Development Services Attachments
Wednesday, 16 November 2016

REPORT NUMBER	REPORT TITLE AND ATTACHMENT DESCRIPTION	PAGE NUMBER(S)
9.1.1	**Proposed shed: 54 Payne Street, Muchea** 1. Proposed Plans 2. Schedule of Submissions 3. Images of streetscape	1 – 4
9.1.2	**Waste and Recycling Tonnages** 1. Chittering Waste and Recycling Census 2015-2016	5 – 33

LUXURY

redink HOMES

BUILDERS REGISTRATION N° 12049
16 FROBISHER STREET,
OSBORNE PARK WA 6017
Phone (08) 9208 1111 Fax (08) 9208 1122

Ref.

BUILDER .....DATE.....
OWNER .....DATE.....
OWNER .....DATE.....

THIS IS ONE OF THE DRAWINGS REFERED TO IN THE CONTRACT :

VARIATIONS:

REV:	DESCRIPTION:	INT:	DATE:
'4'	CONTRACT CORRECTION-HIM	CG	22.04.15
'5'	PSVO 30593 (1-46), VO 30181 (1-7)	AF	07.07.15
'6'	PRESTART CORR	CG	15.07.15
'7'	DA - ADDED 3D VIEW - SP	DD	20/07/15
'8'	ENGINEERS	NW	20.07.15
'9'	VO 31311 (ITEMS 1-50)	NW	14.08.15
'10'	VO 31462 (ITEMS 1-3)	AS	18.08.15
'11'	VO 31552 (ITEMS 1-2)	CG	25.08.15
'12'	VO 31663 (ITEMS 1-9)	AS	04.09.15

CLIENT: BUTTFIELD

SITE ADDRESS: LOT 701 PAYNE STREET MUCHEA WA 6501

SALES: RC | DRAWN: RJ | CHECKED: JL

REVISION N°: 12 | DATE: 4/09/2015 | SCALE: 1:200 | SHEET N°: 03 of 12

JOB N°: 1411026M

LUXURY

SITE PLAN A2

COTTAGE & ENGINEERING SURVEYS

Licensed Surveyors ©

87-89 Guthrie Street, Osborne Park, Western Australia
Telephone: (08) 9446 7361 Facsimile: (08) 9445 2998
Email : perth@cottage.com.au Website: www.cottage.com.au

J/N:	DATE:	SCALE:	DRAWN:
# 357557	03 Dec 14	1:200	C. Weightman

Builder : Redink Homes
CLIENT : BUTTFIELD
LOT 701 Payne Street, Muchea

OLD AREA

D.Plan31627

LEGEND: SEC Dome, Power Pole, Phone, Conc. Path, Conc. slabs

NOTE: EARTHWORKS / SET-OUT DIMENSIONS MAY VARY ON SITE AT BUILDERS DISCRETION. SEWER / DRAINAGE MAY VARY FROM SCHEMATIC PRESENTATION / CHECK MINIMUM CLEARANCES. RETAINING NOT INCLUDED IN CONTRACT - REMAINS OWNERS RESPONSIBILITY. THIS SURVEY DOES NOT GUARANTEE THE LOCATION OF BOUNDARY PEGS OR FENCES. CHECK TITLE FOR EASEMENTS / COVENANTS ETC.

NOTE/BEWARE:ADVISE TRADES O/Head power lines

DISCLAIMER: HIGH TENSION POWER LINES. CHECK TITLE FOR /EASEMENTS AND WESTERN POWER FOR SET-BACKS.

PEG FND NUMB

PEG GONE

Galv. Carport

1.3m Timber Post & Wire Fence (Fair Cond.)

(meas abt 41.65) 41.77

12,181 | 17,490 | 12,100

Tree Ø 0.6m Ht 7m

Tree Ø 0.3m Ht 8m

Tree Ø 0.5m Ht 7m

Tree Ø 0.5m Ht 8m

PROPOSED 160,000L WATER TANK BY OWNER (NOT INCLUDED IN REDINK CONTRACT) SPL @ 9.200

Gravel & Long Grass

Steel Lid

Denotes landscape area of evergreen shrubs

2.75m Setback

Long Grass

IRRIGATION AREA (150MF)

AQUARIUS SEPTIC SYSTEM

SEPTIC TANK BY OWNER

16m X 8m NON EXCAVATION AREA (KEEP SERVICES CLEAR)

Proposed Shed & lean to 9x3m 12x6.5m

1000L x 600W x 50H CONCRETE SLAB GAS HOOD & REG (BOTTLES BY OWNER)

950L x 950W x 50H CONCRETE SLAB REVERSE CYCLE A/C UNIT

PROPOSED RESIDENCE FFL 10.450 SPL 10.365

ALFRESCO PAVED @ -1c

GAS INSTANT HWU

FR TAP

DW TAP

TRIPLE GARAGE GRANO @ -1c

PORTICO PAVED @ -1c

1m WIDE PAVED PATH

PCD ELEC M/BOX (3PHASE)

TREES TO BE REMOVED BY OWNER

Tree Ø 0.1m Ht 3m

PROPOSED 21c HIGH BRICKWALL W/- 14c PIERS BY OWNER AFTER HANDOVER

GATE BY OWNER AFTER HANDOVER

DRIVEWAY BY OWNER

13,202 SETBACK | 13,386 SETBACK | 12,920 SETBACK | 12,600 SETBACK | 12,100 SETBACK | 10,000 SETBACK

82.08 | 23,592 | 39,113 | 88.66 | 23,590 | 39,112

Brick & Galv. on Slab

1.3m Timber Post & Wire Fence (Fair Cond.)

Gate

Closest Wire To Boundary (High Tension)

Crossover Opp.

Power pole (High tension)

No Kerb

Archibald Street Bitumen

SITE CLASSIFICATION : A
FOOTING DETAIL : D10
WIND CATEGORY : N1
COASTAL CONDITIONS : NO

STORMWATER NOTE: STORMWATER DISPOSAL BY OWNER TO COUNCIL REQUIREMENTS

TERMITE TREATMENT NOTE: TERMITE TREATMENT IS TO BE THE HANDSPRAYING OF BIFENTHRIN IN ACCORDANCE WITH AS 3660.1

OVERSHADOW NOTE: NO OVERSHADOW TO NEIGHBOURING PROPERTY OCCURS AT MIDDAY 21ST JUNE

SEPTIC NOTE: DEPTH OF PLUMBING TO OWNER SUPPLIED AND INSTALLED SEPTIC SYSTEM NOT TO EXCEED 850mm DEEP TO TANK LOCATION

DISCLAIMER: Lot boundaries drawn on survey are based on landgate plan only. Survey does not include title search and as such may not show easements or other interests not shown on plan. Title should be checked to verify all lot details and for any easements or other interests which may effect building on the property.

DISCLAIMER: Survey does not include verification of cadastral boundaries. All features and levels shown are based on orientation to existing pegs and fences only which may not be on correct cadastral alingment. Any designs based or dependent on the location of existing features should have those features' location verified in relation to the true boundary.

DISCLAIMER: Survey shows visible features only and will not show locations of underground pipes or conduits for internal or mains services. Verification of the location of all internal and mains services should be confirmed prior to finalisation of any design work.

DISCLAIMER: Cottage & Engineering surveys accept no responsibility for any physical on site changes to the parcel or portion of the parcel of land shown on this survey including any adjoining neighbours levels and features that have occurred after the date on this survey. All Sewer details plotted from information supplied by Water Corporation.

Tree Ø 0.4m Ht 4m

Tree Ø 0.5m Ht 6m

Tree Ø 0.4m Ht 5m

Tree Ø 0.2m Ht 5m

TREES TO BE REMOVED BY OWNER

ACCESS TRACK BY OWNER

22,500 SETBACK | 22,702 SETBACK | T.B.A.

19,375

1.3m Timber Post & Wire Fence (Fair Cond.)

25,958

PEG FND NUMB

M/Box

Power pole (High tension)

CROSSOVER & KERBING BY OWNER TO COUNCIL REQUIREMENTS

Small Bushes & Long Grass

(meas abt 37.33) 37.8

Closest Wire To Boundary (High Tension)

PEG GONE

Power pole (High tension)

Ref Nail centreline of road assumed datum 10.00 m

13,915 | 18,373 | 5,512

Payne Street Bitumen

Stay pole

DISCLAIMER: HIGH TENSION POWER LINES. CHECK TITLE FOR EASEMENTS AND WESTERN POWER FOR SET-BACKS.

NOTE/BEWARE:ADVISE TRADES O/Head power lines

HIGH TENSION POWER LINES. CHECK TITLE FOR EASEMENTS AND WESTERN POWER FOR SET-BACKS.

BEWARE: POSSIBLE SERVICE RUN IN & COST

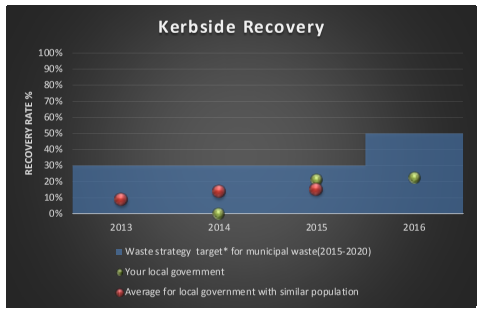
STANDARD UPDATE = 141116 DD

Agency Submissions			
Submitter	**Comment**	**Proponent Response**	**Shire Officer Response**
N/A			
Public Submissions			
Public A **Oppose**	I would suggest that Archibald Street is a main street and not as suggested in your letter as a secondary street. I feel that 7.5mt is a fair requirement for a one acre block in a semi rural area, but as a neighbourly gesture I would agree to a 4mt setback as the 12.5 x 9.5 shed is a large shed. 1.5mt is too close to the road. Hopefully they would plant shrubbery between the shed and fence.	Differing orientation of properties whereby our house faces Payne Street and therefore Archibald is our secondary street. Correction to shed length of 12m. Our property is less than one acre at ~3742sqm. Existing rain tank, ATU, ATU irrigation field, shade house, planted fruit trees and the requirement to complete extensive batter works to the side and rear of the house following shire requirement for a FFL of 10.45m to the primary residence leaves a reduced workable area for shed placement. Planning application lodged for 1.5m setback based on earlier discussion with shire development services. The presence of Telstra exchange equipment (800mm from our boundary) and power poles for overhead lines also limits option for shed placement and orientation. The intention is to plant suitable plants to the entire length of the Archibald Street boundary including alongside the shed softening the appearance. Possible to install a colorbond fence on boundary however I suspect 45 metres of fencing would be more aesthetically displeasing than 12 metres of shed. Extensive vegetation to the front of Public A respondent property would already make the visual impact minimal. Refer to attachment “Public A Side View.jpeg”. Public A respondent is a nearby resident, separated by road and not an adjoining neighbour. Public A respondent is a direct relation to Public B respondent and consideration should be given to this and the similarities with their response.	The existing home is oriented towards Payne Street. Furthermore access to the property is via Payne Street. Therefore this is classed as the property’s ‘main street’. ‘Secondary streets’ do not relate to the importance of the road. 7.5m is the minimum setback prescribed by the Residential Design Codes (R-Codes) ‘deemed-to-comply’ standards. This setback may be varied in accordance with the R-Codes and at the discretion of the Shire. As stated above, the Shire is able to give discretion to allow for a minimum boundary setback of 1.5m as per the R-Codes. This is not a relevant consideration available to the Shire. The Shire must have due regard to the design principles outlined within the R-Codes. Noted. Consideration must be given the streetscape; not the view from private property. Neighbouring properties in close proximity to the proposed shed and therefore deemed to be somewhat affected by the proposal were contacted by the Shire. Each application is assessed upon merits, not number of submissions.
Public B **Oppose**	I’m opposed to the 1.5m setback, the shed would become a dominant part of my front landscape view, but I would support a 4m setback to allow the space to play any shrubs and or trees to act as a visual block if it was needed. Also there has been graffiti targeted on the Telstra exchange boxes alongside the proposed shed boundary in that location, also having the 4m setback would again help to deterrent this behaviour to have out of arms reach of	Property of Public B responder is more aligned with the rear of our property where we have recently planted approximately 12 fruit trees that will establish and grow over time. Refer attachment “Public B Side View.jpeg”. The intention is to plant suitable plants to the entire length of the Archibald Street boundary including alongside the shed softening the	As mentioned above, the Shire is able to give discretion to reduce the setback it deems it necessary. Noted.

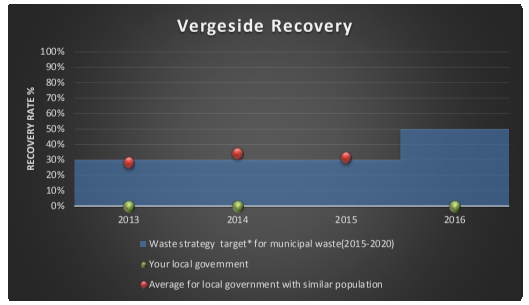
	any graffiti.	appearance. Attachment "Google Earth.jpeg" shows alignment of driveway and also a similar shed structure that sits very close to the boundary of Public B Responder and Public A Responder's properties. Public B respondent is a nearby resident, separated by road and not an adjoining neighbour. Public B respondent is a direct relation to Public A respondent and consideration should be given to this and the similarities with their response.	Precedent is not a relevant consideration under the R-Codes. However, the streetscape impact is required to be assessed Neighbouring properties in close proximity to the proposed shed and therefore deemed to be somewhat affected by the proposal were contacted by the Shire. Noted.

*Note: Comments are as per original submission received by the Shire. Submission comments have not been edited unless for the purposes of confidentiality where necessary.

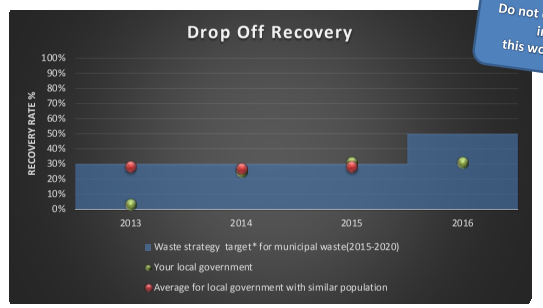
Charting your local government's waste recovery performance



Kerbside recovery rates, for your local government, average of similar local governments and waste strategy targets



Vergeside recovery rates, for your local government, average of similar local governments and waste strategy targets



Do not enter data into this worksheet

Recovery rates for all services, for your local government, average of similar local governments and waste strategy targets

Kerbside recovery rate

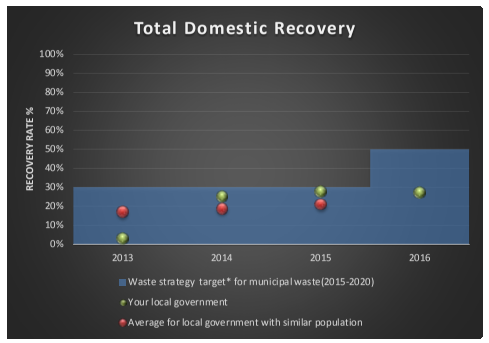
Kerbside recovery rates:	2013	2014	2015	2016
Your local government		0%	21%	22%
Average for local government with similar population	9%	14%	15%	
Waste strategy target* for municipal waste(2015-2020)	30%	30%	30%	50%

Vergeside recovery rate

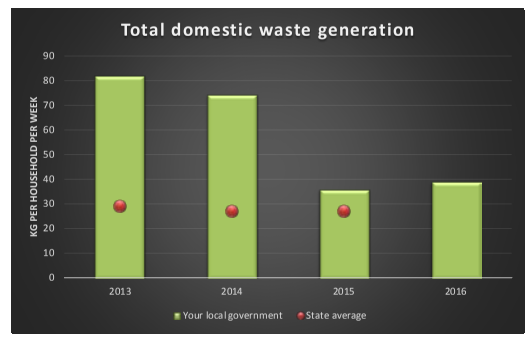
Vergeside recovery rates:	2013	2014	2015	2016
Your local government	0%	0%		#DIV/0!
Average for local government with similar population	28%	34%	31%	
Waste strategy target* for municipal waste(2015-2020)	30%	30%	30%	50%

Drop-off recovery rate

Total recovery rates:	2013	2014	2015	2016
Your local government	3%	25%	31%	31%
Average for local government with similar population	28%	27%	28%	
Waste strategy target* for municipal waste(2015-2020)	30%	30%	30%	50%



Recovery rates for all services, for your local government, average of similar local governments and waste strategy targets



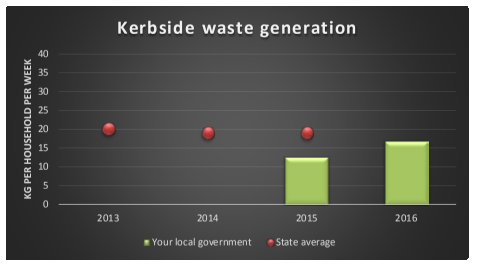
Total waste generation per household compared against the state average

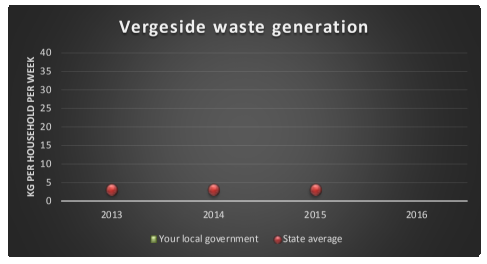
Recovery rate for all services

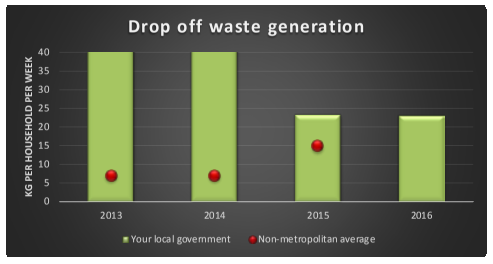
Total recovery rates:	2013	2014	2015	2016
Your local government	3%	25%	28%	27%
Average for local government with similar population	17%	19%	21%	
Waste strategy target* for municipal waste(2015-2020)	30%	30%	30%	50%

Total waste generation per household

Waste per household per week (kg):	2013	2014	2015	2016
Your local government	82	74	36	39
State average	29	27	27	







Kerbside waste generation per household

Waste per household per week (kg):	2013	2014	2015	2016
Your local government	0	0	13	17
State average	20	19	19	

Vergeside waste generation per household

Waste per household annual (kg):	2013	2014	2015	2016
Your local government	0	0		#DIV/0!
State average	3	3	3	

Drop off waste generation per household

Waste per household per week (kg):	2013	2014	2015	2016
Your local government	82	74	23	23
Non-metropolitan average	7	7	15	

Recovery Rate Notes:

***Waste Strategy targets**
Only applicable to metropolitan local governments and major regional centres

Kerbside Recovery Rates
Sum of all waste recovered divided by all waste collected as reported in ***Section B1*** *of the Census*

Vergeside recovery rate
Sum of all waste recovered divided by all waste collected as reported in ***Section B3*** *of the Census*

Recovery rate all services
Sum of all waste recovered divided by all waste collected as reported in ***Sections B1, B3, B4 and B5*** *of the Census*

Averages
LG groups allocated as:

Group	Population
A	Metropolitan
MRC	Major regional centres
B	Non-metropolitan cities (>20,000)
C	Non-metropolitan 2,500 - 20,000
D	Non-metropolitan <2,500

Averages calculated using data from local governments that provide related service and weighted by tonnes collected.

Waste Generation Notes:

Kerbside waste generation per household (weekly)
Sum of all waste collected (kg) divided by the maximum households receiving kerbside services (maximum %HH x households) divided by 52, as reported to ***Section B1*** *of the census*

Vergeside waste generation per household (annual)
Sum of all waste collected (kg) divided by the maximum households receiving vergeside services (maximum %HH x households), as reported to ***Section B3*** *of the census*

Total waste generation per household (weekly)
Sum of all waste collected (kg) divided by the number of households divided by 52, as reported to ***Sections B1,B3,B4 & B5*** *of the census*

Drop off waste per household (weekly)
Sum of all waste collected (kg) divided by number of households, divided by 52 as reported to ***Section B4*** *of the census*

State averages
State averages calculated as an average weighted for population using data from local governments offering related services

Metropolitan & non-metropolitan averages
Used for drop-off waste generation, only 2015 onwards. Prior years refer to State averages.

Population Notes:

The number of households in your local government area have been obtained from the Western Australia Tomorrow, Population Report No. 8, 2006 to 2026, Band C population projections.
The report is available at: www.planning.wa.gov.au/publications/6194.asp
The number of households from the above report have been used to calculate waste generation per year for 2013, 2014 & 2015.
Current year waste generation rates are calculated from the number of households recorded in the SUMMARY worksheet, cell D9.

Summary of your local government's waste management indicators 2015-16

Please do not fill in this sheet. The values of the indicators applicable to your local government (2nd column) will automatically be calculated using the information that you will supply in this census. ONLY the number of households and commercial premises may be edited. Proceed to Section A.

INDICATOR	CALCULATED VALUE	Unit
W&R SERVICES FOR DOMESTIC PREMISES		
Number of households in local government	2,300	households
% households provided with waste & recycling services at premise	95%	%
Waste per person	15	kg per week
Waste per household	39	kg per week
Recovery rate	27%	%
Annual cost of providing waste & recycling collection services to households	$579	per household
Annual charge for providing waste & recycling services to households	$310	per household
Annual cost of household recycling service	$110	per household
Annual charge for household recycling service	$140	per household
W&R SERVICES FOR COMMERCIAL PREMISES		
Number of commercial premises provided with waste & recycling services	0	
Cost of providing waste collection services to commercial premises	#DIV/0!	per commercial premise (annual)
Charge for most commonly provided waste collection services	$0	
Cost of collecting recyclables from commercial premises	#DIV/0!	per commercial premise (annual)
Charge for most commonly provided recycling service	$0	
ALL W&R SERVICES - includes domestic, commercial and council waste collections		
Total waste collected	6296	Tonnes
Total waste recovered	1576	Tonnes
Recovery rate	25%	%

Section A - Participant's Details

	Response
First Name	Glenn
Family Name	Sargeson
Position title	Principal Environmental Health Officer
Organisation	Shire of Chittering
Email address	eho@chittering.wa.gov.au
Direct contact phone number	9576 4600
Do you authorise the release of information you provide in this Census to the Western Australian Local Government Association (WALGA)?	Yes
Do you authorise the release of the information you provide in this Census to the Forum of Regional Councils (FORC)?	Yes

Section B1 - Domestic kerbside collection services

Domestic kerbside services are containerised, regular services where waste or recycling are collected from the kerb in front of the residence.

CLICK HERE TO VIEW PHOTOS OF THIS SERVICE.

	Kerbside waste (garbage) collection		Kerbside collection of recyclable materials				Comments / additional information
	Mixed waste collected and transported directly to landfill or transported to landfill via a transfer station	Mixed waste collected and processed in an AWT (or Resource Recovery Facility)	Co-mingled dry recycling	Green waste collection	Recycling - containers only	Recycling - paper & cardboard only	
Does your local government provide this service to your residents?	Yes		Yes	No			
If so, is the service run in-house or outsourced to a contractor?	Avon Waste		Avon Waste				
Percentage of households in the LGA that receive this service (%)	95%		95%				
Resident participation rate (%)	80%		80%				
Type of container	MGB		MGB				
Size of container	240L		240L				
Colour of container	dark green or black with red lid		dark green or black with yellow lid				
Frequency of collection	Weekly		Fortnightly				
Tonnes collected at kerbside for this service in 2015-16	1,402		521				
Tonnes disposed to landfill from this service in 2015-16	1,402		93				
Tonnes recycled in 2015-16	-	-	428	-	-	-	

Section B2 - Other kerbside services

	Other service 1	Other service 2	Other service 3	Comments/ additional information
Does your local government provide OTHER regular kerbside (*note: containerised)* collection services such as for car batteries, waste oil, fluorescent tubes, etc?				

Section B3 - Domestic vergeside collection services

CLICK HERE TO VIEW PHOTOS OF THIS SERVICE

Vergeside collection services are intermittent collection services, such as green waste and "hard waste" collections. They are typically non-containerised services but bulk bins may also be used for vergeside collections. "Hard waste" is bulky household items such as furniture, mattresses and whitegoods.

	Domestic green waste vergeside collection services	Domestic hard waste vergeside collection services	Comments /additional information
Does your local government provide this service to your residents?	No	No	
If so, is the service run in-house or outsourced to a contractor?			
Percentage of households in the LGA that receive this service (%)			
Frequency of service			
Tonnes collected from verges for this service during 2015-16			
Tonnes disposed to landfill from this service during 2015-16			
Tonnes recycled in 2015-16	-	-	

Section B4 - Domestic Drop-off Services

CLICK HERE TO VIEW PHOTOS OF THIS SERVICE

Waste that is self hauled by householders to facilities such as transfer stations, landfills, recycling depots that are ***operated by your local government*** *. Include householder waste transported by cars, utes and trailers* ***BUT not*** *trucks.*

	Domestic waste drop-off services	Domestic recycling drop-off services			
	Mixed waste drop-off facilities	Dry recyclables Drop-off (includes paper/ cardboard, packaging containers)	Green waste drop-off	Hard waste or bulk rubbish drop-off (includes "junk shop" materials)	Comments / additional information
Number of drop-off facilities operated by the local government	2	2	2	2	
Tonnes collected for this service in 2015-16	1,970	244	305	250	All greenwaste is mulched and used on site. All white
Tonnes disposed to landfill from this service for 2015-16	1,870	1	10	40	
Tonnes recycled in 2015-16	100	243	295	210	

Section B5 - Public Place and Special Events

CLICK HERE TO VIEW PHOTOS OF THIS SERVICE

Public Place services are permanent bins in public places, such as street litter bins and bins in public parks. Special event services are temporary bins that are put in place for events, such as bins for a festival or extra bins brought in for a sporting event.

	Public Place		Special Events		
	Waste (Garbage)	Recycling	Waste (Garbage)	Recycling	Comments / additional information
Does the local government provide this service? (either in-house or through a contractor)	No	No	Yes	Yes	
Tonnes collected for this service in 2015-16	2		1	1	
Tonnes disposed to landfill from this service in 2015-16	2		1	1	Contaminated bins
Tonnes recycled in 2015-16	-	-	-	-	

Section C - Materials recycled from ALL domestic services in 2015-16

Enter amount (in tonnes) recycled in each service column

Volume to weight conversion factors for various materials are available here Conversion Factors

Tonnages here should exclude contaminants/residuals. Generally, the sub-total for each type of service should not be more than recycling tonnes reported in Section B (shown at bottom of table).

	Tonnes recycled					
Material type	**Kerbside**	**Vergeside**	**Drop-off**	**Public Place & Special Events**	**TOTAL**	**Comments / additional information**
Paper and cardboard	217		69		286	Kerbside information from Avon Waste
Glass	157		120		277	Drop-off Glass stockpiled.
Plastics	31		1		32	Drop off recyclabels reduced by 10 tonnes mainly plastics going to landfill.
Aluminium packaging (cans)	14		23		37	
Aluminium non-packaging			1		1	
Steel packaging (cans)	9		22		31	
Steel non-packaging			200		200	Light guage metal taken by Sims.
Other metals (copper, etc)			1		1	
Organics from mixed municipal waste					-	
Green waste			295		295	
Wood / timber					-	
Mattresses			2		2	
Textiles					-	
Tyres / rubber					-	
E-waste			6		6	Stockpiled awaiting collection
Waste oil			4		4	
Batteries			3		3	
Household Hazardous Waste					-	
Other - please specify					-	
Sub-total	428	-	747	-	1,175	
Total recycled from Section B	*428*	-	*848*	-		

Section D - Waste composition data

	Response	Comments / additional information
Was a waste composition audit undertaken in this local government area in 2015-16	No	

If "Yes", please provide a copy of the results to the Waste Authority with this form.

Section E - Annual cost and charges for collection / processing / disposal of domestic material ($)

Section E1 - Annual cost of collection / processing / disposal ($/Yr) 2015-16

Please enter <u>either</u> cost per service <u>or</u> total amounts, depending on the information available in your local government

Collection Service	Cost ($/yr)					Comments / additional information
	Kerbside	Vergeside	Drop-off	Public Place	TOTAL	
Waste / garbage (includes AWT or RRF)	$560,061		$502,512	$16,489	$ 1,079,062.00	
Recycling	$249,279			$4,256	$ 253,535.00	
Hard waste / bulk rubbish					$ -	
Green waste					$ -	
Sub-total	$ 809,340.00	$ -	$ 502,512.00	$ 20,745.00		

Do not fill this table	
CHECK	
total by waste type	$ 1,332,597.00
total by waste service	$ 1,332,597.00
total direct entry	$ 1,332,597.00
All totals should be equal; otherwise, check your cost entries.	

Section E2 - Charges for domestic services ($/yr)

Collection Service	Charge	Unit	Comments / additional information
Kerbside & vergeside <u>waste</u> collection per residence	$ 170	$ per year	
Kerbside & vergeside <u>recycling</u> collection (if separate) per residence	$ 140	$ per year	

Collection Service	Charge	Unit	Comments / additional information
Drop-off <u>waste</u> collection	45		
Drop-off <u>recycling</u> collection	0		

Section F: Services to commercial premises provided by this local government

This includes services that the local government contracts private companies to provide to commercial premises on its behalf.

Section F1: Types of commercial services

	Waste (Garbage) services	Mixed recycling services	Paper & Cardboard only	Other	Comments / extra information
Does your local government offer this service to commercial premises in its LGA?	No	No	No		Commercial premises to make their own arrangements with contractors.
Is the service provided in-house or outsourced to a contractor?					
Number of premises receiving this service					
Types of containers (if more than one type, please list)					
Frequency of collection (if more than one frequency, please list)					
Tonnes collected from commercial premises for this service during 2015-16					
Tonnes disposed to landfill from commercial premises for this service during 2015-16					
Tonnes recycled in 2015-16	0	0	0	0	

Section F2: Costs and charges for commercial services

Costs

	Waste (Garbage) services	Recycling services	Comments / extra information
Total annual cost to local government of providing commercial service ($/yr)			

Services charges

Most commonly provided bin size			
Charge for most common bin size ($)			
Units used for charge			

Section G1 - General

		Response	Comments / extra information
G1	Was any new waste or recycling infrastructure built in your local government area in 2015-16?	No	
G2	Does your local government recycle C&D waste from its own operations (including road upgrades)?	Yes	
G3	Does your local government recycle green waste from its own operations?	Yes	
G4	Does your local government have a Sustainable Purchasing Policy or a Green Purchasing Policy?	Yes	
G5	How much (in AU$) did your local government spend on waste and recycling education programs in 2015-16?	$ -	

Section G2 - Data accuracy and general feedback

		Response	Comments / extra information
G6	Did you or your colleagues have any difficulties or concerns with completing any particular section/s of the Census?	No	
G7	Rate your confidence in the general accuracy of the data you provided to the Census Click here for futher guidance on the confidence scale	3	
G8	How long did it take you to complete Sections B to G1 of the Census?	more than 1 day	
G9	Do you have any further feedback about the Census?		

Section H - Littering and Illegal Dumping

This information is provided to the Keep Australia Beautiful Council.

		Response	Comments / additional information
H1	How many infringement notices were issued in the 2015-16 financial year for littering	1	
H2	How many infringement notices were issued in the 2015-16financial year for illegal dumping	1	
H3	Did your local government commence court proceedings against anyone for illegal dumping in 2015-16?	No	
H4	What were the estimated costs of cleaning up illegally dumped material in your LGA during 2015-16? ($)	2000	
H5	Does your local government have any programs in place aimed at preventing illegal dumping? If so, please provide a brief summary.	Yes	Hidden cameras, signage, surveillance by outside work force and inspection staff eg rangers, EHO. Shire Facebook reporting.
H6	Does your local government have any programs in place aimed at preventing littering? If so, please provide a brief summary.	Yes	Littering signs placed in strategic locations.
H7	Does your local government use CCTV to record and prosecute littering and/or illegal dumping? If so, how many infringements / prosecutions have resulted from the evidence?	Yes	No prosecutions as the cctv did not show any illegal dumping or littering.

OPTIONAL

Section I - Local government waste & recycling services

Does your Local Government keep a record of how much waste it collects through its own activities, such as street sweepings, road works, roadside prunnings and park maintenance?
These activities can be reported here and will be included in an overview of all waste activities performed by your local government in the summary worksheet.

Please combine tonnes if waste is collected from more than 4 service types.

	Service 1	Service 2	Service 3	Service 4	Comments/ extra information
Service description	parks & gardens				
Tonnes collected from this service in 2015-16	1,600				
Tonnes disposed to landfill from this service in 2015-16	1,300				Greenwaste recycled
Tonnes recycled in 2015-16	300	-	-	-	

Frequently asked questions about the census

General questions about the Census

What is the purpose of completing the Census?

What does the Waste Authority do with the information?

What are the benefits in collecting the data for my local government?

Who should complete the Census?

Where can I obtain the information I need to complete the Census?

Why can't information submitted for quarterly reporting under the Waste Levy be used to complete the Census?

Data reporting to government is onerous, why are various requirements not merged?

What can I do if I do not understand some of the terms used?

Do I need to complete all the boxes in the worksheets?

What is the average weight of waste in a green topped, domestic, 240L bin?

Our local government does not send waste / recyclables to a facility that has a weighbridge, how do we handle data in cubic metres or number of skips/loads?

Questions about managing data from several waste services

Our local government provides kerbside, vergeside and drop-off facilities

Our drop-off facilities / landfills are unmanned and waste disposed is not recorded. We **do not** provide kerbside or vergeside collection services, how do I fill out data for drop-off / landfill in this case?

Our drop-off facilities and/or landfills are unmanned and waste disposed is not recorded. We **do** provide kerbside or vergeside collection services and waste is disposed of to the drop-off / landfill sites, how do I fill out data for drop-off / landfill

Questions about handling data from a mixture of domestic and commercial services

Why should my local government know the number of bins provided to householders & commercial premises?

Our waste contractor / in-house collection services only provides one quantity for all waste collected. How can I breakdown (estimate) this figure into waste collected from commercial premises and waste collected from households?

Questions about public place and / or special event services

Our waste contractor / in-house collection services only provide one quantity for all waste collected. How can I breakdown (estimate) this figure into waste collected from public place bins or special event bins and waste collected from households?

Questions about estimating material streams within the recyclables

Our local government does not receive a breakdown of tonnes of materials recycled?

Questions about cost data

Where can I find information about costs and charges ?

Contact

Please email enquiries about the census to waste.data@DER.wa.gov.au

General questions about the Census

What is the purpose of completing the Census?

A To collect quality data in a consistent format for reporting, identifications of trends, opportunities and risks for local and state governments

A To identify and track issues and priorities to inform policy, programs, funding resources

A To measure progress against your local government waste management objectives and targets, and KPIs outlined in the WA Waste Strategy

What does the Waste Authority do with the information?

A Data is used to identify trends, issues and opportunities

A Data is used to inform policy, develop programs and fund initiatives

A Data is collated and reported on behalf of local governments to other agencies including State and Australia Governments (e.g. Survey of WA Recycling Activity, NEPM Used Packaging Materials, Household Hazardous Waste program, National Litter Index, National Greenhouse and Energy Reporting Scheme (NGERS))

What are the benefits in collecting the data for my local government?

A Enables access to funding from the WARR Account

A Enables measurement of progress ainst your local government waste management objectives and targets

A Facilitates development of business cases for receipt of funding (internal and external) for waste and recycling initiatives, plant and equipment, infrastructure

A Identifies areas for improvement / change / cost savings to operational activities

Who should complete the Census?

A Ideally, the Census should be completed by a local government officer who has the task of completing the Census included in their job description.

A However, the Census could be completed by a dedicated Waste Officer, Environmental Health Officer, Administrator, Accounts Officer, member of Engineering / Works / Waste Services or a combination of staff members (depends on who holds the relevant information)

Where can I obtain the information I need to complete the census?

http://www.wasteauthority.wa.gov.au/programs/data/where-to-find-waste-and-recycling-data/

Why can't information submitted to quarterly reporting under the Waste Levy be used to complete the Census?

A The Waste Levy data is a 'subset' of data required for the Census, only data on solid waste to landfill from the metropolitan area is reported

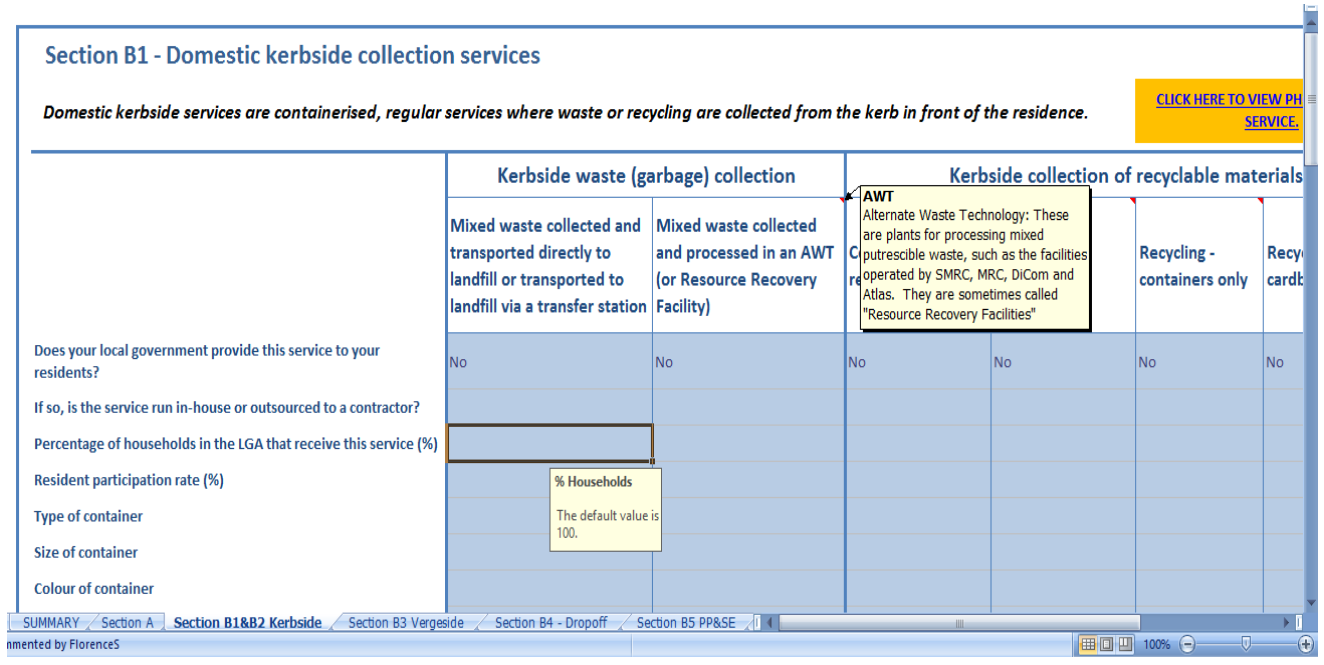
Data reporting to government is onerous, why are various requirements not merged?

A Some data reporting requirements have been merged including those required including national reporting requirements under the NEPM-UPM legislation, reporting to Keep Australia Beautiful Council and WALGA's waste and recycling data requirements.

What can I do if I do not understand some of the terms used?

A The final worksheet is a 'Glossary' and explains terms used in the Census

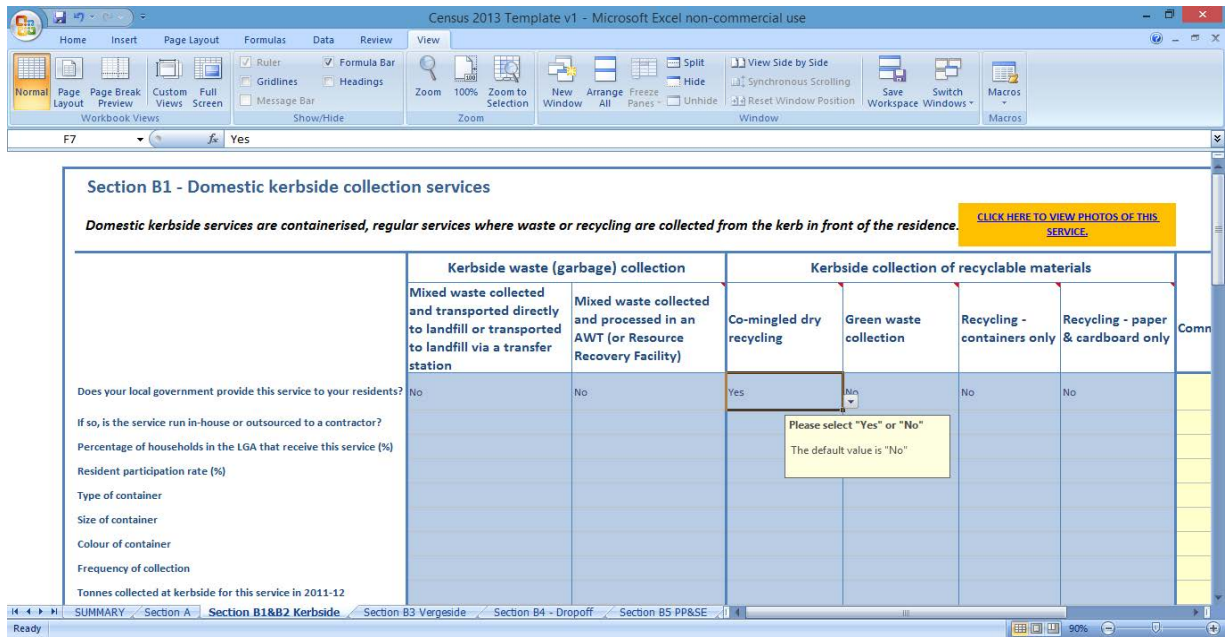
A Cells where there is a red triangle visible in the corner indicates that an explanatory comment has been inserted (refer to below example)



Do I need to complete all the boxes in the worksheets?

A No, only complete information relevant to services provided by your local government

A For example, if your local government provides only "Co-mingled dry recycling" then complete only this box and no others under 'Kerbside collection of recyclable materials'



Our local government does not send waste / recyclables to a facility that has a weighbridge, how do we handle data in cubic metres or number of skips/loads?

A Conversion factors are provided on the worksheets 'Conversion Factors 1' and Conversion Factors 2' that can be used to convert volumes to tonnes for materials

A Alternatively, in-house volumetric to weight conversion factors can be used if these are likely to be more accurate for your waste streams

What is the average weight of waste in a green topped, domestic, 240L bin?

A Recent audits show the average weekly weight of waste collected in a green topped, domestic 240L bin is around 14kg

A Data from waste audits conducted in your local government should be used as a more specific and localised average weight where available

Questions about managing data from several waste services

Our local government provides kerbside, vergeside and drop-off facilities

A Each Census worksheet pertaining to services provided by local governments must be completed

A Data needs to be reported separately so as to avoid duplication

Our drop-off facilities / landfills are unmanned and waste disposed is not recorded. We do not provide kerbside or vergeside collection services, how do I fill out data for drop-off / landfill in this case?

A Data can be estimated from information contained in waste audits conducted and based on population

A Data can be estimated from landfill surveys

A Data can be estimated from sizing of landfill trenches and estimated capacity remaining

Our drop-off facilities and/or landfills are unmanned and waste disposed of is not recorded. We do provide kerbside or vergeside collection services and waste is disposed of to the drop-off / landfill sites, how do I fill out data for drop-off / landfill in this case?

A Data for kerbside / vergeside could be completed based on most accurate data recording system available eg. weighbridge tonnages, contractor records, estimation based on number of bin lifts and residents, estimation based on waste audit data and population

A Data for drop-off facilities / landfill could be estimated based on an average (possibly estimated) amount of waste per drop-off and the number of visits to the facility

A Note that it is very important to be clear about any assumptions made when estimating information in this way and to record all assumptions and methods carefully for transparency and to enable year on year comparisons

Questions about handling data from a mixture of domestic and commercial services

Why should my local government know the number of bins provided to householders & commercial premises?

A To calculate waste disposed of by residents and commercial premises

A To accurately reflect the cost of providing waste and recycling services to both residential and commercial customers

A To ensure services provided by contractors and invoicing is accurate and reflective of service being carried out

Our waste contractor / in-house collection service only provides one quantity for all waste collected. How can I breakdown (estimate) this figure into waste collected from commercial premises and waste collected from households?

A Only report waste collected from households in Section B1&2 of the Census and report waste collected from commercial premises in Section F

A Your local government has records (generally from Accounts) of how many bins are provided to domestic premises and how many are provided to commercial premises

A Estimation of household and commercial waste can be calculated based on the number of bins provided and assumed weight of bins (refer to example calculations below). Note that this assumes all bins are collected at the same frequency (e.g. weekly). If, for instance, commercial bins are collected twice weekly, multiply the commercial capacity by the number of collections per week (e.g. capacity x 2 in this example).

A Your waste contractor (who will have as part of their contract documentation the number of bins at commercial & domestic premises) can also provide this estimation

Example method of estimating waste collected from commercial premises

	Number of Bins		Total Capacity m³ (capacity x bins)		Total (domestic & commercial)
Bin Capacity (m³)	**Domestic**	**Commercial**	**Domestic**	**Commercial**	**Bin capacity x number of bins**
4.5	-	50	-	225	225
3	-	100	-	300	300
1.5	-	50	-	75	75
0.24 (240 L)	59,000	1,000	14,160	240	15,000
Total Capacity			**14,160**	**840**	**15,000 m³**
Estimated Service Proportion			(14,160 ÷ 15,000) x 100 94%	(840 ÷ 15,000) x 100 6%	

Total waste collected (tonnes per annum)			**51,126 tonne p.a.**
Calculation	0.94 x 51,126	0.06 x 51,126	
Estimated waste collected (For reporting to Annual Census)	**48,263 t p.a.**	**2,863 t p.a.**	

Questions about public place and / or special event services

Our waste contractor / in-house collection services only provide one quantity for all waste collected. How can I breakdown (estimate) this figure into waste collected from public place bins or special event bins and waste collected from households?

A Only report waste collected from households in Section B1&2 of the Census and report waste collected from public place and special events in Section B5

A Your local government has records (generally from Accounts) of how many bins are provided to domestic premises

A Your local government has records (generally from Engineering/Waste/Works/Parks & Services or Accounts) of the number and type of public place and / or special event bins

A Estimation of household and public place or special event bins waste can be calculated based on the number of bins provided and assumed weight of bins (refer to example calculations below)

A Your waste contractor (who will have as part of their contract documentation the number of bins at domestic premises, special events or public place recycling) can also provide this estimation

Example Method 1 of estimating waste collected from public place bins

a		Number of public place bins	50
b		Estimated average weight per bin (tonnes)	0.015
c		Number of times collected per year	52
d	a x b x c	**Estimated total tonnes collected from PP service**	**39**

Example Method 2 of estimating waste collected from public place bins (if all bins are the same size on a given collection round)

a		Number of PP bins	50
b		Number of time serviced per week	2
c	a x b	Total number of PP bin services per week	100
d		Total number of ALL services per week	1000
e	(c ÷ d) x 100	% PP bin Services	10%
f		Total of all waste collected from run	5000
g	f x e	**Estimated total tonnes collected from PP service**	**500**

Questions about estimating material streams within the recyclables

Our local government does not receive a breakdown of tonnes of materials recycled?

A This data can be requested from the disposal facility (note: data will likely be provided based on a percentage calculation of tonnages disposed of and overall tonnages of a particular material recycled from the facility)

A Data can be requested from your waste contractor (if relevant) as the waste contractor will be invoiced / reimbursed for recyclables disposed of inclusive of contamination / residuals sent to landfill

Questions about cost data

Where can I find information about costs and charge?

A Your local government's Accounts section will have information about waste and recycling costs and charges

Conversion factors

The factors below are for uncompacted materials, unless specified otherwise. If factors other than those listed here are used, please indicate factor and reference under the Comments column.

Converting volume to weight:

To calculate tonnes from m3, multiply the conversion factor by the volume (in m3).

Material	Tonnes per m^3	Comments
Aluminium cans - whole	0.026	
Aluminium cans - flattened	0.087	
Aluminium cans - baled	0.154	
Car Batteries	0.375	1 car battery= 5 kg 75 car batteries = 1 m^3
Carpets (uncompacted)	0.3	
Cement sheet (uncompacted)	0.5	
Ceramics (uncompacted)	1	
Cobbles/boulders	1.4	
Co-mingled containers (uncompacted plastic, glass, steel and aluminium cans)	0.063	
Garden/vegetation (uncompacted)	0.15	
Glass bottles - whole	0.174	
Glass bottles - semi-crushed	0.347	
Greenwaste processed	0.3	
Greenwaste unprocessed	0.15	
Greenwaste unprocessed compacted	0.26	
Inert (mixed) waste	1.3	
Metals - ferrous metal scrap	0.5	
Metals - steel, trimmings	1.2	
Other Textiles	0.15	
Putrescible (mixed) uncompacted waste	0.3	
Putrescible (mixed) compacted waste	0.425	
Paper / Cardboard	0.1	
Plaster board	0.2	
Plastic containers - whole	0.01	
Plastic containers - whole, some flattened	0.013	
Plastic containers - baled	0.139	
Rubber	0.3	
Steel cans - whole	0.052	
Steel cans - flattened	0.13	
Steel cans - baled	0.226	
Wood / Timber	0.3	
Waste oil	0.8	1000 li oil/paint= 1 m^3

Converting number of items to weight:

Tyres		
Motorcycle	4kg	per tyre
Passenger	8kg	per tyre
Light Truck	16kg	per tyre
Truck	40kg	per tyre
Mattress - queen size	20kg - 30kg	dry weight
Appliances		
Average of all	71kg	
Air conditioner	30kg - 90kg	
Dishwasher	40kg - 50kg	
Dryer (clothes)	30kg - 60kg	
Freezer	30kg - 90kg	
Microwave oven	10kg - 20kg	
Refrigerator	30kg - 121kg	
Washing machine	60kg - 80kg	
Ovens	40kg - 60kg	

Sources: Resource Smart - Victoria; Resource Recovery Rebate Scheme; Waste Wise event toolkit; WARRA administration policy; Tyre Stewardship Australia; US EPA;United Nations University

Conversion Factors for hauled waste and recycling materals using vehicles

Vehicle Type	*Weight*	
	Putrescible	Inert
Single axle trailer, ute, car and van	0.3	1.3
Tandem axle trailer	0.6	2.6
Open trucks, Gr wt <5t	0.9	3.9
Open trucks, Gr wt >5t, <12t	1.8	7.8
Open truck – 3 axles (“6 wheeler”)	3	13
Open truck – 4 axles (“8 wheeler”)	3.6	15.6
Open truck – 5 axles (“Bogy Semi” or “6 wheel pig trailer”)	5.4	23.4
Open truck – 6 axles (“Tri-axle Semi”)	6	26
Open truck – 8 axles	7.8	26
Open truck – 9 axles (“8 wheeler plus trailer”)	9.6	41.6
Open truck – 11 axles (“Road Train”)	12	52
Bins 2-4m3	1.2	3.9
Bins 4-8m3	2.4	7.8
Bins 8-12m3	5	13
Bins 12-19m3	6.5	20.15
Bins > 20m3	8	22
Compactor trucks <8m3	1.7	5.2
Compactor trucks 8-12m3	4.25	13
Compactor trucks 12-18m3	4.34	20.15
Compactor trucks 18-32m3	10.6	32.5
Compactor trucks >32m3	14.9	45.5

Facilities that do not have a weighbridge should use these conversion factors to report all waste entering or leaving the facility

Source: Excerpt fromDEC Landfill Levy Administration Policy July 2009, *Transport mode weight calculations*

Glossary

Term	Explanation
Ad hoc events	See ‘special events’
Annual charges	Waste (kerbside and vergeside): $/yr/Premises – annual fee householder pays for waste collection service, may be provided in a breakdown in rates fees.
	Kerbside recycling: $/yr/premises – annual fee householder pays for recycling collection service, may be provided in a breakdown in rates fees.
	Drop-off waste or recycling charges: - fees paid by householder (i.e. general public) to dispose of waste or recycling (e.g. disposal fees for trailer of waste to be disposed of at landfill)
AWT	Alternate Waste Technology: These are plants for processing mixed putrescible waste, such as the facilities operated by SMRC, MRC, DiCom and Atlas. They are sometimes called "Resource Recovery Facilities"
Bulk rubbish collection	See hard waste collection
C&D waste	Construction and demolition waste. Material generated from commercial, government or residential building sites
Co-mingled dry recyclables	Common recyclables, mostly packaging; such as glass, plastics, aluminium & steel cans, cardboard, paper, liquid paperboard (milk cartons). ‘Dry recyclables’ excludes organic material. For most local governments in WA, this is known as the "yellow top bin" collection.
Commercial & Industrial waste	Waste originating from commercial and/or industrial activities (non-municipal and not construction & demolition)
Composting	The biological process that converts organic material into a useful soil additive. This process diverts organic material from landfill and so prevents the production of methane (a powerful greenhouse gas).
Contamination	Waste component of recyclables that is usually sent to landfill

Contractor invoices	Financial information that often contains waste tonnage / volume data. Often received monthly
Conversion Factors	Calculation used to convert a known volume of material to a weight. Factors are specific to the type of waste and level of compaction
DEC	Former: Department of Environment and Conservation, Western Australia. www.dec.wa.gov.au
DER	Department of Environment Regulation
Dockets	Dockets / tickets / receipt which provide evidence of waste delivery to a facility (landfill, transfer station etc.) usually provides volume or tonnage information and costs
Domestic (or 'household') waste or recycling	Waste or recyclables generated from households collected by Local Government or their contractors.
Drop-off facility	Site where residents can bring their waste or recyclables for disposal. Often located at the local landfill or transfer station
E-waste	Electronic or electrical waste (anything with a plug or battery), such as televisions (CRTs), computers, fridges, printers, kettles, irons, microwaves etc. In Australia this is often used to refer to goods such as computers and their peripherals and televisions covered by product stewardship legislation.
Evaluation	Assessing data sets against relevant benchmarks and/or targets to establish the overall performance of a programme or project (usually carried out at key milestones for a project or at specific points in a year)
Financial year	Year running from 1st July to 30th June (e.g. 01/07/2012 – 30/06/2013) inclusive.
Fluorescent tubes/lamps	Light tubes or compact fluorescent (energy efficient) globes (rather than standard incandescent light globes)

FORC	The Forum of Regional Councils (FORC) comprises the five metropolitan Regional Councils and the City of Greater Geraldton who have agreed voluntarily to work to promote areas of common interest associated with waste management.
General waste	Material that is intended for disposal to landfill or AWT, normally what remains after the recyclables have been collected separately. (Also mentioned under 'Mixed waste')
Green Purchasing Policy	See 'sustainable purchasing policy'
Green waste	Plant material generated from gardens and parks e.g. grass clippings and vegetation prunings.
Gross (weight)	Total (laden) weight of vehicle and contents (waste)
Hard waste (see also bulk waste and vergeside collection)	The collection of bulky items of discarded 'junk' (e.g. furniture, TVs, barbeques etc.) from households on a regular, but infrequent basis (generally about 4 times per year).
Household	Occupants of a dwelling whether a house, flat, unit or farm with its own street address (or lot number for some rural dwellings)
Illegal dumping	A particular type of littering where people go out of their way to dump rubbish. It can be small bags of rubbish in urban streets and parks or trailer loads of material in National Parks or bushland reserves. Illegal dumping can be prosecuted under the Litter Act 1979 and can attract an infringement notice of up to $500 or up to thousands of dollars if taken to court
Inert waste	Inert waste is neither chemically or biologically reactive and will not decompose; examples include glass, sand and concrete.
KABC	Keep Australia Beautiful Council. A movement active in all states and territories to lead, challenge and inspire all Australians to strive for a sustainable and litter free environment

Kerbside collection	A regular, containerised collection services (often a wheelie bin) where the waste or recycling is collected from outside a resident's dwelling. Can apply to either recycling or general waste (and in a few instances green waste)
Kerbside green waste collection	Collection of green waste (garden waste) in a separate container to the waste bin and separate from the recycling bin. This is a different service to the vergeside green waste collection, which is a bulk, non-containerised collection. Vergeside data is recorded in a separate section.
LG	Local Government
LGA	Local Government area.
Liquid paperboard	Composite packaging composing mainly of reconstituted paper fibres (e.g. milk cartons); often recyclable depending upon local infrastructure.
Litter	Rubbish left in public places; not disposed of into a bin. Common litter items include: cigarette butts, chip and confectionery wrappers, fast food containers and drinks bottles.
MGB	Mobile Garbage Bin – A wheeled bin with a lid often used for kerbside collection of waste or recyclables. (Often called a 'wheelie bin').
Mixed recyclables	Sometimes referred to as 'commingled recyclables' any of: bottles, cans, jars, cardboard and paper collected mixed together for recycling
Mixed waste	Waste (general waste ***and / or*** recyclables sent to landfill or AWT).
Monitoring	An ongoing process of collecting data and other information that can feed into an evaluation process
MRF	Materials Recovery Facility. Plant and equipment for sorting and pre-processing materials from the waste stream for resource recovery.

Municipal waste	Waste derived from residential and public activities, collected by local governments (or their agents) from households, public places and public buildings. Municipal waste may include waste from small commercial premises or other similar activities where this is collected as part of the standard local government service.
MWAC	Municipal Waste Advisory Council: a standing committee of WALGA with delegated authority on municipal waste issues.
NEPM	National Environment Protection Measure: broad framework-setting statutory instruments which outline agreed national objectives for protecting or managing particular aspects of the environment.
Nett (weight)	Resultant weight of contents removed. Gross Wt – Tare Wt = Nett Wt
Organic waste	Separated food and/or 'green' material (e.g. grass clippings or vegetation prunings).
Percentage of households in the LGA that receive this service (%)	This is the percentage of households in the local government area that the service is provided to. The number may be less than the total number of households in the area, depending on how widely the service is provided. For example, in rural Councils, a kerbside collection service might only be provided to those households within certain towns, but not to those living outside the town or in very small towns. If you don't provide the service, please leave blank or put "0".
Permanent public place	See public place services
Participation rate (%)	This is the percentage of households that have a collection service that typically put their bin out on collection day. This is useful to understand when conducting bin audits since some householders (particularly single or small households) may not 'present' their bin for collection every week if it is not full (most common for recycling bins). Also refered to as 'presentation rate'.

Public place services	Public place services are waste bins (and can be public place recycling bins) permanently located in public areas such as in parks and on the street
Putrescible waste	Putrescible waste comprises waste capable of decomposition; examples include food organics, green waste, manures, paper and cardboard.
Receipt	Refer to “docket”
Recyclable	Able to be recycled; that is, that local infrastructure is available for collection, sorting and transport to a recycling facility
Recyclables	Materials that can be collected separately from the general waste and sent for recycling. For the purposes of this report it incorporates container glass, plastic, ferrous and non-ferrous metals, paper, cardboard and green waste, remembering that ‘recyclable’ is a location-specific term
Recycling	A set of processes (including biological) that converts solid waste into useful materials or products, net of contaminants/residuals disposed
Residual waste	Remaining waste that is sent to landfill once the recyclables have been sorted out or the biodegradable organic fraction has been recovered
Reuse	Recovering value from a discarded resource in its original state without reprocessing or remanufacture (e.g. moving clean sand from one construction site to another). The term “reuse” can also be applied in circumstances where an otherwise disposable item is replaced by a more durable item hence avoiding the creation of waste (e.g. using a ceramic coffee mug in place of disposable cups).
Separate paper and cardboard collection	Collection of paper and cardboard in a separate container to the waste bin and a separate container to other recyclables
Separate recyclable containers only	Mixed dry recyclable bottles, jars, cans etc. such as glass, plastics, aluminium and steel (excludes paper and cardboard)
Service provider / contractor	Private waste company contracted to undertake waste and / or recycling collection and transportation to disposal or recycling

Solid waste	Waste products and materials that are 'spadeable'.
Special event	An event held by the local government that will require additional bins to be provided on a one-off or *ad hoc* basis (e.g. concerts, fireworks displays or other public gatherings).
Sustainable purchasing policy	Formal policy endorsed by the LG CEO that provides a framework for considering the some or all of the following factors when buying goods or services: · Practices / operations that avoid or minimise consumption of resources · Minimise and manage potential environmental and social impacts associated with production of goods or delivery of services · Minimise social and environmental impacts of whole-of-life of goods and services · Provides value for money over whole-of-life · Is locally produced
Tare (weight)	Un-laden weight of vehicle once waste has been removed
Ticket	Refer to "docket"
Tonnage	Weight of material in metric tonnes (equal to 1000 kg)
Tonnes collected at kerbside for this service	This is the total amount of material collected for this service during the financial year. This includes any contamination that is collected. To calculate this, you will need the weighbridge records from your collection vehicles. If you use a contractor, they should report this back to you regularly. If your local government does not use a weighbridge, then estimate the amount in cubic metres (m3) and use the conversion factors at the end of this document to estimate the tonnes.
Tonnes disposed to landfill from this service	This is the amount of material collected in this service that ends up in landfill. For most waste services, that will be the total amount, unless the material is processed in an AWT facility first. For recycling services, this is the contamination that is collected as part of the service and then separated out in the MRF or by the recycling contractor, and then disposed to landfill.

Vergeside service	Vergeside collection services are bulk, infrequent (~every 4-6 month or on demand) services. Material is collected from residential 'vergesides' either non-containerised or in a skip provided by the Local Government. Vergeside services may relate to green waste or hard waste
WALGA	Western Australia Local Government Association. WALGA is the peak industry body that advocates on behalf of ~140 WA Local Governments and negotiates service agreements for the sector. WALGA is not a government department or agency. www.walga.asn.au
Waste	Any substance or object the holder discards, intends to discard or is required to discard. Generally relates to material where the ultimate end point is disposal rather than recycling
Waste audit	Detailed analysis of waste using physical sorting and weighing to identify composition and weight of each material in the waste stream.
Waste Authority	Statutory body to drive strategic planning and policy development for waste in WA. The Waste Authority was established by the Waste Avoidance and Resource Recovery Act (2007).
Waste composition	The proportion of different materials or products present in a given waste streams e.g. 10% glass, 50% general waste, 30% paper and cardboard, 10% plastics.
Waste generation	The sum of products and materials that are recycled, recovered for energy or disposed to landfill.
Weighbridge	Weighing device that vehicles drive onto; often used at landfill gatehouses to accurately weigh the waste delivered