

The University of Texas at Dallas

Recycling Rate



Facilities Management
800 West Campbell Rd. FM 11
Richardson, Texas, 75080
(972) 883.2141

Summary

The University of Texas at Dallas is committed to reducing our environmental impact. Recycling is one approach that our university has taken to minimize and reduce waste directed toward landfills. This creates value from waste. With a diverse recycling program comprising many different products that are recyclable, applying the most efficient and cost-effective practice is essential.

How to Calculate the Recycling Rate?

- Compile trash and recycling data from the below.
 - Waste Connections – single stream and trash
 - Phoenix Recycling – metal and cardboard
 - PCR America – ink and toner cartridges
 - Office of Research Compliance – batteries, ballasts, and lamps
 - Environmental Health & Safety – confidential paper shredding
 - Organix Recycling and Grounds (Craig) – food and landscape waste
 - Surplus – surplus material (auctioned off)
 - In-house recycling data – plastic film, nitrile gloves, packing peanuts, and Styrofoam #6

What are some potential complications that may arise in calculating the recycling rate?

- Conflicting historical data.
- Multiple data reports with differing formats from a variety of partners.
- There are a total of 30 trash and recycle bins on-campus (excluding housing)
 - Recycle Compactor – 2
 - Recycle Open Top – 1
 - Recycle Front Load – 10 (added library)
 - Trash Compactor – 5
 - Trash Open Top – 2
 - Trash Front Load – 12 (added library)
- Front load trash and recycle dumpsters must have estimate weights.
 - Pickups are mixed with other clients of Waste Connections
 - The containers are not always 100% full when picked up
 - We have assumed containers are 80% full on pickup
 - Construction sometimes hinders pickup abilities
 - Waste Connections provided a conversion weight estimate
 - Front load recycle conversion is 86 lbs. per cubic yard
 - Front load trash conversion is 105 lbs. per cubic yard

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

RecycleMania

RecycleMania is an international recycling competition. Every year, we track our recycling to provide weekly recycling weights on the RecycleMania website. As front load dumpsters are mixed with other clients of our waste hauler, we observe how full the containers are and use a volume to weight conversion to estimate the total weight. This includes the main campus and on-campus housing containers.

RecycleMania

January to April 2017 (recycling only)

Input Week	Total lbs.	Total Ton
Pre Week 1	27,525	13.76
Pre Week 2	29,137	14.57
Week 1	30,000	15.00
Week 2	21,582	10.79
Week 3	23,739	11.87
Week 4	21,139	10.57
Week 5	18,257	9.13
Week 6	17,723	8.86
Week 7	17,990	9.00
Week 8	19,638	9.82
Total	226,731	113

RecycleMania

January to April 2016 (recycling only)

	Total lbs.	Total Ton
Pre Week 1	25,304	12.65
Pre Week 2	27,149	13.57
Week 1	25,693	12.85
Week 2	21,828	10.91
Week 3	21,288	10.64
Week 4	25,061	12.53
Week 5	22,456	11.23
Week 6	24,360	12.18
Week 7	26,206	13.10
Week 8	25,135	12.57
Total	244,480	122.24

RecycleMania

January to April 2017

W/out Housing (recycling only)

Input Week	Total lbs.	Total Ton
Pre Week 1	12,124	6.06
Pre Week 2	13,402	6.70
Week 1	15,711	7.86
Week 2	15,688	7.84
Week 3	17,823	8.91
Week 4	16,558	8.28
Week 5	13,764	6.88
Week 6	13,742	6.87
Week 7	17,990	9.00
Week 8	14,746	7.37
Total	151,549	76

- 10 Week Total of 151,549 lbs. multiplied by 5 (50 weeks) = **757,745 lbs. or 378.9 tons**

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

Front Load Weight Estimates

- One-year duration (using Waste Connections volume to weight conversion)

ID			Location	Map Code		Type	Pickup/week	Yard	% Full	Estimated/week	Estimated/year
5	Main	800 W. Campbell	FM6	C8	FM	8 Yd. Recycle Dumpster	1	8	80%	550.40	28,620.80
7	Main	800 W. Campbell	RL9	C6	NSERL	8 Yd. Recycle Dumpster	5	8	80%	2,752.00	143,104.00
11	Main	800 W. Campbell	RCW4	E3	Aux. Srv.	8 Yd. Recycle Dumpster	3	8	80%	1,651.20	85,862.40
13	Main	800 W. Campbell	PS3	D6	Aux. Srv.	8 Yd. Recycle Dumpster	3	8	80%	1,651.20	85,862.40
15	Main	800 W. Campbell	SU5	G7	Aux. Srv.	4 Yd. Recycle Dumpster	5	4	80%	1,376.00	71,552.00
17	Main	800 W. Campbell	AB2	H6	Aux. Srv.	8 Yd. Recycle Dumpster	2	8	80%	1,100.80	57,241.60
22	Main	800 W. Campbell	U1	L6	Athletics	8 Yd. Recycle Dumpster	2	8	80%	1,100.80	57,241.60
23	Main	800 W. Campbell	U1	L6	Athletics	8 Yd. Recycle Dumpster	2	8	80%	1,100.80	57,241.60
29	Callier Cente	1966 Inwood			FM	8 Yd. Recycle Dumpster	1	8	80%	550.40	28,620.80
						Total				11,833.60	615,347.20

ID			Location	Map Code		Type	Pickup/week	Yard	% Full	Estimated/week	Estimated/year
6	Main	800 W. Campbell	FM6	C8	FM	8 Yd. Trash Dumpster	1	8	80%	672.00	34,944.00
8	Main	800 W. Campbell	RL9	C6	NSERL	8 Yd. Trash Dumpster	3	8	80%	2,016.00	104,832.00
9	Main	800 W. Campbell	RL9	C6	NSERL	4 Yd. Trash Dumpster	3	4	80%	1,008.00	52,416.00
10	Main	800 W. Campbell	RL9	C6	NSERL	8 Yd. Trash Dumpster	5	8	80%	3,360.00	174,720.00
14	Main	800 W. Campbell	PS3	D6	Aux. Srv.	8 Yd. Trash Dumpster	3	8	80%	2,016.00	104,832.00
18	Main	800 W. Campbell	AB2	H6	Aux. Srv.	8 Yd. Trash Dumpster	3	8	80%	2,016.00	104,832.00
20	Main	800 W. Campbell	U1	L6	Athletics	8 Yd. Trash Dumpster	2	8	80%	1,344.00	69,888.00
21	Main	800 W. Campbell	U1	L6	Athletics	8 Yd. Trash Dumpster	2	8	80%	1,344.00	69,888.00
27	Callier Center	1966 Inwood			FM	4 Yd. Trash Dumpster	2	4	80%	672.00	34,944.00
28	Callier Center	1966 Inwood			FM	8 Yd. Trash Dumpster	2	8	80%	1,344.00	69,888.00
30	CBH	2220 W. Mockingbird			FM	8 Yd. Trash Dumpster	1	8	80%	672.00	34,944.00
										16,464.00	856,128.00

Includes

- Pickups per week
- Cubic yardage
- Estimated % full per pickup
- Conversion (provided by waste connections)

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

The New Trash and Recycling Spreadsheet

Service Date	Recycle (lbs.)	Recycle Tons	Material	Location	Revenue	Cost	Unit Quantity
9/1/2016	4,800.0	2.40	Compost	Dining			120
9/7/2016	9,000.0	4.50	Pallets	Campus	\$ 225.00		225
9/8/2016	12,220.0	6.11	Single Stream	WSTC			
9/15/2016	71.0	0.04	Metal Scrap	FM	\$ 88.75		
9/22/2016	6,422.0	3.21	Metal Scrap	Campus	\$ 96.33		
9/22/2016	453.0	0.23	Metal Scrap	Campus	\$ 45.30		
9/22/2016	10.0	0.01	Metal Scrap	Campus	\$ 13.00		
9/22/2016	25.0	0.01	Metal Scrap	Campus	\$ 7.50		
9/28/2016	14,660.0	7.33	Single Stream	WSTC			
9/28/2016	4,750.0	2.38	Confidential Paper	Campus			19
10/1/2016	6,760.0	3.38	Compost	Dining			169
10/1/2016	8,600.0	4.30	Surplus	Surplus			635
10/3/2016	5,660.0	2.83	Metal Scrap	Campus	\$ 490.00		

Service Date	Trash (lbs.)	Trash Ton	Material	Location	Cost
9/5/2016	8,260.0	4.13	Trash	SU	
9/5/2016	7,600.0	3.80	Trash	Police	
9/5/2016	7,240.0	3.62	Trash	DHW	
9/6/2016	9,220.0	4.61	Trash	WSTC	
9/6/2016	4,600.0	2.30	Trash	FM Pole Barn	
9/9/2016	7,840.0	3.92	Trash	JSOM	
9/12/2016	9,460.0	4.73	Trash	DHW	
9/13/2016	10,080.0	5.04	Trash	WSTC	
9/13/2016	16,380.0	8.19	Trash	SU	

Includes

- Service Date
- Weight (lbs.)
- Weight (ton.)
- Material
- Location
- Revenue
- Cost (in progress)
- Unit Quantity

Benefits

- Direct input with sorting capability (oldest to newest)
- Easy to filter and read (user friendly)

The University of Texas at Dallas

Recycling Rate

Facilities Management
800 West Campbell Rd. FM 11
Richardson, Texas, 75080
(972) 883.2141

Trash and Recycling Cost and Revenue

The UT Dallas waste hauling contract entails menu prices for front load dumpsters, compactors and open tops of a variety of sizes. All existing containers retain the original pricing. As of July 2017, any new containers will incur a 2.74% increase in price. For example, an 8 YD. Recycle with a 2x/week pickup costs \$97.68 per month. If we add another Recycle with a 2x/week pickup, it will be \$100.36 per month. Therefore, the original will retain its same cost while the new one will reflect the new cost. For a complete menu price of existing containers, please see appendix A.

$$(\$100.36 - \$97.68) / \$97.68 = 2.74\%$$

Which recycling programs generate revenue?

- Ink Cartridge and Toner
- Metal Scrap
- Wood Pallets
- Cardboard

How much revenue is generated per each recycling program?

Recycling	Pickups	Avg. Revenue	
Ink Cartridge	3-4 months	\$ 208.00	
Metal Scrap	1-2 months	\$ 330.00	*varies
Wood Pallets	3-5 months	\$ 202.00	
Cardboard	1-2 months	\$ 329.00	

- *Ink Cartridge and Toner*
 - Dependent on type and quantity of cartridges palletized.
- *Metal Scrap*
 - Dependent on type of metal.
 - Our metal recycler collects from 3 different locations in Facilities Management.
- *Wood Pallets*
 - Dependent on the quantity and condition of the pallets.
 - They are sold for about \$1 per pallet.
- *Cardboard*
 - Dependent on how much we can place within a cardboard specific compactor.

The University of Texas at Dallas

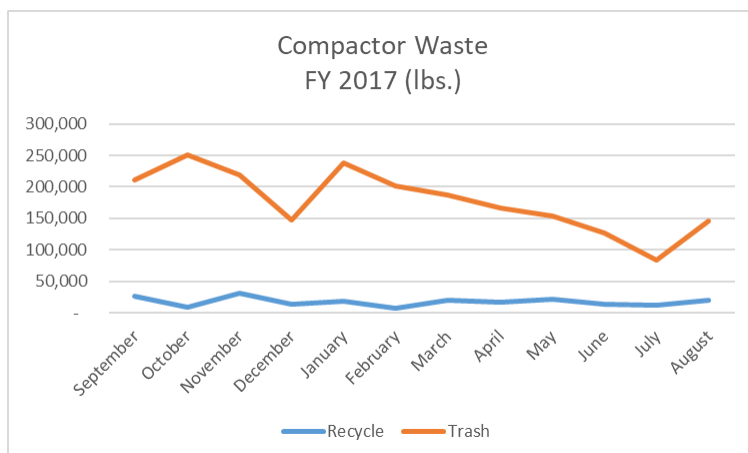
Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

The Overall Recycling Rate for FY 2017

FY 2017	Waste Connection Conversion	
	Weight (lbs.)	Weight (ton)
Trash	2,993,428.0	1,496.71
Recycling	1,194,037.0	597.02
Total	4,187,465.0	2,093.73
% Recycle	28.5%	
% Trash	71%	

Recycling		Weight (lbs.)	Weight (ton)
Single Stream	Compactor	209,180.00	104.59
Single Stream	Front Load	615,347.20	307.67
Metal Scrap		116,478.00	58.24
Ink Cartridges		3,447.00	1.72
Plastic Film		292.40	0.15
Pallets		29,720.00	14.86
Pre-Food Waste		60,320.00	30.16
Surplus		43,400.00	21.70
Paper Shredding		35,000.00	17.50
Binders		15.00	0.01
Styrofoam Peanuts		1.40	0.00
Styrofoam #6		96.00	0.05
Cardboard		77,460.00	38.73
Batteries		1,401.00	0.70
Non-PCB Ballasts		1,879.00	0.94
		1,194,037.0	597.02
Trash			
Trash	Compactor	2,137,300.00	1,068.65
Trash	Front Load	856,128.00	428.06
		2,993,428.00	1,496.71



The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

Historical Information

FY 2016	Waste Connections Conversion	
	Weight (lbs.)	Weight (ton)
Trash	2,652,816	1,326.41
Recycling	1,275,842	637.92
Total	3,928,658	1,964.33
% Recycle	32%	
% Trash	68%	

*with RecycleMania conversion, greater total waste and around 28% recycling rate

Annual Waste - Fiscal Year 2014		
Commodity	Weight	Units
Trash	1,658,358.00	lbs
Wood	16,710.00	lbs
Cardboard (total)	219,028.00	lbs
Paper (total)	188,485.00	lbs
Metal (total)	54,429.00	lbs
Alum Cans	2,590.00	lbs
Pallets	46,600.00	lbs
Concrete	1,498.00	lbs
Plastic	1,624.00	lbs
Food Waste	125,560.00	lbs
Trash	1,658,358.00	
Recycling	656,524.00	
Total	2,314,882.00	
% Recycle		28%
% Trash		72%

*before single stream recycling program

What may influence the recycling rates?

- Recycling events
- Construction
- Removal of trash or recycling containers

The University of Texas at Dallas

Recycling Rate

Facilities Management
800 West Campbell Rd. FM 11
Richardson, Texas, 75080
(972) 883.2141

What should be noted when reviewing the FY 2016 & 2017 recycling rate?

- In January 2017, the Student Union 8 yd. recycle container was not in place due to construction. It was replaced with a 4 yd. recycle in July 2017. This was due to the new building not having a dumpster pad integrated into its design. With the 8 yd., it was nearly 100% full per daily (5x/week) pickup. The current 4 yd. overflows often. This is over 25,000 lbs. of lost recycling.
- In FY 2014, there was over 200,000 lbs. of cardboard recycled in comparison to 104,000 lbs. in FY 2016 and a current 77,000 lbs. in FY 2017. The Student Union produces a lot of cardboard.
- When Bluebonnet (older waste hauler for UT Dallas) was bought out by Progressive (previous waste hauler), then Progressive was bought out by Waste Connections, data records from the company were lost prior to mid-2015.
- The current rate does not include construction waste. This would be a good waste to track as it is known to be heavy and reused in projects.
- We generate revenue through a variety of recycling programs. This includes, ink cartridges and toners, metal scrap and cardboard.
- The total waste is comparable to universities such as the below. (Reference: AASHE STARS)
 - UT El Paso (2,000 tons of total waste)
 - UT Arlington (12,951 tons of total waste)
 - University of Utah, Salt Lake City (2,119 tons of total waste)
 - University of Houston (3,461 tons of total waste)

Conclusions

- From FY 2014 to FY 2017, there was an increase in total waste.
- The recycling rate remains within the 28-30% range.
- Student enrollment has increased to over 27,500 in Fall 2017 versus 23,000 in Fall 2014.
- Square footage has increased at UT Dallas (more buildings and office space).

Recommendations

- Follow through on plans of installing a recycling compactor at SU and a cardboard collection site.
- Figure out the most effective way to track construction waste. This may include integrating a recycling/waste report after each construction project into contracts.
- Identify other revenue generating opportunities through recycling. The revenue can support recycling operations in a variety of ways.

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

Appendix A

Exhibit B – Payment for Services

UTD Campus	Main Address	Location Number	Map code	Department	Dumpster Type	Pickup Schedule	Contract Bid Price \$/Month	2.74% Increase
Main Campus	800 W. Campbell	U1	L6	Athletics	8 Yd Trash	M/F	\$124.80	\$128.22
Main Campus	800 W. Campbell	U1	L6	Athletics	8 Yd Trash	M/F	\$124.80	\$128.22
Main Campus	800 W. Campbell	U1	L6	Athletics	8 Yd Recycle	M/F	\$97.68	\$100.36
Main Campus	800 W. Campbell	U1	L6	Athletics	8 Yd Recycle	M/F	\$97.69	\$100.37
Main Campus	800 W. Campbell	AB2	H6	Aux. Srv.-VC	8 Yd Recycle	M/Th	\$100.46	\$103.21
Main Campus	800 W. Campbell	AB2	H6	Aux. Srv.-VC	8 Yd Trash	M/W/F	\$176.72	\$181.56
Main Campus	800 W. Campbell	PS3	D6	Aux. Srv.-PS3	8 Yd Trash	M/W/F	\$176.72	\$181.56
Main Campus	800 W. Campbell	PS3	D6	Aux. Srv.-PS3	8 Yd Recycle	M/W/F	\$146.52	\$150.53
Main Campus	800 W. Campbell	RCW4	E3	Aux. RH4 Dining	Compactor	On-Call	\$195.00	\$200.34
							\$195.00/month rental + \$260.00 per haul including all Tons	\$260.00
Main Campus	800 W. Campbell	RCW4	E3	Aux. Srv.-RH4 Dining	8 Yd Recycle	M/W/F	\$146.52	\$150.53
Main Campus	800 W. Campbell	SU5	G7	Aux. Srv.-SU	Compactor	On-Call	\$195.00	\$200.34
							\$195.00/month rental + \$260.00 per haul including all Tons	\$260.00
Main Campus	800 W. Campbell	SU5	G7	Aux. Srv.-SU	8 Yd Recycle	Daily	\$293.05	\$301.08
Main Campus	800 W. Campbell	FM6	C8	Fac. Mgmt.	Compactor	On-Call	\$195.00	\$200.34
							\$195.00/month rental + \$260.00 per haul including all Tons	\$260.00
Main Campus	800 W. Campbell	FM6	C8	Fac. Mgmt.	30 Yd Open Top	W	\$0.00	\$0.00
							\$0.00 Monthly Rental + \$234.00 per haul incl. all Tons	\$234.00
Main Campus	800 W. Campbell	FM6	C8	Fac. Mgmt.	Cardboard Compactor	On-Call	\$195.00	\$200.34
							\$195.00/month rental + \$260.00 per haul including all Tons	\$260.00
Main Campus	800 W. Campbell	FM6	C8	Surplus	8 Yd Recycle	W	\$49.00	\$50.34
Main Campus	800 W. Campbell	FM6	C8	Surplus	8 Yd Trash	F	\$85.49	\$87.83
Main Campus	800 W. Campbell	SOM7	H9	Fac. Mgmt.-JSOM	Compactor	On-Call - Monthly Rental	\$195.00	\$200.34
							\$195.00/month rental + \$260.00 per haul including all Tons	\$260.00
Main Campus	800 W. Campbell	WSTC8	C1	Fac. Mgmt.-	Compactor	On-Call	\$195.00	\$200.34

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

				WSTC					
							\$195.00/month rental + \$260.00 per haul including all Tons	\$260.00	\$267.12
Main Campus	800 W. Campbell	WSTC8	C1	Fac. Mgmt.-WSTC	Compactor	On-Call		\$195.00	\$200.34
							\$195.00/month rental + \$260.00 per haul including all Tons	\$260.00	\$267.12
Main Campus	800 W. Campbell	RL9	C6	Vivarium NSERL	8 Yd Bedding/Trash	M/W/F		\$187.05	\$192.18
Main Campus	800 W. Campbell	RL9	C6	NSERL	4 Yd Trash	M/W/F		\$90.00	\$92.47
Main Campus	800 W. Campbell	RL9	C6	NSERL-BSB	8 Yd Trash	M/T/W/TH/F		\$310.00	\$318.49
Main Campus	800 W. Campbell	RL9	C6	NSERL-BSB	8 Yd Recycle	M/T/W/TH/F		\$235.00	\$241.44

UTD Campus	Main Address	Location Number	Map code	Department	Dumpster Type	Pickup Schedule	CONTRACT BID PRICE \$	2.74% Increase	
Callier Center	1966 Inwood			Fac. Mgmt.	30 Yd Open Top	On-Call	\$0.00	\$0.00	
							\$0.00 Monthly Rental + \$234.00 per haul incl. all Tons	\$234.00	\$240.41
Callier Centr	1966 Inwood			Fac. Mgmt.	4 Yd Trash	M/W	\$105.45	\$108.34	
Callier Center	1966 Inwood			Fac. Mgmt.	8 Yd Trash	M/W	\$124.80	\$128.22	
Callier Center	1966 Inwood			Fac. Mgmt.	8 Yd Recycle	M	\$49.00	\$50.34	
Center for Brain Health	2220 Mockingbird Rd.			Fac. Mgmt.	8 Yd Trash	Th	\$65.49	\$67.28	

The University of Texas at Dallas

Recycling Rate



Facilities Management
800 West Campbell Rd. FM 11
Richardson, Texas, 75080
(972) 883.2141

Summary

The University of Texas at Dallas is committed to reducing our environmental impact. Recycling is one approach that our university has taken to minimize and reduce waste directed toward landfills. This creates value from waste. With a diverse recycling program comprising many different materials that are recyclable, applying the most efficient and cost-effective practice is essential.

How to Calculate the Recycling Rate?

- Compile trash and recycling data from the below.
 - Waste Connections – single stream and trash
 - Phoenix Recycling – metal and cardboard
 - Cartridge Recycling Company (CRC) – ink and toner cartridges
 - Office of Research Compliance – batteries, ballasts, and lamps
 - Environmental Health & Safety – confidential paper shredding
 - Organix Recycling and Grounds (Craig) – food and landscape waste
 - Surplus – surplused material (auctioned off)
 - Restaurant Technologies (RTI) – used cooking grease
 - In-house recycling data – plastic film, nitrile gloves, packing peanuts, Styrofoam #6, used-binders

What are some potential complications that may arise in calculating the recycling rate?

- Conflicting historical data.
- Multiple data reports with differing formats from a variety of partners.
- There are a total of 38 trash and recycle bins on-campus (excluding housing)
 - Recycle Compactor – 2
 - Recycle Open Top – 2
 - Recycle Front Load – 12
 - Trash Compactor – 5
 - Trash Open Top – 3
 - Trash Front Load – 14
- Front load trash and recycle dumpsters must have estimate weights.
 - Pickups are mixed with other clients of Waste Connections
 - The containers are not always 100% full when picked up
 - We have assumed containers are 80% full on pickup
 - Construction sometimes hinders pickup abilities
 - Waste Connections provided a conversion weight estimate
 - Front load recycle conversion is 86 lbs. per cubic yard
 - Front load trash conversion is 105 lbs. per cubic yard

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

RecycleMania

RecycleMania is an international recycling competition. Every year, we track our recycling to provide weekly recycling weights on the RecycleMania website. As front load dumpsters are mixed with other clients of our waste hauler, we observe how full the containers are and use a volume to weight conversion to estimate the total weight. This includes the main campus and on-campus housing containers.

RecycleMania

January to April 2017 (recycling only)

Input Week	Total lbs.	Total Ton
Pre Week 1	27,525	13.76
Pre Week 2	29,137	14.57
Week 1	30,000	15.00
Week 2	21,582	10.79
Week 3	23,739	11.87
Week 4	21,139	10.57
Week 5	18,257	9.13
Week 6	17,723	8.86
Week 7	17,990	9.00
Week 8	19,638	9.82
Total	226,731	113

RecycleMania

January to April 2016 (recycling only)

	Total lbs.	Total Ton
Pre Week 1	25,304	12.65
Pre Week 2	27,149	13.57
Week 1	25,693	12.85
Week 2	21,828	10.91
Week 3	21,288	10.64
Week 4	25,061	12.53
Week 5	22,456	11.23
Week 6	24,360	12.18
Week 7	26,206	13.10
Week 8	25,135	12.57
Total	244,480	122.24

RecycleMania

January to April 2018

	Recycle	Trash
Input Week	Total lbs.	Total lbs.
Pre-Week 1	20,887	51,352
Pre-Week 2	19,276	46,887
Week 1	22,368	50,197
Week 2	20,844	50,432
Week 3	17,392	48,088
Week 4	24,384	57,110
Week 5	25,336	57,114
Week 6	18,271	50,780
Week 7	15,423	43,418
Week 8	21,913	51,805
Total	206,095	507,182
% Recycle	29%	

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

Front Load Weight Estimates

- One-year duration (using Waste Connections volume to weight conversion)

Location #	UTD Campus	Main Address	Location Code	Map Code	Department	Dumpster Type	Trash/Recycling	Material	Size (cu. Yd)	Company	Data Count	Pickup/Week	Pickup Days	Metric/Cu Yd	Avg. % Full	Est. lbs./Week	Est. lbs./Year
5	Main	800 W. Campbell	FM6	C8	FM	Front Load	Recycling	Single Stream	8	Waste Connections	1	1		86	80%	550.4	28,620.8
7	Main	800 W. Campbell	RL9	C6	NSERL	Front Load	Recycling	Single Stream	8	Waste Connections	1	5		86	80%	2,752.0	143,104.0
11	Main	800 W. Campbell	RCW4	E3	Aux. Srv.	Front Load	Recycling	Single Stream	8	Waste Connections	1	3		86	80%	1,651.2	85,862.4
13	Main	800 W. Campbell	PS3	D6	Aux. Srv.	Front Load	Recycling	Single Stream	8	Waste Connections	1	3		86	80%	1,651.2	85,862.4
15	Main	800 W. Campbell	SJ5	G7	Aux. Srv.	Front Load	Recycling	Single Stream	4	Waste Connections	1	5		86	80%	1,376.0	71,552.0
17	Main	800 W. Campbell	AB2	H6	Aux. Srv.	Front Load	Recycling	Single Stream	8	Waste Connections	1	2		86	80%	1,100.8	57,241.6
22	Main	800 W. Campbell	U1	L6	Athletics	Front Load	Recycling	Single Stream	8	Waste Connections	1	2		86	80%	1,100.8	57,241.6
23	Main	800 W. Campbell	U1	L6	Athletics	Front Load	Recycling	Single Stream	8	Waste Connections	1	2		86	80%	1,100.8	57,241.6
29	Callier Center	1966 Inwood	N/A	N/A	FM	Front Load	Recycling	Single Stream	8	Waste Connections	1	1		86	80%	550.4	28,620.8
32	Main	800 W. Campbell	DGA10	H7	Alum. Cntr.	Front Load	Recycling	Single Stream	8	Waste Connections	1	2		86	80%	1,100.8	57,241.6
33	Main	800 W. Campbell	SPN11	A4	FM	Front Load	Recycling	Single Stream	8	Waste Connections	1	2		86	80%	1,100.8	57,241.6
36	Main	800 W. Campbell	SPN11	B5	FM	Front Load	Recycling	Single Stream	8	Waste Connections	1	2		86	80%	1,100.8	57,241.6

Location #	UTD Campus	Main Address	Location Code	Map Code	Department	Dumpster Type	Trash/Recycling	Material	Size (cu. Yd)	Company	Data Count	Pickup/Week	Pickup Days	Metric/Cu Yd	Avg. % Full	Est. lbs./Week	Est. lbs./Year
6	Main	800 W. Campbell	FM6	C8	FM	Front Load	Trash	MSW	8	Waste Connections	1	1		105	80%	672.0	34,944.0
8	Main	800 W. Campbell	RL9	C6	NSERL	Front Load	Trash	MSW	8	Waste Connections	1	3		105	80%	2,016.0	104,832.0
9	Main	800 W. Campbell	RL9	C6	NSERL	Front Load	Trash	MSW	4	Waste Connections	1	3		105	80%	1,008.0	52,416.0
10	Main	800 W. Campbell	RL9	C6	NSERL	Front Load	Trash	MSW	8	Waste Connections	1	5		105	80%	3,360.0	174,720.0
14	Main	800 W. Campbell	PS3	D6	Aux. Srv.	Front Load	Trash	MSW	8	Waste Connections	1	3		105	80%	2,016.0	104,832.0
18	Main	800 W. Campbell	AB2	H6	Aux. Srv.	Front Load	Trash	MSW	8	Waste Connections	1	3		105	80%	2,016.0	104,832.0
20	Main	800 W. Campbell	U1	L6	Athletics	Front Load	Trash	MSW	8	Waste Connections	1	2		105	80%	1,344.0	69,888.0
21	Main	800 W. Campbell	U1	L6	Athletics	Front Load	Trash	MSW	8	Waste Connections	1	2		105	80%	1,344.0	69,888.0
27	Callier Center	1966 Inwood	N/A	N/A	FM	Front Load	Trash	MSW	4	Waste Connections	1	2		105	80%	672.0	34,944.0
28	Callier Center	1966 Inwood	N/A	N/A	FM	Front Load	Trash	MSW	8	Waste Connections	1	2		105	80%	1,344.0	69,888.0
30	CBH	2220 W. Mockingbird	N/A	N/A	FM	Front Load	Trash	MSW	8	Waste Connections	1	1		105	80%	672.0	34,944.0
31	Main	800 W. Campbell	DGA10	H7	Alum. Cntr.	Front Load	Trash	MSW	8	Waste Connections	1	2		105	80%	1,344.0	69,888.0
34	Main	800 W. Campbell	SPN11	A4	FM	Front Load	Trash	MSW	8	Waste Connections	1	2		105	80%	1,344.0	69,888.0
35	Main	800 W. Campbell	SPN11	B5	FM	Front Load	Trash	MSW	8	Waste Connections	1	2		105	80%	1,344.0	69,888.0

Includes

- Pickups per week
- Cubic yardage
- Estimated % full per pickup
- Conversion (provided by waste connections)
- Filtering by company, size, material, pickups, department paying, estimated weight, etc...
- Includes limited housing data (planning to include all Housing data in future)

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

The Trash and Recycling Spreadsheet

1	Service Date	Recycle (lbs.)	Recycle Tons	Material	Location	Revenue	Cost	Unit Quantity	Size (YD)	Container
568	7/25/2018	-	-	Compost	SU			3		
569	8/3/2018	1,472.00		Clothing	Campus	\$ 176.64				
570	8/21/2018	19.60		0.01 Plastic Film	Campus			4		
571	8/31/2018	26.50		0.01 Plastic Film	Campus			4		
572	8/31/2018	11,600.00		5.80 Pallets	Campus	\$ 290.00		290		
573	9/14/2018	30.00		0.02 Plastic Film	Campus			4		
574	9/14/2018	1.50		0.00 Styrofoam Peanuts	Campus			1		
575	5/22/2018	10,380.00		5.19 Single Stream	WSTC			1	35	Compactor
576	7/6/2018	9,860.00		4.93 Single Stream	WSTC			1	35	Compactor
577										

1	Service Date	Trash (lbs.)	Trash Ton	Material	Location	Cost	Unit Quant	Size (YD)	Container
1199	7/9/2018	3,240.00	1.62	Trash	UTD-STUDENT UNION BLDG		1	35.00	Packer
1200	7/10/2018	3,440.00	1.72	Trash	UTD-DINING HALL W/ REC CNTR W		1	35.00	Packer
1201	7/11/2018	1,240.00	0.62	Trash	UTD - POLE BARN		1	30.00	Open Top
1202	7/13/2018	9,180.00	4.59	Trash	UTD-JSOM		1	35.00	Packer
1203	7/16/2018	4,940.00	2.47	Trash	UTD-STUDENT UNION BLDG		1	35.00	Packer
1204	7/16/2018	4,240.00	2.12	Trash	UTD-DINING HALL W/ REC CNTR W		1	35.00	Packer
1205	7/18/2018	2,260.00	1.13	Trash	UTD - POLE BARN		1	30.00	Open Top
1206	7/20/2018	11,060.00	5.53	Trash	UTD-WSTC - TRASH		1	35.00	Packer
1207	7/20/2018	4,000.00	2.00	Trash	UTD-POLICE STATION		1	35.00	Packer
1208	7/23/2018	4,220.00	2.11	Trash	UTD-DINING HALL W/ REC CNTR W		1	35.00	Packer
1209	7/23/2018	4,700.00	2.35	Trash	UTD-STUDENT UNION BLDG		1	35.00	Packer

Includes

- Service Date
- Weight (lbs.)
- Weight (ton.)
- Material
- Location
- Revenue
- Cost (in progress)
- Unit Quantity

Benefits

- Direct input with sorting capability (oldest to newest)
- Easy to filter and read (user friendly)

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

Which recycling programs generate revenue?

- Ink Cartridge and Toner
- Metal Scrap
- Wood Pallets
- Cardboard
- Shoes & Clothing

How much revenue is generated per each recycling program?

Recycling	Pickups	Avg. Revenue	Notes
Ink Cartridge	4-5 months	\$208.00	*Varies
Metal Scrap	1-3 months	\$330.00	*Varies
Wood Pallets	3-5 months	\$202.00	*Varies
Cardboard	2-3 months	\$329.00	*Varies
Shoes & Clothing	2-3 months	\$279.72	*Varies

- *Ink Cartridge and Toner*
 - Dependent on type and quantity of cartridges palletized.
- *Metal Scrap*
 - Dependent on type of metal.
 - Our metal recycler collects from three different locations in Facilities Management.
 - Plumbing, FM Open Top, and Surplus.
- *Wood Pallets*
 - Dependent on the quantity and condition of the pallets.
 - Sold for about \$1 per pallet.
- *Cardboard*
 - Dependent on how much we can place within a cardboard specific compactor.
 - Has shown great decline over past few years.
- *Shoes & Clothing*
 - These bins are open for students, staff, faculty, and community members.
 - This program support sustainability initiatives and intern projects.
 - Received our first check in June 2018.
 - Good fundraising opportunity for specific months and events.

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

The Overall Recycling Rate for FY 2018

Overall			
FY 2018	Weight (lbs.)	Weight (ton)	%
Trash	3,278,932.00		71.3%
Recycling	1,318,031.69		28.7%
Total	4,596,963.69		
Line Item			
	Weight (lbs.)	Weight (ton)	%
All Recycling (act)	530,959.69	265.48	
Single Stream (EST)	787,072.00	393.54	
Single Stream	205,180.00	102.59	38.6%
Metal Scrap	89,275.00	44.64	16.8%
Ink and Toner	974.00	0.49	0.2%
Plastic Film	577.40	0.29	0.1%
Pallets	46,200.00	23.10	8.7%
Compost	61,455.00	30.73	11.6%
Surplus	37,200.00	18.60	7.0%
Confidential Paper	31,000.00	15.50	5.8%
Binders (1 lbs. each)	50.00	0.03	0.0%
Styrofoam Peanuts	3.80	0.00	0.0%
Styrofoam # 6 (Polysty)	248.49	0.12	0.0%
Cardboard	43,900.00	21.95	8.3%
Batteries	5,777.00	2.89	1.1%
Non-PCB Ballasts	1,876.00	0.94	0.4%
Grease	2,083.00	1.04	0.4%
Clothing	4,662.00	2.33	0.9%
Lamps	-	-	0.0%
Neoprene	498.00	0.25	0.1%
Trash (act)	2,213,140.00		
Trash (est)	1,065,792.00		
Total	4,596,963.69		

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

Historical Information

FY 2016	Waste Connections Conversion	
	Weight (lbs.)	Weight (ton)
Trash	2,652,816	1,326.41
Recycling	1,275,842	637.92
Total	3,928,658	1,964.33
% Recycle	32%	
% Trash	68%	

*with RecycleMania conversion, greater total waste and around 28% recycling rate

Annual Waste - Fiscal Year 2014		
Commodity	Weight	Units
Trash	1,658,358.00	lbs
Wood	16,710.00	lbs
Cardboard (total)	219,028.00	lbs
Paper (total)	188,485.00	lbs
Metal (total)	54,429.00	lbs
Alum Cans	2,590.00	lbs
Pallets	46,600.00	lbs
Concrete	1,498.00	lbs
Plastic	1,624.00	lbs
Food Waste	125,560.00	lbs
Trash	1,658,358.00	
Recycling	656,524.00	
Total	2,314,882.00	
% Recycle	28%	
% Trash	72%	

*before single stream recycling program

The University of Texas at Dallas

Recycling Rate

Facilities Management
800 West Campbell Rd. FM 11
Richardson, Texas, 75080
(972) 883.2141

What may influence the recycling rates?

- Recycling events
- Construction
- Removal of trash or recycling containers
- Effective tracking of material pickups (cardboard/metal/ink and toner)

Conclusions

- From FY 2017 to FY 2018, there was an increase in total waste.
- The recycling rate remains within the 28-32% range.
- Student enrollment has increased from Fall 2016 to Fall 2017 (26,793 to 27,642).
- Square footage has increased at UT Dallas (more buildings and office space).

Top three Recommendations

- Install a recycle compactor at Student Union Loading Dock location
- Develop a cardboard collection site near Student Union and DHW (high generation sites); this goes to the cardboard only compactor at FM.
- Design a generic yet flashy sticker to add visual to indoor recycling bins

The University of Texas at Dallas

Recycling Rate

Facilities Management
 800 West Campbell Rd. FM 11
 Richardson, Texas, 75080
 (972) 883.2141

Appendix A

UTD Campus	Main Address	Location Number	Map code	Department	Dumpster Type	Pickup Schedule	Service Code
Main Campus	800 W. Campbell	U1	L6	Athletics	8 Yd Trash	M/F	C08T2X
Main Campus	800 W. Campbell	U1	L6	Athletics	8 Yd Trash	M/F	C08T2X
Main Campus	800 W. Campbell	U1	L6	Athletics	8 Yd Recycle	M/F	C08R2X
Main Campus	800 W. Campbell	U1	L6	Athletics	8 Yd Recycle	M/F	C08R2X
Main Campus	800 W. Campbell	AB2	H6	Aux. Srv.- VC	8 Yd Recycle	M/Th	C08R2X
Main Campus	800 W. Campbell	AB2	H6	Aux. Srv.- VC	8 Yd Trash	M/W/F	C08T3X
Main Campus	800 W. Campbell	PS3	D6	Aux. Srv.- PS3	8 Yd Trash	M/W/F	C08T3X
Main Campus	800 W. Campbell	PS3	D6	Aux. Srv.- PS3	8 Yd Recycle	M/W/F	C08R3X
Main Campus	800 W. Campbell	RCW4	E3	Aux. RH4 Dining	Compactor	On-Call	N/A
					\$195.00/month rental + \$260.00 per haul including all Tons		PACKER
Main Campus	800 W. Campbell	RCW4	E3	Aux. Srv.- RH4 Dining	8 Yd Recycle	M/W/F	C08R3X
Main Campus	800 W. Campbell	SU5	G7	Aux. Srv.- SU	Compactor	On-Call	N/A
					\$195.00/month rental + \$260.00 per haul including all Tons		PACKER
Main Campus	800 W. Campbell	SU5	G7	Aux. Srv.- SU	8 4 Yd Recycle	Daily (A11-11.01.18)	C08R5X
Main Campus	800 W. Campbell	FM6	C8	Fac. Mgmt.	Compactor	On-Call	N/A
					\$195.00/month rental + \$260.00 per haul including all Tons		PACKER
Main Campus	800 W. Campbell	FM6	C8	Fac. Mgmt.	30 Yd Open Top	W	N/A
					\$0.00 Monthly Rental + \$234.00 per haul incl. all Tons		OPEN TOP
Main Campus	800 W. Campbell	FM6	C8	Fac. Mgmt.	Cardboard Compactor	On-Call	N/A
					\$195.00/month rental + \$260.00 per haul including all Tons		PACKER
Main Campus	800 W. Campbell	FM6	C8	Surplus	8 Yd Recycle	W	C08R1X
Main Campus	800 W. Campbell	FM6	C8	Surplus	20 - 30 Yd Trash Open Top	F - Monthly Rental	N/A
					\$50.00/month rental + \$250.00 per haul including all Tons		OPEN TOP
Main Campus	800 W. Campbell	SOM7	H9	Fac. Mgmt.- JSOM	Compactor	On-Call - Monthly Rental	N/A
					\$195.00/month rental + \$260.00 per haul including all Tons		PACKER
Main Campus	800 W. Campbell	WSTC8	C1	Fac. Mgmt.- WSTC	Compactor	On-Call	N/A
					\$195.00/month rental + \$260.00 per haul including all Tons		PACKER
Main Campus	800 W. Campbell	WSTC8	C1	Fac. Mgmt.- WSTC	Compactor	On-Call	N/A
					\$195.00/month rental + \$260.00 per haul including all Tons		PACKER
Main Campus	800 W. Campbell	RL9	C6	Vivarium NSERL	8 Yd Bedding/Trash	M/W/F	C08T3X
Main Campus	800 W. Campbell	RL9	C6	NSERL	4 Yd Trash	M/W/F	C04T3X
Main Campus	800 W. Campbell	RL9	C6	NSERL-BSB	8 Yd Trash	M/T/W/TH/F	C08T5X
Main Campus	800 W. Campbell	RL9	C6	NSERL-BSB	8 Yd Recycle	M/T/W/TH/F	C08R5X
Main Campus	800 W. Campbell	DGA-10	H7	MC-DGA	8 Yd Trash	M/W/F (A5-09.01.17) M/T/W/TH/F (A6-10.30.17)	C08T5X
Main Campus	800 W. Campbell	DGA-10	H7	MC-DGA	8 Yd Recycle	M/W/F (A5-09.01.17) M/T/W/TH/F (A6-10.30.17)	C08R5X
Main Campus	800 W. Campbell	SPN-11		SPN	8 Yd Trash	T/F (A7-12.11.17)	C08T2X
Main Campus	800 W. Campbell	SPN-11		SPN	8 Yd Trash	T/F (A7-12.11.17)	C08T2X
Main Campus	800 W. Campbell	SPN-11		SPN	8 Yd Recycle	T/F (A7-12.11.17)	C08R2X
Main Campus	800 W. Campbell	SPN-11		SPN	8 Yd Recycle	T/F (A7-12.11.17)	C08R2X
Main Campus	800 W. Campbell			ECSW	20 Yd Trash Open Top	On-Call - Monthly Rental	N/A
					\$50.00/month rental + \$250.00 per haul including all Tons		OPEN TOP
Main Campus	800 W. Campbell			ECSW	20 Yd Recycle Open Top	On-Call - Monthly Rental	N/A
					\$50.00/month rental + \$250.00 per haul including all Tons		OPEN TOP
South Campus							
Callier Center	1966 Inwood			Fac. Mgmt.	30 Yd Open Top	On-Call	N/A
					\$0.00 Monthly Rental + \$234.00 per haul incl. all Tons		OPEN TOP
Callier Centr	1966 Inwood			Fac. Mgmt.	4 Yd Trash	M/W	C04T2X
Callier Center	1966 Inwood			Fac. Mgmt.	8 Yd Trash	M/W	C08T2X
Callier Center	1966 Inwood			Fac. Mgmt.	8 Yd Recycle	W (A3-07.03.17)	C08R1X
Center for Brain Health	2220 Mockingbird Rd.			Fac. Mgmt.	8 Yd Trash	T/TH (A6-10.30.17)	C08T2X
Brain Performance Institute	2220 Mockingbird Rd.			Fac. Mgmt.	8 Yd Recycle	W	C08R1X
Food Waste Recycling							
Main Campus	800 W. Campbell	PS3	D6	Auxiliary Services-PS3*	3 Yd Recycle	F (A5-09.01.17) W (A6-10.30.17)	N/A
Main Campus	800 W. Campbell	RCW4	E3	Auxiliary Services-RH4 Dining	3 Yd Recycle	F (A5-09.01.17) W (A6-10.30.17)	N/A
Main Campus	800 W. Campbell	SU5	G7	Auxiliary Services-SU	3 - 65 Gallon Totes Recycle	F (A5-09.01.17) W (A6-10.30.17)	N/A