

# **APPENDIX G**

## **Recycling Data**

---

Henderson County SWMP

Summary of Recycling Data Received From County

		2005												Yearly Total 2005	
		Jan 05	Feb 05	Mar 05	Apr 05	May 05	June 05	July 05	Aug 05	Sept 05	Oct 05	Nov 05	Dec 05		
Contr RCY	tons	34.26	32.55	57.13	38.87	41.06	37.55	39.75	36.16	37.56	53.89	34.09	36.94	39.98	479.81
	# Loads	5	4	6	5	6	5	5	5	5	7	5	5	5	63
	Average Tons per Load	6.85	8.14	9.52	7.77	6.84	7.51	7.95	7.23	7.51	7.70	6.82	7.39	7.62	7.62
Oil	tons	2.48	2.46	2.98	2.94	3.60	5.03	3.42	3.40	3.35	3.39	2.81	3.09	3.25	38.95
	# Loads	2	2	2	2	2	3	2	2	2	2	1	3	2	25
	Est. Gal. of oil @ 6.8 lbs./gal.	729	724	876	865	1,059	1,479	1,006	1,000	985	997	826	909	955	11,456
Paper / RCYL	tons	75.73	95.93	81.56	116.78	116.93	82.49	94.57	92.47	99.25	103.62	117.84	105.34	98.54	1,182.51
	# Loads	6	5	4	7	8	5	6	6	6	7	8	7	6	75
	Average Tons per Load	12.62	19.19	20.39	16.68	14.62	16.50	15.76	15.41	16.54	14.80	14.73	15.05	15.77	15.77
Tires Hauled Out	tons	136.23	80.56	121.88	141.03	130.40	137.06	122.79	139.01	148.42	96.40	120.87	88.00	121.89	1,462.65
	# Loads	11	7	10	11	10	11	10	12	13	8	10	7	10	120
	Average Tons per Load	12.38	11.51	12.19	12.82	13.04	12.46	12.28	11.58	11.42	12.05	12.09	12.57	12.19	12.19
	Est. No. Tires @ 100 tires/ton	13,623	8,056	12,188	14,103	13,040	13,706	12,279	13,901	14,842	9,640	12,087	8,800	12,189	146,265
	Est. No. Tires per Load	1,238	1,151	1,219	1,282	1,304	1,246	1,228	1,158	1,142	1,205	1,209	1,257	1,219	1,219
White Goods	tons	150.30	353.73			531.48		349.66	180.08		250.44	104.61	88.47		2,008.77
	# Loads	11	23			30		19	10		18	6	4		121
	Average Tons per Load	13.66	15.38			17.72		18.40	18.01		13.91	17.44	22.12		16.60





Henderson County SWMP

Summary of Recycling Data Received From County

		2007												Yearly Total
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	2007
		07	07	07	07	07	07	07	07	07	07	07	07	
Contr RCY	tons	55.92	34.59	37.84	36.35	56.32	51.38	44.18	48.27	31.99	43.13	46.88	37.63	524.48
	# Loads	7	5	5	5	8	7	7	8	5	7	7		71
	Average Tons per Load	7.99	6.92	7.57	7.27	7.04	7.34	6.31	6.03	6.40	6.16	6.70		7.39
Oil	tons	2.37	1.73	2.34	3.71	4.88	4.31	3.05	4.60	3.14	3.87	1.25		35.25
	# Loads	2	2	2	2	3	2	2	3	2	2	1		23
	Est. Gal. of oil @ 6.8 lbs./gal.	697	509	688	1,091	1,435	1,268	897	1,353	924	1,138	368		10,368
Paper / RCYL	tons	108.15	90.59	129.85	98.55	158.44	95.54	111.97	121.15	94.26	119.40	121.90	105.38	1,355.18
	# Loads	8	7	9	7	12	6	8	9	7	9	7	6	95
	Average Tons per Load	13.52	12.94	14.43	14.08	13.20	15.92	14.00	13.46	13.47	13.27	17.41	17.56	14.27
Tires Hauled Out	tons	136.23	146.95	113.79	128.51	185.28	122.52	170.26	139.41	177.30	217.29	113.21	113.24	1,763.99
	# Loads	11	11	10	10	15	10	14	11	14	18	11	9	144
	Average Tons per Load	12.38	13.36	11.38	12.85	12.35	12.25	12.16	12.67	12.66	12.07	10.29	12.58	12.25
	Est. No. Tires @ 100 tires/ton	13,623	14,695	11,379	12,851	18,528	12,252	17,026	13,941	17,730	21,729	11,321	11,324	176,399
	Est. No. Tires per Load	1,238	1,336	1,138	1,285	1,235	1,225	1,216	1,267	1,266	1,207	1,029	1,258	1,225
White Goods	tons	194.77			271.33	98.55	13.76	113.42					291.96	983.79
	# Loads	12			18	8	1	8					16	63
	Average Tons per Load	16.23			15.07	12.32	13.76	14.18					18.25	15.62

Note: Oil removal data only provided through November 2007

No. from SWAC Report



		2008												Monthly Average	Total Jan - Oct 2008
		Jan 08	Feb 08	Mar 08	Apr 08	May 08	June 08	July 08	Aug 08	Sept 08	Oct 08	Nov 08	Dec 08		
Contr RCY	tons	51.72	35.99	44.90	49.15	59.43	71.32	56.14	47.81	63.54	54.69	38.71	69.35	53.56	642.75
	# Loads	7	6	8	7	7	12	7	6	8	7			8	75
	Average Tons per Load	7.39	6.00	5.61	7.02	8.49	5.94	8.02	7.97	7.94	7.81			7.14	8.57
Oil	tons														
	# Loads														
	Est. Gal. of oil @ 6.8 lbs./gal.														
Paper / RCYL	tons	126.84	90.48	116.09	115.86	100.54	122.04	143.63	101.52	118.03	121.34	99.40	176.90	119.39	1,432.67
	# Loads	8	6	7	7	7	8	10	7	8	8			8	76
	Average Tons per Load	15.86	15.08	16.58	16.55	14.36	15.26	14.36	14.50	14.75	15.17			15.71	18.85
Tires Hauled Out	tons	120.98	129.01	149.92	132.82	164.54	156.69	134.89	166.88	128.69			113.23	139.77	1,397.65
	# Loads	11	10	11	11	13	15	11	13	13			9	12	117
	Average Tons per Load	11.00	12.90	13.63	12.07	12.66	10.45	12.26	12.84	9.90			12.58	11.95	11.95
	Est. No. Tires @ 100 tires/ton	12,098	12,901	14,992	13,282	16,454	15,669	13,489	16,688	12,869			11,323	13,977	139,765
	Est. No. Tires per Load	1,100	1,290	1,363	1,207	1,266	1,045	1,226	1,284	990			1,258	1,195	1,195
White Goods	tons	139.03					350.33	65.17							554.53
	# Loads	8					23	4							35
	Average Tons per Load	17.38					15.23	16.29							15.84

Average White Goods & Metal Delivered to Site Per Month: 106.26 tons per month

Numbers from SWAC reports

Note: White Goods - Average tonnage figured from March 2005 through July 2008 - Assumed all white goods hauled off at end of February 2005  
Assumes all white goods delivered after July 2008 have not been collected

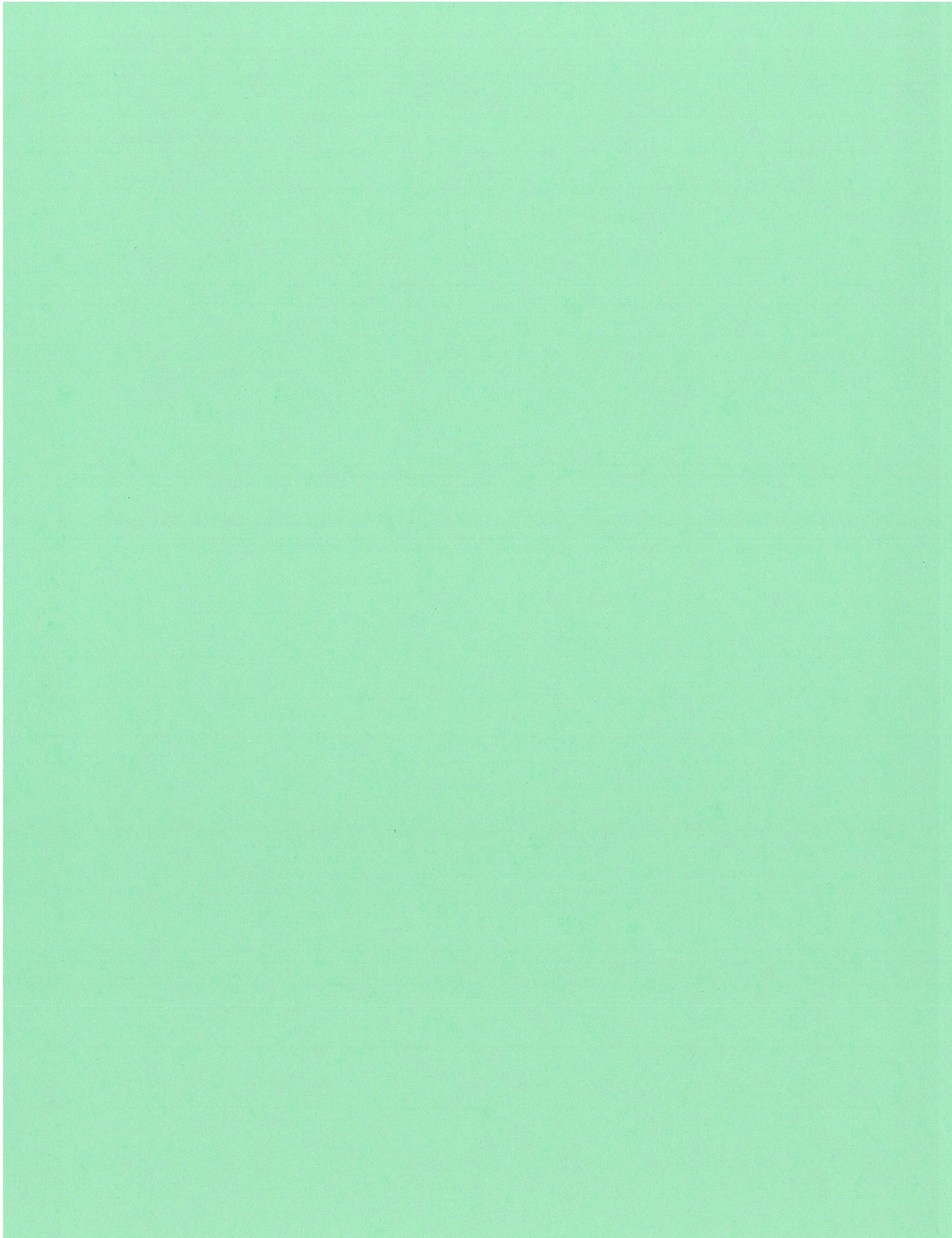
	2009												Total Jan - Oct 2008	
	Jan 09	Feb 09	Mar 09	Apr 09	May 09	June 09	July 09	Aug 09	Sept 09	Oct 09	Nov 09	Dec 09		Monthly Average
Contr RCY	47.09	45.32											46.51	93.01
tons														
# Loads														
Average Tons per Load														
Oil														
tons														
# Loads														
Est. Gal. of oil @ 6.8 lbs./gal.														
Paper / RCYL	75.06	98.25											86.66	173.31
tons														
# Loads														
Average Tons per Load														
Tires Hauled Out														
tons														
# Loads														
Average Tons per Load														
Est. No. Tires @ 100 tires/ton														
Est. No. Tires per Load														
White Goods														
tons														
# Loads														
Average Tons per Load														

Average White Goods & Metal Delivered to Site Per Month: 56.64 tons per month

Numbers from SWAC reports

Note: White Goods - Average tonnage figured from March 2005 through July 2008 -  
 Assumed all white goods hauled off at end of February 2005  
 Assumed all white goods delivered after July 2008 have not been collected







Town of Fletcher:  
Recycling Data for July and September, 2008

Received from Ronnie Frady on  
Wednesday, March 11, 2009

**Participation:**

2008 Month	No. of Pounds Collected	Total Households On Routes	No. of Participants	% Participation	Avg. WT Per Participant Per Collection (lbs.)	Avg. WT Per Household Per Collection (lbs)	Avg. WT Per Participant Per Month (lbs.)
July	62,960	5,546	3,812	68.7%	16.5	11.4	35.8
September	58,089	5,294	3,680	69.5%	15.8	11.0	34.2
<b>TOTALS</b>	<b>121,049</b>	<b>10,840</b>	<b>7,492</b>	<b>69.1%</b>			
<b>Avg. / Mo.</b>	<b>60,525</b>	<b>5,420</b>	<b>3,746</b>	<b>69.1%</b>	<b>16.2</b>	<b>11.2</b>	<b>35.0</b>

**Material Collected:**

2008 Month		No. of Pounds Collected	News Print	OCC	Mixed Paper	Cans	Glass	Plastic
July	Lbs. Collect	62,960	19,382	4,454	16,181	2,596	16,183	4,162
	% Of Stream	100.0%	30.8%	7.1%	25.7%	4.1%	25.7%	6.6%
	Tons	31.48	9.69	2.23	8.09	1.30	8.09	2.08
September	Lbs. Collect	58,089	21,064	5,286	11,699	2,382	13,824	3,834
	% Of Stream	100.0%	36.3%	9.1%	20.1%	4.1%	23.8%	6.6%
	Tons	29.04	10.53	2.64	5.85	1.19	6.91	1.92
Totals	Lbs. Collect	121,049	40,446	9,740	27,880	4,978	30,007	7,996
	% Of Stream	100.0%	33.4%	8.0%	23.0%	4.1%	24.8%	6.6%
	Tons	60.52	20.22	4.87	13.94	2.49	15.00	4.00
Average Per Month	Lbs. Collect	60,525	20,223	4,870	13,940	2,489	15,004	3,998
	% Of Stream	100.0%	33.4%	8.0%	23.0%	4.1%	24.8%	6.6%
	Tons	30.26	10.11	2.44	6.97	1.24	7.50	2.00

**Material Collected Per Household Per Collection:**

Average Weight in Pounds Per Participant Per Collection	16.2	News Print	OCC	Mixed Paper	Cans	Glass	Plastic
Average Percentage of Material in Recycle Stream Per Collection Cycle		33.4%	8.0%	23.0%	4.1%	24.8%	6.6%
Average Weight in Pounds of Material in Recycle Stream Per Collection Cycle		5.4	1.3	3.7	0.7	4.0	1.1

TOWN OF FLETCHER  
 September  
 2008 RECYCLING COLLECTION REPORT

Actual Tonnage by Material

	Weyheit	News	Mixed Paper	OCC	Cans	Glass	Plastic
	300.0%	23.8%	30.7%	9.1%	4.1%	25.7%	6.6%
Mon 9/3	0	0	0	0	0	0	0
Tue 9/2	3650	869	1121	332	150	938	241
Wed 9/3	3187	759	978	290	131	819	210
Thur 9/4	2475	589	760	225	100	636	163
Fri 9/5	4728	1126	1652	430	194	111	312
<b>Total</b>	<b>14141</b>						

Mon 9/8	0	0	417	0	0	0	0
Tue 9/9	3565	848	563	324	146	916	235
Wed 9/10	3312	788	519	301	136	853	219
Thur 9/11	2390	569	183	217	98	614	158
Fri 9/12	3248	773	249	296	133	835	214
<b>Total</b>	<b>14141</b>						

Mon 9/15	0	0	542	0	0	0	0
Tue 9/16	3755	894	503	342	154	965	248
Wed 9/17	3312	788	589	301	136	851	219
Thur 9/18	2488	592	112	226	102	639	164
Fri 9/19	5142	1224	287	468	211	1321	339
<b>Total</b>	<b>14141</b>						

Mon 9/22	0	0	543	0	0	0	0
Tue 9/23	3601	857	608	328	148	925	238
Wed 9/24	3598	854	549	327	147	922	237
Thur 9/25	2475	589	110	225	101	636	163
Fri 9/26	3326	792	496	303	136	855	220
<b>Total</b>	<b>14141</b>						

Mon 9/29	0	0	0	0	0	0	0
Tue 9/30	3846	915	1181	350	158	988	254
Wed 10/1	0	0	0	0	0	0	0
Thur 10/2	0	0	0	0	0	0	0
Fri 10/3	0	0	0	0	0	0	0
<b>Total</b>	<b>3846</b>						

lbs	58089	33825	11699	5286	2382	13824	3834
TONS	29.04	6.91	5.85	2.64	1.19	6.91	1.92

Submitted by Curbside Management

21064  
 11699  
 5286  
 2382  
 3834

TOWN OF FLETCHER  
September  
2008 RECYCLING COLLECTION REPORT

Participation, Average Weight per household, Average Weight per Set Out

	Total lbs	No. of Households	Estimated Participation	No. of Participants	Average Weight per Household	Average Weight per Participant
Mon 9/1	0					
Tue 9/2	3850	298	65%	194	32.25	18.84
Wed 9/3	3187	250	77%	193	12.75	16.56
Thur 9/4	2475	248	71%	176	9.98	14.06
Fri 9/5	4729	518	65%	337	9.13	14.05
<hr/>						
Mon 9/8	0					
Tue 9/9	3565	298	68%	203	11.96	17.59
Wed 9/10	3311	340	79%	269	9.74	12.33
Thur 9/11	2390	248	65%	161	9.64	14.83
Fri 9/12	3249	288	67%	200	10.90	16.27
<hr/>						
Mon 9/15	0					
Tue 9/16	3755	288	78%	226	12.60	16.58
Wed 9/17	3312	250	81%	203	13.25	16.36
Thur 9/18	2488	248	63%	156	10.03	15.92
Fri 9/19	5142	518	63%	326	9.93	15.76
<hr/>						
Mon 9/22	0					
Tue 9/23	3601	298	71%	212	12.08	17.02
Wed 9/24	3588	340	79%	269	10.55	13.36
Thur 9/25	2475	248	66%	164	9.98	15.12
Fri 9/26	3376	298	62%	185	11.16	18.00
<hr/>						
Mon 9/29	0					
Tue 9/30	3846	298	69%	206	12.93	18.70
Wed 10/1	0					
Thur 10/2	0					
Fri 10/3	0					
<hr/>						
TOTALS	58089.0	5294.0	69%	3676.9	11.0	15.8
Overall Participation =			69%			34.80

Submitted by Curbside Management

# Households 2498  
Avg - 2414  
Total 59915



## Town of Fletcher July 2008 Curbside Recycling Collection Report

Actual Tonnage by Material

	Total	News	Occ	Mix paper	Cans	Clear	Brown	Green	Plastic
Tue Jul 1	3,310	1,018	234	851	136	416	248	187	219
Wed Jul 2	3,290	1,013	233	846	136	414	246	186	218
Thu Jul 3	1,580	488	112	408	65	199	118	89	104
Fri Jul 4*	3,160	973	224	812	130	397	237	178	209
B Week	11,340	3,491	802	2,915	468	1,426	849	639	750
Tue Jul 8	3,140	967	222	807	129	395	235	177	208
Wed Jul 9	3,230	994	229	830	133	408	242	182	214
Thu Jul 10	3,190	982	226	820	132	401	239	180	211
Fri Jul 11	6,170	1,899	437	1,588	254	776	462	348	408
A Week	15,730	4,842	1,113	4,043	649	1,979	1,178	887	1,040
Tue Jul 15	3,090	951	219	794	127	399	231	174	204
Wed Jul 16	3,320	1,022	235	853	137	418	249	187	219
Thu Jul 17	1,700	523	120	437	70	214	127	96	112
Fri Jul 18	4,040	1,244	286	1,038	167	508	302	228	267
B Week	12,350	3,740	860	3,123	501	1,528	910	685	803
Tue Jul 22	3,170	978	224	815	131	399	237	179	210
Wed Jul 23	3,280	1,010	232	843	135	413	246	185	217
Thu Jul 24	3,050	938	216	784	128	394	228	172	202
Fri Jul 25	6,130	1,887	434	1,575	253	771	458	348	405
A Week	15,630	4,812	1,106	4,017	644	1,966	1,170	881	1,033
Tue Jul 29	3,200	986	226	822	132	402	240	180	212
Wed Jul 30	3,180	973	224	812	130	397	237	178	209
Thu Jul 31	1,750	539	124	450	72	220	131	99	116
B Week	8,110	2,497	574	2,084	334	1,020	607	457	536

\* Picked up on July 3

Curbside Management, Inc  
by Stan Olesky, General Manager

LBS	TONS	News	OCC Mix Paper	Cans	Clear	Brown	Green	Plastic
62,960	19,382	4,454	16,181	2,596	7,919	4,714	3,560	4,162
31.5	9.7	2.2	8.1	1.3	4.0	2.4	1.8	2.1

## Town of Fletcher July 2008 Curbside Recycling Collection Report

Participation, Average Weight per household, Average Weight per Set Out

	Totals	Households	Estimated Participation	No. of Participants	Average Weight per Household	Average Weight per Participant
Tue Jul 1	3,310	298	71%	212	11.1	15.6
Wed Jul 2	3,290	340	67%	228	9.7	14.4
Thu Jul 3	1,580	248	55%	136	6.4	11.6
Fri Jul 4*	2,160	298	68%	203	10.6	15.6
B Week	11,340	1,184	69%	778	9.6	14.6
Tue Jul 8	3,140	200	82%	164	15.7	19.1
Wed Jul 9	3,230	200	86%	172	16.2	18.8
Thu Jul 10	3,190	228	73%	167	14.0	19.1
Fri Jul 11	6,470	518	65%	332	11.9	18.3
A Week	15,730	1,146	73%	840	13.7	18.7
Tue Jul 15	3,080	298	71%	212	10.4	14.6
Wed Jul 16	3,320	340	67%	228	9.8	14.6
Thu Jul 17	1,700	248	55%	136	6.9	12.5
Fri Jul 18	4,040	298	68%	203	13.6	19.9
B Week	12,150	1,184	66%	778	10.3	15.6
Tue Jul 22	3,170	200	82%	164	15.9	19.3
Wed Jul 23	3,280	200	86%	172	16.4	19.1
Thu Jul 24	3,050	228	73%	167	13.4	18.2
Fri Jul 25	6,130	518	65%	332	11.8	18.2
A Week	15,630	1,146	73%	840	13.6	18.6
Tue Jul 29	3,200	298	71%	212	10.7	15.1
Wed Jul 30	3,160	340	67%	228	9.3	13.9
Thu Jul 31	1,750	248	55%	136	7.1	12.8
B Week	8,110	888	65%	576	9.2	14.1

*Handwritten:* 2330  
Households

**62,960**

5,546

**69%**

3,812

11.4

**16.5**

Overall Participation = 70%

Curbside Management, Inc  
by Stan Olesky, General Manager







*Handwritten:* Henderson 11/15

*Handwritten:* 3/12/09

# Garbage and Recycling Summary

2008	HC Charges	Tons	Curbside Chgs	Total Rec tons	News	Occ	Mixed	Cans	Glass	Plastic	Scrap Tons
January	\$ 16,948.13	353.75	\$ 13,319.07	80.39	28.60	4.30	17.5	4.1	17.8	4.9	3.19
February	\$ 15,040.39	313.93	\$ 13,342.35	98.36	35.80	5.40	22	5.1	22.3	6.2	1.56
March	\$ 16,119.31	336.45	\$ 13,342.35	80.54	28.80	4.40	17.7	4.1	18	5	2.54
April	\$ 17,843.10	372.43	\$ 13,359.81	80.74	29.20	4.40	17.9	4.2	18.2	5.1	1.74
May	\$ 18,481.31	385.75	\$ 13,348.17	99.8	36.90	5.60	22.6	5.3	23	6.4	0
June	\$ 16,693.29	348.43	\$ 13,383.09	83.13	29.90	4.50	18.4	4.3	18.7	5.2	2.13
July	\$ 20,620.08	396.54	\$ 13,888.98	81.1	30.00	4.50	18.4	4.3	18.7	5.2	0
August	\$ 18,048.16	347.08	\$ 13,916.16	96.23	35.00	5.30	21.5	5	21.7	6.1	1.63
September	\$ 18,964.40	364.7	\$ 13,919.18	79.48	17.04	8.23	33.33	2.49	13.24	5.15	0
October	\$ 18,295.16	351.83	\$ 13,919.18	93.52	19.91	9.61	38.94	2.91	16.13	6.02	0
November	\$ 17,012.84	327.17	\$ 13,922.20	78.56	16.10	7.78	31.5	2.36	15.95	4.87	0
December	\$ 18,270.72	361.36	\$ 13,931.26	77.6	16.64	8.04	32.57	2.44	12.87	5.04	0
2008 Totals	\$ 212,336.89	4259.42	\$ 163,591.80	1029.45	323.89	72.06	292.34	46.6	216.59	65.18	12.79

*Handwritten:* 12/7/09  
 -1016.66/112  
 (84.92 Tons)  
 31.5%  
 7.0%  
 (31.9)  
 (17.1)

*Handwritten:* 28.4%  
 (28.8)  
 4.5%  
 (4.6)  
 21.0%  
 (21.3)  
 6.3%  
 (6.4)  
 1.2%

Cart Size

Current Price

32 gal	\$ 12.50
32 gal w/ recycling	\$ 8.00

96 gal	\$ 14.50
96 gal w/ recycling	\$ 10.00

No.Hshlds	Est % Partic	Avg No Partic	Avg Hshld Weight	Avg. Wght per Partic	40% w/ 10% Recycle Per Mo. 3rd
4467	90	4020	8.6	9.6	40.0
4467	90	4020	8.7	9.6	48.9
4467	90	4020	8.7	9.7	40.0
4467	90	4020	8.8	9.8	40.2
4467	90	4020	8.9	9.9	49.7
4467	90	4020	9.1	10.1	41.4
4467	90	4020	9.1	10.1	40.4
4467	88	3931	8.5	9.6	49.0
4609	86	3952	9.02	10.51	40.2
4609	86	5044931	8.43	9.85	47.2
4609	85	3929	8.52	10	40.0
4609	83	3802	8.81	10.68	40.8
54172	1058	48685	105.18	119.44	40.9 = 42.29

4514

88%

~~4467~~  
~~47706~~

817

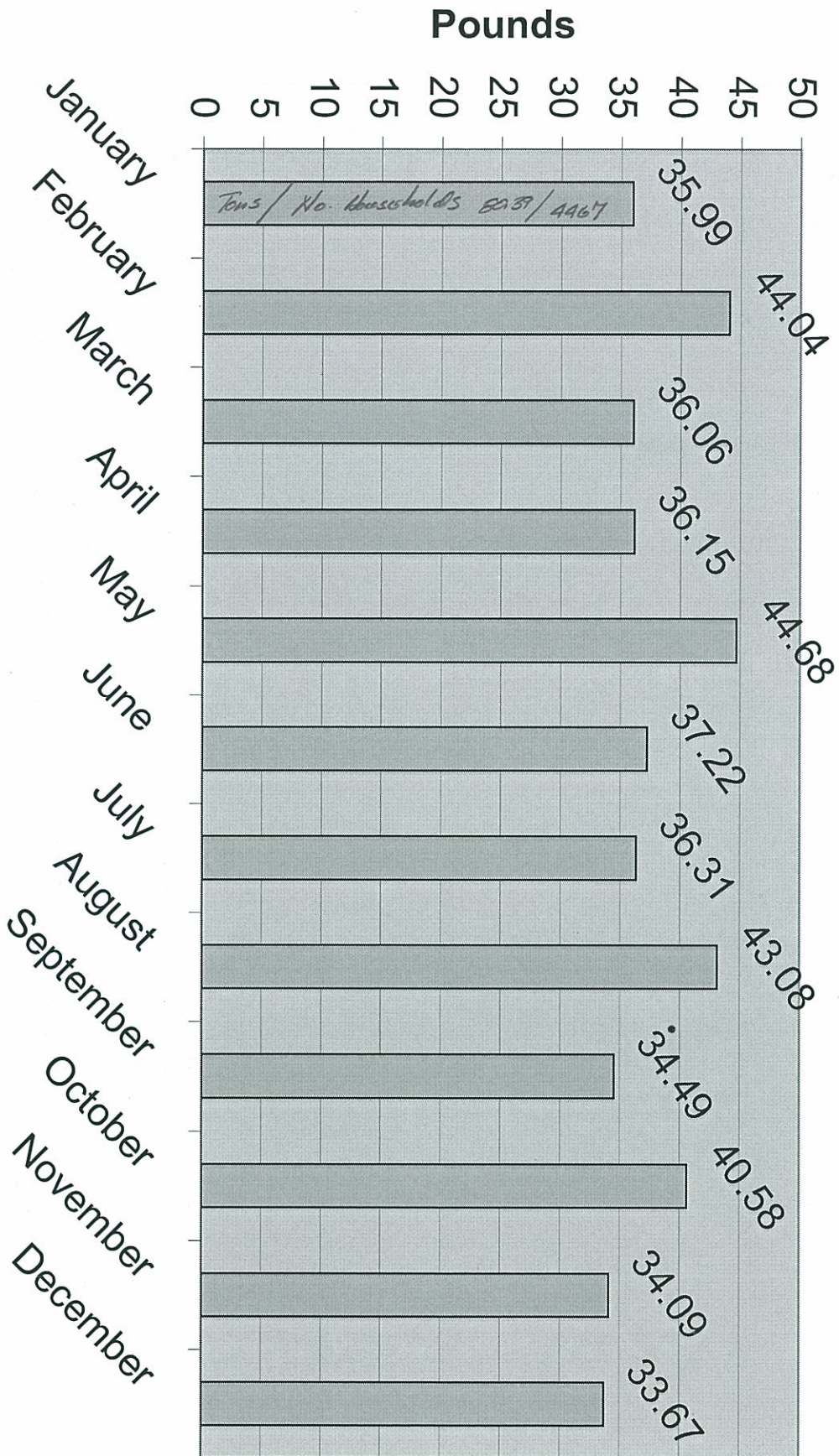
9.95

~~3975~~  
 3975

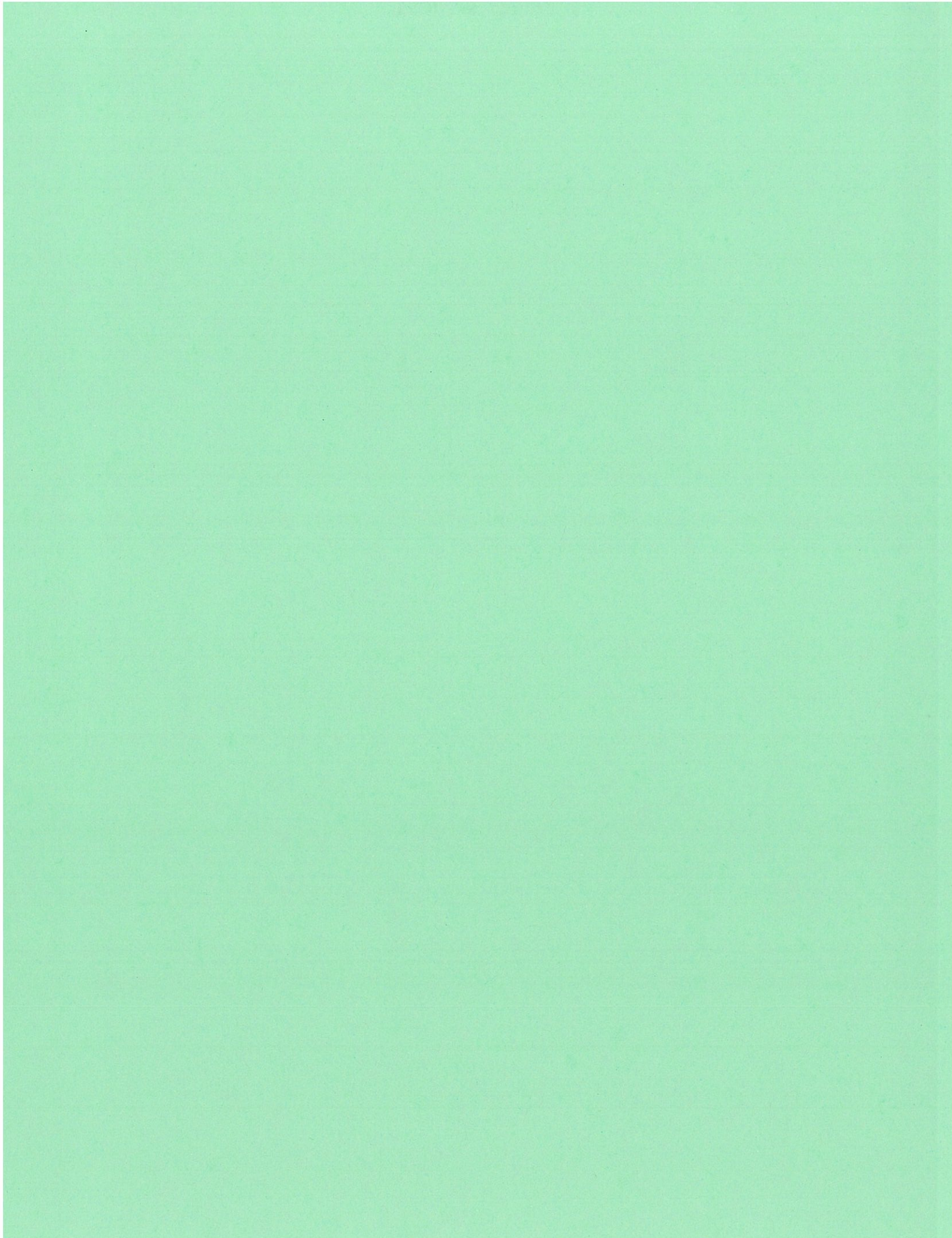
3964



# Pounds of Recycling per Home in 2008









## **I. Purpose, Background, and Scope of Service**

### **A. Purpose of Request for Proposal**

The City of Asheville (herein "City") is soliciting proposals from qualified firms interested in providing curbside collection, transporting, processing, and marketing of recycled materials.

### **Background**

The City of Asheville is located in Buncombe County, North Carolina. The City provides bi-weekly curbside recycling services to approximately 26,800 residences via a contracted contractor as set forth in Attachment 2. The City currently incorporates a curbside recycling system that uses two separate bins for glass, plastic bottles, cans, newspaper, cardboard, and mixed paper. These bins are furnished by the contractor. Recycling and Solid Waste data for calendar years 2006 through 2008 are included as Attachment 3.

### **B. Intent**

The City's intent and the requirements of this RFP are to provide its' Service Recipients with the appropriate level of service, at the best price and highest quality. The specifications contained within this RFP document are designed to establish an effective, efficient, uniform and safe system of recycling services that provides for the following intended purposes:

1. Establish and maintain a continuous and uniform level of recycling services in order to assure protection of the health, safety and welfare of the community.
2. Provide recycling services in a coordinated manner, through a routing system that is efficient and minimizes changes to current collection schedules.

To this end, the City has tried to provide as much information as possible to all prospective bidders in order to allow them to compute fair and reasonable rate quotes. However, it is the sole responsibility of the bidder to independently investigate, to calculate and to be responsible for the prices quoted.

### **C. Scope of Services**

The selected firm will be required to provide the following services including, but not limited to, the following:

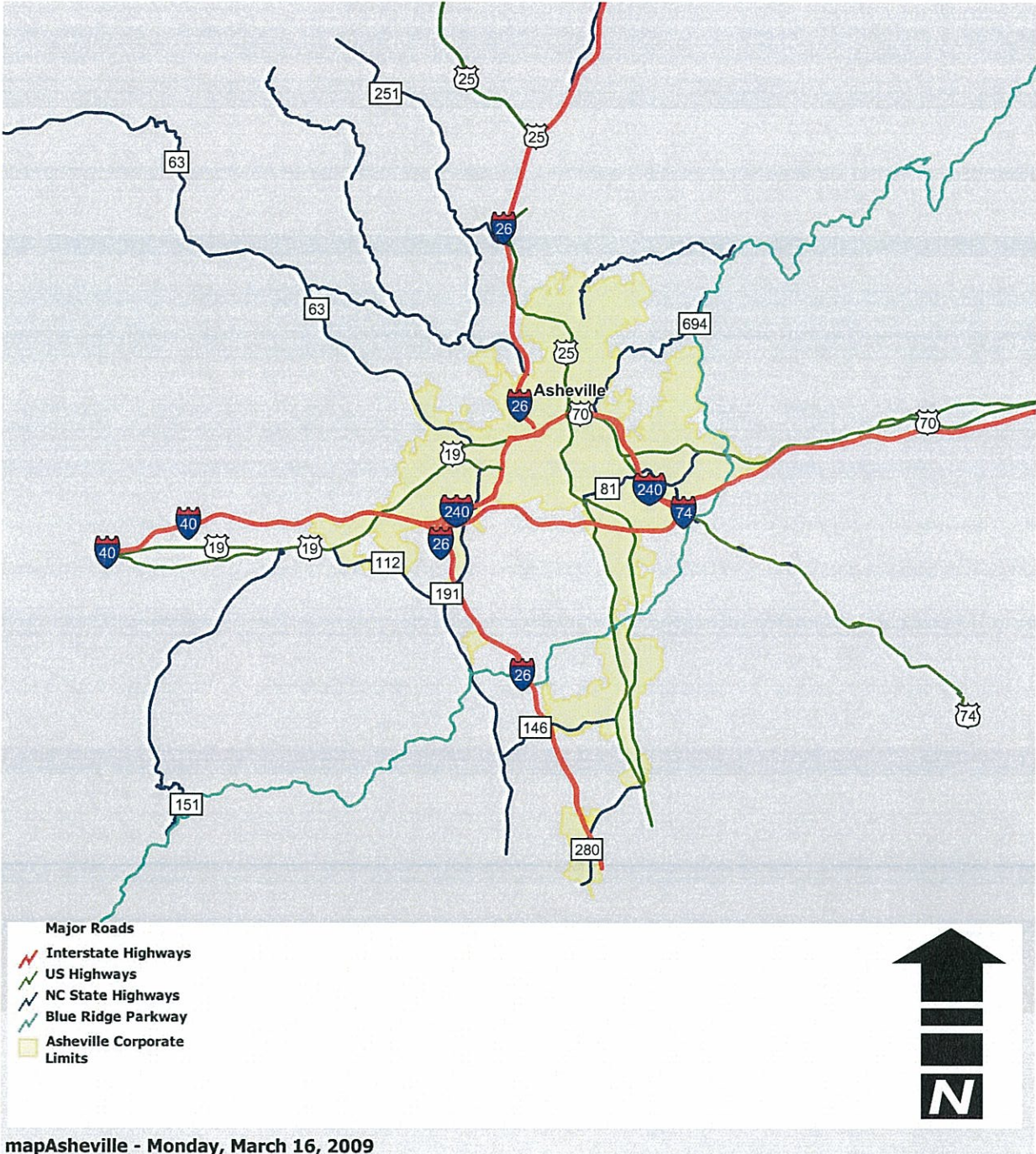
1. Provide curbside recycling service to approximately 26,800 residences according to terms and conditions basically as set forth in Attachment 1.
2. Provide curbside recycling service to City facilities according to the terms and conditions basically set forth in Attachment 1.
3. Be responsible for safely and legally collecting, transporting, processing, and marketing the collected materials for recycling.
4. Furnish and maintain containers (i.e., bins or roll out carts) to all Service Recipients for the collection of materials to be recycled.



# APPENDIX A - Description of Service Area

The Service Area is delineated as the Asheville Corporate Limits on the map entitled "CONTRACTOR'S Service Area."

## CONTRACTOR'S SERVICE AREA



# APPENDIX C - Container Specifications

## 1. Recycling Containers Specifications

Recycling Containers shall conform with the following minimum specifications:

- Shall be constructed of high quality polyethylene
- Shall be recyclable at the end of their useful life
- Shall be of a uniform color approved by the City that clearly distinguishes them as different from refuse collection containers

### ***Option 1: Bins***

Shall be rectangular in shape and have a volume not less than 12 gallons per container. A minimum of two bins must be provided per Service Recipient with a total volume not less than 28 gallons. A minimum of one bin shall have a lid. All containers shall be clearly marked for recycling use and shall include a list of acceptable items.

### ***Option 2: Roll Out Carts***

Roll out carts shall have a volume not less than 90 gallons. A minimum of one roll out cart must be provided per service recipient. Roll out carts shall have a lid to shed water and an external handle for ease of movement. All containers shall be clearly marked for recycling use and shall include a list of acceptable items.

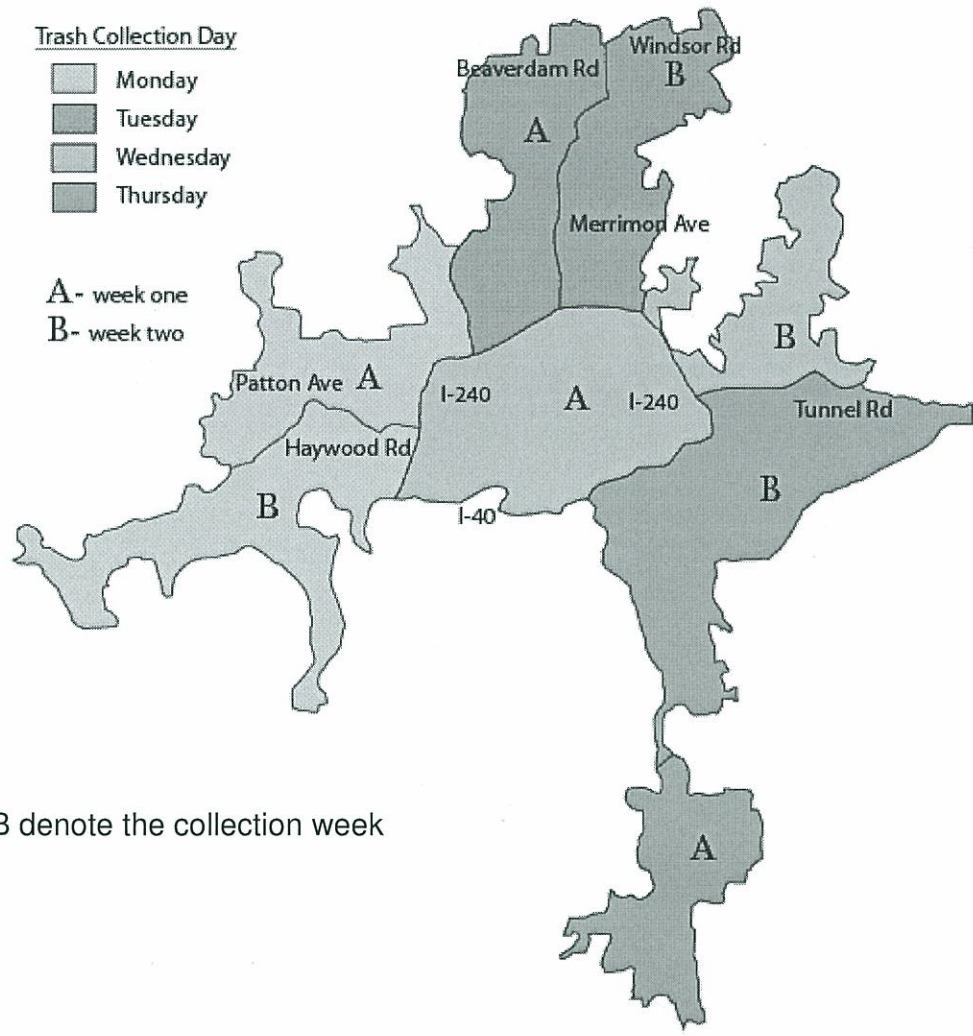


## APPENDIX D – Holiday Schedule

<b>Holiday</b>	<b>Status</b>
<b>New Year's Day</b>	Closed
<b>Martin's Luther King Jr.'s Birthday</b>	Open
<b>Good Friday</b>	Open
<b>Memorial Day</b>	Open
<b>Independence Day</b>	Open
<b>Labor Day</b>	Open
<b>Thanksgiving Day</b>	Closed
<b>Christmas Day</b>	Closed

# ATTACHMENT 2

## CITY OF ASHEVILLE Map of Current collection Area Day and Week Designated



A & B denote the collection week

# ATTACHMENT 3

## CITY OF ASHEVILLE RECYCLING AND SOLID WASTE DATA

### I. Solid Waste and Recycling Tonnages for 2006-2008

	Solid Waste Collected by City (residential & small businesses)			Curbside Recycling Collected By Contractor (residential & City facilities)		
	2006	2007	2008	2006	2007	2008
JAN	2108	2190	2214	352.73	367.00	397.01
FEB	1681	1729	1815	306.93	313.19	358.23
MAR	2018	2083	1989	334.07	326.82	370.66
APR	1983	2067	2238	305.58	267.58	400.10
MAY	2352	2370	2118	367.13	340.71	375.03
JUN	2194	2031	2180	331.53	325.58	371.52
JUL	2267	2357	2406	332.31	378.26	416.16
AUG	2410	2380	1962	376.34	370.85	329.17
SEP	1990	1999	2136	253.59	270.95	331.15
OCT	2133	2269	2022	290.21	395.24	383.29
NOV	2154	2151	1803	335.88	344.85	343.65
DEC	1890	2059	2144	305.97	349.88	418.24
<b>TOTAL</b>	<b>25182</b>	<b>25686</b>	<b>25027</b>	<b>3892</b>	<b>4051</b>	<b>4494.21</b>

\*Note: All units are in tons.

*24.2      25.2      27.95*

*Aug = 374.52 Tons!*

*Per Residence/mo*

### II. 2008 Yearly Recycling Rate (% of Total MSW)

2008: 15.22%

*26,800 Residences*

*374.52 Tons/mo / 26,800 res  
⇒ 27.95<sup>th</sup> / res / mo  
Aug.*

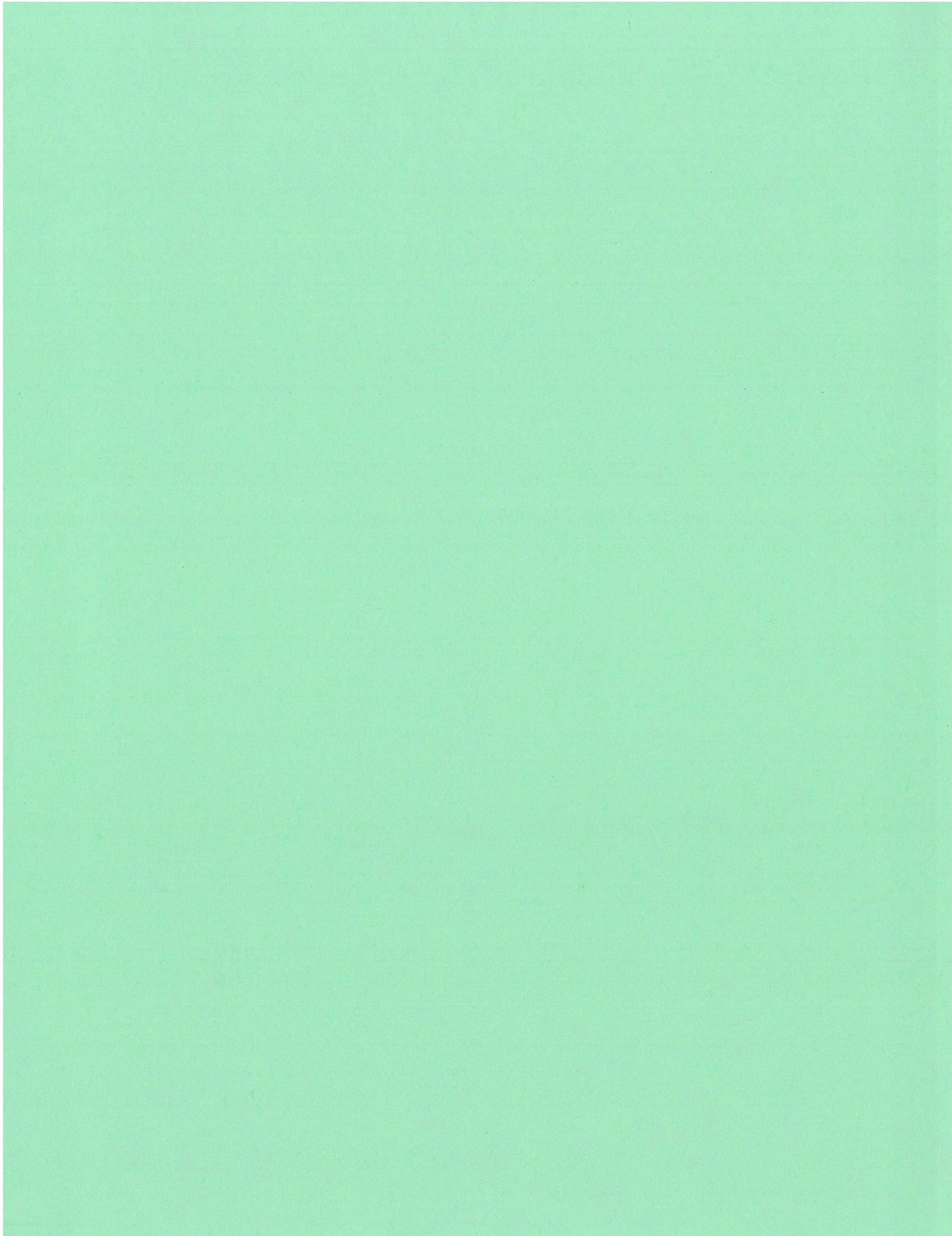


III. 2008 Recycling Tonnage by Material

Material	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Mixed Paper	202,926	182,923	189,269	204,348	191,171	189,616	212,351	167,705	201,290	249,484	223,555	272,382	2,487,020
News Paper	243,065	219,106	226,706	244,768	228,984	227,122	254,354	200,877	156,049	181,028	162,214	197,643	2,541,916
Cardboard	55,861	50,355	52,102	56,253	52,625	52,197	58,456	46,166	59,666	70,738	63,386	77,230	695,035
Plastic	52,198	47,053	48,685	52,564	49,174	48,774	54,623	43,138	36,717	44,877	40,213	48,995	567,011
Glass	202,956	192,740	195,980	203,682	196,952	196,157	207,770	184,967	175,063	186,353	166,985	203,456	2,313,061
Aluminum	32,553	29,344	30,362	32,781	30,667	30,418	34,065	26,903	26,882	28,143	25,218	30,726	358,062
<b>Material Total</b>	<b>893,203</b>	<b>814,949</b>	<b>839,772</b>	<b>898,766</b>	<b>847,213</b>	<b>841,129</b>	<b>930,077</b>	<b>755,411</b>	<b>655,667</b>	<b>760,623</b>	<b>681,571</b>	<b>830,432</b>	<b>9,748,813</b>

\*Note: All units are in pounds.

25.51%  
26.07%  
17.15%  
5.82%  
23.73  
3.67







Engineering • Planning • Finance  
 McGill Associates, P.A. P.O. Box 2259, Asheville, NC 28802  
 55 Broad Street, Asheville, NC 28801 828-252-0575 Fax 828-252-2518

PROJECT: HENDERSON CH SWAMP  
 PROJECT NO.: 08.00710  
 DESCRIPTION: Recycling Rates  
 CALCULATED BY: WHS CHECKED BY: \_\_\_\_\_  
 DATE: 4/22/09 SHEET NO. 1 OF 4

Existing Operations w/ Additional Comminution Containers:

Existing Stony Mountain Road Site:

5 Additional Sites

Visit site once every 10 Days - 9.5 # Containers / Trip - Avg.  
 - 21.2 # Mixed Paper / Trip - Avg.  
 30.7 # - Total / Trip - Avg.

Each household - 36.5 visits / yr (365 Days / 10 Days = 36.5 Trips)

∴ Each household brings: 1120.6 # Recyclable Materials / yr  
 [36.5 visits @ 30.7 #/visit = 1120.6 # / yr ⇒ 0.56 Tns / yr.]

Assume: 1 sites @ 200\* vehicles per Day \* once every 10 Days = 2000  
 2 sites @ 150\* vehicles per Day \* once every 10 Days = 3000  
 3 sites @ 100\* vehicles per Day \* once every 10 Days = 3000  
 8,000

⇒ Serve 8,000 households:

\* ⇒ 8,000 households / year @ 0.56 Tns / House / year = 4482 Tons

Existing Operation: 2000 Tons / year

∴ 2.24 Times as much material OR  
 124% increase over existing Rates:

\* Discussed on 4/20/09  
 WHS: W.S.

Existing operation: ± 2,000 Tns / yr. Total combined Recyclables.

Franchised Operation in conjunction w/ Residential Waste Collection:

Data Received:

Town of Fletcher: Avg wt. / household / month - 35.0 # @ 69% part.  
 City of Hendersonville: Avg wt. / household / month - 42.29 # @ 85-90% part.

weighted Avg. = 39.54 #

Various Calculated %'s of Waste Stream by weight:

	Fletcher/Hendersonville	Asheville city
News Print	32.3%	26.1%
Mixed Paper	27.2%	25.5%
Glass	22.2%	23.7%
OGC	7.3%	7.1%
Plastic	6.5%	5.8%
CANS	4.5%	3.7%





Engineering • Planning • Finance  
 McGill Associates, P.A. P.O. Box 2259, Asheville, NC 28802  
 55 Broad Street, Asheville, NC 28801 828-252-0575 Fax 828-252-2518

PROJECT: HENDERSON CTY SWMP  
 PROJECT NO.: 08.00710  
 DESCRIPTION: Recycling Rates  
 CALCULATED BY: WMS CHECKED BY: \_\_\_\_\_  
 DATE: 4/22/09 SHEET NO. 2 OF 4

Franchise System (Cont.)

Information provided by John O'Neal - GDS - at SWAC mtg on 4/20/09

Buncombe Cty - ± 6.4<sup>#</sup> / home / wk @ ± 24,000 - 25,000 homes  
Generally collect ± 300 - 350 Tns / month (3600 - 4200 Tns / yr)

(check: 6.4<sup>#</sup> / home / wk \* 52 wks \* 25,000 homes = 4160 Tns / yr)

City of Asheville - RFP for Recycle Collection Services (4/9/2009)  
26,800 Residents + some City agencies:

2006: 3892 Tns / 26,800 Res = 21.2<sup>#</sup> / Res / mo (290.4<sup>#</sup> / yr)  
 2007: 4051 Tns / 26,800 Res = 25.2<sup>#</sup> / Res / mo (302.3<sup>#</sup> / yr)  
 2008: 4494 Tns / 26,800 Res = 27.9<sup>#</sup> / Res / mo (335.4<sup>#</sup> / yr)

ON A Per wk Basis: 2006: 5.6<sup>#</sup> / Res / wk.  
 2007: 5.8<sup>#</sup> / Res / wk  
 \* 2008: 6.4<sup>#</sup> / Res / wk

Town of Fletcher: (July & September 2008)

Aug / mo. Collected: 60,525<sup>#</sup>  
 Total households: 5420  
 No. of Participants: 3746 (69.1% participation)  
 Avg wt / Participant / collection: 16.2<sup>#</sup> (35.0<sup>#</sup> / mo.) Est. weight  
 \* Avg wt / household / collection: 11.2 (24.2<sup>#</sup> / mo.) Est. weight

City of Hendersonville: (2008)

Aug / mo. Collected: 84.72 Tons = 169,440<sup>#</sup>  
 Total Households (Aug.) 4514  
 Aug. No. of Participants: 3975 (88% participation)  
 Avg wt. / Participant / collection: 9.95<sup>#</sup> (43.1<sup>#</sup> / mo) Est. weight  
 \* Avg wt. / Household / collection: 8.8<sup>#</sup> (38.1<sup>#</sup> / mo.) Est. weight





Engineering • Planning • Finance  
 McGill Associates, P.A. P.O. Box 2259, Asheville, NC 28802  
 55 Broad Street, Asheville, NC 28801 828-252-0575 Fax 828-252-2518

PROJECT: Henderson City SWMP  
 PROJECT NO.: 08.00710  
 DESCRIPTION: Recycling Rates  
 CALCULATED BY: WNS CHECKED BY: \_\_\_\_\_  
 DATE: 4/22/09 SHEET NO. 3 OF 4

	No of Households	*	Avg. wt. / household/wk	*	No. wks	=	Tons
Buncombe	25,000	*	6.4 <sup>#</sup> /wk	*	52 wks	=	4160
Asheville	26,800	*	6.4 <sup>#</sup> /wk	*	52 wks	=	4460
Fletcher	5,420	*	11.2 <sup>#</sup> /wk	*	52 wks	=	1578
Hendersonville	<u>4,514</u>	*	<u>8.8<sup>#</sup>/wk</u>	*	<u>52 wks</u>	=	<u>1033</u>
	<u>61,734</u> households						<u>11,231</u> Tons
<p>Weighted Average: <math>\frac{11,231 \text{ Tons}}{61,734 \text{ households}} = 0.182 \text{ Tns/Household/yr}</math></p> <p><math>= 363.9^{\#}/\text{Household/yr}</math></p> <p><math>\Rightarrow 363.9^{\#}/\text{Household/yr} = 30.3^{\#}/\text{Household/mo.}</math></p> <p><math>= 7.0^{\#}/\text{Household/wk}</math></p>							
<p>Assume: All households will contribute on average 30.3<sup>#</sup>/household/mo. (some more/some less/some none). Those that will continue to use the convenience carts at Stony Mountain Road LF are included in the total households and absorbed into the 30.3<sup>#</sup>/household/mo.</p> <p><math>\therefore 35,516 \text{ households @ } 30.3^{\#}/\text{household/mo} = 538.1 \text{ Tns/mo.}</math></p> <p><math>\times 12 \text{ months}</math></p> <p><u>6457 Tns/year.</u></p>							





Engineering • Planning • Finance  
 McGill Associates, P.A. P.O. Box 2259, Asheville, NC 28802  
 55 Broad Street, Asheville, NC 28801 828-252-0575 Fax 828-252-2518

PROJECT: Henderson Co SWMP  
 PROJECT NO.: 08.00710  
 DESCRIPTION: Recycling Rates  
 CALCULATED BY: WMS CHECKED BY: \_\_\_\_\_  
 DATE: 4/22/09 SHEET NO. 4 OF 4

Summary:

(1) Maintain Existing Collections:  
 (Stony Mountain Rd LF Conven. Ctr.) 2000 ± Tns/yr

(2) Maintain Existing Stony Mountain Rd  
 Conven Ctr; Add additional  
 Conven. Ctrs at strategic locations  
 throughout The County (5 GA) 4482 ± Tns/yr.  
 (± 124% increase over  
 Existing)

(3) Franchised Collection to include  
 Recycle Collections. 6457 ± Tns/yr  
 (± 223% increase  
 over Existing)