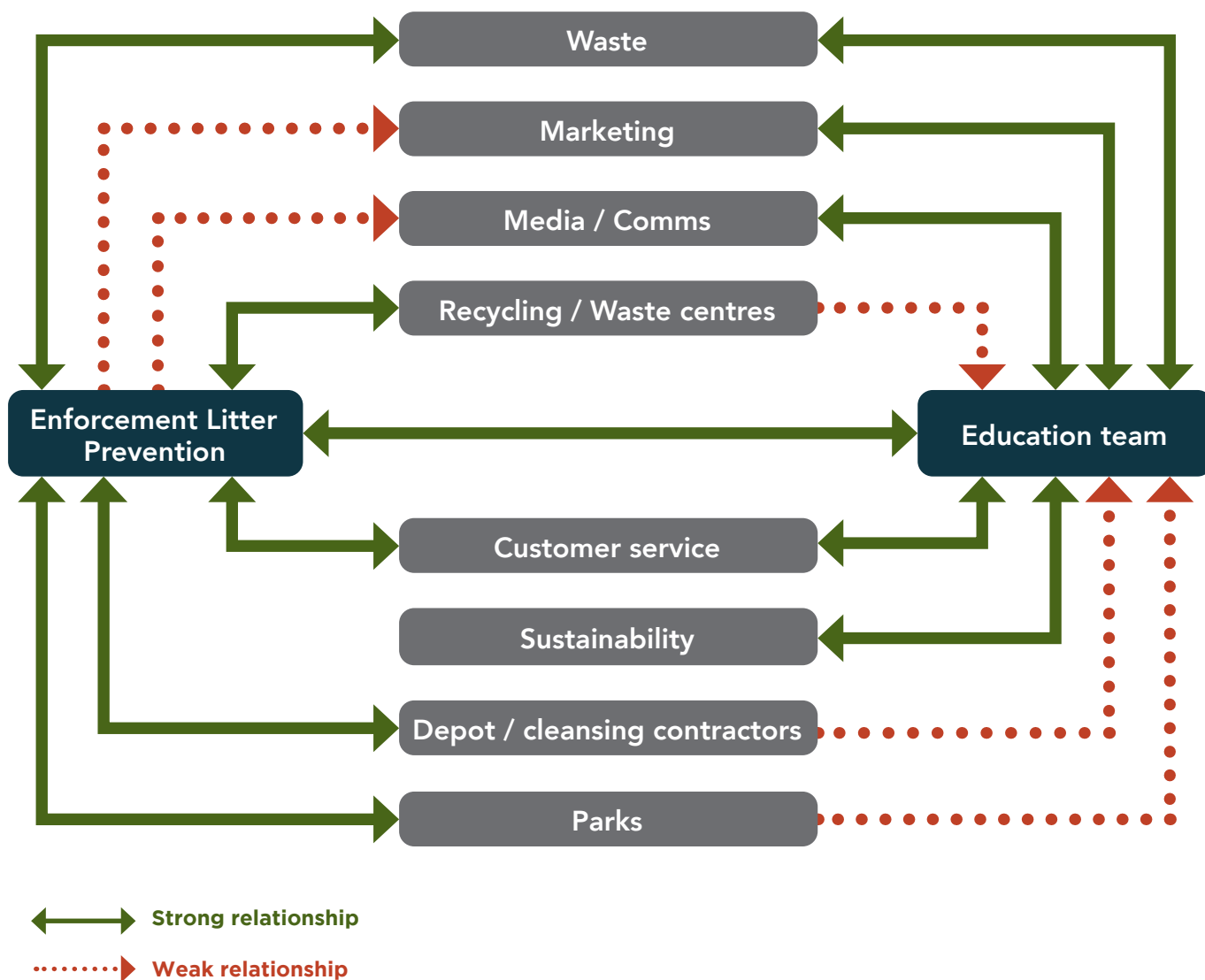
The benefit of dedicating resources to illegal waste

For councils without a dedicated litter prevention team or litter enforcement officer, internal relationships were often a barrier to effective education and enforcement to prevent illegal waste.



This was the most common internal relationship model seen in councils without a dedicated litter prevention team. Local laws or enforcement are disconnected from other council teams. This leads to more reactionary enforcement and reduced effectiveness of illegal waste prevention initiatives, if any.

The most common internal relationship model for councils with a dedicated litter prevention team was different.



Stronger relationships between the litter prevention team or dedicated officer with the education team facilitates connection to a variety of other council teams and enables more effective illegal waste prevention initiatives.

Council external relationships

Councils reported working with 108 different parties who have been impacted by illegal waste. The top 40 organisations Councils work with are listed and the top 10 organisations shown. List of organisations are ranked in order of those contacted most frequently.

ORGANISATIONS

- | | | | |
|-----------------------------|---|--|---|
| 1. Parks Victoria | 13. DEPI | 22. Victorian Prosecution Association | 32. Fast food outlets |
| 2. VicTrack | 14. EPA | 23. Aboriginal Victoria | 33. MWRRG |
| 3. DELWP | 15. LGPRO | 24. Body Corporates | 34. North East Officers Association |
| 4. Vicroads | 16. MAV | 25. Caulfield Racecourse Reserve Trust | 35. Other charity stores |
| 5. DHHS | 17. Merri Creek Management Committee | 26. Clean Up Australia | 36. Park Lands Albury Wodonga Committee of Management |
| 6. Melbourne Water | 18. Planning Enforcement Officers Association | 27. Colaban Water Authority | 37. Private carparks |
| 7. Metro Trains | 19. Regional Roads Victoria | 28. Contractors | 38. Private Landowners |
| 8. DoT | 20. Saint Vincent De Paul Society Victoria | 29. Crown Land | 39. Private property owners |
| 9. Victoria Police | 21. South East Water | 30. Developers | 40. PTV |
| 10. V-Line | | 31. Diachon | |
| 11. ARTC | | | |
| 12. Central Highlands Water | | | |



Local government processes for responding to illegal waste

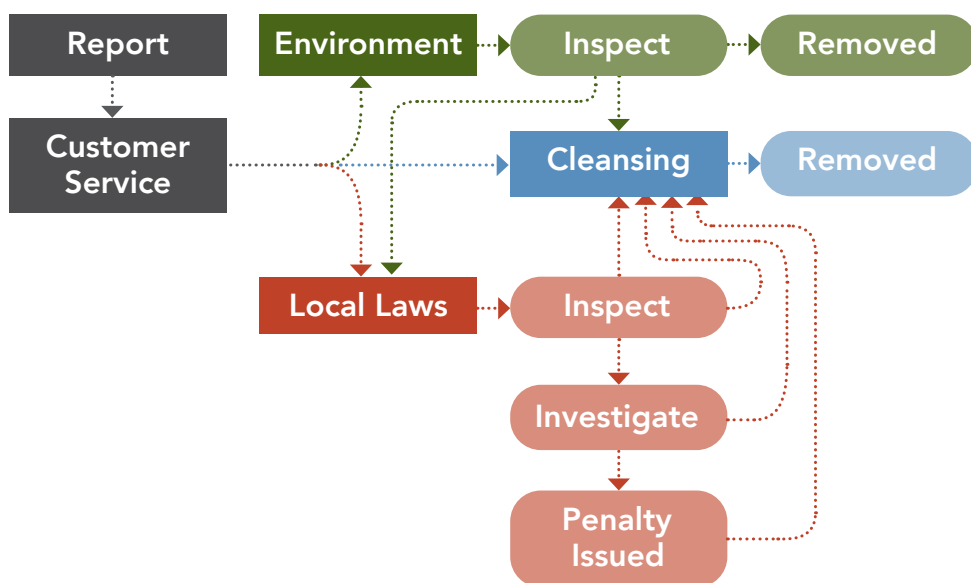
Local government uses varying processes to respond to illegal waste. Authorised officers identified the key factors that influence how the officer responds as:

- + council policy or processes
- + council structure and internal relationships
- + resourcing
- + illegal waste incidence
- + executive management attitude to enforcement or surveillance
- + disposal options available
- + geography
- + socio-demographics of surrounding populations

Some of these factors were identified as contributing factors to increased resource use and staff stress.

A common response

The most common response in a metropolitan council results in double handling and an increased work load for the collection and disposal teams, which is reflected in the high annual cost of this team.



In this response, the report would be triaged firstly to cleansing if there was evidence of hazardous material. If not, the report would be triaged to local laws if there was evidence of the offender. Finally, if neither is present, the report is triaged to the environment team to inspect for hazardous material or evidence.

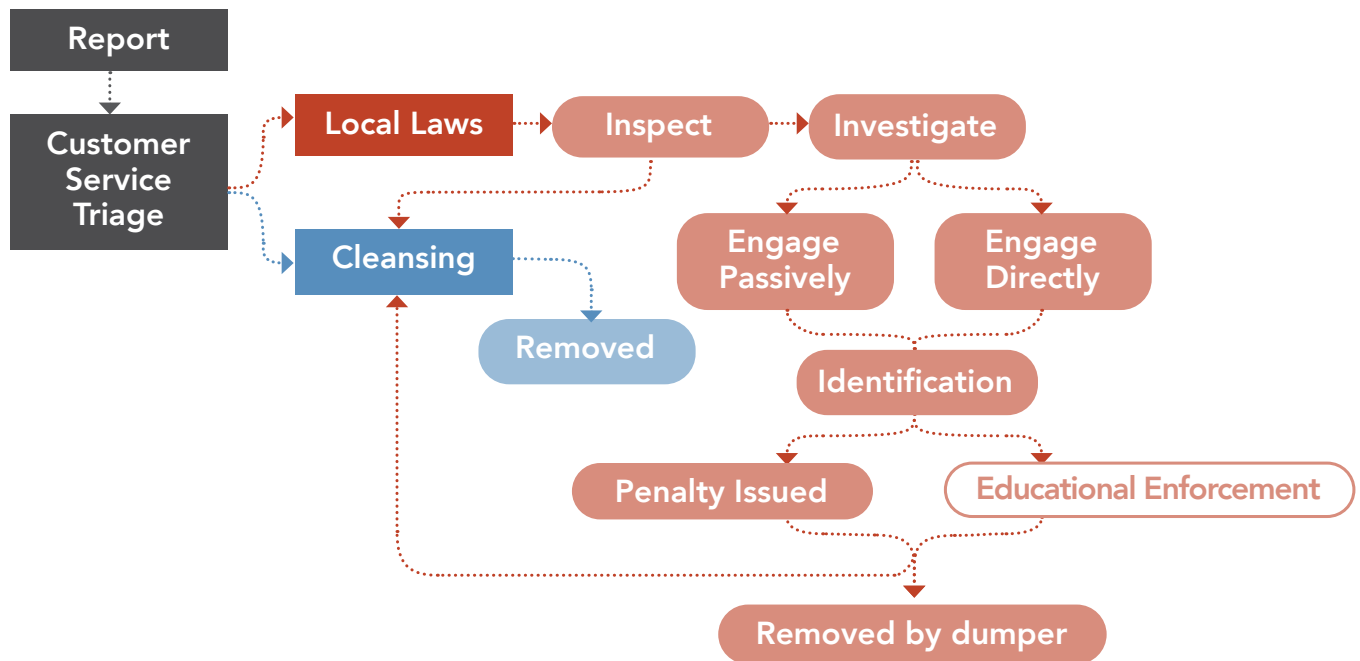
In all situations, inspection is likely to result in a cleansing response to remove the waste, increasing the workload and cost of collection and disposal. This is because this model does not place an emphasis on investigation. Without this priority,

authorised officers are often lacking in skills, confidence, or options to investigate effectively when possible. They also have difficulty engaging with any potential offender to remove the incident when possible and achieve compliance. Because of this, even if an investigation is conducted, the collection team will often be engaged, sometimes with a penalty issued to the offender. This model maximises the cost per incident to council by increasing staff handling and increasing collection and disposal costs, while not necessarily recovering costs incurred.



A better response

Councils which placed an emphasis on investigation typically had a lower cost per incident and higher recovery per incident, especially councils which used 'educational enforcement'.



In this response, the report would be triaged firstly to cleansing if there is evidence of hazardous material. If not, the report would be triaged to local laws if there is evidence of the offender. Local laws inspects for hazardous material or evidence. This model reduces staff handling compared to the previous model.

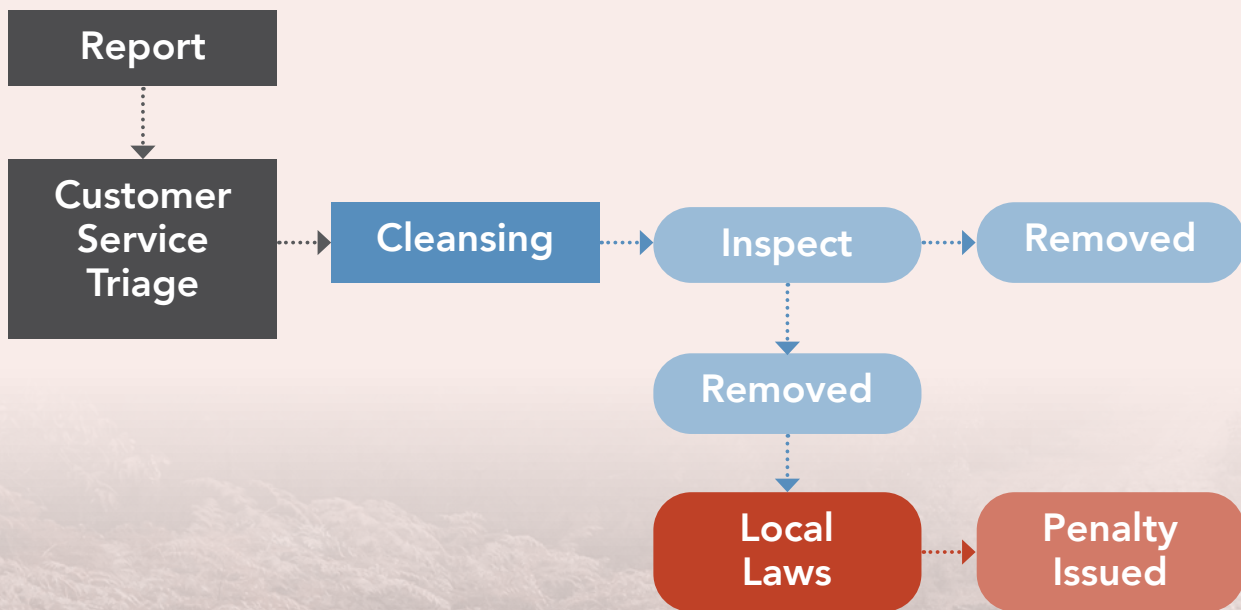
When a council places an emphasis on investigation, officers are typically more skilled and more confident

in their authority and engaging with offenders. This leads to a greater rate of engagement and the opportunity for an educational approach from the officer instead of penalty use. This model has higher rates of removal by the offender, reducing the cost per incident. It also allows for 'accidental dumpers' to be engaged and educated, preventing future misuse of council services and increasing appropriate disposal.

Tailored responses are required

Although this report has suggested better responses, it is important to note that each council will have its own best practice response. The complex nature of illegal waste and all the factors that influence it means there is no one size fits all solution, so councils should tailor their response to illegal waste.

For example, we have assessed the most common and reasonable response in metropolitan councils and a better 'educational enforcement' approach. Below is the most common response for regional councils, which reduces staff handling by upskilling cleansing teams to investigate and collect evidence where possible.



Support requested by Councils

Councils provided ideas on the type of support that would help them better respond to illegal waste incidents.



ADVOCACY

- + Get more support for dog poo issue
- + Need to get appropriate workloads for officers (LEOs/LPOs)
- + Get more smart bins



COLLATERAL

- + More media, news and ads
- + Materials to engage with community
- + Targeted collateral examples for different types of waste or behaviours (x2)
- + Ready to use comms packages (x6)
- + Ready to upload web page information



EDUCATION

- + More education in primary/secondary schools (x2)
- + Educate CEOs / Mayors / that enforcement is about forming connected, safe communities
- + Educate management



ENGAGEMENT

- + Activity centres in parks to capture people
- + Targeting MUDS - contacting owners corps
- + Targeting MUDS - waste management plans (x2)



FINANCIAL SUPPORT

- + More resourcing (x2)
- + More resources to educate the community
- + Roaming litter prevention officer



NETWORKING

- + Building more relationships between authorities
- + Newsletters to see what other councils are doing
- + See more of other people methods
- + See more of other people's equipment
- + See what other land managers are doing
- + Proactively speak with more officers



TECHNICAL ASSISTANCE

- + Businesses/builders and site management plans
- + More research into how illegal waste impacts the environment
- + More information on surveillance
- + Assistance with demarcation
- + Templates of notices
- + Flowchart on different scenarios with notices/templates (x2)
- + Increase access to external sources of data for evidence (deliveroo, airtasker)
- + Identify advantages/disadvantages of dedicated LEOs



TRAINING

- + More training webinars
- + More training (x4)

Note: (x) is the number of councils requesting this item.

Broader impacts of illegal waste

Environment

Illegal waste is destructive to the environment and can be hazardous wildlife. Waste makes it into waterways through run-off, garden clippings spread invasive weeds, and animals and birds can ingest discarded waste material (Parks Victoria, 2019). 3 councils reported injured wildlife because of illegal waste and 2 councils reported contamination because of illegal waste. Despite this, only 1 council monitors the environmental impact of illegal waste.

Community

Incidental exposure, contamination and fire hazards put communities at risk when incidents of illegal waste occur. 2 councils reported harm to a community member occurring because of illegal waste.



Conclusion

Illegal waste is a pervasive problem that continues to affect Victorian councils, communities and the environment. To date, very little research or successful action has been provided beyond the local government level. This is the first year of a concerted attempt to gather robust, real time data of what is happening with Victorian local governments managing illegal waste.

Keep Victoria Beautiful knows that Illegal waste is destructive to the environment and can be hazardous wildlife. Councils reported injury to wildlife and contamination, but most councils do not monitor the environmental impact of illegal waste. Incidental exposure, contamination and fire hazard puts communities at risk when incidents of illegal waste occur, with councils reporting harm to community members occurring.

In addition to the social and environmental impacts, illegal waste cost Victorian councils \$88,967,000 in 2019-20. This cost is primarily spread over the northern, western and southeastern regions, with many councils experiencing higher costs per incident because of their internal relationships and processes for responding to illegal waste. A better response using 'educational enforcement' was seen by councils that emphasised the importance of investigating illegal waste.

Officers reported an increase in illegal waste reports and community complaints, with specific issues of increasing dumping of hard rubbish on nature strips, green waste, mattresses and construction waste.

Metropolitan councils generally have the lowest number of illegal waste incidents per capita but higher costs per incident, whereas interface councils, northwestern and western regional councils experience the opposite.

Councils reported the top five challenges in responding to illegal waste as organisational processes, volumes of illegal waste, dumped green waste, a lack of resources and a lack of time. Most of these were seen as key limiting factors that needed to be addressed before improving elsewhere.

Finally, councils were able to request support to assist them in reducing illegal waste. Council requests were broadly about providing more advocacy, collateral, education, financing, networking, and training.

Success of the 2019-20 Annual Illegal Waste Survey

This survey has achieved:

- + Baseline robust data on illegal waste for the majority of Victorian local governments
- + Confirmation of data that was previously anecdotal

These survey results have been:

- + Presented at the 2020 National Waste Conference, the 2021 LEON Illegal Waste Conference
- + Reported to relevant ministers in Victoria, Council CEOs, EPA, DELWP, Parks Victoria and MAV.

At the time of writing no policy changes or funding support provided to KVB.

However, KVB continues in this important work to advocate for local government to state government to reduce the incidents, impact and damage that illegal waste causes.



Keep 
Victoria
Beautiful