# EPA Litter Prevention Kit Part 4

Butt Litter Check Guidelines



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# EPA Litter Prevention Kit Part 4

The EPA Litter Prevention Kit helps you tackle local litter problems and keep your environment the way it was meant to be - litter-free.

There are four parts to the EPA Litter Prevention Kit.

#### Part 1



Things you should know about litter and litterers

#### Part 2



Delivering effective local litter prevention projects

#### Part 3



Local Litter Check Guidelines

#### Part 4



**Butt Litter Check** Guidelines



#### You can download the Litter Prevention Kit documents from the EPA website:

www.epa.nsw.gov.au/your-environment/litter-and-illegaldumping/epa-work-prevent-litter/run-litter-prevention-project/ local-litter-check

## Overview





The Butt Litter Check (BLC) is an easy to use tool to understand why smokers may be littering cigarette butts, and to develop evidence-based interventions to prevent cigarette butt litter.

Understanding and addressing the causes of butt littering is the first step to effective long-term butt litter reduction.

There are four key steps of the BLC to assess what is happening in local smoking areas:

Step 1: Area inspection

Step 2: Observations

Step 3: Litter count

**Step 4:** Conversations with people in smoking areas.

#### These four steps will:

- provide evidence about what contributes to smokers littering butts
- identify ways to help prevent butt litter
- help build support for local organisations to seek funding for evidence-based targeted programs
- help track changes in the litter rate over time.

The BLC is designed for smoking areas where people congregate to smoke or pass through while smoking. Smoking areas can be grouped into two types of areas: 'streamlined' and 'hotspot'. The BLC should be repeated in both types of locations to help contrast what is working and what is not.

A BLC should take around 30 minutes to complete at each smoking area and will include at least one 15-minute observation session of smoker disposal actions in each area. Observing smokers' littering behaviour will help generate litter prevention ideas.

## Smoking areas

Smoking areas are places where smoking is permissible and where smokers may pass through or congregate while smoking.

The research completed by the EPA found that contextual factors associated with smoking areas significantly influence cigarette butt disposal behaviour. The research shows that categorising smoking areas based on the area's context provides a useful approach to understanding and preventing butt littering behaviour.

In line with this research, the BLC guides you to 'designate' outdoor smoking areas into two categories, 'streamlined smoking areas' and 'hotspot smoking areas'.

'Streamlined smoking areas' are places where the expectations of the correct disposal of butts is obvious and clear. Typically, these areas are clean. well prepared for capturing butts, relatively free of butt litter, may have clear signage on where to smoke and dispose of butts and have places for smokers to meet out of the weather.

'Hotspot smoking areas' are where expectations of correct butt disposal are unclear, butt littering is a problem and there are inadequate butt bin facilities available

The BLC is related to the more detailed assessment tool, the NSW EPA Local Litter Check. It is based on the idea that the best insights into disposal behaviours are found when streamlined and hotspot smoking areas are compared.









Talking to local government staff involved with city services, operations cleansing or waste may help you find a smoking area suitable for comparing disposal actions.

# Selecting 'streamlined' and 'hotspot' areas

Generally, the smoking areas to be assessed will be relatively contained spaces where smokers may gather in small groups or clusters. They can also include thoroughfares or easements where people typically dispose of butts while moving through spaces from car parks to shops or from streets to public transport.

Note: If there are no areas that seem streamlined for preventing butt littering in your local community then focus attention on smoking litter hotspots.

Selecting local streamlined and hotspot smoking areas will:

- Increase understanding of local problems and solutions
- Provide evidence of the issues contributing to butt litter in hotspots and help focus attention on prevention efforts
- Start building a case to demonstrate likely value and return for effort/investment in capturing cigarette butts from the litter stream.

There is no set size for conducting a BLC in a smoking area. The boundaries for the BLC are selected to enable easy observation of all smokers using the area. The first walk around the area will enable clear boundaries to be set and recorded. It will also provide an opportunity to test different potential vantage points for observing smokers disposing of butts.

Avoid choosing boundaries for an area that are so big everyone cannot be easily seen. Similarly, avoid limiting the boundaries so that observations will be uncomfortably close to smokers in the area

#### Site types

Smoking areas are often located close to, or at permissible distances from, many other types of sites where disposal behaviour may be an issue. It is important to note the type of sites adjacent to smoking areas when studying disposal actions in the smoking area These include:

- Transport (an interchange, hub or thoroughfare near a train station, bus stop, bus interchange, or car park).
- Shops including retail strips, outdoor malls, and outside shopping centres.
- Office buildings including office blocks, landmark buildings, courts, adult education centres, and tertiary institutions.
- Venues outside pubs. clubs. or hotels and other licensed venues, and outdoor eating areas.
- Health facilities including outside hospitals, or medical centres
- Recreational parks, outdoor markets, and waterways.
- Roadside stops or rest areas.



#### Smoke-free legislation

In NSW, the Smoke-free Environment Act 2000, Smoke-free Environment Amendment Regulation 2009 and the Smoke-free Environment Regulation 2007, ban smoking in the following outdoor public areas:

- within 10 metres of children's play equipment in outdoor public places
- public swimming pools
- spectator areas at sports grounds or other recreational areas used for organised sporting events.

Informal smoking areas can develop in outdoor places where smokers congregate, near and even underneath non-smoking signs or other areas such as near air conditioning intakes and close to entry and exit points for buildings often on the edge of smokefree buffer zones. It is important to consider these issues when thinking about interventions to address cigarette littering behaviour.

# Preparation before you leave

#### Stay safe while collecting information

Your personal safety is of paramount importance when collecting information in your community.

Follow these tips to keep safe:

- Have two people collect information if you are doing checks out of hours.
- Let other staff know where you are.
- Leave immediately if you have any concerns about vour safety.
- Ensure you have a mobile phone with you to contact someone in case of an emergency.
- Apply sunscreen and cover up, as you would for any day spent outdoors and make sure you have an adequate supply of water.
- Take a break between assessments.
- Allow sufficient time to rest between assessments. Often this break is a good opportunity to fill in forms and start thinking about your findings.



#### Plan the best time to visit

You'll need to visit locations when smokers are present and the amount of litter in the area reflects the way it usually looks.

- Find out when the area is cleaned. Don't visit straight after it has been cleaned
- Think about when the chosen areas will be used, and plan to go at those times.

For example, if you have selected an area next to office buildings where people go to smoke, then do a check at break times such as lunch, or morning or afternoon tea. Similarly, if the target area is next to public transport, the best time to do a check would be during the morning or afternoon peak commute time.

#### Take the following items

- Clipboard, pen, watch, sunscreen and hat, camera and a mobile phone in case of emergency, a calculator.
- Two sets of forms one for the streamlined smoking areas and one for the hotspot smoking areas.
- Three or four copies of the conversation record (surveys).
- This guide, which has instructions on how to fill out the forms

#### Day-time/night-time Observations

Observations at some site types such as pubs or clubs may provide better insights when conducted at night. Take extra precautions such as going with two people, letting colleagues know where you are and leaving if you have any concerns.



#### Tips for doing a **Butt Litter Check**

The guidelines and tips below show how to complete the forms for each smoking area. The same forms are used to record details in both areas. The preferred order for completing the BLC is:

Step 1: Area inspection (record judgements while walking around the area to set boundaries and choose observation vantage points)

Step 2: Observing and recording cigarette butt disposals (at least one 15-minute session)

Step 3: Butt litter count

Step 4: Conversations with smokers.

Note: Do the BLC at a streamlined smoking area first and then at a hotspot already identified for litter prevention initiatives

## **Step 1:** Smoking area inspection

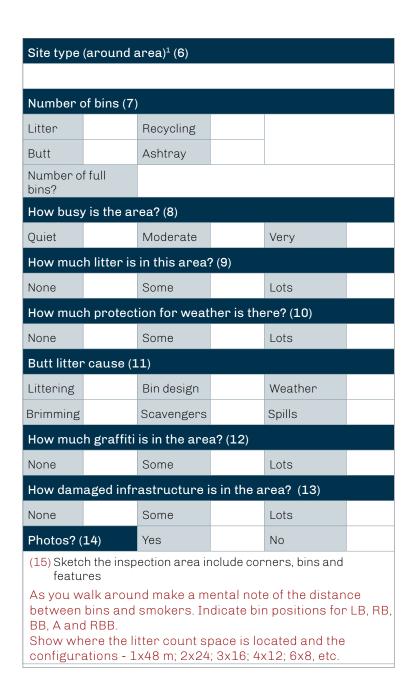
On arrival at the smoking area, walk around and select the boundaries for the 'area inspection' and BLC observations of smokers' disposal actions. Walk through the different paths of approach taken by users to the space to help understand users' experience of different angles and views of the smoking area. Try to avoid choosing too large an area for completing the area inspection, and remember that the best observations are collected when all smokers in the area can be seen at the time of disposing of cigarette butts.

- 1. Record the date.
- 2. Record the time of day.
- 3. Tick whether this is a **streamlined** or **hotspot** smoking area.

- 4. Tick the project stage when the BLC is undertaken. The first check is the baseline – tick the Before box to indicate it was before activities to reduce littering had started. The other boxes are for recording later inspections. Tick the During box when a second area inspection is done soon after you have introduced litter prevention activities (usually between two to five weeks after you start to make changes). When the litter prevention activities are finished tick the After box
  - Tick the Long after box to show an inspection that measures the follow up or the lasting impact long after your activities have finished (possibly a vear after).
- 5. Name and describe smoking area. For example, Central Station, Sydney - designated smoking area located just outside the entrance from Eddy Avenue.

Date (1)	Time (2)	Are	name ar	ıd descr	iption (	5)		
Streamlined (3)	Hotspot							
Stage of butt I	itter prevention activities	Befo	е	During		After	Long after	

- **6.** Insert the **site type** surrounding or adjacent to the smoking area. Use descriptions from page 4.
- 7. Count the number of bins in the area separate litter, recycling, butt bins and ashtrays. Note: butt bin count includes both recycling butt bins and other butt bins. Show the number of full litter and recycling bins separate from full butt bins and ashtrays. If no bins are present insert zero; similarly, if no bins are full, insert zero.
- 8. Rate how busy the area is at the start of the inspection.
- 9. Rate how littered the area is with butts.
- **10.** Rate how **protected** smokers are from the effects of wind, rain and heat. Tick if it seems to be slightly (None), moderately (Some) or very (Lots) protected.
- 11. Tick the cause of butt litter is it deliberate littering? e.g. dropped in the gutter or garden bed? Is it due to poorly designed easily blocked bins that don't contain butts? Has it built up by weather rain or wind? Has it happened because of spills from bins or from people stacking butts on top of a full bin or on the edge of a bin (i.e. brimming)? Does butt litter result from people pulling butts out of bins to collect tobacco and leaving the discarded butts on the ground (i.e. scavengers)? Tick all the boxes that seem to explain how the butt litter got there.
- **12.** Carefully look for **graffiti** in any parts of the area and if present, tick the amount.
- **13**. Carefully look for any **damage** to parts of the area and if present, tick the amount.
- **14.** Tick whether photos are taken of the area and the litter count space.
- 15. Sketch the area to relocate it for next inspection (include key features such as poles, seats, bins, butt bins and the corners). Include in the sketch the outline of the litter count space. Mark key features along the boundary of the sketch and inside the area



Step 1: Step 2: Step 3: Step 4: Observing disposals Smoking area inspection **Butt litter count** Survey tips

## Inspect the features in each smoking area

Slowly walk around and inspect the main features in each area and judge if the statements below are True or False. Don't spend too much time deciding True or False; first impressions after a detailed inspection are often best.

	Ar Fal	ea Inspection – True or se	T/F	Notes					
Tips	Clean								
Walk around the area, record impressions about whether each statement is True or False.	1	Most butt litter seems to be new (recently discarded)		What is or isn't working well? e.g. the area is very clean.What isn't working? Note suggestions to improve clean features.					
	2	Cleaning up the butt litter would be easy to do							
		Clean subtotal (add only True responses)	/2						

Tips	Bu	tt bins and Infrastructure		
Q3. If no butt bins, but the area is free of butt litter,	3	There are enough butt bins in the area		Examples: Butt bins effectively capture and hold
answer 'T'. Q. 4,5,6. If no butt bins answer 'F'	4	Butt bins can be easily seen in the area		butts.  Repair or improve bins and/or furniture.  Area needs more bins.
If there is more than one butt bin in the area, if the	5	Butt bins are easy to use		Area needs more oms.
statement is 'False' for one bin then answer 'F' for all.	6	Butt bins are clean (free of dirt, graffiti, damage)		
	7	Butts cannot escape from butt bins		
If the answer is 'False' for any one amenity, e.g. furniture, answer 'F'.	8	This area looks cared for (e.g. seats, garden, paths)		
		Butt bins and infrastructure subtotal (add only True responses)	/6	

Tips	Inf	Information										
	9	Signs tell smokers what to do with butts		Examples: There are butt litter prevention signs and								
Look at all signs, focusing on litter signs.	10	Signs are easy to understand		the signs are undamaged and clear. There are no litter prevention signs.								
	Litter is from smokers ignoring signs											
	12	Butt litter and the problems it causes are easily seen										
		Information subtotal (add only True responses)	/4									

After observing and recording cigarette butt disposals, Step 4 (described below) is to have conversations with smokers in each smoking area to ask them to make judgments on the same features included in the area inspection (Step 1 described above). These conversations will provide community viewpoints and judgments about those same key features and factors in the area, namely:

- cleanliness
- butt bins and infrastructure
- information
- surveillance
- involvement.

Comparing smokers' judgements about the features of the smoking areas with area inspection ratings will provide a more complete picture and help target butt litter prevention activities.

Tips	Su	rveillance (visibility of dispos		
	13	Butt litter seems to be under control		Examples: Consider giving more warnings to
	14	Smokers littering butts will be easily seen		smokers caught littering.
	15	Smokers are aware of potential fines for littering		
	16	Rangers seen patrolling this area		
		Surveillance subtotal (add only True responses)	/4	

Tips	Inv	rolvement		
	17	The area is a good example of smokers doing the right thing		Examples: Smokers seem comfortable and proud of the area.
If vandalism or damage is evident, answer 'F'	18	Finding graffiti or damage to things in the area requires considerable effort		
	19	Smokers seem to look after this area		
	20	I am satisfied with how clean this area is today		
		Involvement subtotal (add only True responses)	/4	

Add the totals for each subsection to get a total out of 20. Multiply this score by 5 for a score out of 100 and insert it in the box on the far right.	Area inspection total (add all True responses)	/20	/100
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Smoking area inspection

## Step 2: Observing cigarette butt disposals

Try to identify vantage points to conduct observations while walking around the area during the area inspection. Stop and look around the smoking area to see if all smokers and potential disposal points are visible.

After completing the area inspection form, return to a suitable observation position to watch how smokers dispose of cigarette butts.

## Observation tips for positioning

- Find a comfortable position. If possible be seated. If standing try not to constantly shift and turn around to watch smokers.
- Concentration is important but avoid looking only at the smokers or at the bins - keep scanning all parts of the area. There is a balance between subtly scanning the area and obviously trying to include absolutely everyone.
- Try to notice when smokers are reaching the end of the cigarette and scan back to them when they are likely to dispose of the butt.
- Try to be as unobtrusive as possible without trying to hide.
- Recognise the challenge of trying to blend into the area to observe people that go there to smoke.
- Some people prefer not to use a clipboard to blend in.
- Consider how prominent council logos or work uniforms ought to be.

- Focus attention on smokers nearing the end of their cigarette but avoid staring.
- Avoid standing too still in the same position for the entire session. It is okay to move around the area.
- Try to control reactions when observing someone littering or using a butt bin.
- Do not undertake enforcement actions while observing.
- If smokers become aware of being observed then if possible move to another part of the area to observe. Note on the data sheet if the smoker's behaviour appeared to change as a result of being aware of being watched and if it is necessary move away and return later to complete observations.
- If asked about your actions, respond truthfully, briefly describe the BLC and how it will be used. Take this opportunity to talk with smokers to complete the questions from the smoker's conversation survey in Step 4 – often talking with smokers will facilitate observations.





## Completing the form

- 1. Write in the area name and description and indicate what type of site it is near.
- 2. Record the date
- **3.** Tick whether this is the streamlined or hotspot area.
- 4. Complete one 15-minute observation session the minimum observation time for each area. Record the observation session start time i.e. when in position to observe and at the time the first smoker is seen disposing of a cigarette.
- After 15 minutes rule a line across the observations record table to show the session has ended.
- Disposals observed outside the 15-minute observation session, such as smokers seen littering while the area inspection (Step 1) is carried out or when other steps in the BLC (Step 3 litter count and Step 4 conversations) were completed, can be added to records with notes indicating time observed outside the 15-minute period.
- 5. Immediately at the start of an observation session count and record the number of people in the smoking area and estimate the percentage of those people smoking a cigarette. Repeat this at the start of subsequent sessions

# Describing disposal actions

 The codes (next page) summarise smoker actions and familiarity with the codes will make it easy to record details of disposals and help with efficient use of time, particularly in busy

Area name an	d description (1)			Area (3)					
Site type	office block? reta	il?	Date (2)	Streamlined		Hotspot			
	car park? etc.		/ /	<b>Tips:</b> Note the start time for each session ar record the number of people and % of smok					
Session (4)#	Start time (4)	No. of people in area (5)	Number of people smoking			-			
1		III al'ea (5)	people silloking	In the data table below rule a line across observations at the end of a session.					
2									
3									
4									
5									
6									

locations.

 If multiple disposals occur at once try to use your own reminders or prompts of what occurred to aid memory recall, which will help avoid being distracted from seeing other disposals while filling in the form. Using memory is okay if the codes are familiar.

### Recording disposals

Details of littering behaviour concern what is done with any littered items, but in this study the principal focus is on cigarette butt littering and the littering of smoking accessories and a secondary focus on

## Observation tips for recording

- Practice the observation codes before you start, to make recording more automatic and save time.
- Try not to obviously record data immediately after seeing a disposal; this can make smokers more aware of being observed.
- Use the codes to record each disposal action for each item on a single line of the form.
- Remember a smoker not seen using a bin doesn't mean littering. Use caution when recording the most likely disposal outcome from a smoker who leaves the area without a burning eigarette.

- If unsure, verify the disposal outcome by looking for evidence of new litter in exactly the spot where the smoker was positioned.
- Use common sense and avoid completely guessing about whether someone littered or used a bin.
- If uncertain about the disposal actions and an observation seems incomplete and a smoker leaves the area without a clear disposal, you can record 'carried away'.

non-smoking related items, which are also recorded.

- 6. Record each disposal act as either littering (L), using a bin (B) or carrying it away (CA).

  Details of each disposal action are recorded differently for littering and bin use acts. Where the outcome from a disposal is uncertain or the person has carried the object away from the smoking area the disposal is recorded as CA and is not counted as a littering action.
- 7. The item disposed is categorised into three groups:
  - cigarettes (including cigars) burning or extinguished
  - cigarette accessories (like matches, lighters, cigarette packets – cardboard, foil and plastic wrappers)
  - non-smoking related items.

At the point of disposal of cigarettes, it is important to observe and record if the cigarette was still burning (CB) or not burning, having been extinguished or butted out (CO). If unsure record CO.

Each disposal from the same person is recorded on a single line of the form. For example, sometimes a smoker may use a different method of disposal for a number of items at one time e.g. a plastic lid of a takeaway coffee cup may go into a bin while a cigarette butt is littered on the ground and the cup itself is carried away. In this case three disposal acts have been observed for three items (a coffee cup, its lid and the butt).

Dispos	sal act	Item	dispos	ed			1	Where				How		How				
Littere	ed (L)	Ciga	rette bu	urning		СВ	3 ,	Around b	in		AB	Brimmed o	n bin		ВМ			
		Ciga	rette ou	ut		CO	) (	Garden b	ed		GB	Drop and s	tomp		DS			
		Acce	ssory (	cigaret	ite)	А	(	Gutter or	drain		GD	Forgot			FG			
		Non-	cigaret	te		Ν	(	Open ground			OG	Flagrant fling			FL			
							1	Raised su	ırface		RS	Hide or bury			НВ			
							ı	Under se	at		US	Sneaky dro	р		SD			
												Wedged			WD			
Dispos	sal act	t Item disposed						Bin type				Bin fixture	(11)					
Binned	Binned (B) Cigarette burning				СВ	3 ,	Ashtray			AF	Free stand	ing		FS				
	Cigarette out					CO	) ,	Ashtray p	ersona	l	AP	Fixed to bir	١		FB			
		Acce	ssory (	cigaret	tte)	А	-	Butt bin			ВВ	Fixed to po	le		FP			
	Non-cigarette					N	- 1	Butt recycling bin				Fixed to wall FV						
								Litter bin			LB							
								Butt plate on bin BPB				Bin distan	ce (12)					
								D = = = 1; = =	hin		RB	How far from	hin hafan	o dienoe	-1 (4)			
								Recycling	, DIII		TID	now iai ii oiii	DILI DETOI	e uispus	ai (metres)			
Dispos	sal act	Item	dispos	ed				Demogra		L3)	TID	now far from	DILI DEIOL	e dispos	ai (metres)			
Carrie			<b>dispos</b> rette bu			CE					oup size	Number 1-		e dispos	ai (metres)			
-		Ciga		urning		CE	3 ,	<b>Demogra</b> Age	phics (1 Years	Gr	oup size	Number 1-	- 9					
Carrie away		Cigai Cigai	rette bu	urning ut	tte)		3 ,	<b>Demogra</b> Age	phics (1 Years	Gr mograp	roup size hics colui		- 9 erson v					
Carrie away		Ciga Ciga Acce	rette bu	urning ut cigaret	ite)	CO	E	<b>Demogra</b> Age	phics (1 Years	Gr mograp	roup size hics colui	Number 1-	- 9 erson v					
Carrie away (CA)	ed	Cigal Cigal Acce Non-	rette bu rette ou essory ( cigaret	urning ut cigaret	,	CO A N	3 ,	<b>Demogr</b> a Age Tick <b>√</b> ii	phics (2 Years In the dea	Gr mograp or sui	roup size hics colur veyed i.e	Number 1- nn below if p a conversat	- 9 erson v ion	vas spo	ken to			
Carrie away (CA)	Dispos	Cigal Cigal Acce Non-	rette bu rette ou essory ( cigaret	urning ut cigaret te Item	dispos	CO A N	3 ,	Demogra Age Tick ✔ ii	phics (I Years In the del	Grap or sui	roup size hics colui rveyed i.e	Number 1- mn below if p a conversat	- 9 person wition	vas spo graphio	oken to			
Carrie away (CA)	ed	Cigal Cigal Acce Non-	rette bu rette ou essory ( cigaret	urning ut cigaret	,	CO A N	3 ,	Demogra Age Tick ✔ ii	phics (2 Years In the dea	Grap or sui	roup size hics colur veyed i.e	Number 1- nn below if p a conversat	- 9 erson v ion	vas spo	ken to			
Carrie away (CA)	Dispos	Cigal Cigal Acce Non-	rette bu rette ou essory ( cigaret	urning ut cigaret te Item	dispos	CO A N	3 ,	Demogra Age Tick ✔ ii	phics (I Years In the del	Grap or sui	roup size hics colui rveyed i.e	Number 1- mn below if p a conversat	- 9 person wition	vas spo graphio	oken to			
Carrie away (CA)	Dispos	Cigal Cigal Acce Non-	rette bu rette ou essory ( cigaret	urning ut cigaret te Item	dispos	CO A N	3 ,	Demogra Age Tick ✔ ii	phics (I Years In the del	Grap or sui	roup size hics colui rveyed i.e	Number 1- mn below if p a conversat	- 9 person wition	vas spo graphio	oken to			
Carrie away (CA)	Dispos	Cigal Cigal Acce Non-	rette bu rette ou essory ( cigaret	urning ut cigaret te Item	dispos	CO A N	3 ,	Demogra Age Tick ✔ ii	phics (I Years In the del	Grap or sui	roup size hics colui rveyed i.e	Number 1- mn below if p a conversat	- 9 person wition	vas spo graphio	oken to			
Carrie away (CA)  Obs.  #	Dispos	Cigal Cigal Acce Non-	rette bu rette ou essory ( cigaret	urning ut cigaret te Item	dispos	CO A N	3 ,	Demogra Age Tick ✔ ii	phics (I Years In the del	Grap or sui	roup size hics colui rveyed i.e	Number 1- mn below if p a conversat	- 9 person wition	vas spo graphio	oken to			
Carrie away (CA)  Obs.  #  1  2  3	Dispos	Cigal Cigal Acce Non-	rette bu rette ou essory ( cigaret	urning ut cigaret te Item	dispos	CO A N	3 ,	Demogra Age Tick ✔ ii	phics (I Years In the del	Grap or sui	roup size hics colui rveyed i.e	Number 1- mn below if p a conversat	- 9 person wition	vas spo graphio	oken to			

- 8. Record where littered objects are discarded within the smoking area using the six categories. Items might be littered close to or around bins, or littered away from bins in garden beds, in the gutter or drain leading directly to stormwater and waterways or on the ground, or left on flat raised-above-ground surfaces, or under seating.
- 9. Record how the person disposed of the item. Was it placed on the edge or brim or on the top of the bin (brimming)? Does the person drop the item, and in the case of cigarettes, stomp on it to extinguish it? Do they forget about the item and leave it behind as they leave the smoking area? Is the disposal more flagrant, involving flicking or flinging of the item or is it more discreet, involving trying to hide the disposal action possibly by burying the item or a sneaky act of discarding or dropping the item? Finally, some people dispose of items by jamming or wedging them into small gaps in fixed features of a smoking area like slats between seats.
- 10. When items are disposed into a bin it is important to know what type of bin was used. Generally, the type of bin is obvious such as ashtrays, whereas butt bins can be regular garbage butt bins or a marked butt bin for collecting and recycling cigarette butts (a recycling butt bin). Most smoking areas will have a general litter bin where smokers can dispose of butts while some litter bins have a butt plate fitted for smokers to extinguish their cigarette and place the butt in the litter bin. Occasionally public place recycling bins are present and used as butt bins by smokers who extinguish butts on the edge of the bin (often leaving burn marks) and then put the butt in the recycling bin.

Obs.	Disp	Disposal act Item disposed					Littere	d	Binne	t	Distance	Demog	graphic	cs	
#	L	В	CA	СВ	СО	Α	N	Where	How	Туре	Fixture	From bin	Age	Size	<b>✓</b> Conv
7															
8															
9															
10															
11															
12															
13															
14															
15															
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26															
27	$\leftarrow$														$\longrightarrow$

Summary of impressions (one sentence only)

**Step 1:**Smoking area inspection

**Step 2:**Observing disposals

Step 3:
Butt litter count

Step 4: Survey tips

11. Indicate which type of installation feature is holding up the cigarette butt bin to help understand the impact of butt bins that are free standing, fixed to the side of bins, attached to poles or to walls.

- 12. For all disposal acts the distance to the nearest bin (butt or litter or recycling) is always recorded. If the smoker is standing or sitting very close to the bin or walking through the area up to the bin, then record the bin distance as 0.5 m. All other disposal actions (whether using the bin or littering) must have the distance the person was away from the bin just before starting their disposal actions. The upper limit of 100 m can be used if no bins are present.
- 13. Basic demographic details are recorded to track disposal behaviour in particular areas so that interventions to prevent butt littering can be better tailored. Record if the person was alone or in a group of smokers and indicate the size of that group (i.e. 1 = alone, and size ranges from 2 9).

- **14.** Start observation records by indicating the time when the disposal occurred and insert the codes under each aspect relevant to the disposal actions observed.
- 15. Rule a line across the observations to show the end of a 15-minute session. Sometimes back-to-back sessions can provide a more complete understanding of disposal behaviour. Choosing to do more than one session will help to better understand the factors influencing local butt disposal and improve the quality of information and insights into smokers' actions. Combining records for observation sessions in the same smoking area can create a more complete overall picture.
- 16. After completing the observations write a summary of things that stood out. Record any stories relevant to litter prevention initiatives e.g. the station staff member reflected on how she'd had success when asking commuters not to litter; or the cleaner described how he approached and educated people smoking in non-smoking areas while picking up butts.

17. Note: If the Butt Litter Check is being conducted by one person, complete the observations in Step 2, followed by Step 3 and Step 4.

However, if two people are completing the Butt Litter Check, one person can be talking with some smokers (**Step 3**) and counting the butt litter (**Step 4**) while the other observes disposal actions (**Step 2**).

## Step 3: Butt litter count

You will need to undertake a litter count with a 48-square metre rectangular plot within your smoking area. The litter count space in each smoking area may have a different configuration chosen to best represent the cigarette butt litter.

Spaces to count litter can be configured as:

- 1 m x 48 m
- 2 m x 24 m
- 3 m x 16 m
- 4 m x 12 m
- 6 m x 8 m

The litter count space is only part of each smoking area and knowing how to pace a onemetre stride will enable litter count results to be compared across 48 square metre spaces (accuracy is important).

The 48-square metre butt litter count space should not be the most or least littered part of the smoking area. Ideally the amount of butt litter in the count space should be about the same as the rest of the area. If the area has seats, tables, litter bins and butt bins then try to include them in the count space.

DO NOT touch or pick up the butt litter.

Area type (ti	Area type (tick ✔)			Area name	Date			
Streamlined		Hotspot				/	/	

Item category	Small item tally: Cigarette butts All cigarette butts are considered to be small items – up to thumb size	Total
Cigarette butts	Butts (all small)	
	e.g. ## ## ## ##	
		32

Item category	Small item tally	Sum	Medium item tally	Sum	Large item	Sum	TOTAL
Cigarette accessories	Matches, foil, plastic wrap, lighters		Cigarette packet, cigarette pouch, matchbox		Cigarette carton		
		10		9		7	26

Cigarette items total	Cigarette butts + Cigarette accessories	78
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Step 1:Step 2:Step 3:Step 4:Smoking area inspectionObserving disposalsButt litter countSurvey tips

Start the litter count in one corner of the count area and walk along one boundary then turn around and take a shoulder's width step to the side before walking back counting litter in parallel lines and covering the whole area. With each parallel pass, count litter items that can be seen on the ground directly in front. Counting this way covers the whole area and reduces the chance of double-counting.

- 1. Tick the area type and insert the area name where the litter count is conducted.
- 2. For each piece of litter, place a mark in the Tally column. Tally marks are a quick way to keep track of numbers in groups of five and make addition easier. Tally marks use one vertical line for each of four littered items and then a diagonal line to represent the fifth item e.g. II/II II/II equals 10 items which would be written in the Total column.
- 3. Work down the page to add the total for all item groups to give the overall total and place the total litter items under the related item categories (3).
- 4. Estimate the percentage of each size of litter.

Item category	Small item tally	Sum	Medium item tally	Sum	Large item	Sum	TOTAL
Non-cigarette items All other items	Up to thumb size		Fist size		Bigger		
	######		####		₩		
		15		20		5	40

			Total: All items (3)				
TOTAL: Small items (includes butts)		Medium items		Large items			TOTAL
	35 + 25 = 60	60	10 +20 = 30	30	5 + 5 = 10	10	60 + 40 = 100
Percentage: Small items % All items (4) 60%		Medium items % 30%		Large items % 10%		Total = 100%	

#### Smoking area inspection

## Step 4: Conversations with smokers (survey tips)

- 1. A complete BLC requires at least one conversation with a smoker in each smoking area. If there are no smokers in an area to have a conversation with about butt littering, then reschedule your surveying to come back at another time.
- 2. If the area is quiet you can survey smokers during the other steps of the BLC but remember to try not to alert too many people about the BLC by talking too loudly.
- 3. Note the questions are the same for both types of smoking areas except for Question 2 and 2A that are alternatives to be used when there are bins (litter or butt bins) either present or not present in an area. If there are litter or butt bins in the area then ask all questions except Q2A which is used when NO Bins are in the area. DO NOT ask both options.
- 4. The survey questions seek smokers' views on what is working well and what might be done to address butt litter problems in each area. It is important to understand all views about the area.
- 5. It doesn't matter if the person uses the area every day or if they are using it for the first time.
- 6. You need to be familiar with the questions so it will seem like a conversation rather than reading from the form and reducing your involvement in the conversation. It's okay to make the wording of the questions more conversational rather than having to ask them exactly as written but try not to change the meaning.

- 7. Approach smokers directly and in a positive and friendly tone of voice. Briefly explain that you would like to ask about their views on litter in the area they are in.
- 8. Some smokers in the area will not have the time or interest to do a survey. Try to quickly assess whether the person is interested or is in a hurry, don't push to have a conversation, and try not to irritate or annoy them. You might walk with them while you have the conversation if they are walking away (ask if this is OK to do).
- 9. Be prepared if someone asks:
  - What are you doing?
     Stop and explain you are looking at butt litter in the area and ask them to do a survey.
  - How long it will take?
     Explain that it will only take a few minutes.
  - What are results used for?
     Explain that their ideas will inform a butt
     litter prevention project developed from local feedback.
- 10. Don't spend too much time on any one question or issue, but do allow people time to think before pushing them for a response or moving on to the next issue
- **11.** If the statement is 'Not True' mark it as False, or if the person can't make a judgement put a dash in the empty box to indicate the issuet was covered and not missed

Area Name								
Date (write in)	Area type		Conversation #					
/ /	Streamlined	Hotspot	Enter the number					

In the conversation with smokers ask if they think the statements below are true for the area.

The conversations are all about the smoking area where the survey is conducted. Make sure each aspect of the smoking area is covered in the conversation. Write in T for TRUE or F for FALSE.

Step 1:	Step 2:	Step 3:	Step 4:
Smoking area inspection	Observing disposals	Butt litter count	Survey tips

- 12. After finishing the conversation write down any additional positive comments made by the smoker about the area. Record any ideas about the area itself or anything that the person feels is important in relation to preventing cigarette butt littering. Some people may have relevant stories which shed light on things that have been tried previously which can also be useful.
- 13. When you have finished the conversation check the survey form is completed and count the number of Trues for each of the five features and write the total out of eight and then multiply that total by 12.5 to give a total out of 100.

Clean		True/False	Comments			
1	Most butt litter here seems to be new (recently discarded)					
Bins	and infrastructure	True/False	Comments			
2	There are enough butt bins in this area					
If the	ere are <b>no</b> bins in the area ask <b>Q2A and if</b>	True then enter a T for Qs 2A, 3 and 4. If false insert F for Q2A, 3 and				
2A	Butt bins aren't needed in this area					
3	Butt bins are easy to use					
4	Bins are clean (free of dirt, graffiti, damage)					
5	This area looks cared for (e.g. seats, garden, paths, play areas)					
Info	rmation	True/False	Comments			
6	Litter here is from smokers ignoring signs					
Sur	veillance (visibility of disposals)	True/False	Comments			
7	Smokers here know they can be fined for littering					
Involvement		True/False	Comments			
8	I am proud of how clean this area is today					
Count all the True responses to give the total score (add all True responses)		/8	Multiply total out of 8 by 12.5 to give a score out of 100	/100		

# Developing a Cigarette Butt Litter Project

# Brief council and find other partners and supporters

After you finish your Butt Litter Check you should talk to your council and other stakeholders about your findings, and any ideas you have for a cigarette butt litter prevention project.

Find a suitable person in council who knows about the site e.g. a sustainability or waste officer. You don't need to do a formal presentation, just talk to the person about what you've found and your ideas.

#### Applying for a grant and repeating the Butt Litter Check to measure the success of your litter project

If you are applying for a grant to carry out your litter project, a Butt Litter Check will give you important evidence to use in your application to back up the ideas you have for action.

After you have implemented your actions to try to reduce cigarette butt littering, you will aslo be able to use the Butt Litter Check steps again in your chosen location to measure what difference your actions have made, e.g. on the reduction in cigarette butt littering behaviour, the amount of cigarette butt litter, and on how users feel about the location.



Before



After