



The University of North Carolina at Chapel Hill

Office of Waste Reduction and Recycling

**2018-19 Fiscal Year
Waste Recovery**



Office of Waste Reduction and Recycling

Fiscal Year 2018-19 Trend Report

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"C&D": Construction and Demolition

"MSW": Municipal Solid Waste

UNC-Chapel Hill

FY 2018-19

Using the EPA Waste Reduction Model (WARM version 15), the total change in energy use due to campus
(46,719.69)

This is equivalent to conserving:

510 Households' annual energy consumption
8,041 Barrels of oil
387,869 Gallons of oil

Using EPA WARM, the total change in GHG emissions due to campus recycling (MTCO₂E):
(6,474.52)

This is equivalent to removing annual emissions from:

1,375 Passenger vehicles
728,539 Gallons of gasoline
269,772 Cylinders of propane used for home barbecues

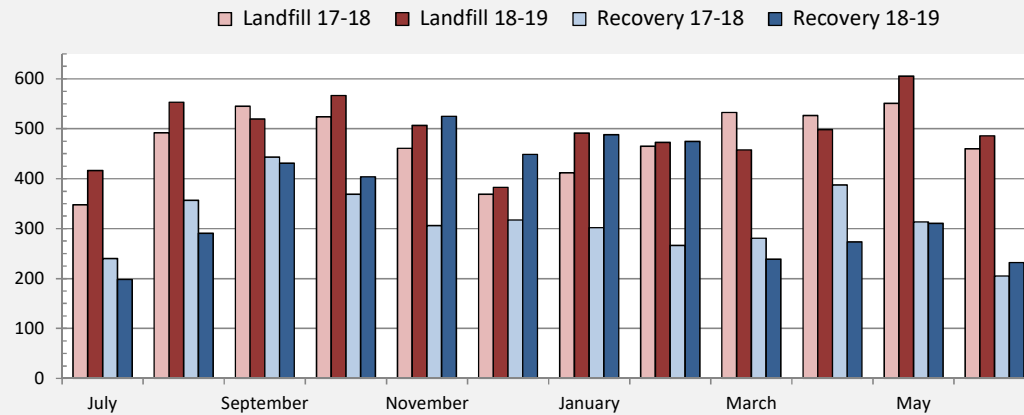
0.00036% Annual CO₂ emissions from US transportation sector
0.00036% Annual CO₂ emissions from US electricity sector

Total Tons Recovered = 4,314.9

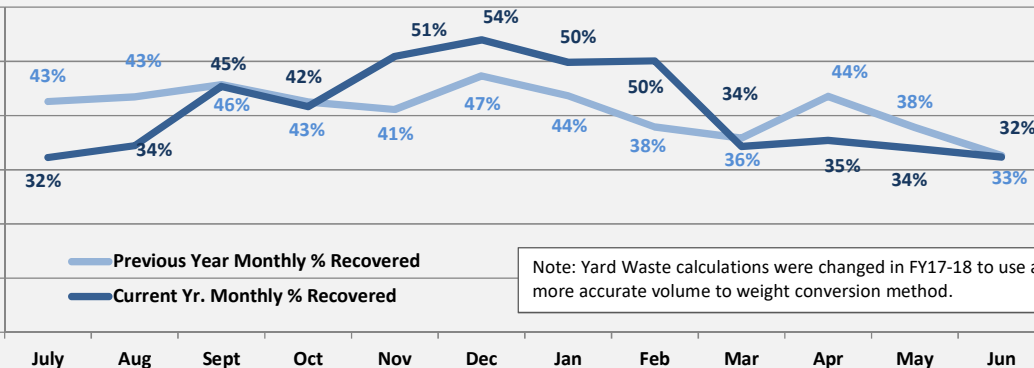
<https://www.epa.gov/warm/versions-waste-reduction-model-warm#15>

PAPER recycling at UNC Chapel Hill saves:		Recycling 1 ton of paper saves:	
Trees:	19,099	17 trees	
Gallons of water:	7,811,661	6,953 gallons of water	
Cubic yards of landfill space:	3,370	3 cubic yards of landfill space (uncompacted)	
Kilowatt hours of energy:	4,580,489	4,077 kilowatt hours of energy	
Total Tons Fiber Recycled = 1,123.5			

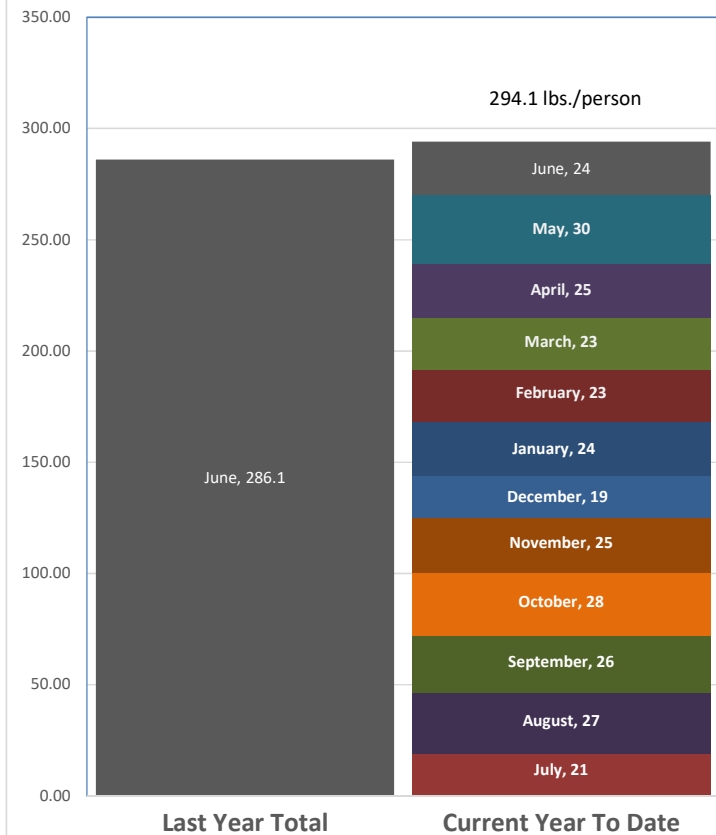
Monthly Landfill and Recovery Trend Comparison of Tons



Monthly Recovery Rate Comparison - Previous vs Current Year



Pounds of Waste Landfilled Per Person (FTE): Last Year vs. Current YTD



June	Month (in tons)		
	2018-19	2017-18	% increase or decrease
Landfill	486	460	6%
Recycling	201	190	6%
Compost	31	32	-4%
Total Waste	718	682	5%
% Recovered	32.3%	32.6%	-0.9%

June	Year To Date (in tons)		
	2018-19	2017-18	% increase or decrease
Landfill	5,957	5,685	5%
Recycling	3,669	3,236	13%
Compost	646	761	-15%
Total Waste	10,271	9,682	6%
% Recovered	42.0%	41.3%	1.8%

In FY18-19, Grounds processed large batches of mulch from November thru February. This contributes to spikes in recycling data for those months.

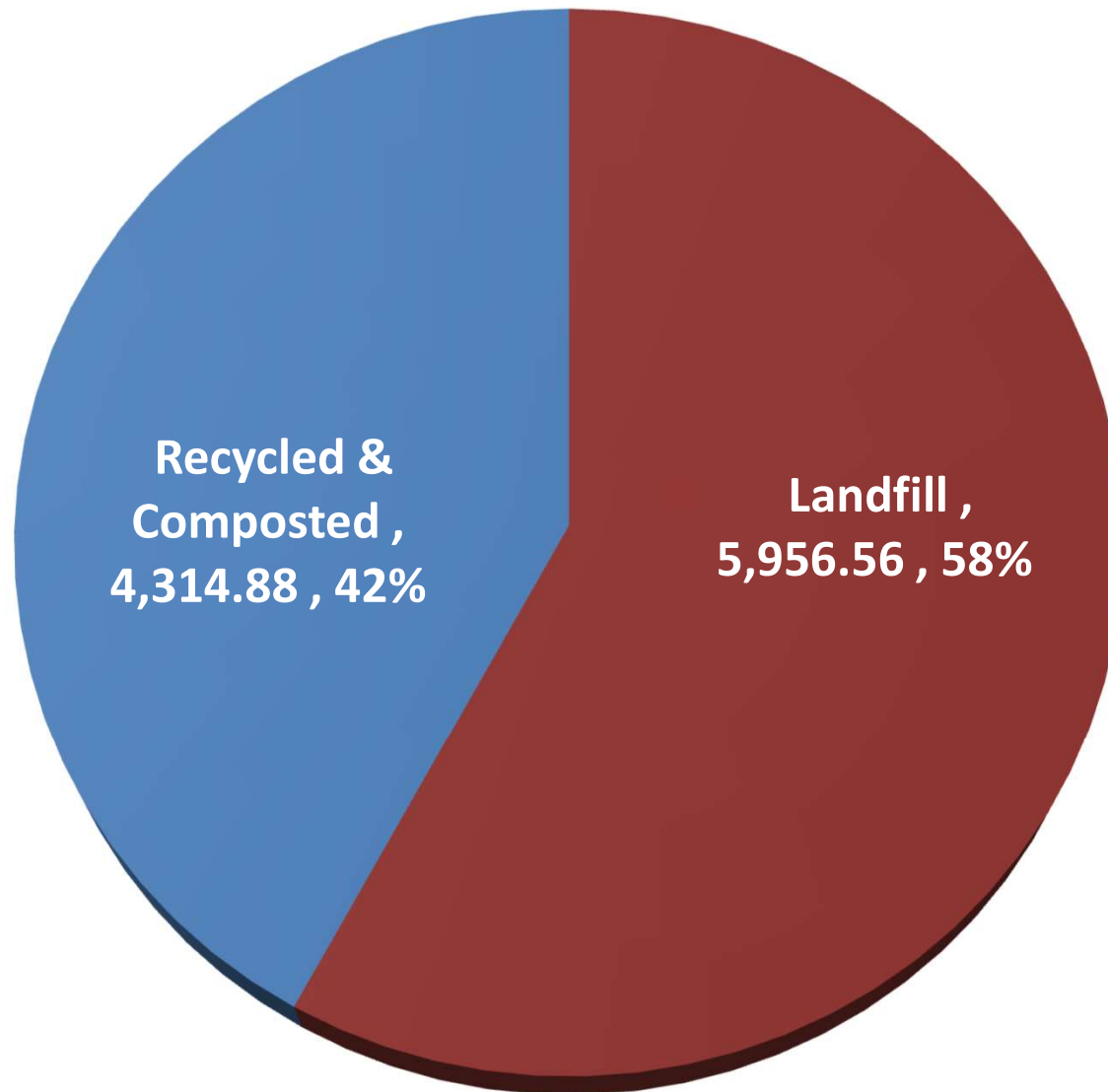
May/June 2019 MSW spike due to Housing project (bed ends): May (23 rolloff hauls, 89.41 tons)

Correction(s): Sept. 2017 MSW was reduced by 74.6 due to data entry error. The overall annual recycling rate was still 40%.

From FY17-18 forward, cubic yards of mulch **made** by Grounds is used (600 lbs./yard from limbs & branches and 800 lbs./yard from leaves).

Amount Landfilled & Recovered 2018-19 (tons)

Does Not Include Coal Ash

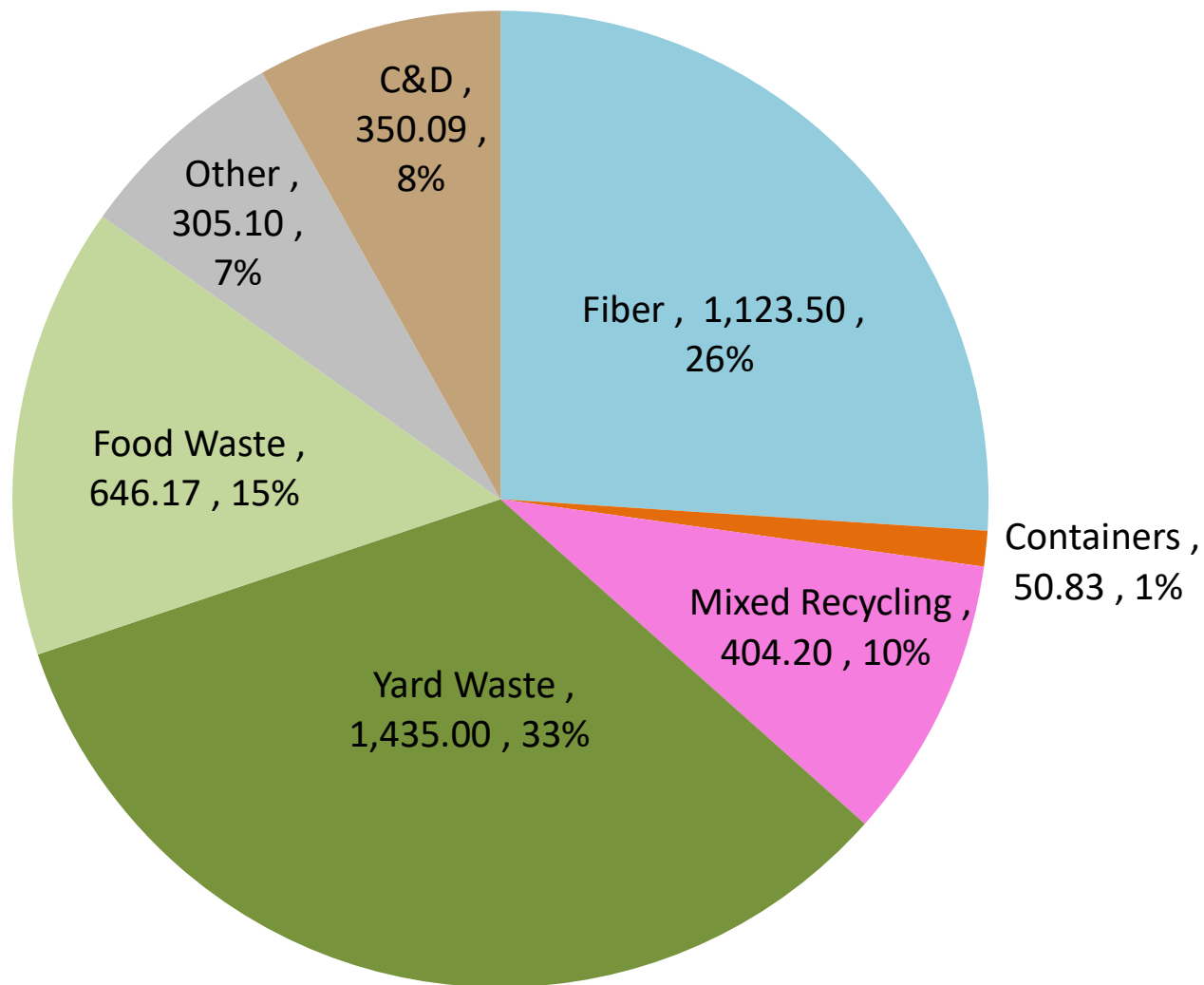


9/24/2019

OWRR 17-18, Landfill v Recovered

2018-19 Recovered Waste Categories

Tons and Percent of
All Recovered Materials



C&D (Construction & Demolition): scrap metal, pallets and clean wood waste, concrete and block, carpet, and ceiling tiles

Containers = commingled bottles and cans (aluminum cans, glass bottles [green/blue, clear, brown, plastic bottles, steel cans])

Fiber = corrugated cardboard, office paper, confidential paper, magazines and newspaper, hardback books and mixed paper

Food Waste = food waste collected and composted from dining halls and residence halls

Yard Waste = brush, limbs, trees and leaves collected by UNC Grounds Services and recycled into mulch

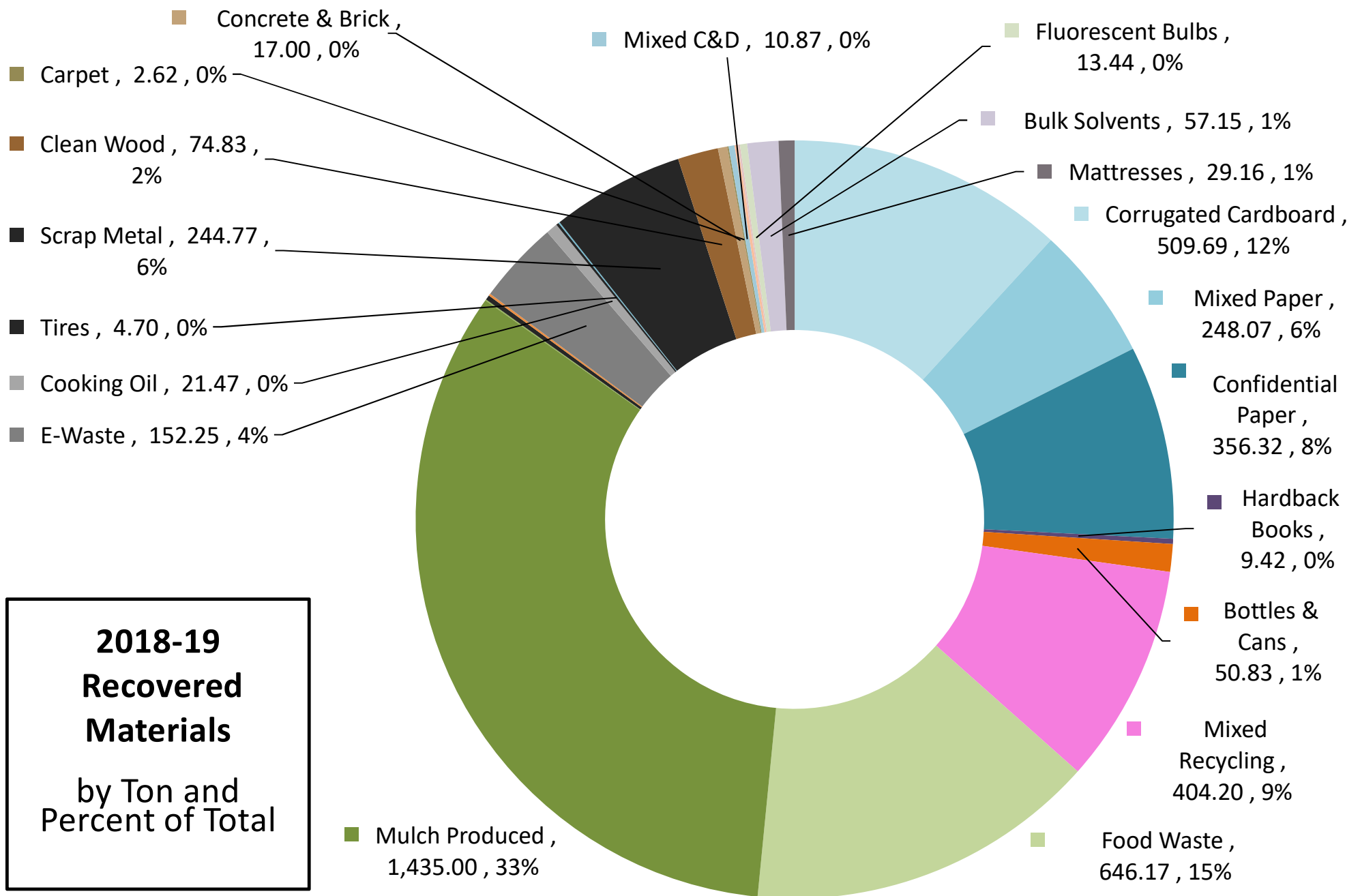
Other = auto batteries, auto oil & filters, freon, printer cartridges, fluorescent lights, bulk solvent, tires, mattresses, polystyrene, white goods

Mixed Recycling = one stream of recyclables (both containers and paper mixed together) as opposed to separate dual stream recyclables (paper and containers separated in separate bins)

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OWRR 18-19, Recovered Categories

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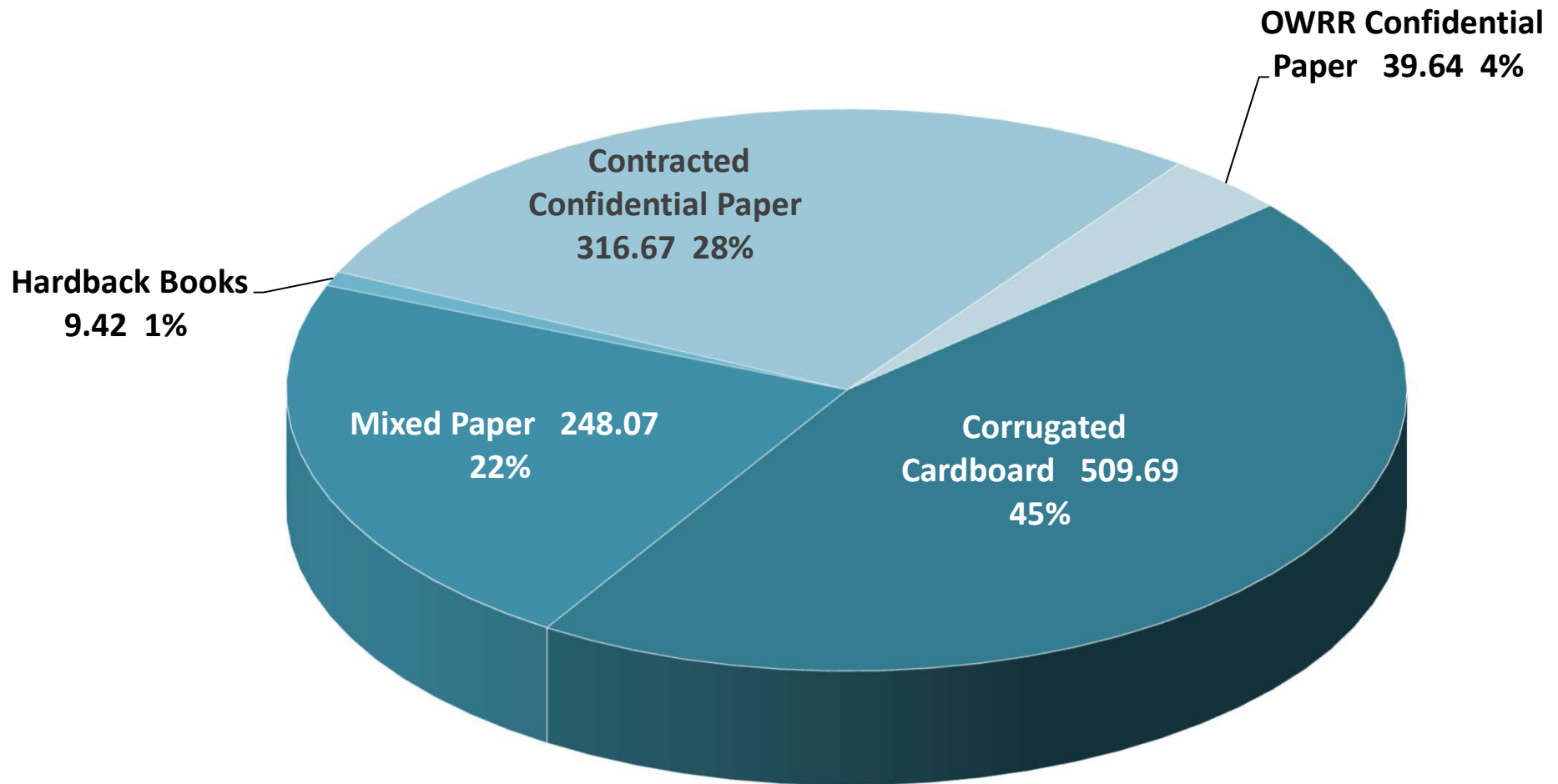


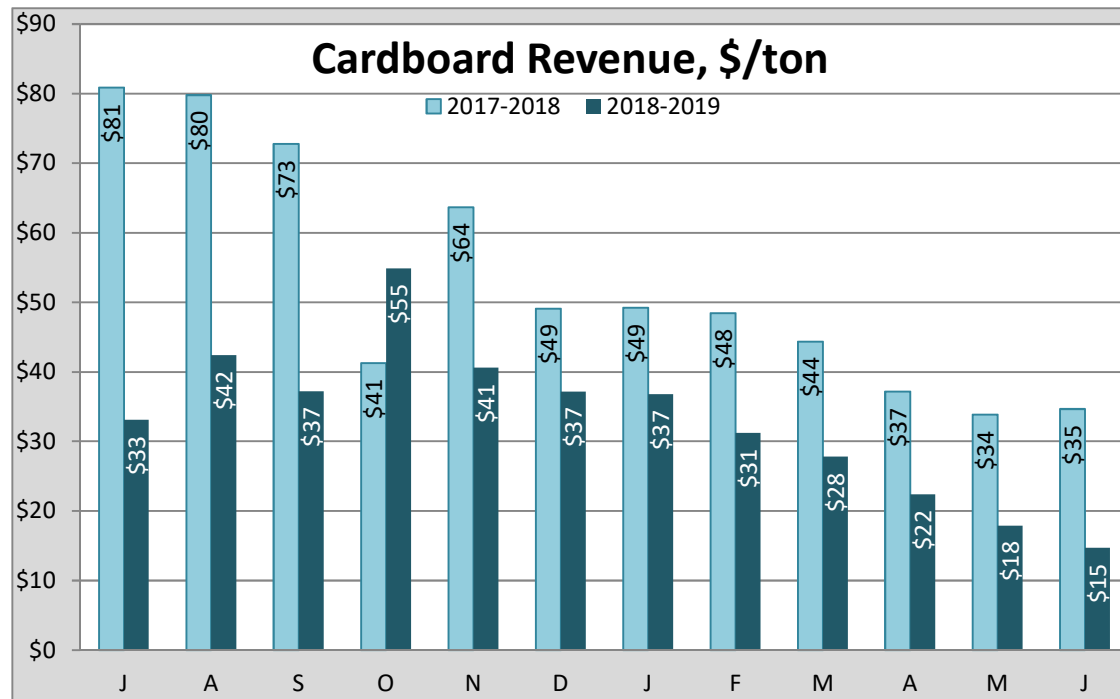
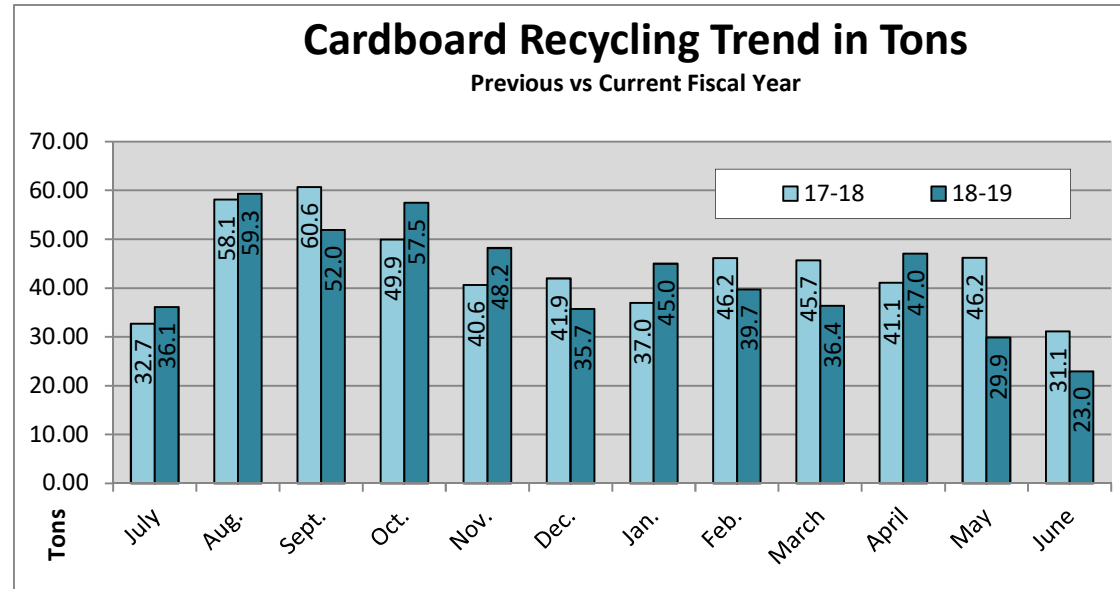
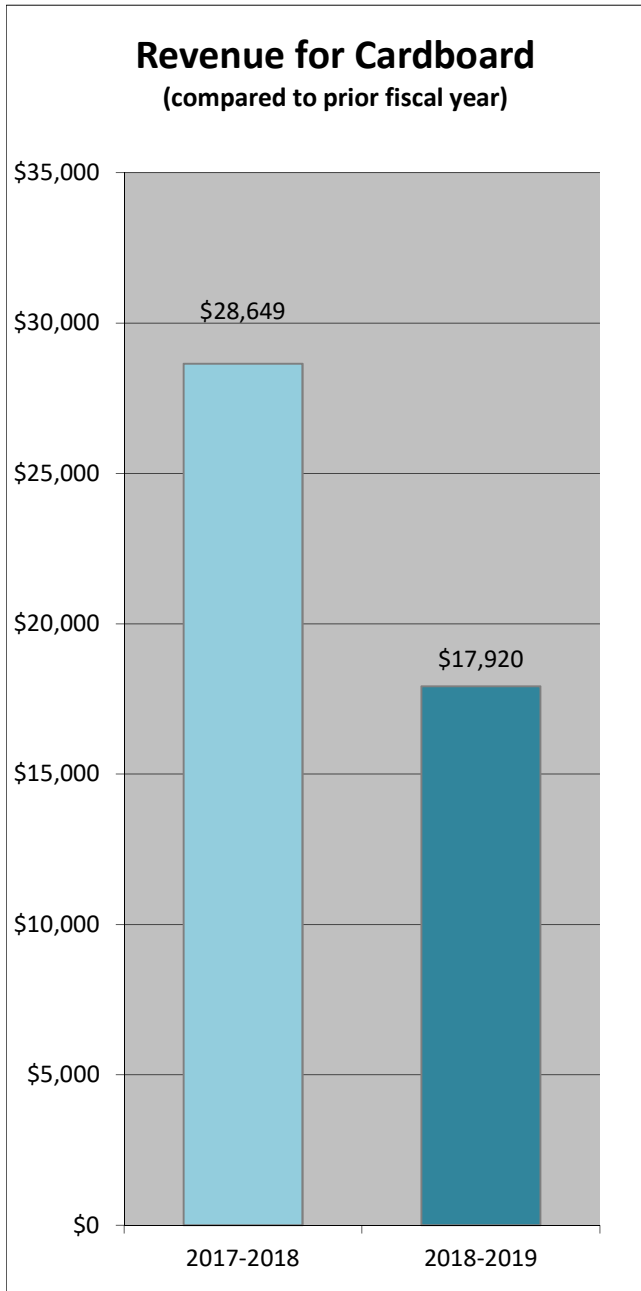
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OWRR 18-19, All Recovered Materials

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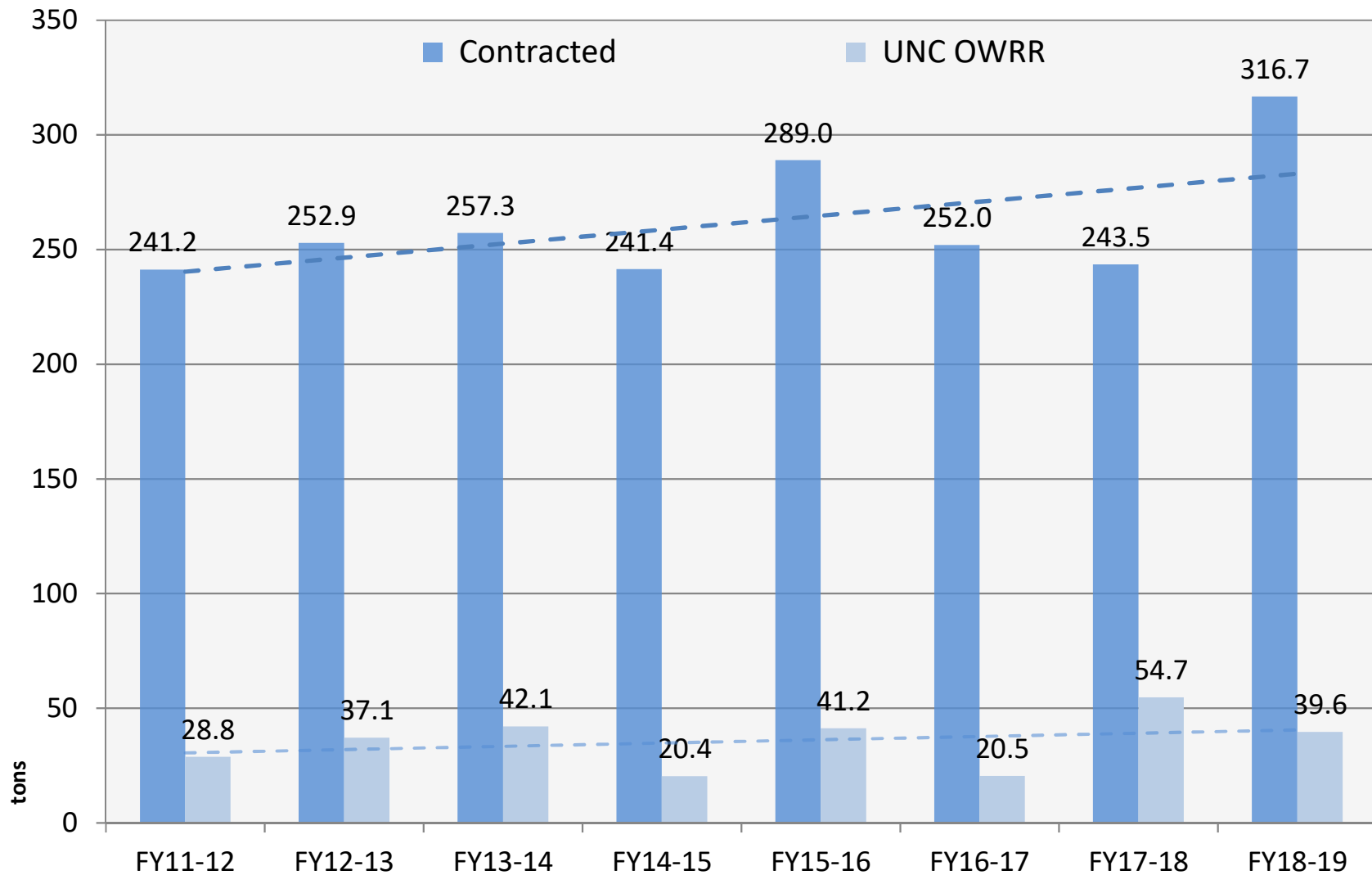
Fiber Tons, 2018-19





Confidential Paper Trends

Contractor Collected vs. UNC OWRR Collected (in tons)



FISCAL YEAR 2018-19 WASTE RECOVERY TREND REPORT

FIBER

CORRUGATED CARDBOARD

CORRUGATED CARDBOARD	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	36.14	59.28	51.95	57.47	48.21	35.72	44.95	39.73	36.38	47.04	29.86	22.96
Y-T-D Tons	36.14	95.42	147.37	204.84	253.05	288.77	333.72	373.45	409.83	456.87	486.73	509.69
Last Year Monthly Tons	32.71	58.13	60.63	49.94	40.64	41.93	36.97	46.16	45.67	41.05	46.19	31.12
% Incr./Decr. Monthly	10%	2%	-14%	15%	19%	-15%	22%	-14%	-20%	15%	-35%	-26%

MIXED PAPER

MIXED OFFICE PAPER	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Shimar Recycling - Indoor	18.46	18.20	12.87	21.07	17.03	13.46	25.02	24.09	24.21	23.69	25.96	24.01
Monthly Tons	18.46	18.20	12.87	21.07	17.03	13.46	25.02	24.09	24.21	23.69	25.96	24.01
Y-T-D Tons	18.46	36.66	49.53	70.60	87.63	101.09	126.11	150.20	174.41	198.10	224.06	248.07
Last Year Monthly Tons	17.77	21.31	15.90	18.49	15.75	13.62	17.06	17.21	15.99	17.84	21.38	17.61
% Incr./Decr. Monthly	4%	-15%	-19%	14%	8%	-1%	47%	40%	51%	33%	21%	36%

CONFIDENTIAL PAPER	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
CP-OWRR Collected	0.00	0.00	0.00	0.00	19.90	0.00	0.00	0.00	0.00	0.00	0.00	19.74
CP-SOM Contractor Collected	25.22	30.18	24.99	26.86	26.53	23.14	28.63	22.90	23.64	23.37	27.69	22.78
CP - Contractor Collected	0.60	0.71	0.62	0.95	0.89	1.77	0.78	0.89	0.83	1.12	0.94	0.66
Monthly Tons	25.82	30.89	25.61	27.81	47.32	24.91	29.41	23.79	24.47	24.49	28.63	43.18
Y-T-D Tons	25.82	56.70	82.31	110.12	157.43	182.34	211.75	235.54	260.01	284.50	313.13	356.32
Last Year Monthly Tons	21.10	22.15	22.80	20.10	18.90	19.65	20.35	18.85	34.81	19.35	20.45	20.00
% Incr./Decr. Monthly	22%	39%	12%	38%	150%	27%	45%	26%	-30%	27%	40%	116%

'18-19 was first year to have comprehensive School of Medicine (SOM) totals AND totals from other UNC-CH locations

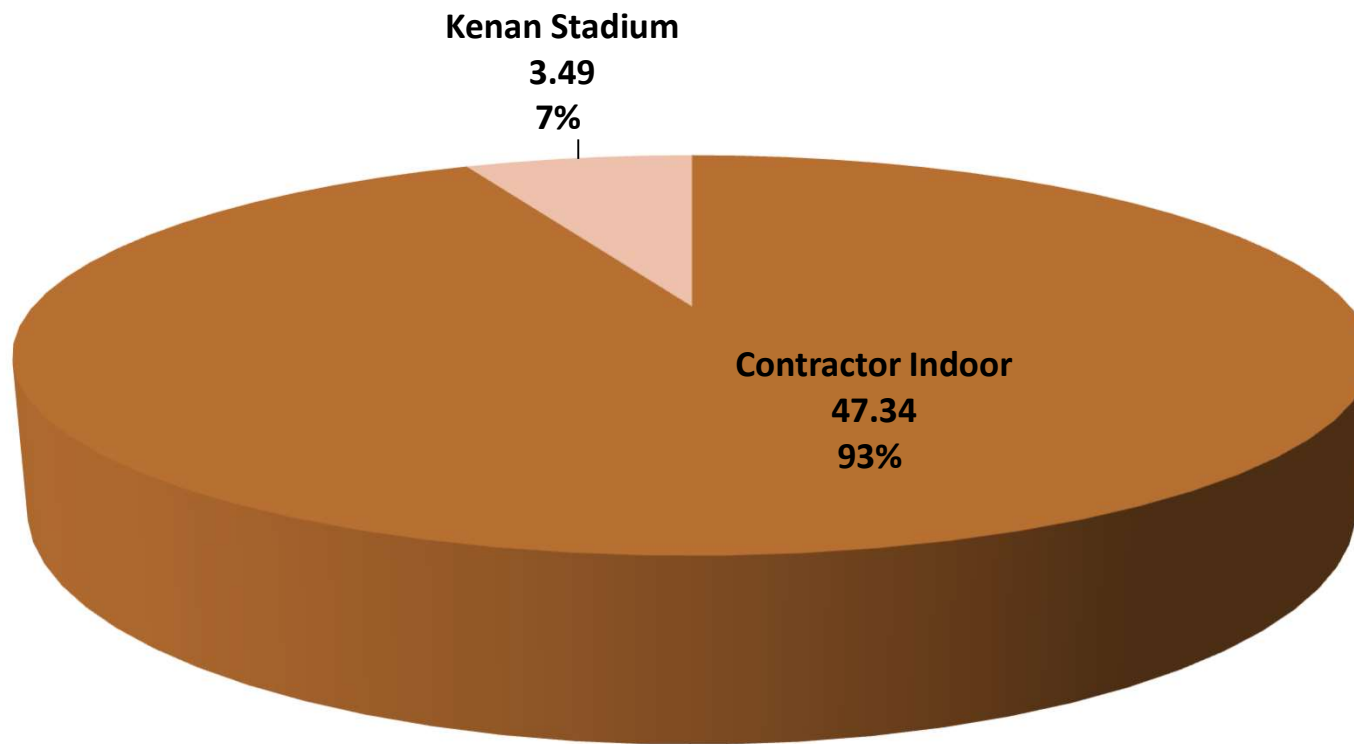
HARDBACK BOOKS	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	3.26	1.47	1.71	1.22	0.00	0.00	0.00	0.00	0.38	0.00	0.82	0.56
Y-T-D Tons	3.26	4.73	6.44	7.66	7.66	7.66	7.66	7.66	8.04	8.04	8.86	9.42
Last Year Monthly Tons	0.84	1.31	1.01	0.61	0.79	1.31	0.42	0.79	0.44	0.71	0.22	0.32
% Incr./Decr. Monthly	288%	12%	69%	100%	N/A	N/A	N/A	N/A	-14%	N/A	273%	75%

MIXED PAPER TOTAL TONS	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	47.54	50.56	40.19	50.10	64.35	38.37	54.43	47.88	49.06	48.18	55.41	67.75
Y-T-D Tons	47.54	98.09	138.28	188.38	252.72	291.09	345.52	393.40	442.46	490.64	546.05	613.81
Last Year Monthly Tons	39.71	44.77	39.71	39.20	35.44	34.58	37.83	36.85	51.24	37.90	42.05	37.93
% Incr./Decr. Monthly	20%	13%	1%	28%	82%	11%	44%	30%	-4%	27%	32%	79%

TOTAL FIBER TONS

TOTAL FIBER	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	83.68	109.84	92.14	107.57	112.56	74.09	99.38	87.61	85.44	95.22	85.27	90.71
Y-T-D Tons	83.68	193.51	285.65	393.22	505.77	579.86	679.24	766.85	852.29	947.51	1,032.78	1,123.50
Last Year Monthly Tons	90.19	124.21	116.24	107.63	91.83	90.13	91.86	100.22	112.90	96.79	109.62	86.66
% Incr./Decr. Monthly	-7%	-12%	-21%	0%	23%	-18%	8%	-13%	-24%	-2%	-22%	5%

Containers* 2018-19



*Containers = commingled bottles and cans (aluminum cans, glass bottles [green/blue, clear, brown, plastic bottles, steel cans])

Note: "Indoor " and "Outdoor " refers to where materials are collected. Our Indoor program is inside all buildings on campus. Our Outdoor program is outside all residence halls, buildings with high volumes or catering kitchens, etc. Outdoor numbers include materials collected from the "walkway sites". Materials collected from home football games are recorded under the "Kenan Stadium" heading. Bottles and cans from buildings serviced by OWRR are taken to the outdoor sites. Thus these statistics aren't a true representation of amounts collected from each individual area.

FISCAL YEAR 2018-19 WASTE RECOVERY TREND REPORT

CONTAINERS (BOTTLES AND CANS)

CONTAINERS	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Indoor Recycling	3.10	3.30	2.90	4.12	4.34	2.77	4.87	4.74	3.84	4.43	4.12	4.81
Football Recycling*			0.92	0.80	1.77							

TOTAL CONTAINERS

TOTAL CONTAINERS	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	3.10	3.30	3.82	4.92	6.11	2.77	4.87	4.74	3.84	4.43	4.12	4.81
Y-T-D Tons	3.10	6.40	10.22	15.14	21.25	24.02	28.89	33.63	37.47	41.90	46.02	50.83
Last Year Monthly Tons	2.92	4.11	6.97	6.64	3.24	2.65	2.52	3.44	3.40	3.44	3.04	3.48
% Incr./Decr. Monthly	6%	-20%	-45%	-26%	89%	5%	93%	38%	13%	29%	36%	38%

*Football statistics are from Kenan Stadium. Tailgate recyclables are included in the single stream statistics.

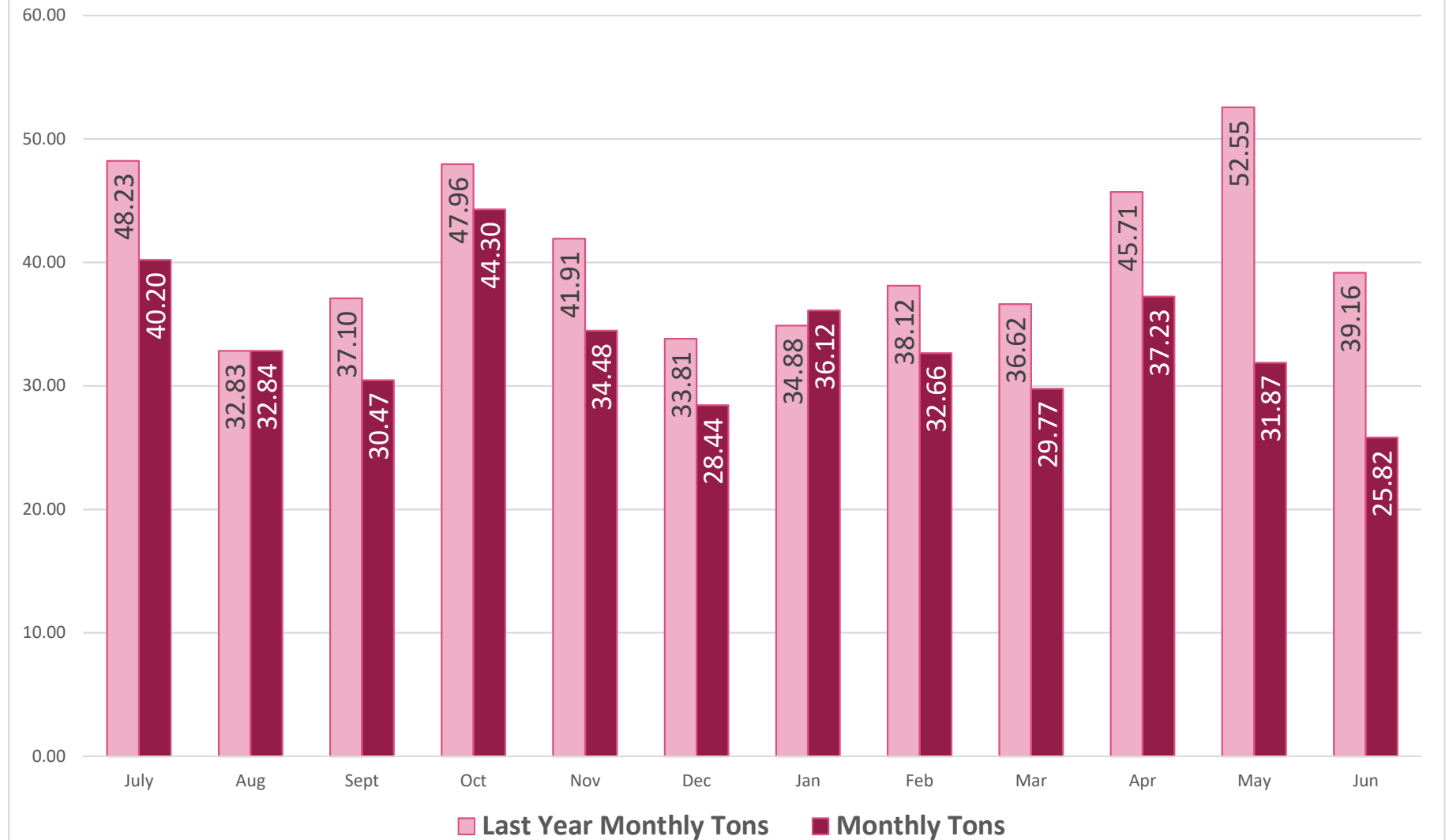


Office of Waste Reduction
and Recycling
(919) 962-1442
go.unc.edu/recycling

BOTTLES & CANS

Plastic and Glass Bottles ■ #2 and #5 Plastic Tubs
Aluminum and Steel Cans

Mixed Recycling Collected by Sonoco Previous (17-18) vs. Current Year (18-19) in tons



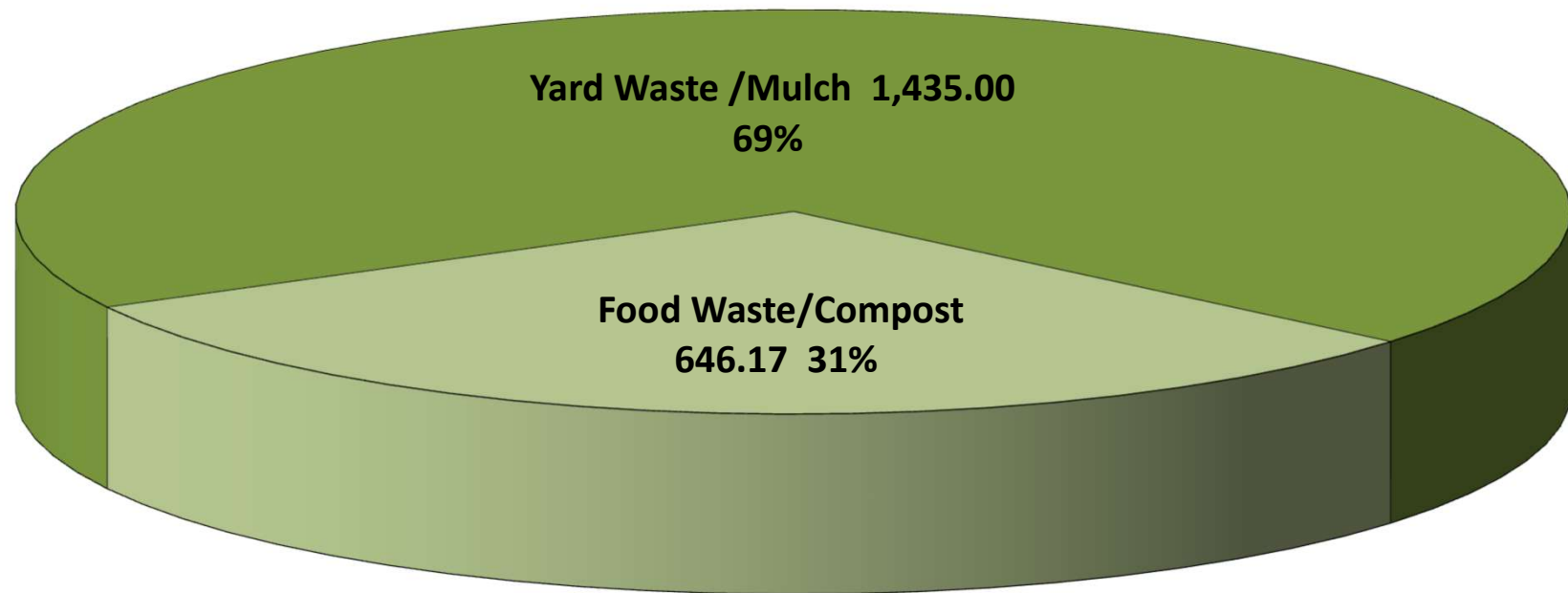
FISCAL YEAR 2018-19 WASTE RECOVERY TREND REPORT

MIXED RECYCLING - CARTS

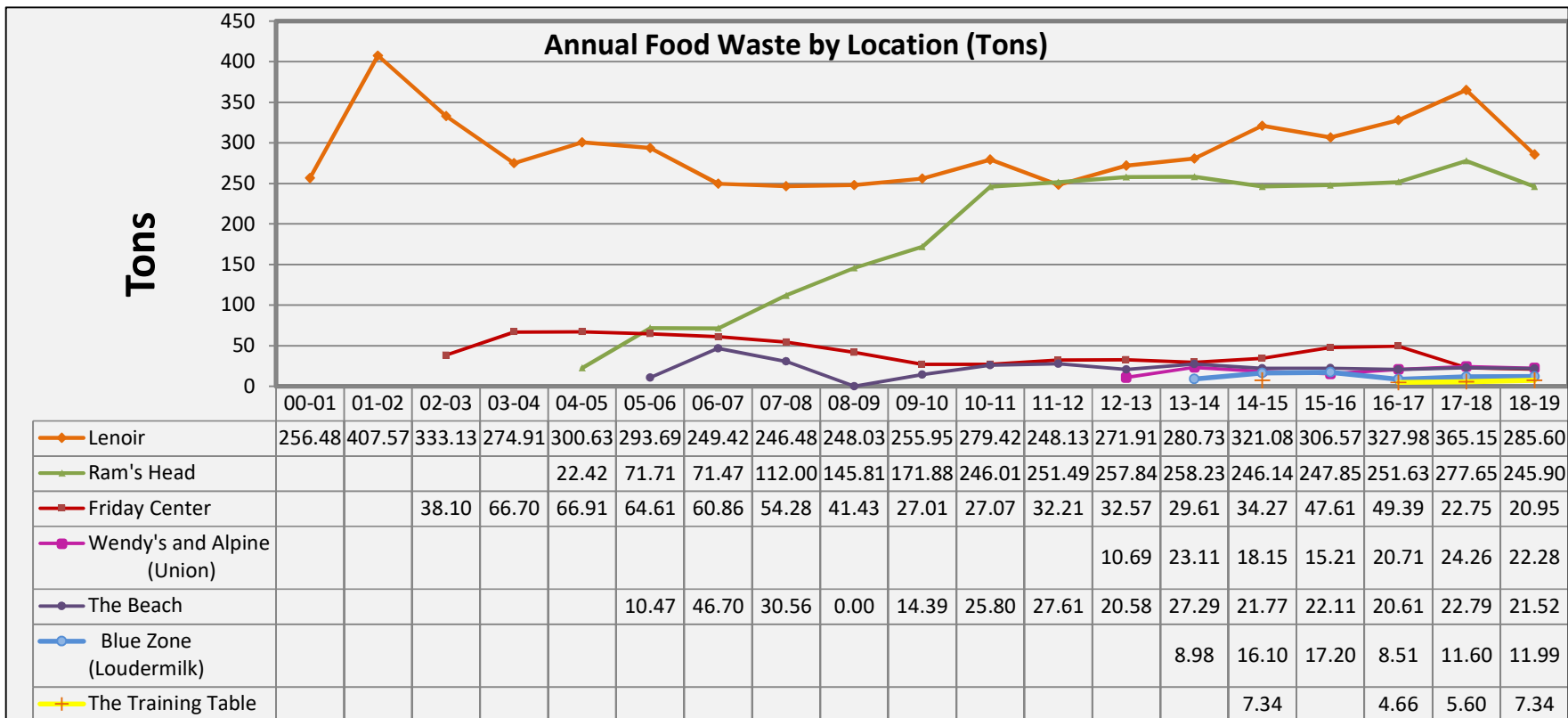
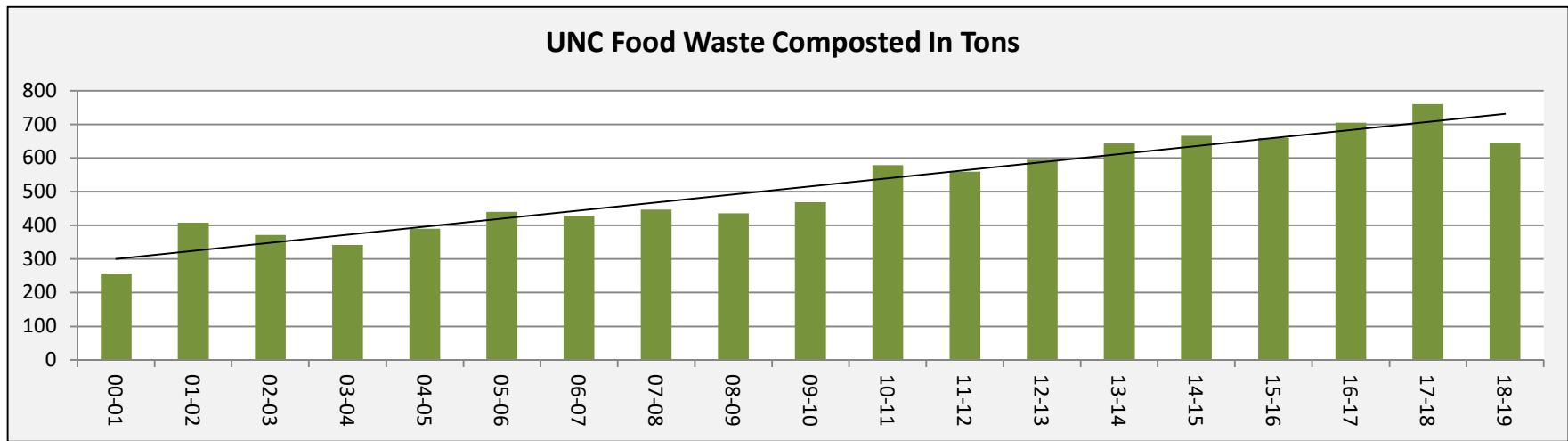
MIXED RECYCLING (Outdoor Carts)	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	40.20	32.84	30.47	44.30	34.48	28.44	36.12	32.66	29.77	37.23	31.87	25.82
Y-T-D Tons	40.20	73.04	103.51	147.81	182.29	210.73	246.85	279.51	309.28	346.51	378.38	404.20
Last Year Monthly Tons	48.23	32.83	37.10	47.96	41.91	33.81	34.88	38.12	36.62	45.71	52.55	39.16
% Incr./Decr. Monthly	-17%	0%	-18%	-8%	-18%	-16%	4%	-14%	-19%	-19%	-39%	-34%



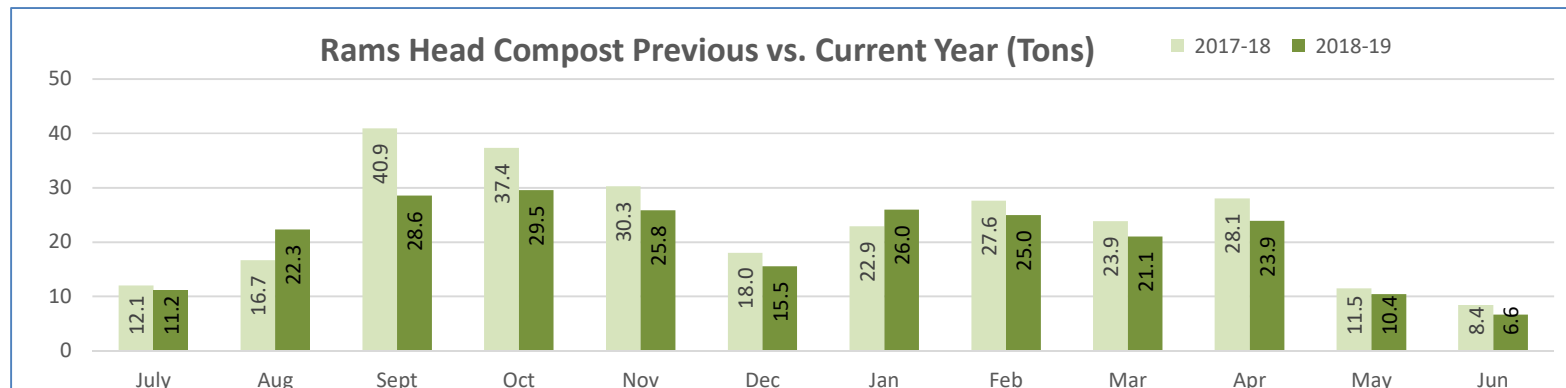
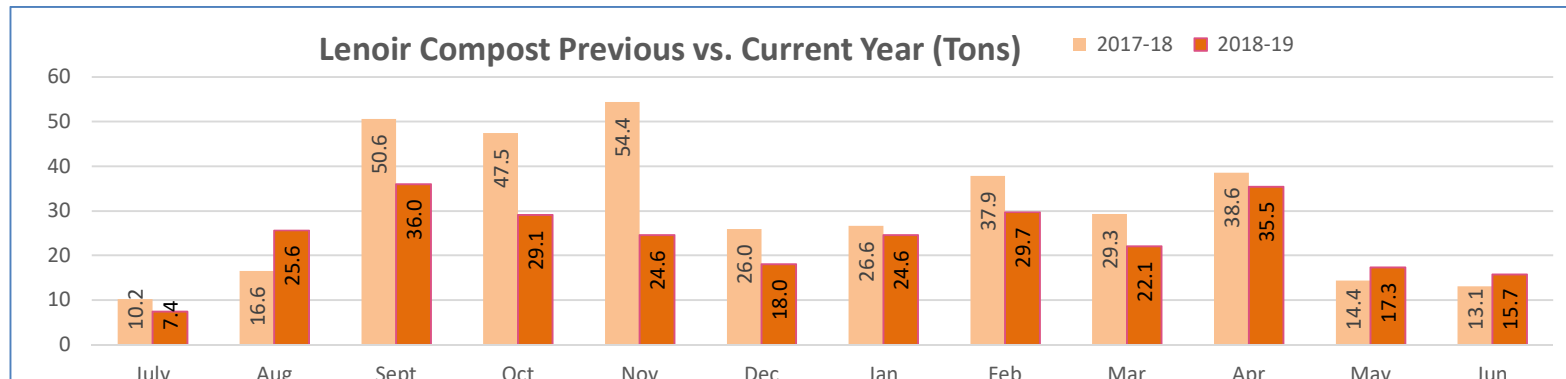
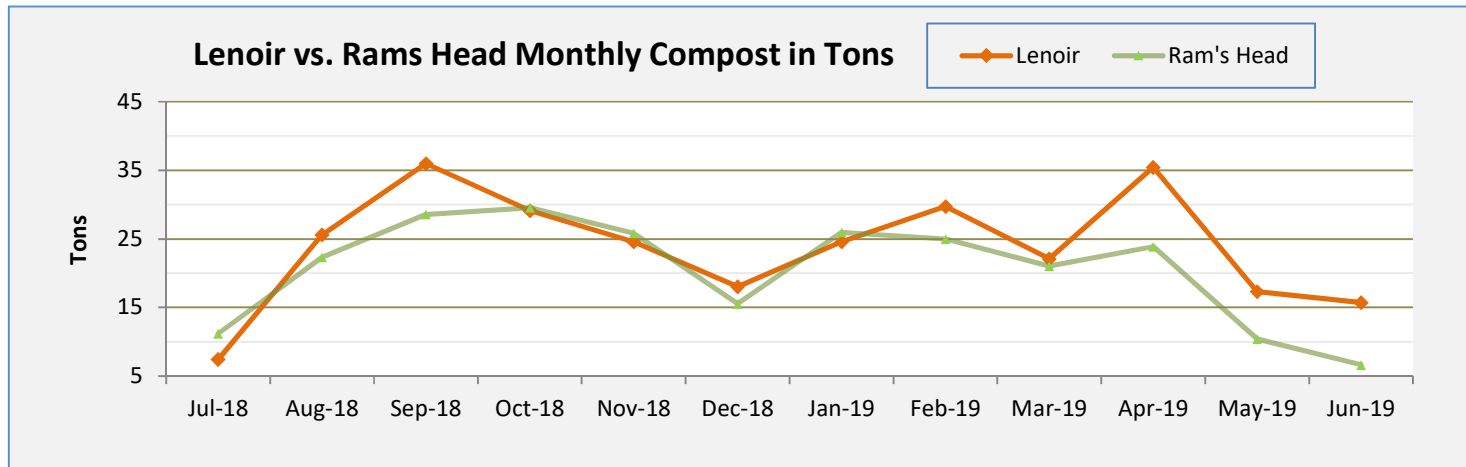
Recovered Organic Material 2018-19



NOTE: Prior to FY 17-18, yard waste totals were based on volume-to-weight conversions that were calculated based on estimated truck loads of leaves, limbs, and branches (with varying contents, truck sizes, and % full.)



2018-19 Food Waste (tons)	Jul-18 23.05	Aug-18 59.29	Sep-18 74.11	Oct-18 71.50	Nov-18 58.51	Dec-18 39.85	Jan-19 59.23	Feb-19 65.81	Mar-19 52.96	Apr-19 72.57	May-19 38.41	Jun-19 30.87	Year To Date: 646.17
Blue Zone (Loudermilk)	0.17	1.03	0.73	1.17	0.73	0.72	0.78	2.11	0.66	1.99	1.06	0.84	11.99
Consolidated Pickups*	0.97	0.99	0.78	1.15	0.97	0.81	0.55	1.31	1.58	2.21	1.33	0.63	13.28
Friday Center	0.18	3.54	0.67	3.14	1.82	1.62	0.73	1.84	1.68	1.89	2.25	1.59	20.95
Hyde Hall		0.01	0.03	0.05	0.01	0.01	0.02	0.04	0.02	0.05	0.04	0.00	0.29
Greenhouse (Genome Building)	0.78	1.14	1.08	2.64	0.71	0.64	1.12	0.73	1.83	1.05	1.57	2.20	15.49
Lenoir	7.41	25.59	35.98	29.10	24.60	18.03	24.59	29.71	22.09	35.46	17.30	15.74	285.60
Ram's Head (Chase Hall)	11.20	22.32	28.56	29.54	25.84	15.54	25.95	24.96	21.05	23.88	10.42	6.64	245.90
The Beach Cafe (Brinkhous- Bullitt)	1.54	1.81	1.68	1.84	1.06	1.04	1.44	1.77	1.59	2.16	3.29	2.30	21.52
The Mean Time (Campus Y)							0.14	0.42	0.24	0.54	0.13	0.06	1.53
The Training Table (Football)	0.18	0.73	1.20	1.20	0.53	0.45	0.47	0.60	0.49	1.32	0.02	0.15	7.34
Wendy's and Alpine (Union)	0.62	2.13	3.40	1.67	2.24	0.99	3.44	2.32	1.73	2.02	1.00	0.72	22.28
* This includes compost from Residence Halls and several special collection points (Bot Garden, EHS, SOG, TTK).													
Rizzo Center began in February 2008. It is not counted as University.													
Carolina Inn began in October 2009. It is not counted as University.													
Hospital began in 2008. It is not counted as University.													
*The Special Events site collects waste from several pilot locations on campus such as the Botanical Gardens, School of Government, Global Education Center, and individual events.													



2018-19 Trash, Cardboard, and Compost at Lenoir and Rams Head Dining Halls

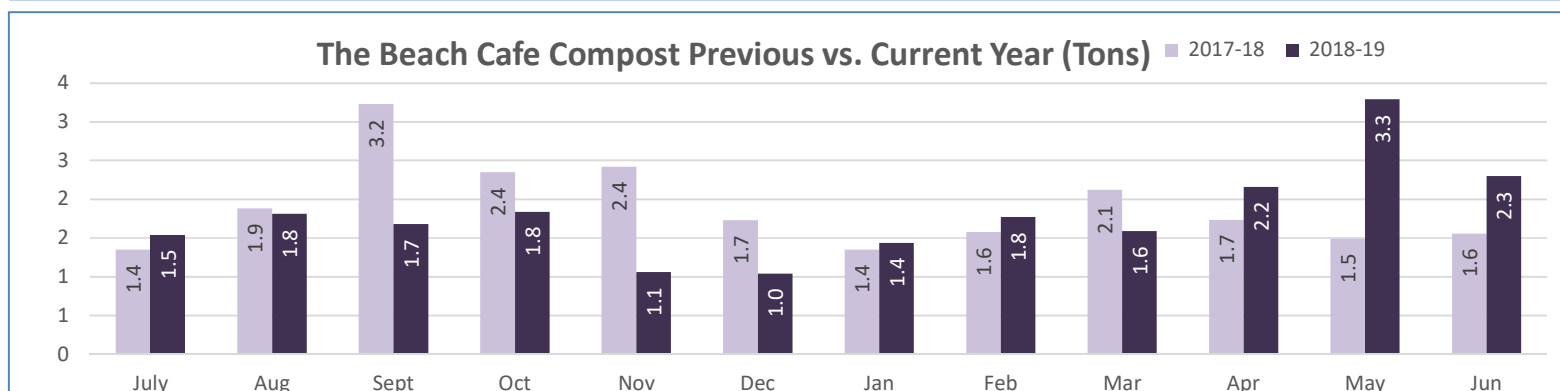
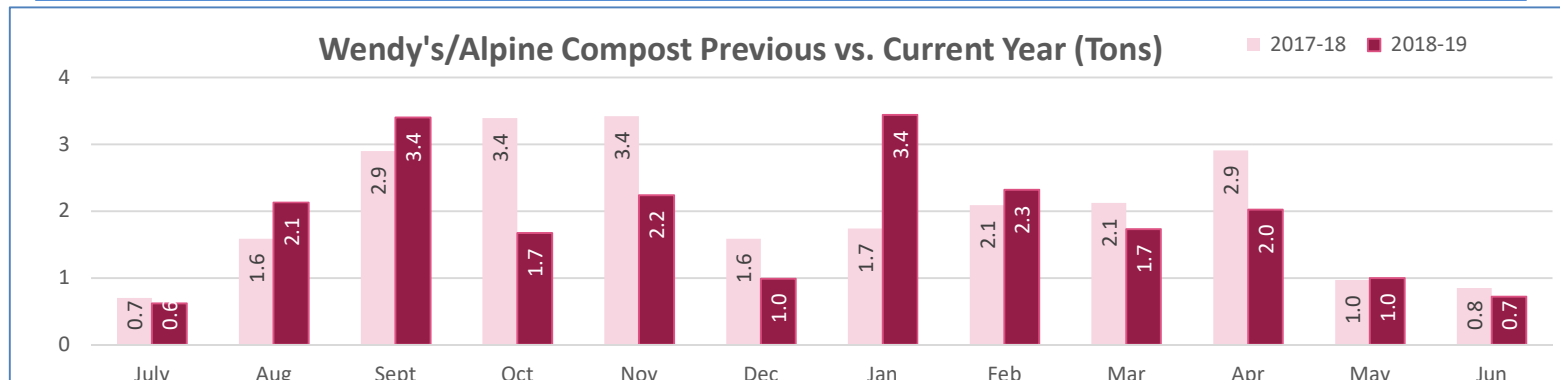
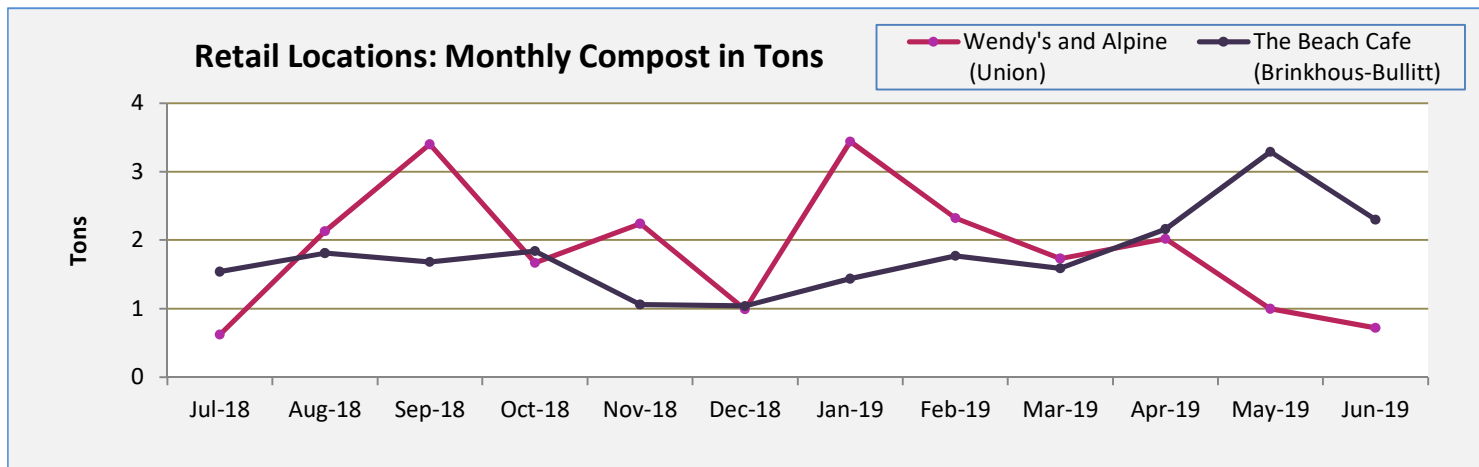
Lenoir Waste by Ton	Trash	Cardboard	Compost	Mixed Recycling	**Used Cooking Grease	Total Recycled Tons	Recovery Rate
Jul-18	4.19	1.85	7.41	0.28	**	9.54	69.5%
Aug-18	10.66	4.54	25.59	0.26	**	30.39	74.0%
Sep-18	21.99	7.80	35.98	0.28	**	44.06	66.7%
Oct-18	27.11	9.07	29.10	0.33	**	38.50	58.7%
Nov-18	15.33	6.49	24.60	0.17	**	31.26	67.1%
Dec-18	16.62	6.16	18.03	0.19	**	24.38	59.5%
Jan-19	17.87	5.93	24.59	0.26	**	30.78	63.3%
Feb-19	25.45	7.99	29.71	0.40	**	38.10	60.0%
Mar-19	18.48	7.04	22.09	0.26	**	29.39	61.4%
Apr-19	26.01	13.26	35.46	0.36	**	49.08	65.4%
May-19	8.43	4.04	17.30	0.24	**	21.58	71.9%
Jun-19	4.78	2.84	15.74	0.20	**	18.78	79.7%
	196.92	77.01	285.60	3.23	0.00	365.84	65.0%

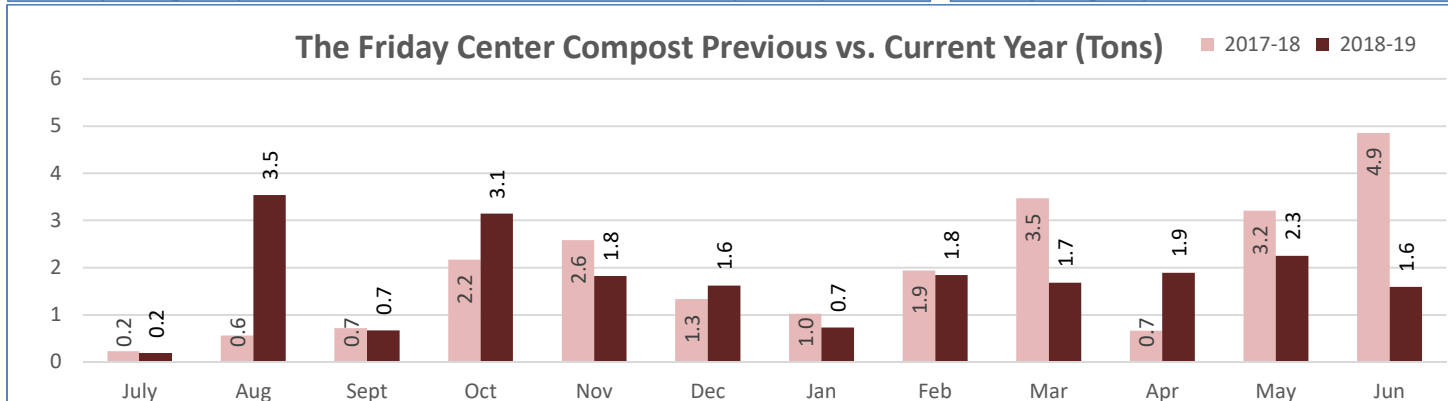
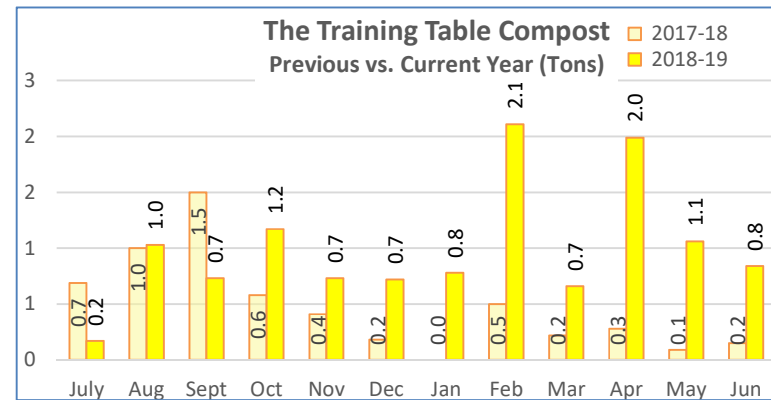
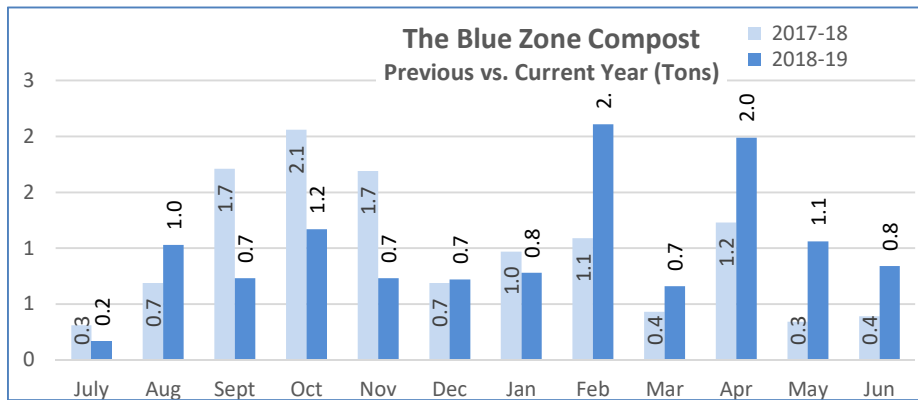
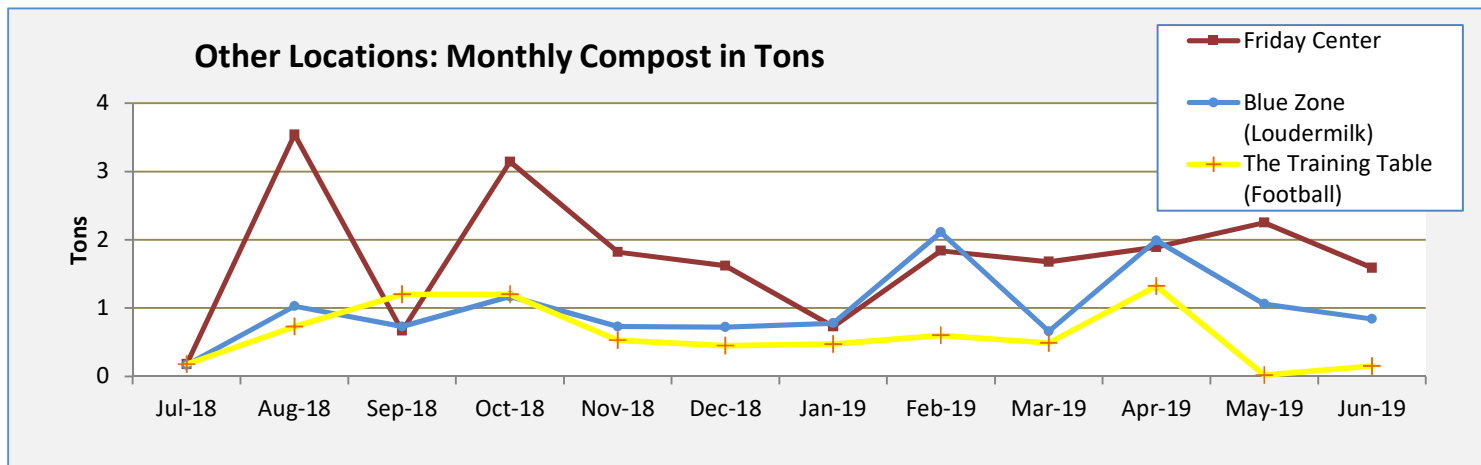
2018-19

Rams Head Waste by Ton	Trash	Cardboard	Compost	Mixed Recycling	**Used Cooking Grease	Total Recycled Tons	Recovery Rate
Jul-18	6.09	0.57	11.20	0.23	**	12.00	66.3%
Aug-18	7.12	5.37	22.32	0.23	**	27.92	79.7%
Sep-18	16.64	6.05	28.56	0.28	**	34.89	67.7%
Oct-18	15.2	3.85	29.54	0.25	**	33.64	68.9%
Nov-18	6.15	4.1	25.84	0.17	**	30.11	83.0%
Dec-18	11.6	1.80	15.54	0.19	**	17.53	60.2%
Jan-19	9.17	3.68	25.95	0.23	**	29.86	76.5%
Feb-19	13.11	5.69	24.96	0.27	**	30.92	70.2%
Mar-19	10.92	3.81	21.05	0.21	**	25.07	69.7%
Apr-19	9.05	5.27	23.88	0.41	**	29.56	76.6%
May-19	6.16	2.97	10.42	0.24	**	13.63	68.9%
Jun-19	2.75	1.12	6.64	0.12	**	7.88	74.1%
	113.96	44.28	245.90	2.83		293.01	72.0%

** There are not individual cooking grease weights for each building, but cooking grease is collected and recovered from each. See "Other" sheet for monthly totals.

**Food Waste Composted since 2000: 9,795 Tons
19,590,747 Pounds**

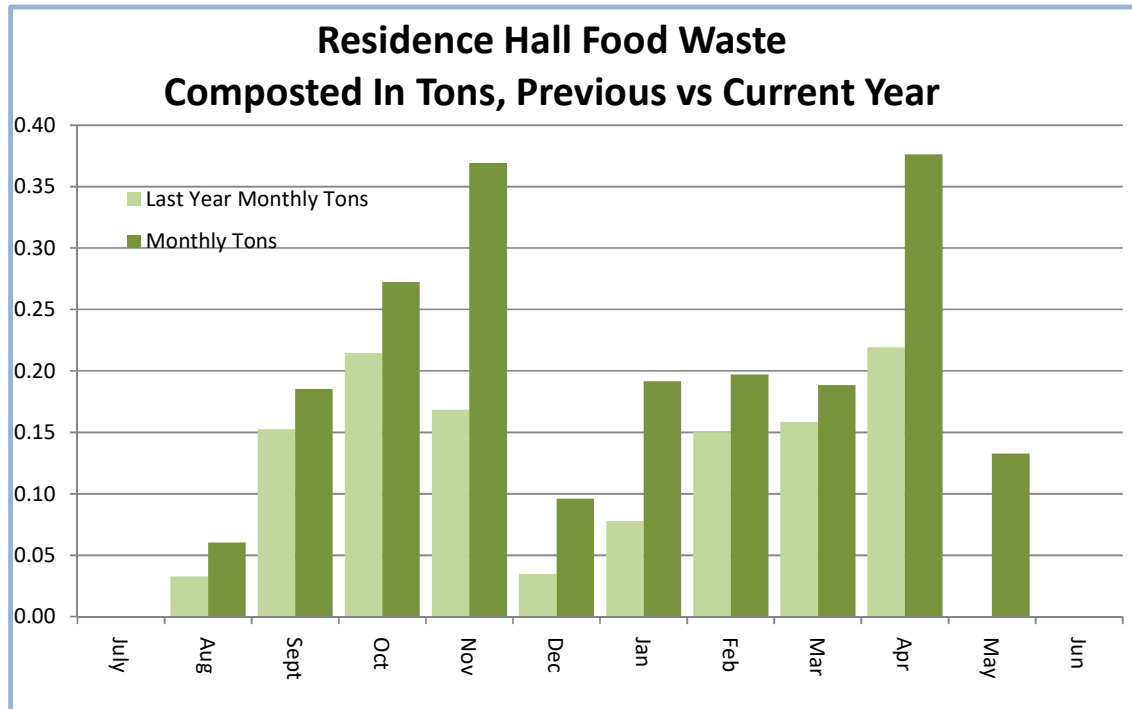




In July 2017, CDS catering operations were moved to Chase Hall/Rams Head. Rocky Top was the food service provider for the Friday Center from July 2017 through June 2018.

FISCAL YEAR 2018-19 WASTE RECOVERY TREND REPORT

ORGANIC												
RESIDENTIAL COMPOST	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.06	0.19	0.27	0.37	0.10	0.19	0.20	0.19	0.38	0.13	0.00
Y-T-D Tons	0.00	0.06	0.25	0.52	0.89	0.98	1.17	1.37	1.56	1.94	2.07	2.07
Last Year Monthly Tons	0.00	0.03	0.15	0.21	0.17	0.03	0.08	0.15	0.16	0.22	0.00	0.00
% Incr./Decr. Monthly	0%	84%	21%	27%	119%	176%	146%	31%	19%	72%	N/A	0%



Note: The program is put on hold and carts are removed during summer school and camp season (late May through mid-August). Kickoff programs happen in August. In 2018, carts were pulled at the end of April, before exams were over. In 2019, carts were removed in May, after graduation.



FISCAL YEAR 2018-19 WASTE RECOVERY TREND REPORT

ORGANIC

FOOD WASTE (Dining, Residential & Special Events)

FOOD WASTE	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	23.05	59.29	74.11	71.50	58.51	39.85	59.23	65.81	52.96	72.57	38.41	30.87
Y-T-D Tons	23.05	82.34	156.45	227.94	286.46	326.31	385.54	451.35	504.32	576.89	615.30	646.17
Last Year Monthly Tons	27.70	41.85	104.44	99.03	97.41	51.53	56.41	74.52	64.65	76.24	34.75	32.21
% Incr./Decr. Monthly	-17%	42%	-29%	-28%	-40%	-23%	5%	-12%	-18%	-5%	11%	-0.04

MULCH PRODUCED FROM YARD WASTE AND TRIMMINGS

MULCH PRODUCED	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	30.00	180.00	130.00	270.00	265.00	240.00	230.00	0.00	0.00	90.00	0.00
Y-T-D Tons	0.00	30.00	210.00	340.00	610.00	875.00	1,115.00	1,345.00	1,345.00	1,345.00	1,435.00	1,435.00
Last Year Monthly Tons	45.00	105.00	135.00	60.00	30.00	120.00	90.00	0.00	0.00	120.00	60.00	0.00
% Incr./Decr. Monthly	ne ThisMont	-71%	33%	117%	800%	121%	167%	ast Year This	0%	N/A	50%	0.00

TOTAL ORGANIC TONS

note: Pallets have been moved to the C&D page.

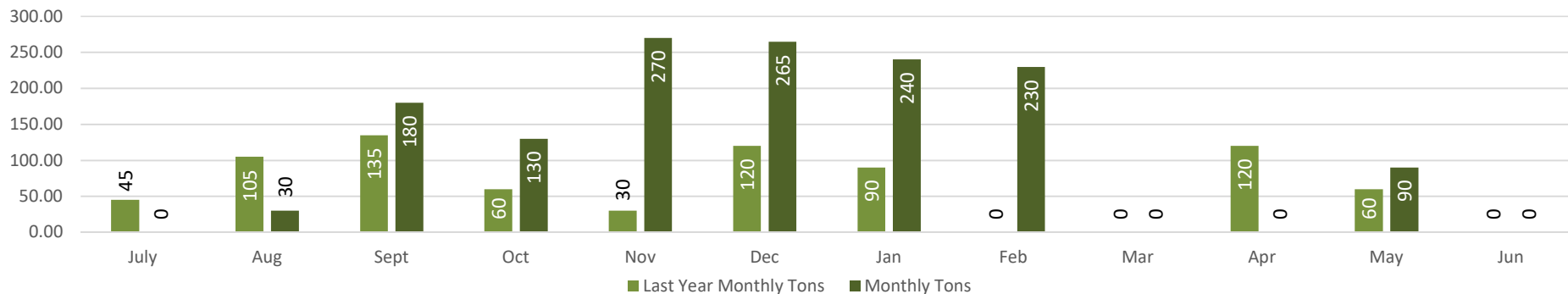
TOTAL ORGANIC	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	23.05	89.29	254.11	201.50	328.51	304.85	299.23	295.81	52.96	72.57	128.41	30.87
Y-T-D Tons	23.05	112.34	366.45	567.94	896.46	1,201.31	1,500.54	1,796.35	1,849.32	1,921.89	2,050.30	2,081.17
Last Year Monthly Tons	72.70	146.85	239.44	159.03	127.41	171.53	146.41	74.52	64.65	196.24	94.75	32.21
% Incr./Decr. Monthly	-68%	-39%	6%	27%	158%	78%	104%	297%	-18%	-63%	36%	-0.04

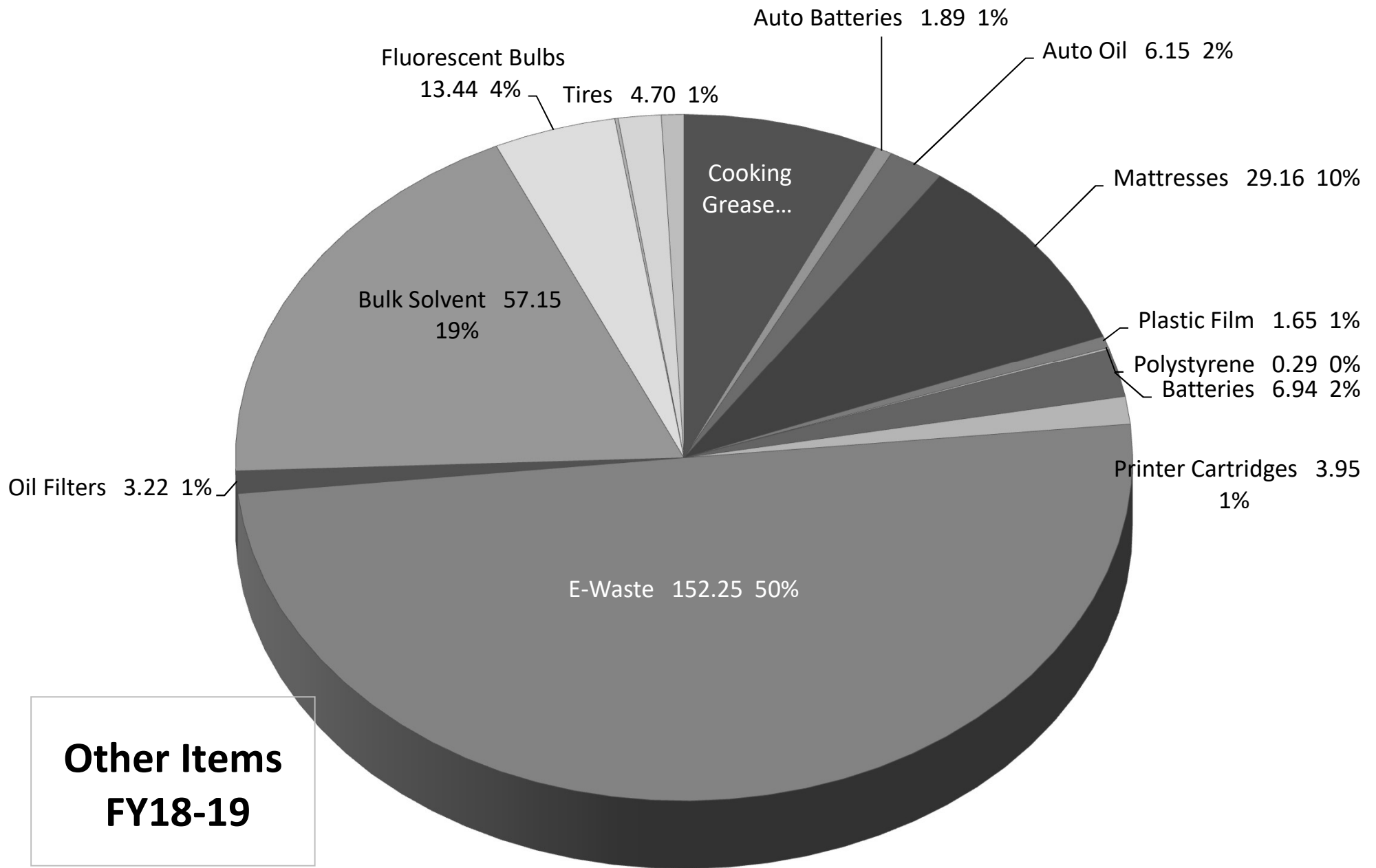
Monthly Yard Waste Tons:

Prior Year (2017-18) to Current Year (2018-19)

Prior to FY 17-18, volume-to-weight conversions were based on estimates of the number and size of truck loads of leaves, limbs, and branches.

As of FY 17-18, the number of cubic yards





FISCAL YEAR 2018-19 WASTE RECOVERY TREND REPORT

OTHER ITEMS

SPECIAL WASTES

AUTO BATTERIES	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.05	0.25	0.20	0.20	0.16	0.16	0.18	0.14	0.14	0.16	0.18	0.09
Y-T-D Tons	0.05	0.29	0.49	0.69	0.85	1.01	1.19	1.33	1.46	1.62	1.80	1.89
Last Year Monthly Tons	0.18	0.23	0.41	0.18	0.14	0.16	0.43	0.23	0.32	0.25	0.18	0.16
% Incr./Decr. Monthly	-75%	10%	-51%	11%	19%	2%	-58%	-41%	-57%	-35%	0%	-43%

AUTO OIL	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.55	0.00	1.15	0.52	0.52	0.00	0.82	0.00	0.86	0.52	0.00	1.21
Y-T-D Tons	0.55	0.55	1.70	2.22	2.74	2.74	3.56	3.56	4.42	4.94	4.94	6.15
Last Year Monthly Tons	1.15	0.91	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.93	0.00
% Incr./Decr. Monthly	-52%	N/A	N/A	N/A	N/A	N/A	N/A	0%	N/A	N/A	N/A	N/A

AUTO OIL FILTERS	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.90	0.00	0.52	0.00	0.00	0.90	0.90	0.00	0.00	0.00
Y-T-D Tons	0.00	0.00	0.90	0.90	1.42	1.42	1.42	2.32	3.22	3.22	3.22	3.22
Last Year Monthly Tons	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.90	0.00	0.00	0.00
% Incr./Decr. Monthly	0%	0%	N/A	0%	-42%	0%	0%	N/A	0%	0%	0%	0%

AUTO COOLANT	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.18	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00
Y-T-D Tons	0.00	0.00	0.18	0.18	0.18	0.18	0.37	0.37	0.37	0.37	0.37	0.37
Last Year Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Incr./Decr. Monthly	0%	0%	last Year This	0%	0%	0%	last Year This	0%	0%	0%	0%	0%

BATTERIES	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	1.56	0.00	0.45	0.08	0.00	0.05	3.82	0.02	0.25	0.56	0.15
Y-T-D Tons	0.00	1.56	1.56	2.01	2.09	2.09	2.14	5.96	5.98	6.23	6.79	6.94
Last Year Monthly Tons	0.00	0.68	0.00	0.93	0.00	0.00	0.00	3.72	0.27	6.35	0.00	0.00
% Incr./Decr. Monthly	0%	129%	0%	-52%	N/A	0%	N/A	3%	-93%	-96%	N/A	N/A

BULK SOLVENT	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	11.43	0.00	0.00	11.43	0.00	11.43	11.43	0.00	11.43	0.00
Y-T-D Tons	0.00	0.00	11.43	11.43	11.43	22.86	22.86	34.29	45.72	45.72	57.15	57.15
Last Year Monthly Tons	0.00	8.49	0.00	0.00	7.51	0.00	0.00	9.10	9.37	6.89	0.00	5.97
% Incr./Decr. Monthly	0%	N/A	N/A	0%	N/A	N/A	0%	26%	22%	N/A	N/A	N/A

COOKING OIL (biodiesel)	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	1.40	0.81	0.86
Y-T-D Tons	0.00	2.30	4.60	6.90	9.20	11.50	13.80	16.10	18.40	19.80	20.61	21.47
Last Year Monthly Tons	0.81	1.33	2.75	2.36	1.82	1.33	1.60	2.39	2.36	2.75	1.67	0.82
% Incr./Decr. Monthly	one ThisMont	73%	-16%	-3%	26%	73%	44%	-4%	-3%	-49%	-51%	5%

E-WASTE	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	14.51	14.67	7.85	15.56	10.54	0.79	11.74	10.93	13.68	18.46	15.93	17.59
Y-T-D Tons	14.51	29.18	37.03	52.59	63.13	63.92	75.66	86.59	100.27	118.73	134.66	152.25
Last Year Monthly Tons	9.90	9.42	12.63	23.90	8.60	3.90	11.59	12.46	15.99	9.00	10.91	10.90
% Incr./Decr. Monthly	47%	56%	-38%	-35%	23%	-80%	1%	-12%	-14%	105%	46%	61%

FLUORESCENT BULBS	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	2.20	1.54	0.00	2.54	1.10	1.98	1.98	0.00	0.50	0.88	0.28	0.44
Y-T-D Tons	2.20	3.74	3.74	6.28	7.38	9.36	11.34	11.34	11.84	12.72	13.00	13.44
Last Year Monthly Tons	2.20	1.54	0.00	2.54	1.10	1.98	0.00	1.15	2.48	0.49	1.54	1.39
% Incr./Decr. Monthly	0%	0%	0%	0%	0%	0%	N/A	N/A	-80%	80%	-82%	-68%

MATTRESSES	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.00
Y-T-D Tons	0.00	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	29.16
Last Year Monthly Tons	0.05	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.16	0.00
% Incr./Decr. Monthly	N/A	-16%	0%	0%	0%	0%	0%	0%	0%	N/A	N/A	N/A

METAL ITEMS	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.24	0.31	0.00	0.26	0.00	0.12	0.18	0.28	0.29	0.27	0.27	0.25
Y-T-D Tons	0.24	0.55	0.55	0.81	0.81	0.93	1.11	1.39	1.68	1.95	2.22	2.47
Last Year Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Incr./Decr. Monthly	N/A	N/A	0%	N/A	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A

PLASTIC FILM	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.76	0.00	0.57
Y-T-D Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32	1.08	1.08	1.65
Last Year Monthly Tons	0.21	0.21	0.00	1.05	0.00	0.00	0.39	0.00	0.00	0.26	0.00	0.00
% Incr./Decr. Monthly	N/A	N/A	0%	N/A	0%	0%	N/A	N/A	0%	192%	0%	N/A

POLYSTYRENE (loose)	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y-T-D Tons	0.00	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Last Year Monthly Tons	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Incr./Decr. Monthly	0%	N/A	N/A	0%	0%	0%	0%	0%	0%	0%	0%	0%

PRINTER CARTRIDGES	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	0.00	0.19	0.07	0.13	0.83	1.09	0.80	0.64	0.20
Y-T-D Tons	0.00	0.00	0.00	0.00	0.19	0.26	0.39	1.22	2.31	3.11	3.75	3.95
Last Year Monthly Tons	0.00	4.40	0.00	0.00	5.60	0.00	0.00	5.20	0.00	0.00	3.20	0.00
% Incr./Decr. Monthly	0%	N/A	0%	0%	-97%	N/A	N/A	-84%	N/A	N/A	-80%	N/A

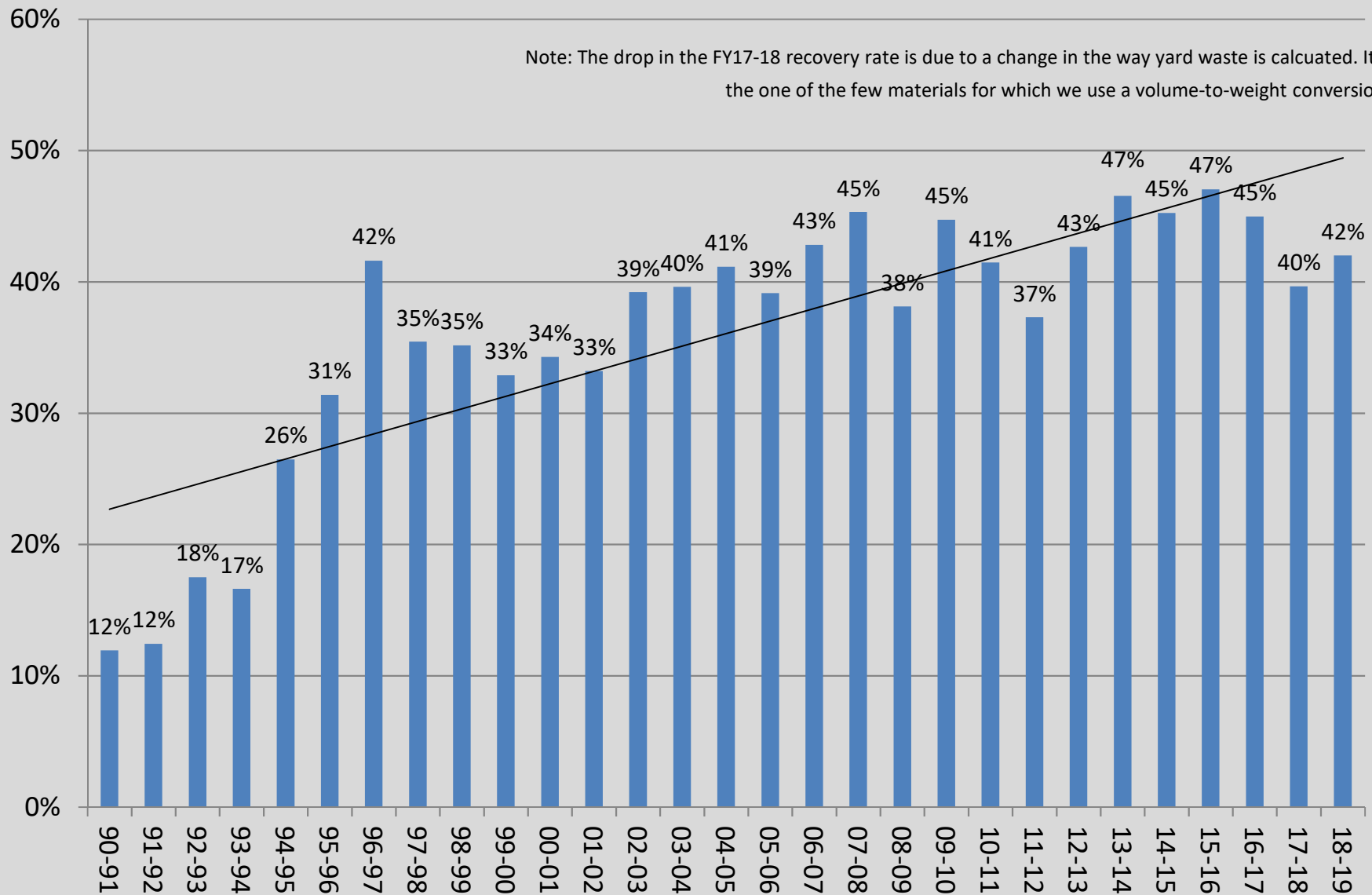
TIRES	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	1.44	0.00	0.00	1.48	0.00	1.78	0.00	0.00	0.00	0.00	0.00
Y-T-D Tons	0.00	1.44	1.44	1.44	2.92	2.92	4.70	4.70	4.70	4.70	4.70	4.70
Last Year Monthly Tons	1.28	1.73	1.26	1.24	0.00	0.00	1.72	0.00	0.00	0.43	0.00	0.00
% Incr./Decr. Monthly	N/A	-17%	N/A	N/A	N/A	0%	3%	0%	0%	N/A	0%	0%

OTHER TOTALS

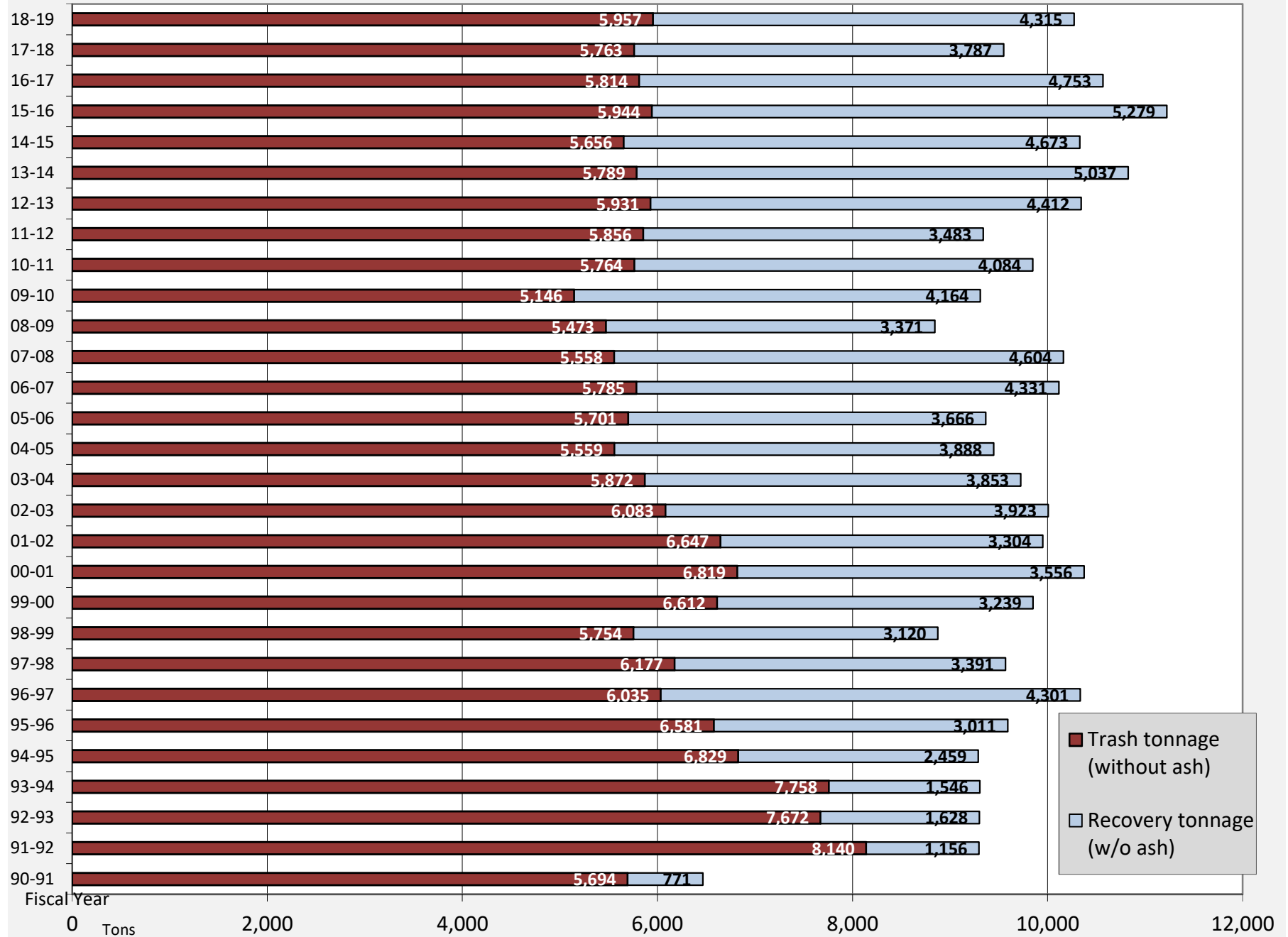
(note: scrap metal, surplus and concrete/brick have been moved to the C&D page)

OTHER TOTAL	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	17.55	22.52	24.01	21.83	16.89	16.85	19.35	30.95	31.21	23.50	30.10	50.36
Y-T-D Tons	17.55	40.06	64.07	85.90	102.79	119.64	138.99	169.94	201.14	224.64	254.74	305.10
Last Year Monthly Tons	15.78	29.12	17.29	32.20	25.67	8.05	15.73	34.25	31.69	26.44	18.59	19.24
% Incr./Decr. Monthly	11%	-23%	39%	-32%	-34%	109%	23%	-10%	-2%	-11%	62%	162%

Recovery Rate History



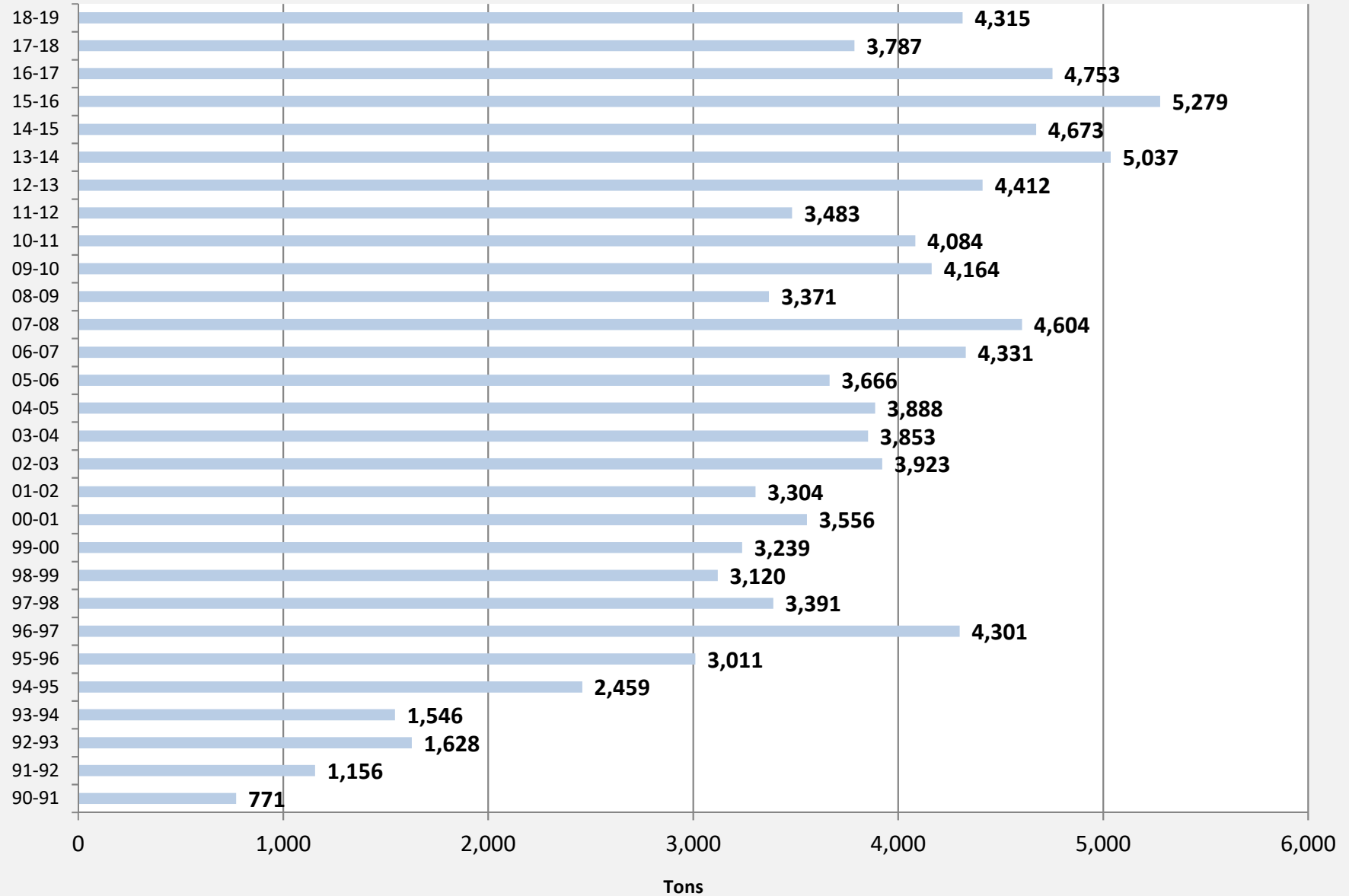
UNC-Chapel Hill Waste Landfill & Recovery Trends (without Coal Ash)



9/24/2019

Historical View of Recovery Tons

Note: The drop in the amount recovered in FY17-18 is due to a change in the method used to calculate yard waste.



FISCAL YEAR 2018-19 WASTE RECOVERY TREND REPORT

MUNICIPAL SOLID WASTE (MSW)												
MSW FRONT LOAD	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	199.81	288.84	252.76	301.38	272.96	209.42	232.64	242.68	238.38	263.87	258.27	187.54
Y-T-D Tons	199.81	488.65	741.41	1,042.79	1,315.75	1,525.17	1,757.81	2,000.49	2,238.87	2,502.74	2,761.01	2948.55
Last Year Monthly Tons	177.6	235.16	274.21	277.69	239.92	199.4	217.16	238.79	252.95	294.07	288.61	212.32
% Incr./Decr. Monthly	13%	23%	-8%	9%	14%	5%	7%	2%	-6%	-10%	-11%	-12%

MSW ROLLOFF	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Waste Industries Hauled	132.97	195.71	197.41	213.54	175.43	124.07	177.67	177.52	151.29	180.42	267.01	239.34
OWRR Hauled	0.00	0.69	2.16	0.48	0.00	0.00	0.00	0.00	0.67	0.00	24.79	2.57
Monthly Tons	132.97	196.40	199.57	214.02	175.43	124.07	177.67	177.52	151.96	180.42	291.80	241.91
Y-T-D Tons	132.97	329.37	528.94	742.96	918.39	1,042.46	1,220.13	1,397.65	1,549.61	1,730.03	2,021.83	2,263.74
Last Year Monthly Tons	124.75	199.01	201.75	187.49	169.83	138.24	153.28	174.77	209.88	178.33	212.42	178.33
% Incr./Decr. Monthly	7%	-1%	-1%	14%	3%	-10%	16%	2%	-28%	1%	37%	36%

* 9/17 tons adjusted. Data entry error.

MSW REAR LOAD	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	4.01	0.00	11.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y-T-D Tons	0.00	0.00	4.01	4.01	15.58	15.58	15.58	15.58	15.58	15.58	15.58	15.58
Last Year Monthly Tons	0	0	14.96	6.83	4.3	0	0	0	0	0	0	0
% Incr./Decr. Monthly	0%	0%	-73%	N/A	169%	0%	0%	0%	0%	0%	0%	0%

ANIMAL BEDDING	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons Gen Med	15.77	18.06	18.83	16.97	14.17	13.35	18.21	19.41	24.98	19.09	22.78	18.60
Bingham Facility	4.37	4.95	5.39	4.09	3.92	3.73	4.27	4.71	3.94	3.59	3.58	5.21
MEJ Facility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Monthly Tons Rear Load	22.00	23.48	26.87	25.00	22.57	21.55	26.26	22.71	23.59	24.54	19.68	21.24
Monthly Tons	42.14	46.49	51.09	46.06	40.66	38.63	48.74	46.83	52.51	47.22	46.04	45.05
Y-T-D Tons	42.14	88.63	139.72	185.78	226.44	265.07	313.81	360.64	413.15	460.37	506.41	551.46
Last Year Monthly Tons	40.58	46.51	47.9	40.47	40.73	28.38	36.85	37.1	63.98	49.72	43.39	50.55
% Incr./Decr. Monthly	4%	0%	7%	14%	0%	36%	32%	26%	-18%	-5%	6%	-11%

MSW TOTAL	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	374.92	531.73	507.43	561.46	500.62	372.12	459.05	467.03	442.85	491.51	596.11	474.50
Y-T-D Tons	374.92	906.65	1,414.08	1,975.54	2,476.16	2,848.28	3,307.33	3,774.36	4,217.21	4,708.72	5,304.83	5,779.33
Last Year Monthly Tons	342.93	480.68	538.82	512.48	454.78	366.02	407.29	450.66	526.81	522.12	544.42	441
% Incr./Decr. Monthly	9%	11%	-6%	10%	10%	2%	13%	4%	-16%	-6%	9%	8%

FISCAL YEAR 2018-19 WASTE RECOVERY TREND REPORT

COAL ASH

RECYCLED	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y-T-D Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Last Year Monthly Tons	0	0	0	0	0	0	0	0	0	0	0	0
% Incr./Decr. Monthly	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

COMPOSTED	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y-T-D Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Last Year Monthly Tons	0	0	0	0	0	0	0	0	0	0	0	0
% Incr./Decr. Monthly	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

REUSED*	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	1,218.51	1,316.14	1,357.40	1,546.81	1,851.31	2,126.23	3,145.30	2,503.36	2,353.65	1,787.22	1,290.66	27.97
Y-T-D Tons	1,218.51	2,534.65	3,892.05	5,438.86	7,290.17	9,416.40	12,561.70	15,065.06	17,418.71	19,205.93	20,496.59	20,524.56
Last Year Monthly Tons	1,272.87	1,460.93	1,222.60	1,285.74	1,802.07	2,275.77	3,336.04	2,142.61	1,832.03	1,053.59	1,100.33	1,532.67
% Incr./Decr. Monthly	-4%	-10%	11%	20%	3%	-7%	-6%	17%	28%	70%	17%	-0.98

LANDFILLED	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y-T-D Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Last Year Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Incr./Decr. Monthly	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

COAL ASH TOTAL	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	1,218.51	1,316.14	1,357.40	1,546.81	1,851.31	2,126.23	3,145.30	2,503.36	2,353.65	1,787.22	1,290.66	27.97
Y-T-D Tons	1,218.51	2,534.65	3,892.05	5,438.86	7,290.17	9,416.40	12,561.70	15,065.06	17,418.71	19,205.93	20,496.59	20,524.56
Last Year Monthly Tons	1,272.87	1,460.93	1,222.60	1,285.74	1,802.07	2,275.77	3,336.04	2,142.61	1,832.03	1,053.59	1,100.33	1,532.67
% Incr./Decr. Monthly	-4%	-10%	11%	20%	3%	-7%	-6%	17%	28%	70%	17%	-0.98
Last Y-T-D Tons	1,272.87	2,733.80	3,956.40	5,242.14	7,044.21	9,319.98	12,656.02	14,798.63	16,630.66	17,684.25	18,784.58	20,317.25
% Incr./Decr. YTD	-4%	-7%	-2%	4%	3%	1%	-1%	2%	5%	9%	9%	1%

Recycled: Made into new products like concrete or absorbant (Mintek)

***Reused:** Can be used for structural fill, alternative daily cover at landfills, sand replacement in boiler start up, and sometimes beneficial fill.

Composted: Made into a new product via decomposition or compost processing.

Landfilled: Buried as waste.

TOTAL SOLID WASTE LANDFILLED (MSW and C&D)												
TOTAL SW LANDFILLED -- MSW and C&D	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	416.26	553.26	519.34	566.67	506.64	382.82	491.53	472.82	457.62	498.32	605.53	485.77
Last Year Monthly Tons	347.70	491.92	545.36	524.09	461.12	368.60	411.88	464.96	532.35	526.43	550.86	459.81
% Incr./Decr. MONTH	20%	12%	-5%	8%	10%	4%	19%	2%	-14%	-5%	10%	6%
Y-T-D Tons	416.26	969.52	1,488.86	2,055.53	2,562.17	2,944.98	3,436.51	3,909.33	4,366.94	4,865.26	5,470.79	5,956.56
Last Y-T-D Tons	347.70	839.62	1,384.98	1,909.07	2,370.19	2,738.79	3,150.67	3,615.63	4,147.98	4,674.41	5,225.27	5,685.08
% Incr./Decr. YTD	20%	15%	8%	8%	8%	8%	9%	8%	5%	4%	5%	5%

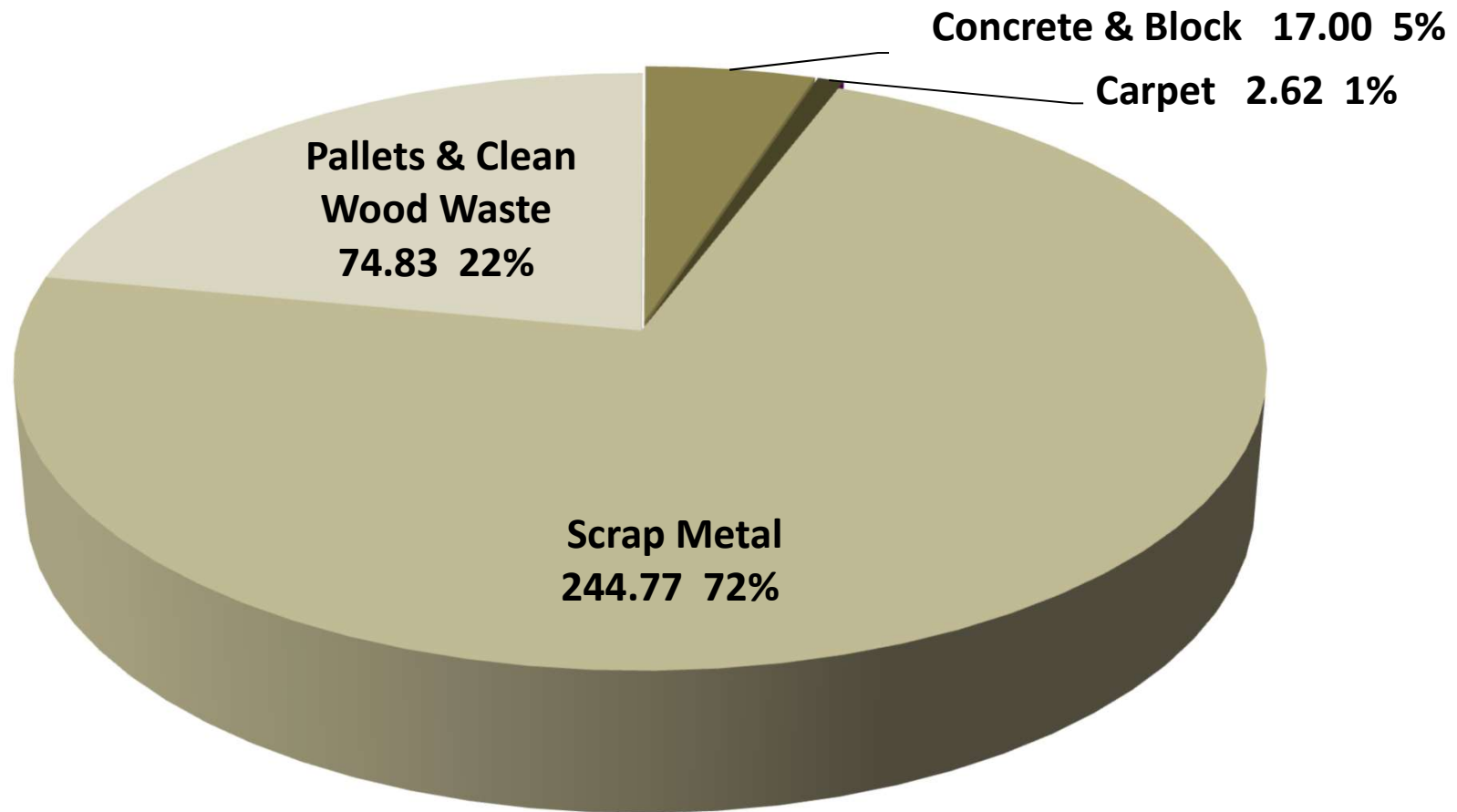
TOTAL WASTE RECYCLED (ALL SOURCES, EXCEPT COAL ASH)												
TOTAL SW RECYCLED	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	175.09	231.40	357.06	332.38	466.34	408.84	428.60	408.81	185.92	200.79	272.46	201.03
Last Year Monthly Tons	230.23	335.91	354.57	288.40	224.41	279.40	262.58	208.88	232.13	329.23	299.96	190.23
% Incr./Decr. MONTH	-24%	-31%	1%	15%	108%	46%	63%	96%	-20%	-39%	-9%	6%
Y-T-D Tons	175.09	406.49	763.55	1,095.93	1,562.27	1,971.10	2,399.70	2,808.51	2,994.43	3,195.22	3,467.68	3,668.72
Last Y-T-D Tons	230.23	566.14	920.71	1,209.11	1,433.52	1,712.92	1,975.49	2,184.37	2,416.50	2,745.73	3,045.69	3,235.92
% Incr./Decr. YTD	-24%	-28%	-17%	-9%	9%	15%	21%	29%	24%	16%	14%	13%

TOTAL WASTE GENERATED = LANDFILLED + RECYCLED (not including coal ash)												
TOTAL SW COMPOSTED	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	23.05	59.29	74.11	71.50	58.51	39.85	59.23	65.81	52.96	72.57	38.41	30.87
Last Year Monthly Tons	27.70	41.85	104.44	99.03	97.41	51.53	56.41	74.52	64.65	76.24	34.75	32.21
% Incr./Decr. MONTH	-17%	42%	-29%	-28%	-40%	-23%	5%	-12%	-18%	-5%	11%	-4%
Y-T-D Tons	23.05	82.34	156.45	227.94	286.46	326.31	385.54	451.35	504.32	576.89	615.30	646.17
Last Y-T-D Tons	27.70	69.55	173.99	273.02	370.43	421.96	478.37	552.89	617.54	693.78	728.53	760.75
% Incr./Decr. YTD	-17%	18%	-10%	-17%	-23%	-23%	-19%	-18%	-18%	-17%	-16%	-15%

TOTAL WASTE GENERATED = LANDFILLED + RECYCLED (not including coal ash)												
TOTAL WASTE GENERATED	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	614.40	843.95	950.50	970.54	1031.49	831.50	979.36	947.44	696.50	771.69	916.40	717.67
Last Year Monthly Tons	605.63	869.68	1004.37	911.52	782.94	699.53	730.87	748.36	829.13	931.90	885.57	682.26
% Incr./Decr. MONTH	1%	-3%	-5%	6%	32%	19%	34%	27%	-16%	-17%	3%	5%
Y-T-D Tons	614.40	1,458.35	2,408.86	3,379.40	4,410.89	5,242.39	6,221.76	7,169.19	7,865.69	8,637.37	9,553.77	10,271.45
Last Y-T-D Tons	605.63	1,475.31	2,479.68	3,391.21	4,174.14	4,873.67	5,604.54	6,352.89	7,182.02	8,113.92	8,999.50	9,681.75
% Incr./Decr. YTD	1%	-1%	-3%	0%	6%	8%	11%	13%	10%	6%	6%	6%

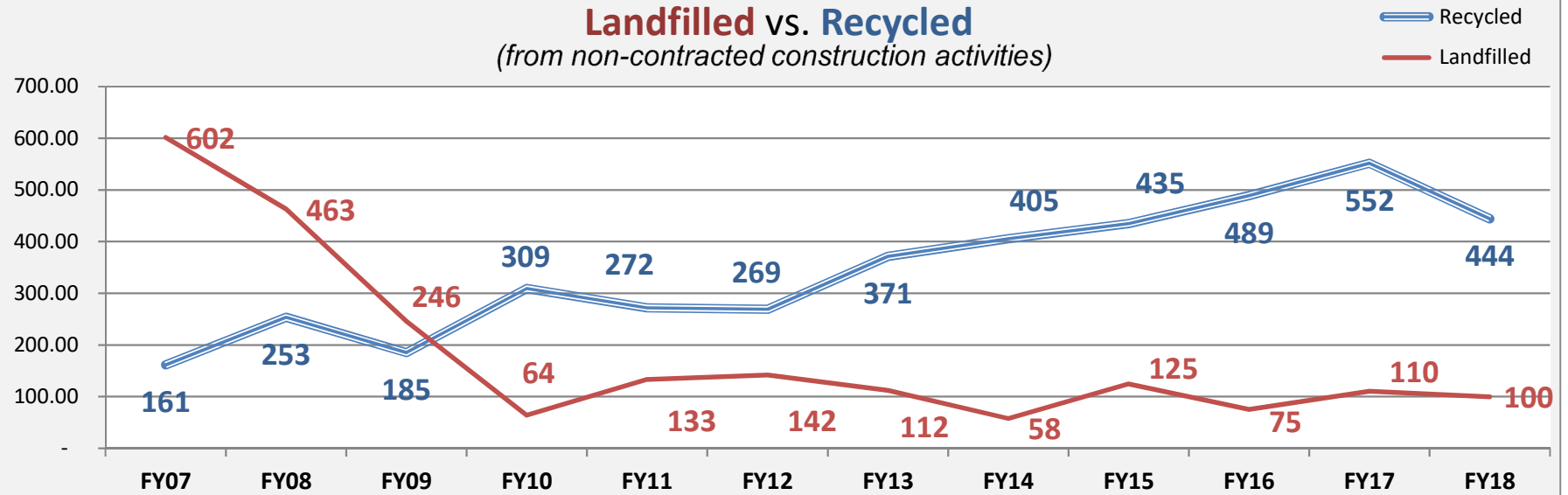
% RECOVERED = (Recycled+Composted)/Total Waste Generated (not including coal ash)												
MONTHLY % RECOVERED	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	198.14	290.69	431.16	403.87	524.86	448.69	487.83	474.62	238.88	273.37	310.87	231.90
Last Year Monthly Tons	257.93	377.76	459.01	387.43	321.82	330.93	318.99	283.40	296.78	405.47	334.71	222.45
Current Yr. Monthly % Recovered	32%	34%	45%	42%	51%	54%	50%	50%	34%	35%	34%	32%
Previous Year Monthly % Recovered	43%	43%	46%	43%	41%	47%	44%	38%	36%	44%	38%	33%
% Incr./Decr. MONTH	-24%	-21%	-1%	-2%	24%	14%	14%	32%	-4%	-19%	-10%	-1%
Current YTD % Recovered	32%	34%	38%	39%	42%	44%	45%	45%	44%	44%	43%	42%
Last YTD % Recovered	43%	43%	44%	44%	43%	44%	44%	43%	42%	42%	42%	41%
% Incr./Decr. YTD	-24%	-22%	-13%	-10%	-3%	0%	2%	6%	5%	3%	2%	2%

2018-19
Source Separated Construction and Demolition Recycling
(from non-contracted construction activities)



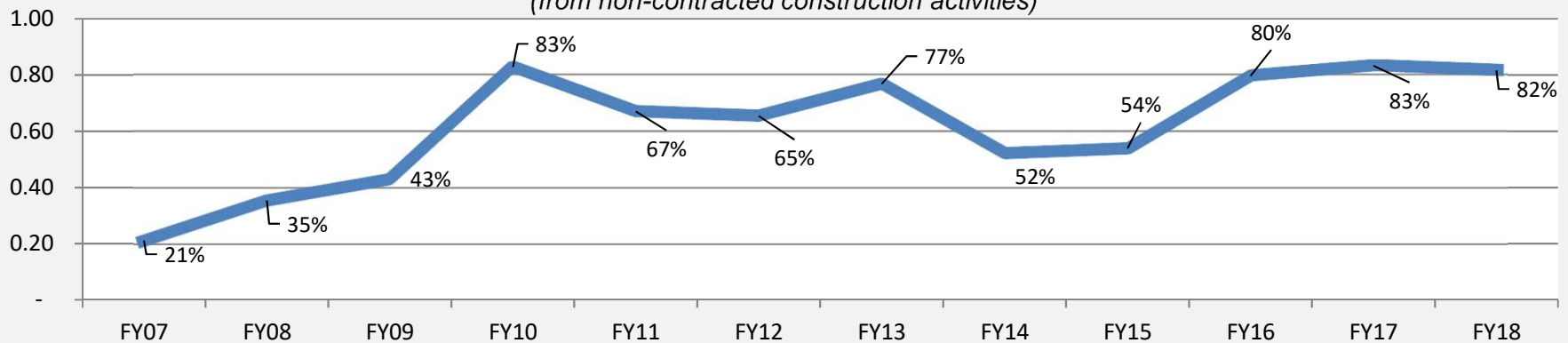
Construction and Demolition Total Annual Waste in Tons

Landfilled vs. Recycled
(from non-contracted construction activities)



Construction and Demolition Recycling Rate

(from non-contracted construction activities)



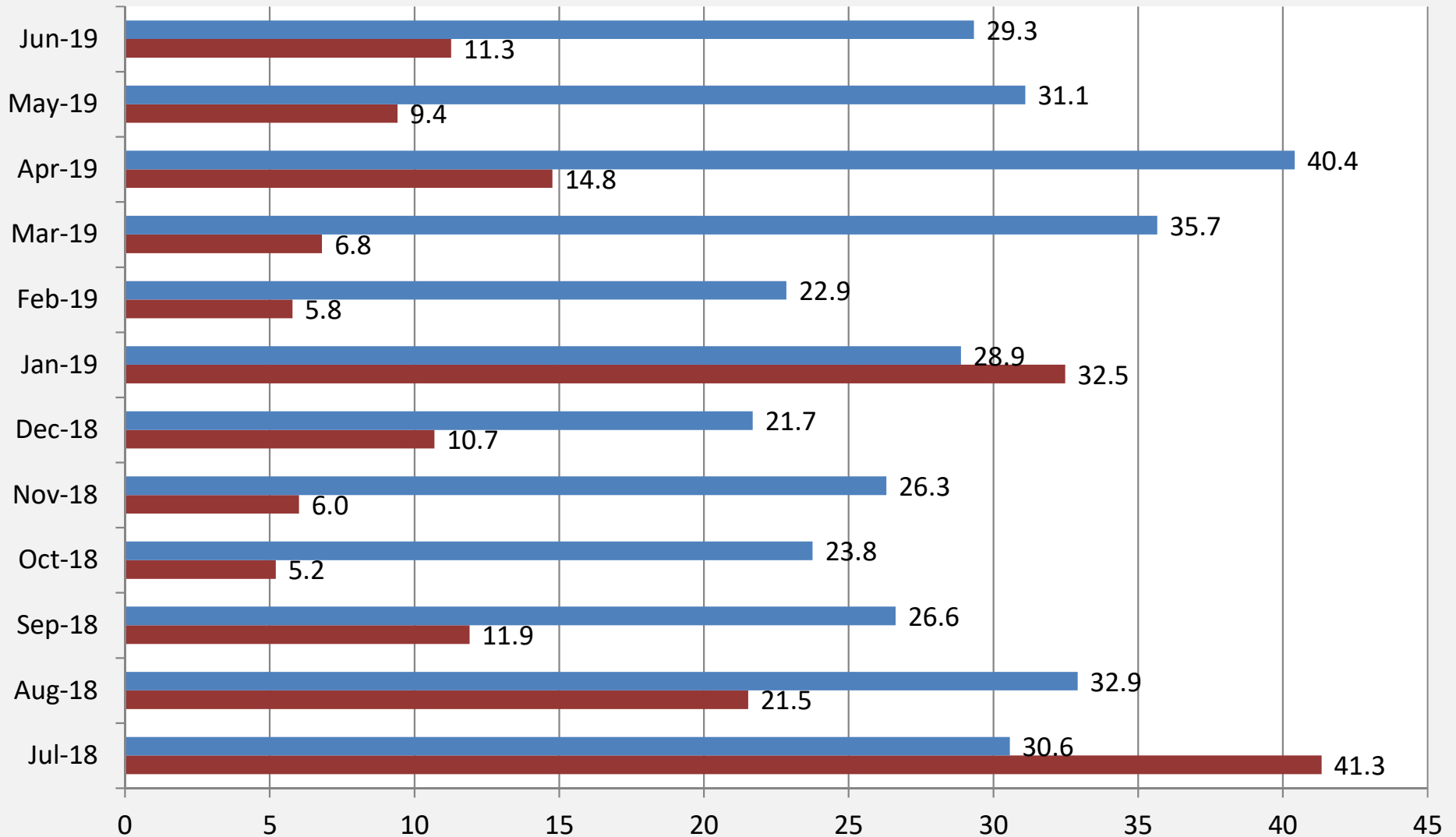
Monthly Construction and Demolition Waste Trends

Amount Landfilled and Recycled in Tons

(University Only, No Contractor Projects)

■ FY18-19: C&D Recycled

■ FY18-19 C&D Landfill

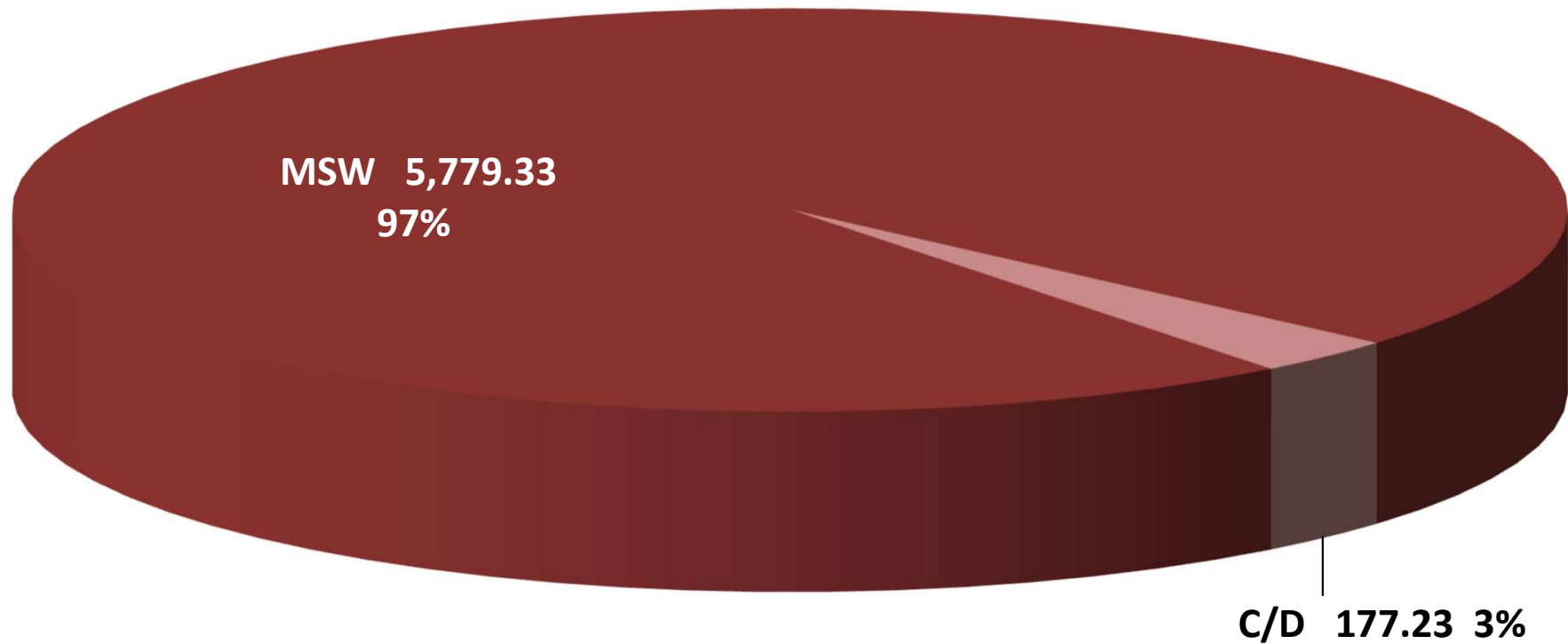


9/24/2019

OWRR 18-19, Monthly C&D Trends

C/D Waste Landfilled, tons 2018-19

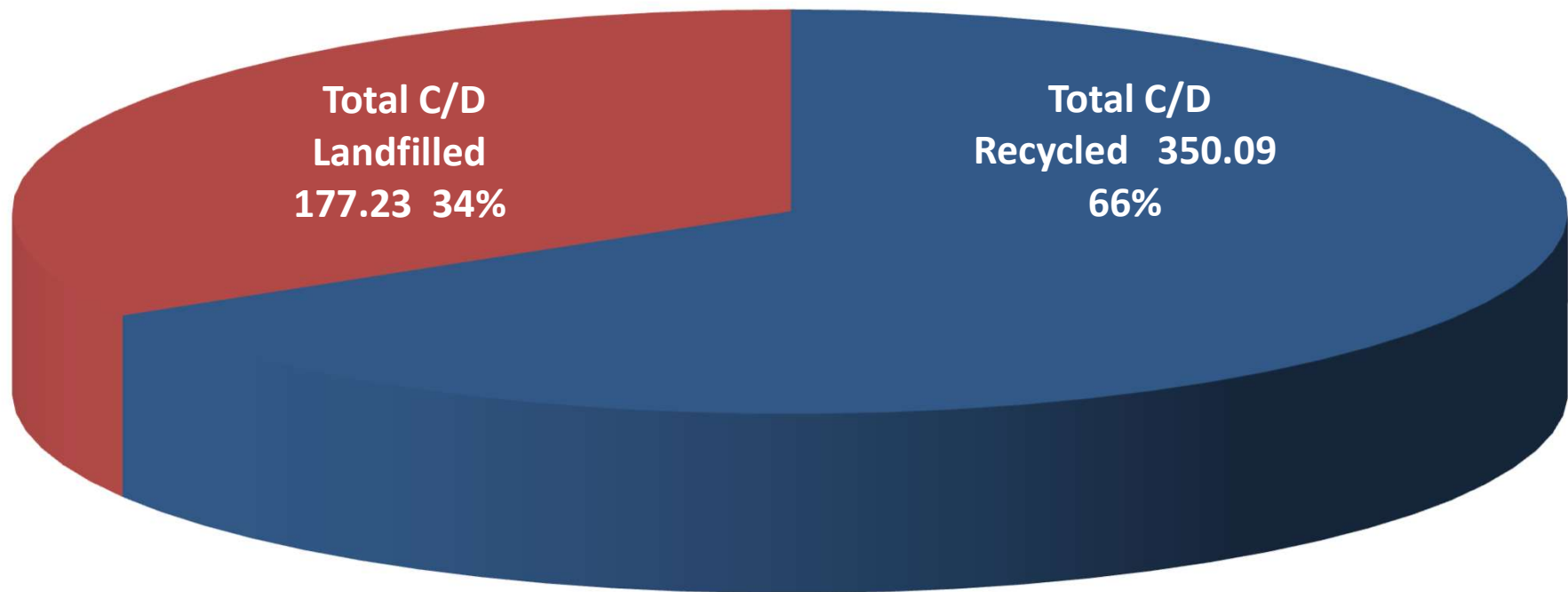
Note: The Construction and Demolition Landfill figure includes the amount disposed by Material Recovery Facilities (MRFs) based on the overall disposal percentages reported by the facilities used.



(from non-contracted construction activities)

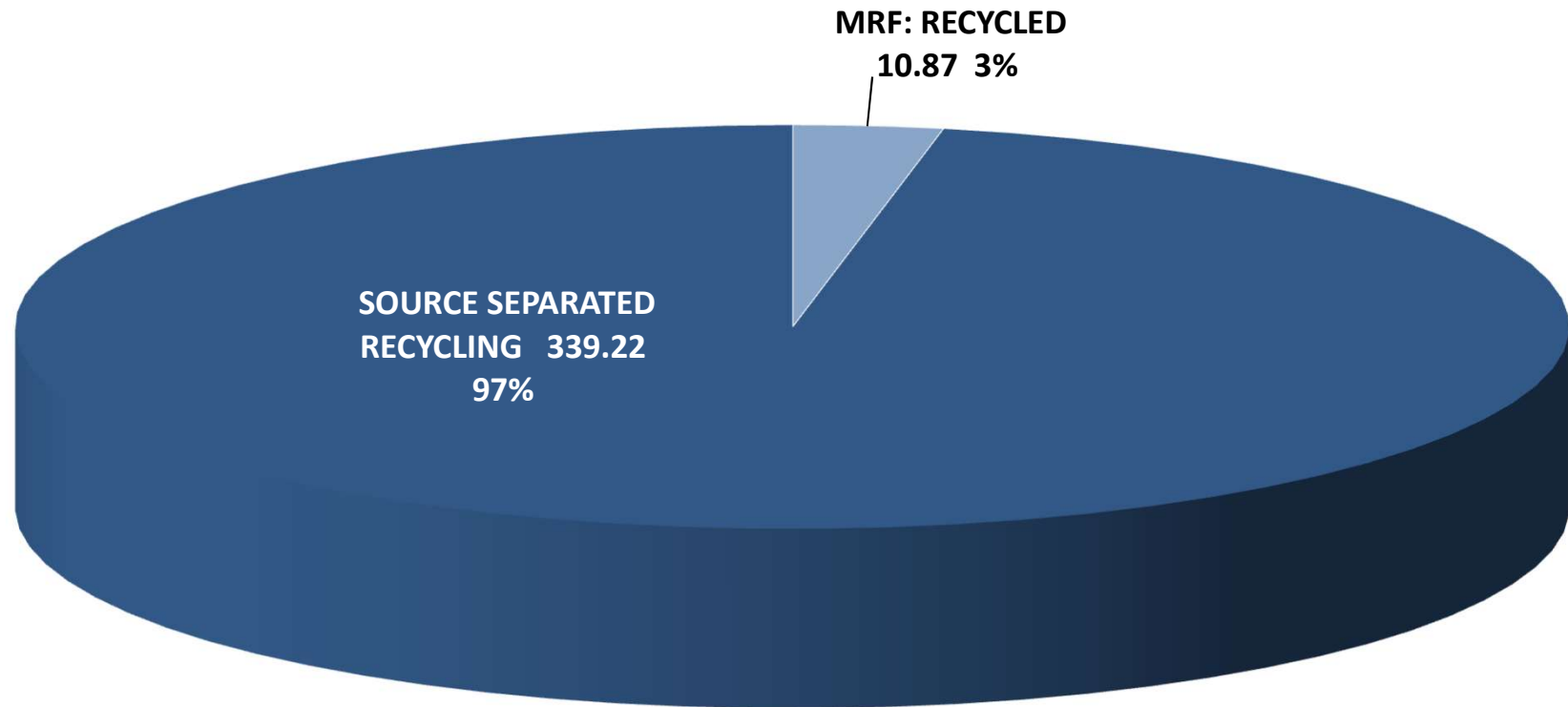
2018-19 Construction and Demolition Waste *in tons*

Campus Operations, Maintenance, Repair and In-House
Construction Activities



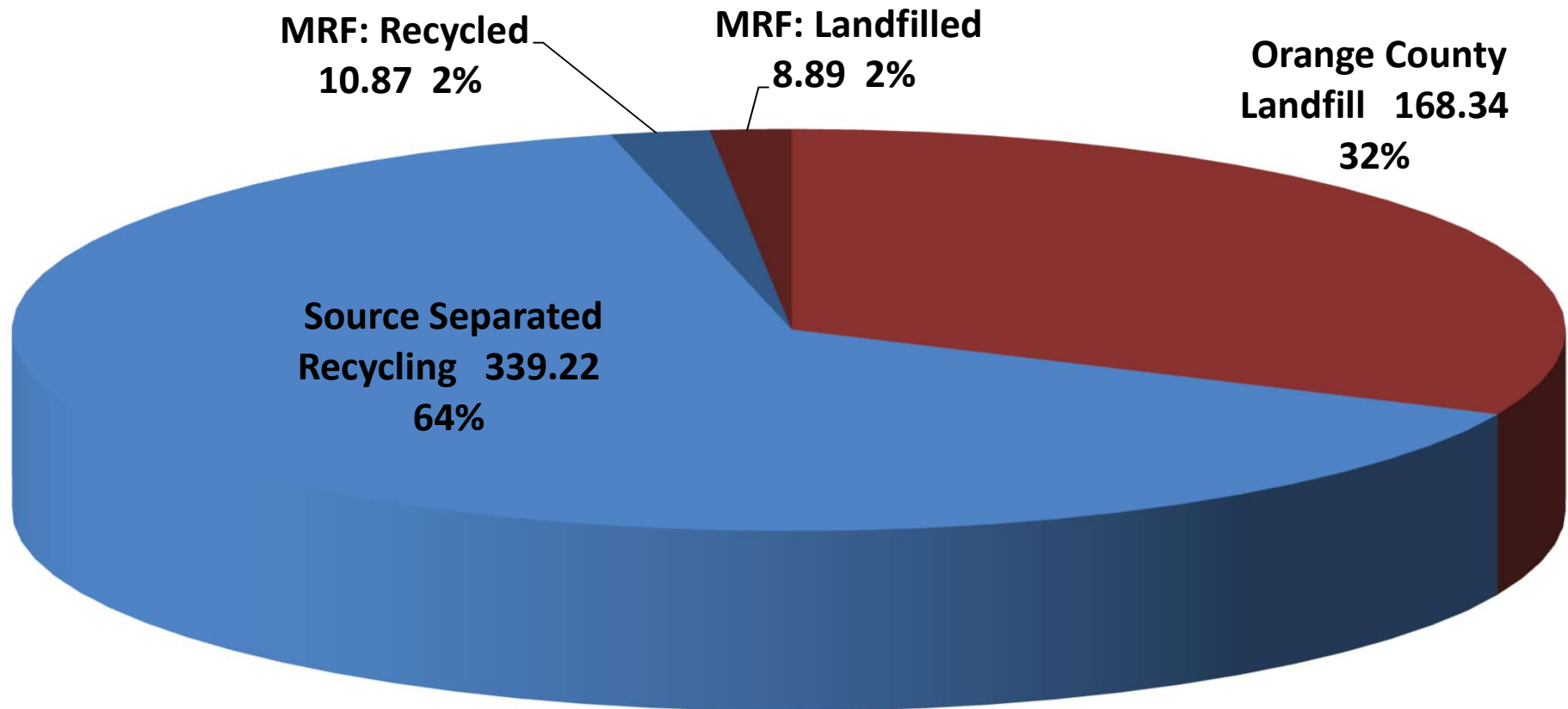
(from non-contracted construction activities)

2018-19 Total Construction and Demolition Recycling



MRF stands for Material Recovery Facility which is a facility that separates mixed loads into materials that can be recycled and those for which no market exists (thus they are landfilled). This represents the amount recycled from the total amount taken to the MRF. See the previous graph for total amount of mixed load construction and demolition waste that University shops and departments sent to MRFs.

Construction and Demolition Waste Management Source Separation, Mixed Load Processing (MRF), & Landfill



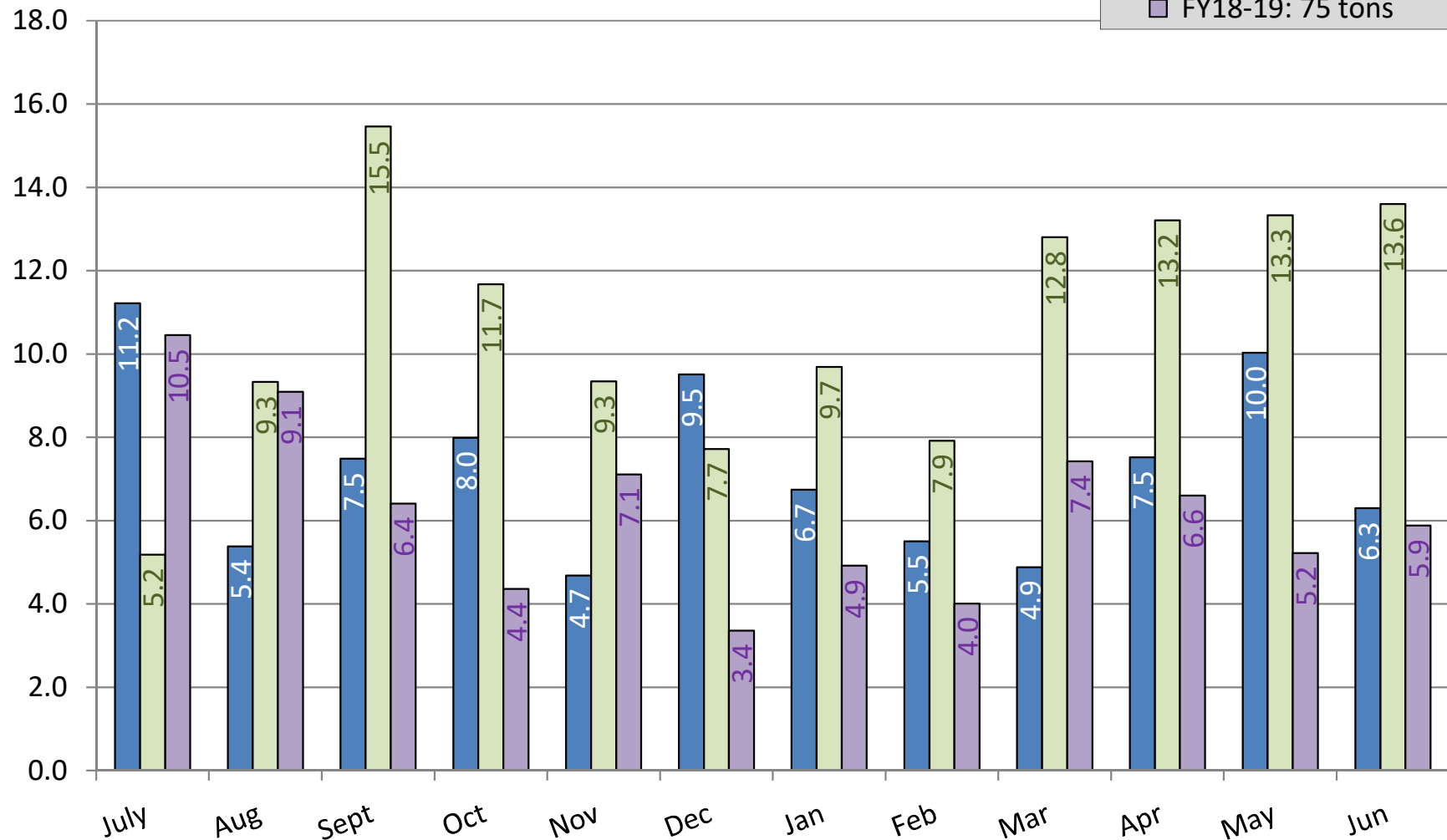
MRF stands for Material Recovery Facility which is a facility that separates mixed loads into materials that can be recycled and those for which no market exists (thus they are landfilled).

Note: A mixed load may contain construction and demolition waste (which is landfilled) AND materials that can be recycled (clean wood waste, pallets, scrap metal, concrete and brick, and other materials of value.)

(from non-contracted construction activities)

Pallets and Clean Wood Waste by Year in Tons

■ FY16-17: 87 tons
■ FY17-18: 129 tons
■ FY18-19: 75 tons



OWRR began collecting pallets from campus via bi-weekly routes in 2010-11. As of FY 17-18, pallets are picked up at least weekly, sometimes multiple times per week. In FY18-19, Orange County began rejecting pallets made from processed wood (particle board). This may account for a lower quantity of pallets collected starting in September 2019. Painted and particle board are collected separately and disposed as either C&D waste.

FISCAL YEAR 2018-19 WASTE RECOVERY TREND REPORT
SOURCE SEPARATED CONSTRUCTION AND DEMOLITION MATERIALS (RECYCLED)

SCRAP METAL												
BALLASTS	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	1.22	0.00	1.06	0.00	0.00	0.00	0.83	0.00	0.00	2.68	0.00	0.00
Y-T-D Tons	1.22	1.22	2.28	2.28	2.28	2.28	3.11	3.11	3.11	5.79	5.79	5.79
Last Year Monthly Tons	0.84	0.00	1.32	0.00	0.00	0.00	0.00	2.90	0.00	0.00	1.24	0.00
% Incr./Decr. Monthly	45%	0%	-20%	0%	0%	0%	N/A	N/A	0%	N/A	N/A	0%

SCRAP METAL	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	18.90	23.82	19.15	18.20	16.94	8.84	21.53	17.76	17.79	31.13	22.47	22.45
Y-T-D Tons	18.90	42.72	61.87	80.07	97.01	105.85	127.38	145.14	162.93	194.06	216.53	238.98
Last Year Monthly Tons	22.09	29.89	25.19	22.30	21.42	15.20	17.90	20.15	32.28	20.85	38.89	25.05
% Incr./Decr. Monthly	-14%	-20%	-24%	-18%	-21%	-42%	20%	-12%	-45%	49%	-42%	-10%

METAL TOTAL	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	20.12	23.82	20.21	18.20	16.94	8.84	22.36	17.76	17.79	33.81	22.47	22.45
Y-T-D Tons	20.12	43.94	64.15	82.35	99.29	108.13	130.49	148.25	166.04	199.85	222.32	244.77
Last Year Monthly Tons	22.93	29.89	26.51	22.30	21.42	15.20	17.90	23.05	32.28	20.85	40.13	25.05
% Incr./Decr. Monthly	-12%	-20%	-24%	-18%	-21%	-42%	25%	-23%	-45%	62%	-44%	-10%

PALLETS AND CLEAN WOOD--SOURCE SEPARATED												
PALLETS & CLEAN WOOD	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	10.45	9.09	6.41	4.36	7.11	3.36	4.92	4.01	7.42	6.60	5.22	5.88
Y-T-D Tons	10.45	19.54	25.95	30.31	37.42	40.78	45.70	49.71	57.13	63.73	68.95	74.83
Last Year Monthly Tons	5.18	9.33	15.46	11.67	9.34	7.72	9.69	7.92	12.80	13.21	13.33	13.60
% Incr./Decr. Monthly	102%	-3%	-59%	-63%	-24%	-56%	-49%	-49%	-42%	-50%	-61%	-57%

CONCRETE AND BRICK--SOURCE SEPARATED												
CONCRETE & BRICK	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	1.00
Y-T-D Tons	0.00	0.00	0.00	0.00	0.00	8.00	8.00	8.00	16.00	16.00	16.00	17.00
Last Year Monthly Tons	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	2.79	0.00	0.00
% Incr./Decr. Monthly	0%	0%	0%	0%	N/A	N/A	0%	0%	N/A	N/A	0%	N/A

MISCELLANEOUS--SOURCE SEPARATED												
CARPET	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.62	0.00
Y-T-D Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.62	2.62
Last Year Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Incr./Decr. Monthly	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	Last Year This	0%
CEILING TILES	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y-T-D Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Last Year Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Incr./Decr.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MISC TOTAL	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.62	0.00
Y-T-D Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.62	2.62
Last Year Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Incr./Decr. Monthly	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	Last Year This	0%
SOURCE SEPARATED TOTAL	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	30.57	32.91	26.62	22.56	24.05	20.20	27.28	21.77	33.21	40.41	30.31	29.33
Y-T-D Tons	30.57	63.48	90.10	112.66	136.71	156.91	184.19	205.96	239.17	279.58	309.89	339.22
Last Year Monthly Tons	28.11	39.22	41.97	33.97	31.76	22.92	27.59	30.97	45.08	36.85	53.46	38.65
% Incr./Decr. Monthly	9%	-16%	-37%	-34%	-24%	-12%	-1%	-30%	-26%	10%	-43%	-24%

NON-MSW LANDFILLS (Construction/Demolition or Land Clearing and Inert Debris)												
CONSTRUCTION AND DEMOLITION LANDFILL (ORANGE COUNTY)												
WI	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	1.75	0.00	0.00	2.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y-T-D Tons	1.75	1.75	1.75	4.57	4.57	4.57	4.57	4.57	4.57	4.57	4.57	4.57
Last Year Monthly Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.00	0.00
% Incr./Decr. Monthly	N/A	0%	0%	N/A	0%	0%	0%	0%	N/A	0%	0%	0%

UNC (UNC trucks & rollofts)	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	39.59	21.53	11.91	1.41	4.17	9.48	31.17	4.90	12.76	6.81	8.77	11.27
Y-T-D Tons	39.59	61.12	73.03	74.44	78.61	88.09	119.26	124.16	136.92	143.73	152.50	163.77
Last Year Monthly Tons	4.77	10.08	6.54	11.61	6.34	2.12	4.59	8.47	2.42	4.31	5.44	17.61
% Incr./Decr. Monthly	730%	114%	82%	-88%	-34%	347%	579%	-42%	427%	58%	61%	-36%

TOTAL Orange County C&D Landfill	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	41.34	21.53	11.91	4.23	4.17	9.48	31.17	4.90	12.76	6.81	8.77	11.27
Y-T-D Tons	41.34	62.87	74.78	79.01	83.18	92.66	123.83	128.73	141.49	148.30	157.07	168.34
Last Year Monthly Tons	4.77	10.08	6.54	11.61	6.34	2.12	4.59	8.47	4.54	4.31	5.44	17.61
% Incr./Decr. Monthly	767%	114%	82%	-64%	-34%	347%	579%	-42%	181%	58%	61%	-36%

2018-19 note: ME room clean up project. Also, Orange County rejects particle board pallets for recycling and directs them to the C&D landfill for disposal.

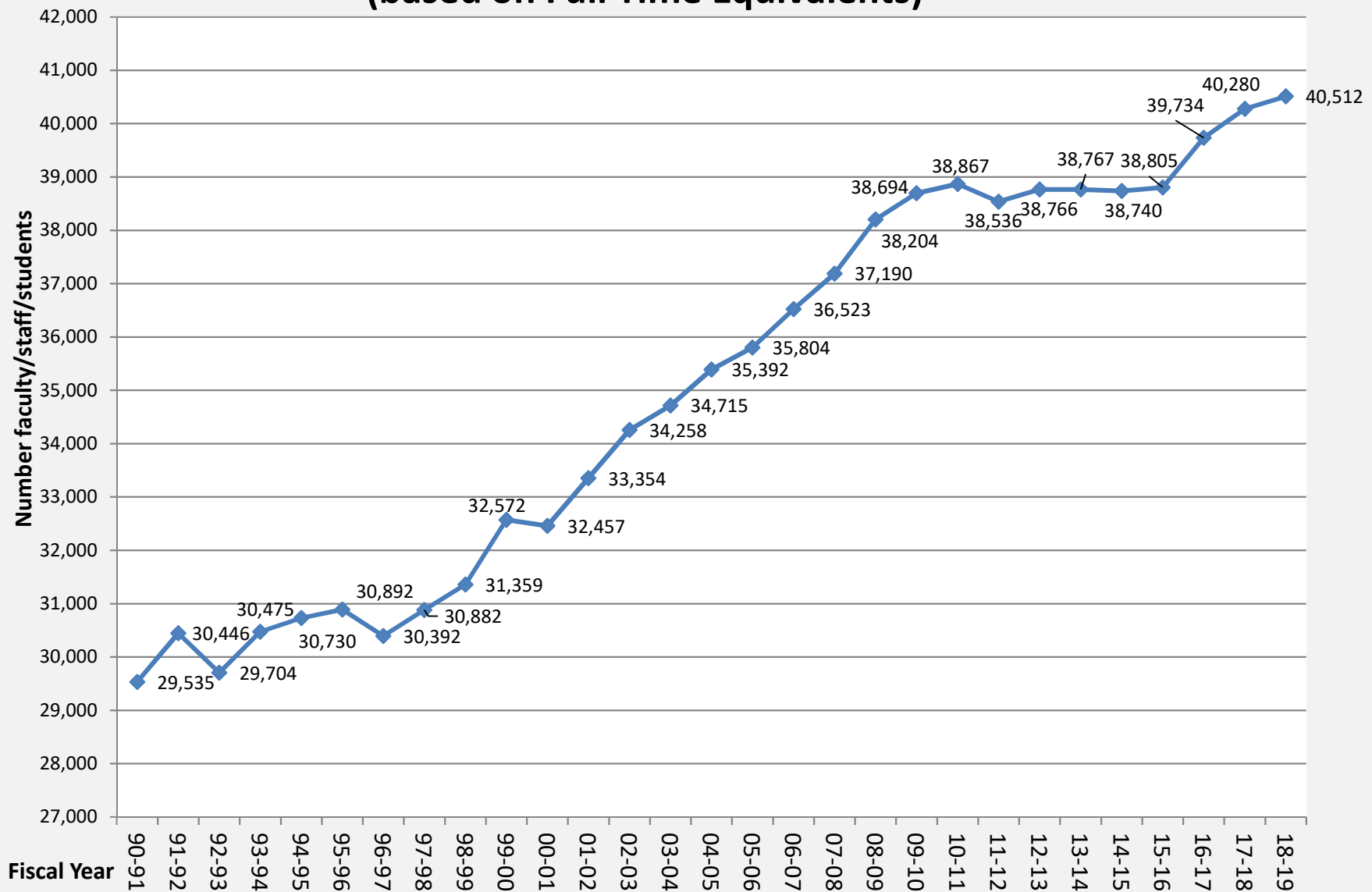
MIXED LOAD CONSTRUCTION WASTE PROCESSING FACILITIES (MRF)												
Wake Reclamation (Owned by Waste Industries) - 421 Raleigh View Rd., Raleigh												
Wake Reclamation--MRF	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	2.18	4.10	2.70	2.91	1.97	4.46	0.00	1.44	0.00
Y-T-D Tons	0.00	0.00	0.00	2.18	6.28	8.98	11.89	13.86	18.32	18.32	19.76	19.76
Last Year Monthly Tons	0.00	2.58	0.00	0.00	0.00	2.30	0.00	7.71	2.44	0.00	8.04	3.58
% Incr./Decr. Monthly	0%	N/A	0%	N/A	N/A	17%	N/A	-74%	83%	0%	-82%	N/A

RECYCLING (55% of total)	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	1.20	2.26	1.49	1.60	1.08	2.45	0.00	0.79	0.00
Y-T-D Tons	0.00	0.00	0.00	1.20	3.45	4.94	6.54	7.62	10.08	10.08	10.87	10.87
Last Year Monthly Tons	0.00	1.42	0.00	0.00	0.00	1.84	0.00	1.88	1.44	0.00	7.04	2.58
% Incr./Decr. Monthly	0%	N/A	0%	N/A	N/A	-19%	N/A	-42%	70%	0%	-89%	N/A

LANDFILL (45% of total)	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	0.98	1.85	1.22	1.31	0.89	2.01	0.00	0.65	0.00
Y-T-D Tons	0.00	0.00	0.00	0.98	2.83	4.04	5.35	6.24	8.24	8.24	8.89	8.89
Last Year Monthly Tons	0.00	1.16	0.00	0.00	0.00	0.46	0.00	5.83	1.00	0.00	1.00	1.00
% Incr./Decr. Monthly	0%	N/A	0%	N/A	N/A	164%	N/A	-85%	101%	0%	-35%	N/A

MIXED LOAD CONSTRUCTION WASTE PROCESSING												
(This section totals all C&D MRFs used. If others are used, expand section above and enter data for the specific facility.)												
TOTAL RECYCLED AND LANDFILLED												
TOTAL	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	2.18	4.10	2.70	2.91	1.97	4.46	0.00	1.44	0.00
Y-T-D Tons	0.00	0.00	0.00	2.18	6.28	8.98	11.89	13.86	18.32	18.32	19.76	19.76
% Incr./Decr. Monthly	0%	0%	0%	N/A	N/A	N/A	N/A	N/A	N/A	0%	N/A	0%
Last Year Monthly Tons	0.00	2.58	2.58	2.58	2.58	4.88	4.88	12.59	15.03	15.03	23.07	26.65
MRF RECYCLE TOTAL	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	1.20	2.26	1.49	1.60	1.08	2.45	0.00	0.79	0.00
Y-T-D Tons	0.00	0.00	0.00	1.20	3.45	4.94	6.54	7.62	10.08	10.08	10.87	10.87
Last Year Monthly Tons	0.00	1.42	0.00	0.00	0.00	1.84	0.00	1.88	1.44	0.00	7.04	2.58
% Incr./Decr. Monthly	0%	N/A	0%	N/A	N/A	-19%	N/A	-42%	70%	0%	-89%	N/A
MRF LANDFILL TOTAL	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	0.00	0.00	0.00	0.98	1.85	1.22	1.31	0.89	2.01	0.00	0.65	0.00
Y-T-D Tons	0.00	0.00	0.00	0.98	2.83	4.04	5.35	6.24	8.24	8.24	8.89	8.89
Last Year Monthly Tons	0.00	1.16	0.00	0.00	0.00	0.46	0.00	5.83	1.00	0.00	1.00	1.00
% Incr./Decr. Monthly	0%	N/A	0%	N/A	N/A	164%	N/A	-85%	101%	0%	-35%	N/A
CONSTRUCTION AND DEMOLITION WASTE TOTALS--AMOUNT RECYCLED AND LANDFILLED												
TOTAL C&D LANDFILLED	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	41.34	21.53	11.91	5.21	6.02	10.70	32.48	5.79	14.77	6.81	9.42	11.27
Y-T-D Tons	41.34	62.87	74.78	79.99	86.01	96.70	129.18	134.97	149.73	156.54	165.96	177.23
Last Year Monthly Tons	4.77	11.24	6.54	11.61	6.34	2.58	4.59	14.30	5.54	4.31	6.44	18.61
% Incr./Decr. Monthly	767%	92%	82%	-55%	-5%	315%	608%	-60%	167%	58%	46%	-39%
TOTAL C&D RECYCLED	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Monthly Tons	30.57	32.91	26.62	23.76	26.31	21.69	28.88	22.85	35.66	40.41	31.10	29.33
Y-T-D Tons	30.57	63.48	90.10	113.86	140.16	161.85	190.73	213.58	249.25	289.66	320.76	350.09
Last Year Monthly Tons	28.11	40.64	41.97	33.97	31.76	24.76	27.59	32.85	47.52	36.85	56.16	41.69
% Incr./Decr. Monthly	9%	-19%	-37%	-30%	-17%	-12%	5%	-30%	-25%	10%	-45%	-30%

Total Campus Population, 1990-present (YTD) (based on Full Time Equivalents)

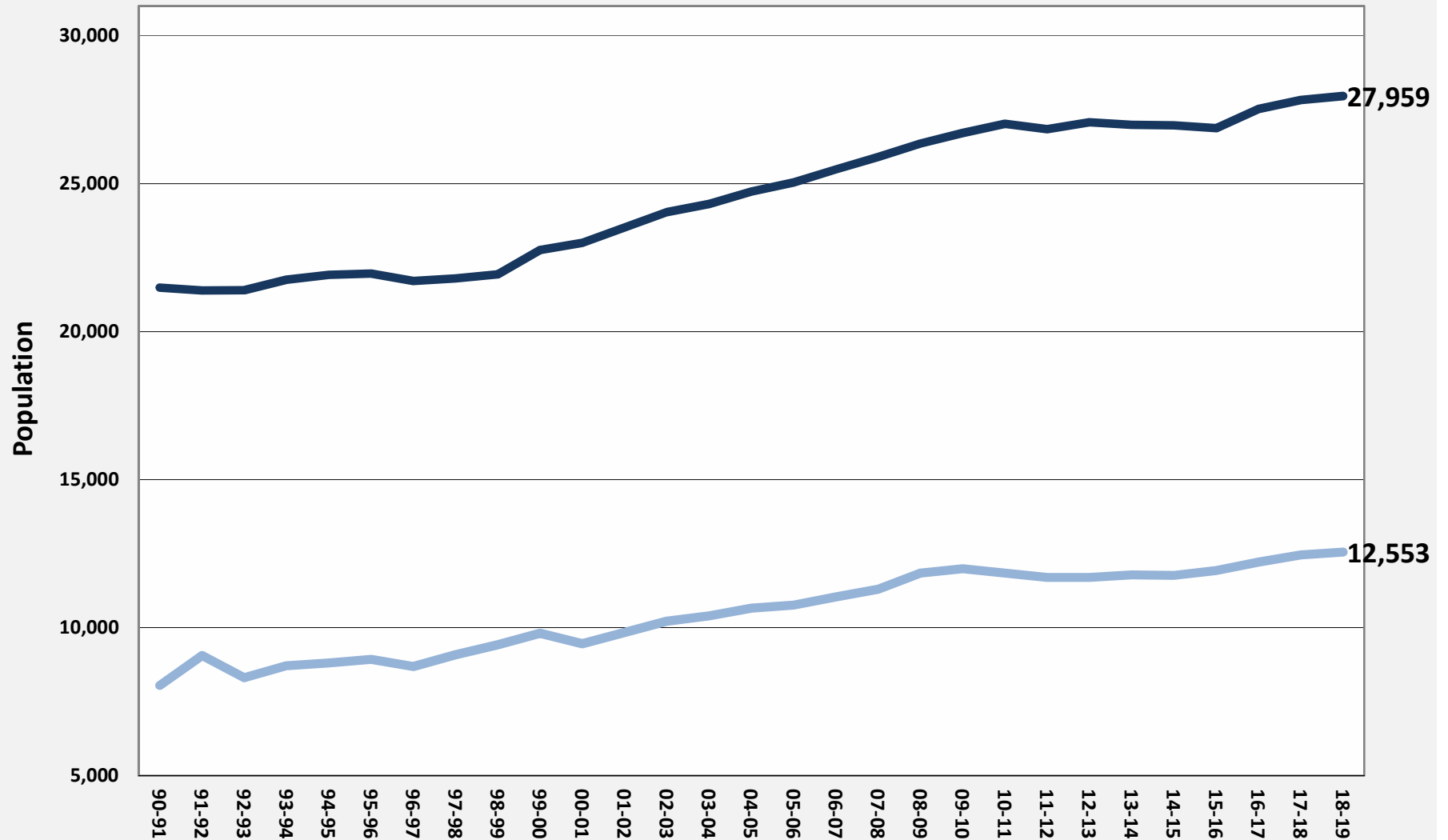


9/24/2019

OWRR 18-19, Total Campus Population

Students (Full Time Equivalent) and Employees FY90-91 to Present

(Source: UNC Office of Institutional Research and Assessment <https://oira.unc.edu/reports/>)



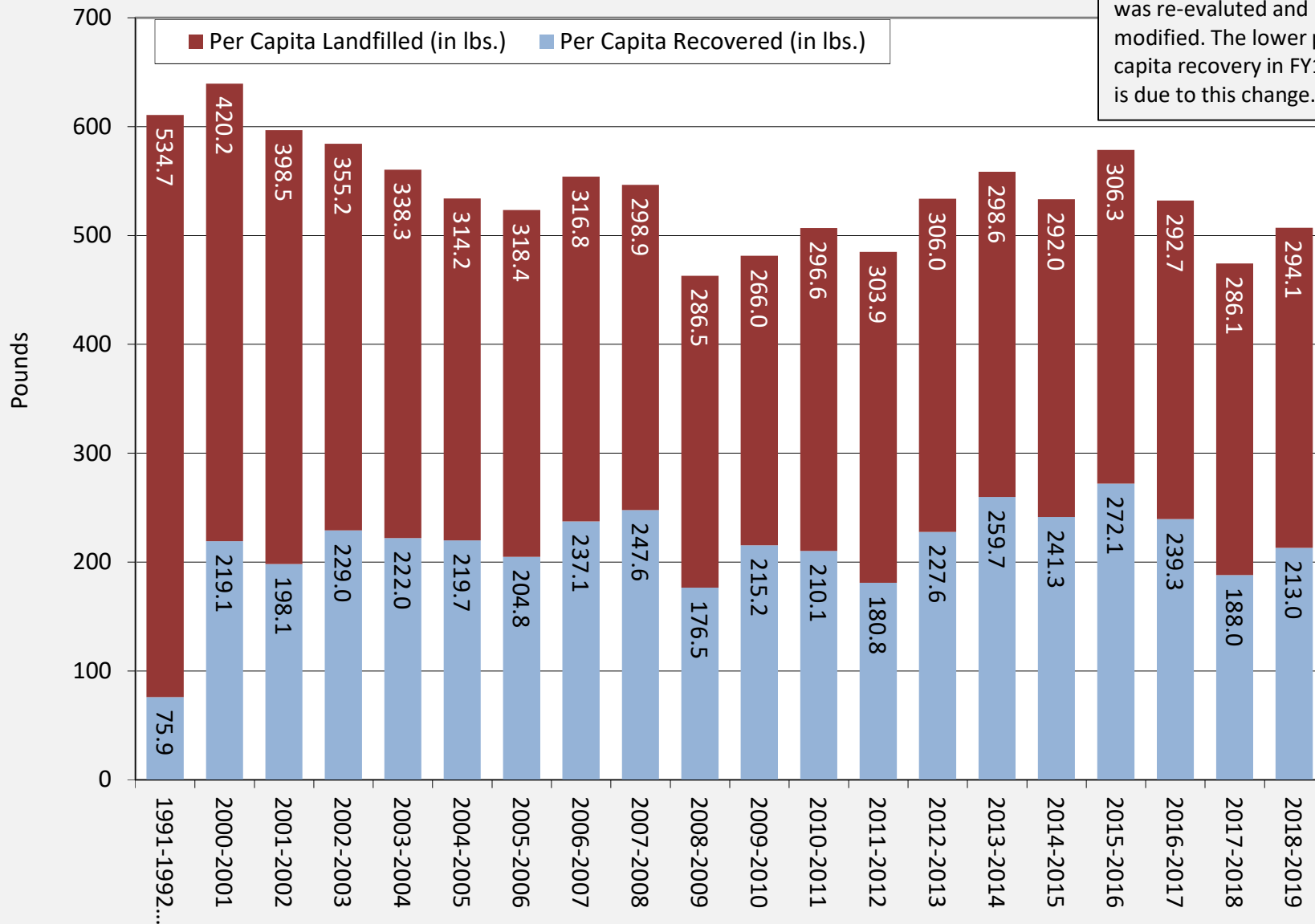
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OWRR 18-19, Employees vs. Students

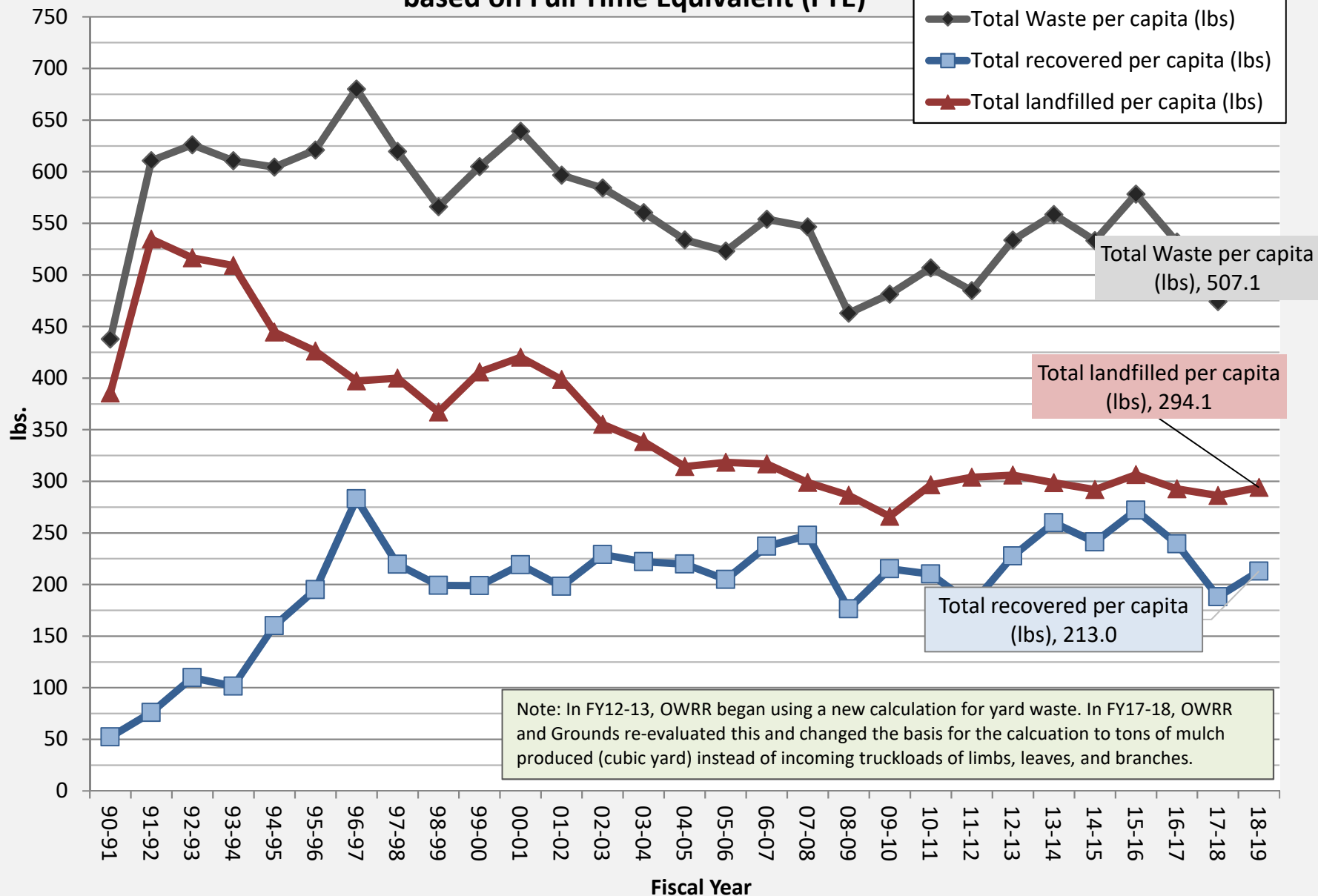
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Per Capita Waste & Recovery based on Full Time Equivalent (FTE)

Yard waste calculations were changed in FY12-13. In FY17-18, this method was re-evaluated and modified. The lower per capita recovery in FY17-18 is due to this change.

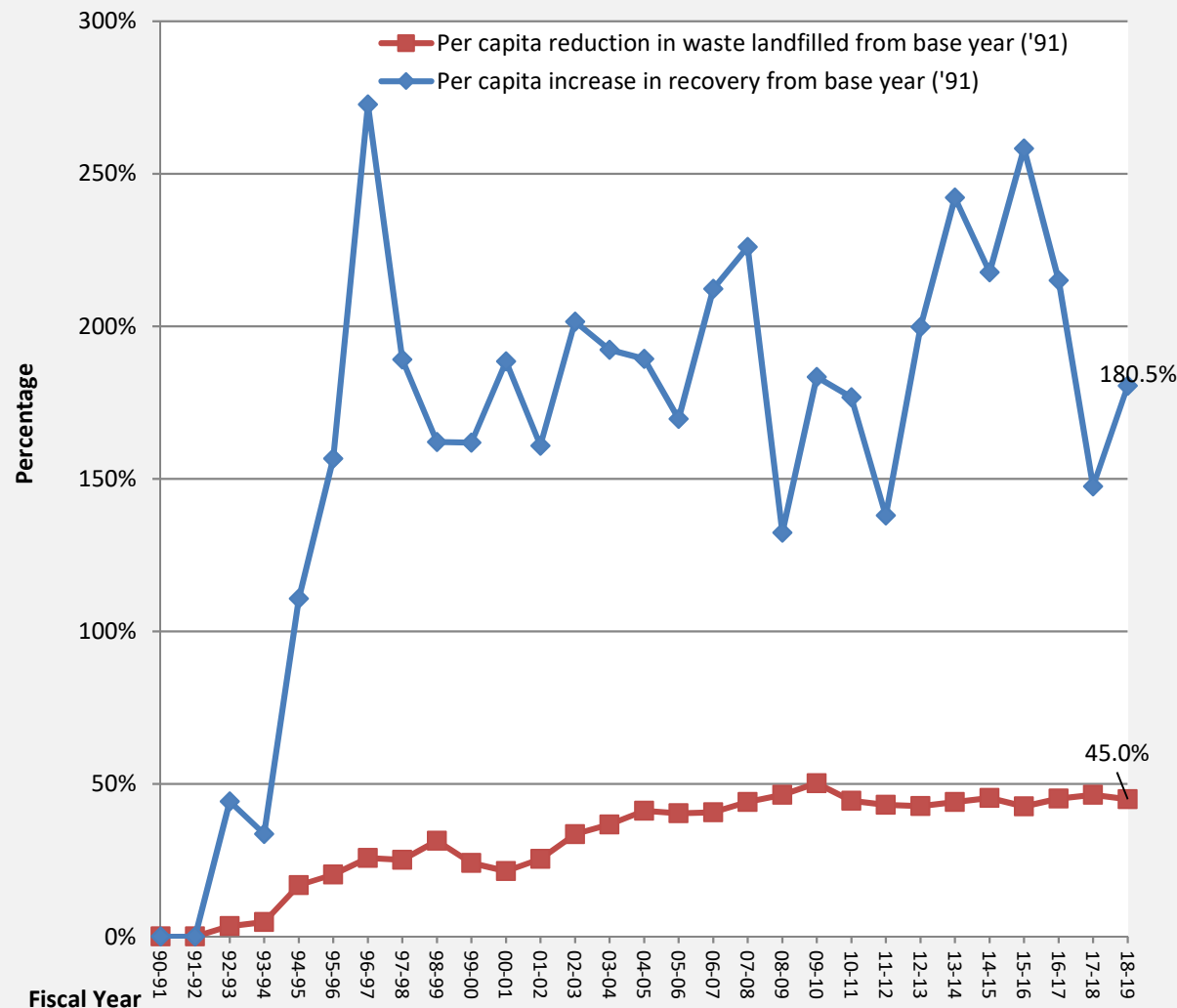


Per Capita Waste/Recovery Weights, 1990-Current YTD based on Full Time Equivalent (FTE)



9/24/2019

Percentage Landfilled, Waste Reduction/Recovery Increase per Capita, 1990-current



1992: Drop in population may account for per capita waste reduction spike.

1996: Large spike in per capita waste reduction may be accounted for by a combination of factors--hurricane Fran, OWRR taking over cardboard recycling, and a drop in population.

1997-1999: Decrease in per capita waste reduction may be explained partially by the loss of the education/outreach position during those years.

2000: Increase in 2000 may be partially explained by beginning of food waste recycling program.

2001: Decrease in 2001 can be explained by Tidewater Fibre Corp. taking over outdoor contract and changing the way they report tonnage (actual as opposed to estimated weights).

2009: Decrease may have been due to a change in reporting of indoor recycling weights (from estimated to actual).

2011: Decrease may have been due to a change in reporting for yard waste (added actual and refined estimates based on brush, leaves, limbs, tree trunks).

2013: Increase is in part due to a project at Carolina North that resulted in an additional 157 tons recycled.

2017: In addition to changes in yard waste calculations, OWRR was significantly short staffed, thus new programs and outreach efforts were curtailed.

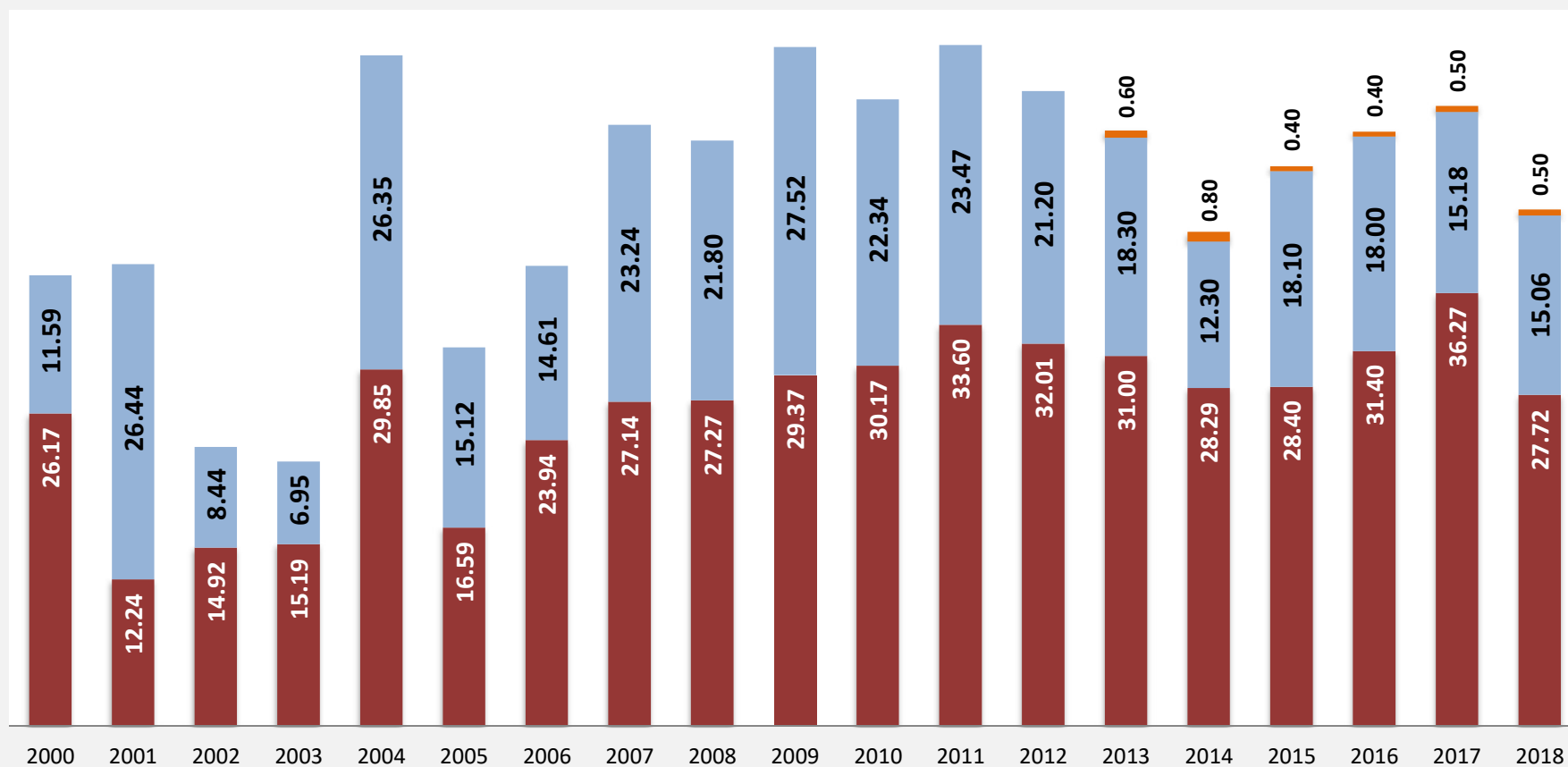
9/24/2019

OWRR 18-19, Per Capita Waste Reduction

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Move In Landfilled and Recycled In Tons

■ Waste Landfilled ■ Cardboard Recovered ■ Polystyrene & Plastic Film Recovered



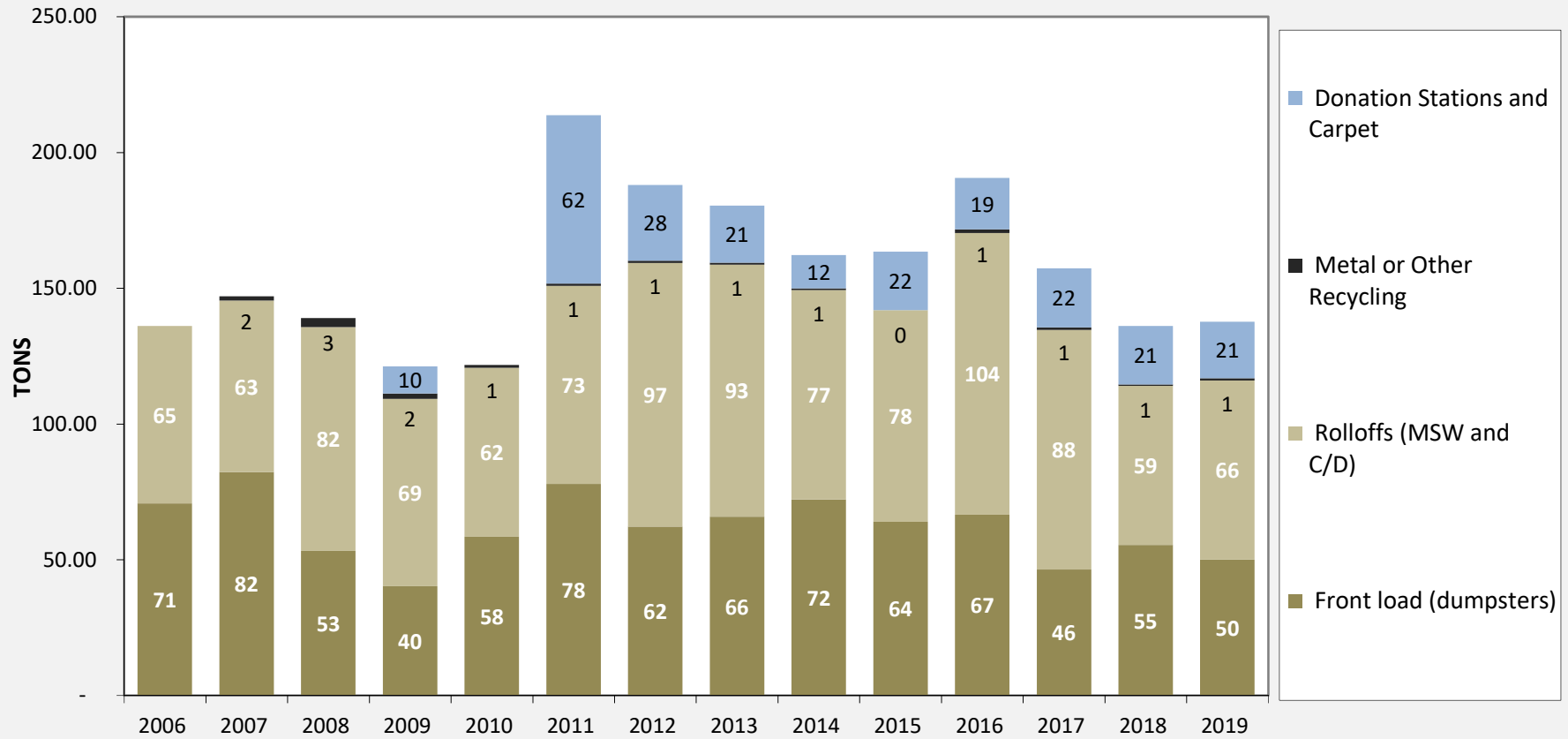
*Tonnes (Landfilled and Cardboard) = all move-in rolloff hauls and front load hauls from second haul during move-in days.

**2000 and 2001 statistics compiled by Matt Todd; 2002-2006 stats compiled by Amy Preble and Jen Maxwell. 2007 & 2008 stats compiled by BJ Tipton

***More data was reported in 2004, due to changes in Waste Industries reporting and their truck making a second route specifically for move-in.

****A standardized formula was used to calculate move-in figures for 2006 - 2008.

Move Out Results



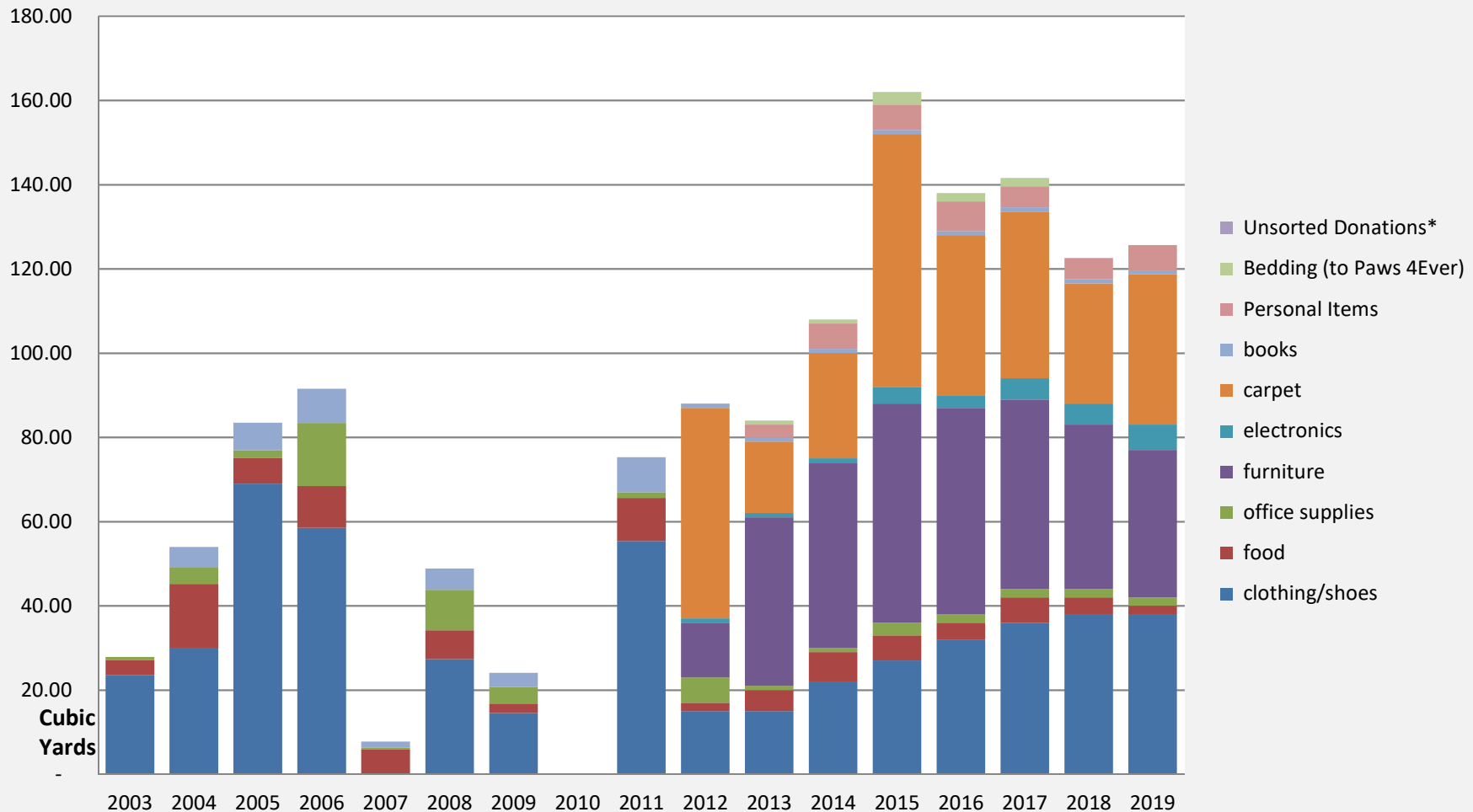
Note: In 2006, we used 100% of the second frontload run of the day. In 2007-2009, we adjusted our calculations to use a percentage of the second load and 100% of the third and fourth loads.

Move Out Donation Stations

Note: Data collection is based on visual estimates and thus are subjective and may vary from year to year or person to person.

2010 -- quantities were not reliably recorded

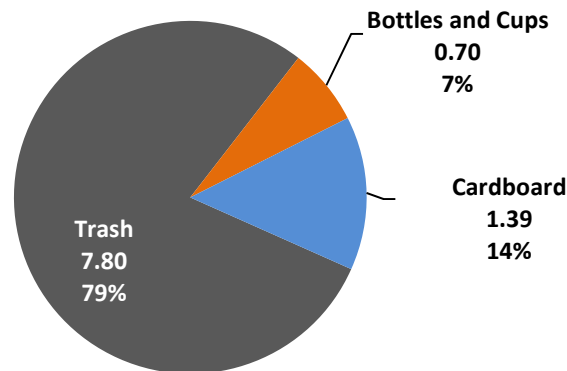
2016 -- carpet data was not available and is an estimate



Kenan Football Stadium, Fall 2018: Game Day Waste & Recycling

Playing Against:	UCF	Pitt	VT	Georgia Tech	WCU	NC State				
Game Time:	cancelled	12:20 PM	7:00 PM	12:15 PM	3:00 PM	12:20 PM				
Approx. Attendance:	0	44,168	50,500	40,782	41,151	41,510				
Game Date:	9/15/2018	9/22/2018	10/13/2018	11/3/2018	11/17/2018	11/24/2018				
Kenan Stadium, Loudermilk and Rams Club								For the Season	Season Average	Season Total
Trash:	0.00	8.53	5.43	8.33	7.46	9.23		Trash	7.80	38.98
Bottles/Cups:	0.00	0.92	0.80	0.60	1.00	0.17		Bottles & Cups:	0.70	3.49
Cardboard:	0.00	0.24	0.38	0.75	1.74	3.86		Cardboard:	1.39	6.97
Total Waste	0.00	9.69	6.61	9.68	10.20	13.26		Total Waste Total	9.89	49.44
Total Recycled	0.00	1.16	1.18	1.35	2.74	4.03		Recycled	2.09	10.46
% Recycled by Weight		11.97%	17.85%	13.95%	26.86%	30.39%		% Recycled by Weight	20%	21%
Game Day Waste Disposed per Person (in pounds)**		0.44	0.26	0.47	0.50	0.64				

2018 Football Season Waste Breakdown (tons)

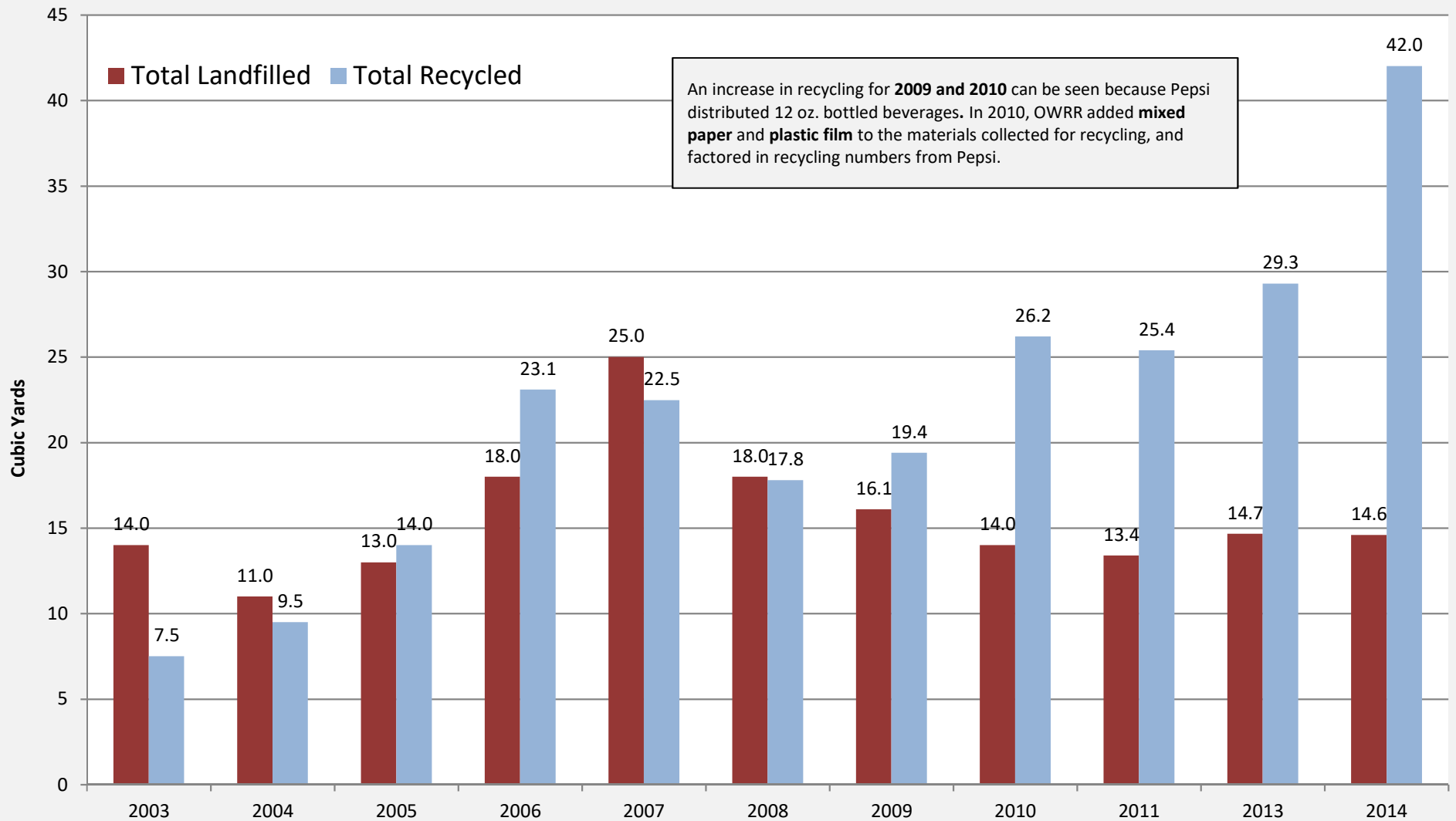


*Data was unavailable for games listing "0 tons recycled"

***"Per person" accounts for stadium fans only - staff, press, team, etc not included in total attendance count.

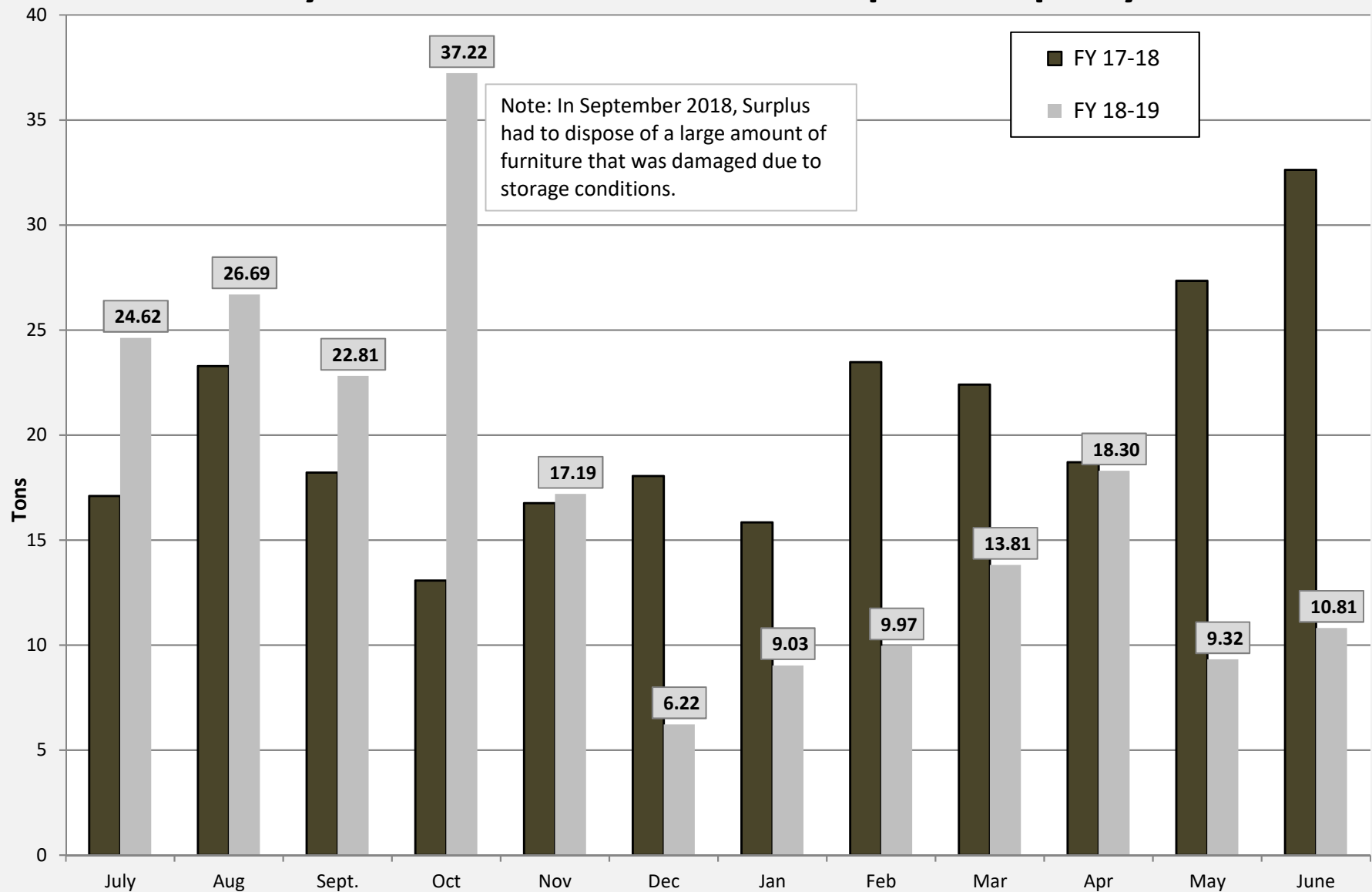
Fall Fest

Trash & Recycling by Volume



* 2012 Fall Fest was cancelled, No data for 2015-2017 Fall Fests*

Bulky Waste Landfilled from Surplus Property



**EPA College & University(C/U) Sector
Year-to-Date EPA WARM Input Information**

Material Category As Defined by the US EPA's WARM Model	EPA WARM Definition: http://epa.gov/epawaste/conserve/tools/warm/materials.html	Tons	UNC's Waste Material within EPA Categories:
Corrugated Containers	Corrugated cardboard boxes made from containerboard (liner and corrugating medium) used in packaging applications.	509.7	Corrugated Cardboard collected by Waste Industries
Mixed Paper (primarily from offices)	Office mixed paper is assumed to be 21% newspaper, 5% corrugated cardboard, 36% magazines, and 38% office paper.	571.4	Mixed Paper collected from Shimar, OWRR and Sonoco
Office Paper	Office paper represents paper made from uncoated bleached chemical pulp.	356.3	Confidential Paper as collected by OWRR & Hospital Contractor
Textbooks	Textbooks represent books made from paper produced from chemical pulp.	9.4	Hardback books are collected across campus by OWRR & Shimar
Mixed Plastics	Mixed plastics are made up of 39% HDPE and 61% PET plastic.	83.8	Mixed Plastics collected from Shimar, OWRR and Sonoco
Glass	Glass represents glass containers (e.g., soft drink bottles and wine bottles)	26.6	Glass collected from Shimar, OWRR, and Sonoco
Aluminum Cans	Aluminum cans represent cans produced out of sheet rolled aluminum ingot.	11.0	Aluminum Cans collected from Shimar, OWRR, and Sonoco
Mixed Metals	Mixed metals are made up of 35% aluminum cans and 65% steel cans.	259.4	Mixed Metals collected by EHS, Surplus, Shimar, OWRR and Sonoco
Food Waste	Food waste consists of uneaten food and wasted, prepared food from residences, commercial establishments such as grocery stores and restaurants, institutional sources such as school cafeterias, and industrial sources such as factory lunchrooms. This emission factor contains a weighted average of all food types in the waste stream currently modeled in WARM, including beef, poultry, grains, fruits and vegetables, and dairy products. The mix is assumed to be 9% beef, 11% poultry, 13% grains, 49% fruits and vegetables, and 18% dairy products.	667.6	Food Waste collected by Brooks Contractors *Also includes Cooking Oil from Carolina Dining Services
Yard Trimmings	Yard trimmings are assumed to be 50% grass, 25% leaves, and 25% tree and brush trimmings from residential, institutional, and commercial sources.	855.0	Yard waste, limbs, brush and leaves as collected by UNC's Grounds department and made into mulch.
Leaves	Leaves consist of fallen leaves from deciduous trees recovered from residential, institutional and commercial sources.	580.0	Leaves are ground into a compost/mulch by Grounds.
LDPE	No longer included in warm. Added to Mixed Plastics.	0.0	Plastic Film as collected in the Student Union by OWRR
Polystyrene	No longer included in warm. Added to Mixed Plastics.	0.0	Polystyrene as collected by OWRR during Student Move-In events and processed by Shimar Recycling Services
Mixed Electronics	Mixed electronics consist of desktop CPUs (11%), Portable electronic devices (5%), flat panel displays (23%), CRTs (44%), peripherals (2%), hard copy devices (15%)	165.0	E-Waste, Printer Cartridges and Batteries as collected by Surplus and EHS

**EPA College & University(C/U) Sector
Year-to-Date EPA WARM Input Information**

Material Category As Defined by the US EPA's WARM Model	EPA WARM Definition: http://epa.gov/epawaste/conservation/tools/warm/materials.html	Tons	UNC's Waste Material within EPA Categories:
Tires	Tires represent scrap tires that have been disposed of by consumers and have several end uses in the U.S. market including as a fuel, in civil engineering, and in various ground rubber applications such as running tracks and molded products.	4.7	Tires as collected by UNC and processed at Orange County Landfill
Fly Ash	Fly ash is a byproduct of coal combustion that is used as a cement replacement in concrete.	0.0	Coal Ash that is processed and recycled from UNC's CoGen Plant
Concrete	Concrete is a high-volume building material produced by mixing cement, water, and coarse and fine aggregates. In WARM, concrete is assumed to be recycled into aggregate, so the GHG benefits are associated with the avoided emissions associated with mining and processing aggregate.	17.0	Concrete as collected by Waste Industries from UNC Operations
Dimensional Lumber	Lumber includes wood used for containers, packaging, and building and includes crates, pallets, furniture and dimensional lumber like two by fours.	74.8	Pallets and Clean Wood Waste as collected by UNC and Waste Industries
Carpet	Carpet represents broadloom residential carpet containing a mix of nylon, PET and PP components within the face fiber, primary and secondary backing, and latex used for attaching the backings.	2.6	Carpet as collected by UNC
Sum of data for WARM model		4,194.5	
Misc not included in warm		120.4	Mattresses, batteries, bulbs, solvents, motor oil and filters
Total Recovered Tons		4,314.9	(including coal ash actually recycled vs. beneficial fill)
Solid Waste (Trash) to Landfill		5,956.6	(not including standard coal ash used for beneficial fill or landfilled)
Total Solid Waste Managed		10,271.4	
Recovery Percentage		42.01%	