



Data Report:  
THE IMPACT OF COLLECTION OF RECYCLABLES AND  
REFUSE ON A SUBURBAN NEIGHBORHOOD

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The objective of this study was to evaluate the potential litter generated by recycling and automated garbage collection in a suburban neighborhood in Gainesville, FL.

## METHODOLOGY

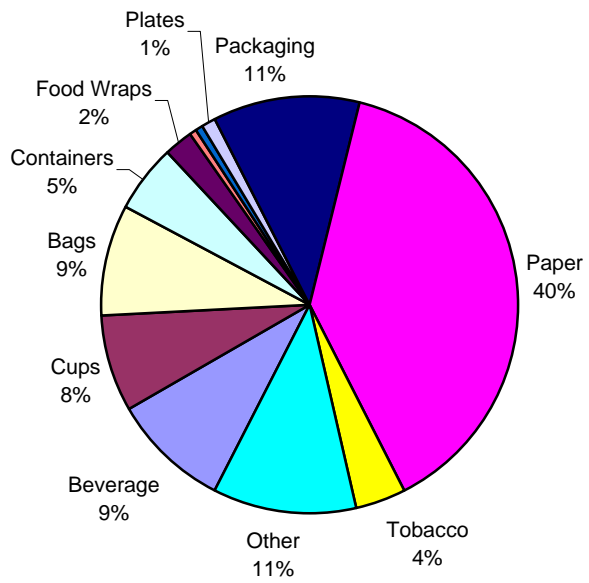
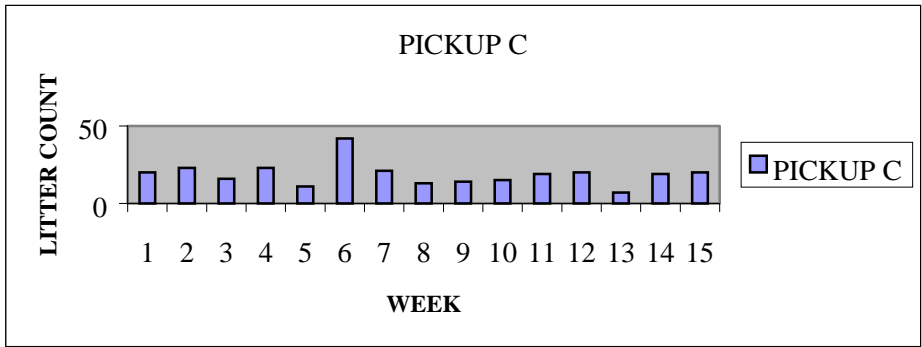
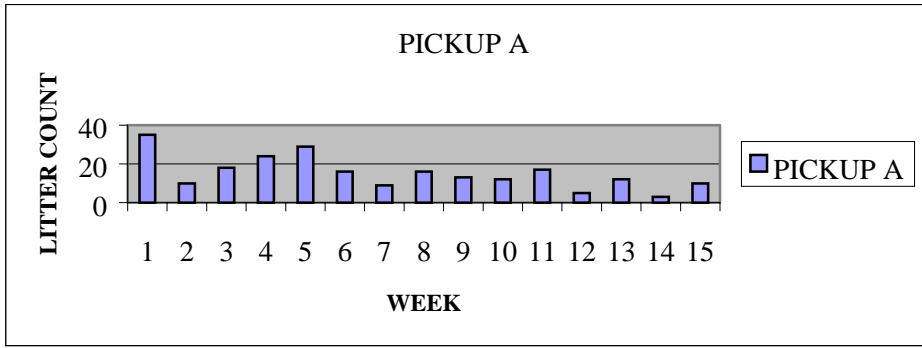
- Three surveys weekly for 15 weeks (Pickup A=6:45 am, baseline, Pickup B=10:00am, after recycling collection and Pickup C=4:00 pm after refuse collection).
- After each survey, all litter present was collected for composition analysis.

Litter = All misplaced solid waste found on the street or right-of-way that is larger than four square inches.

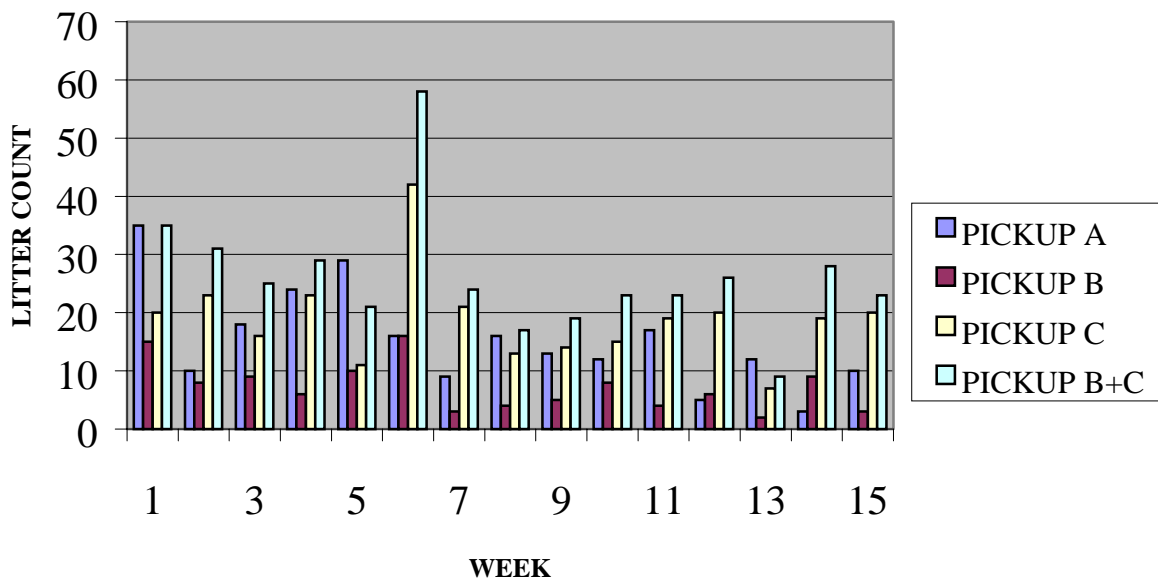
## DATA

LITTER SURVEY/PICKUP				
WEEK	PICKUP A	PICKUP B	PICKUP C	PICKUP B+C
1	35	15	20	35
2	10	8	23	31
3	18	9	16	25
4	24	6	23	29
5	29	10	11	21
6	16	16	42	58
7	9	3	21	24
8	16	4	13	17
9	13	5	14	19
10	12	8	15	23
11	17	4	19	23
12	5	6	20	26
13	12	2	7	9
14	3	9	19	28
15	10	3	20	23
<b>TOTALS</b>	<b>229</b>	<b>108</b>	<b>283</b>	<b>391</b>

Mean	15.26667	Mean	7.2	Mean	18.86667	Mean	26.06667
Standard Error	2.228531	Standard Error	1.0788	Standard Error	2.025708	Standard Error	2.776546
Median	13	Median	6	Median	19	Median	24
Mode	10	Mode	8	Mode	20	Mode	23
Standard Devia	8.631062	Standard Devia	4.178175	Standard Devia	7.845533	Standard Devia	10.75352
Sample Varianc	74.49524	Sample Varianc	17.45714	Sample Varianc	61.55238	Sample Varianc	115.6381
Kurtosis	0.788655	Kurtosis	0.331576	Kurtosis	5.30032	Kurtosis	5.615098
Skewness	0.95103	Skewness	0.929092	Skewness	1.703052	Skewness	1.798331
Range	32	Range	14	Range	35	Range	49
Minimum	3	Minimum	2	Minimum	7	Minimum	9
Maximum	35	Maximum	16	Maximum	42	Maximum	58
Sum	229	Sum	108	Sum	283	Sum	391
Count	15	Count	15	Count	15	Count	15
Confidence Lev	4.779727	Confidence Le	2.313798	Confidence Lev	4.344715	Confidence Lev	5.955104



## COMPOSITE LITTER COUNT



## CONCLUSIONS

- Need for further research with emphasis on increasing the number of study locations.
- It appears that recycling and garbage services contribute to neighborhood litter.
- Need to control for litter from residents in the study area between collections.
- Need to collect/survey litter between recycling and garbage pickups.