



ORANGE COUNTY WASTE COMPOSITION STUDY

June 2017



Prepared for:

Submitted by:



printed on recycled paper

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Section 1

Introduction

1.1 Study Objectives

1.2 Background

1.3 Acknowledgements

¹ <https://www.census.gov/quickfacts/table/PST045216/37135>

² <http://uncnews.unc.edu/facts-about-carolina/facts-figures/>

³ <http://d4.nccommerce.com/QCEW/LargestEmployers.aspx>

Section 2

Methodology

2.1 Generator Sectors and Sorting Events

2.2 Material Categories

2.3 Location, Equipment and Labor

2.4 Sampling and Sorting Procedures

2.5 Analytical Procedures

Section 3

Results

3.1 Introduction to Results

3.2 Aggregate MSW

3.3 Single-Family Residential MSW

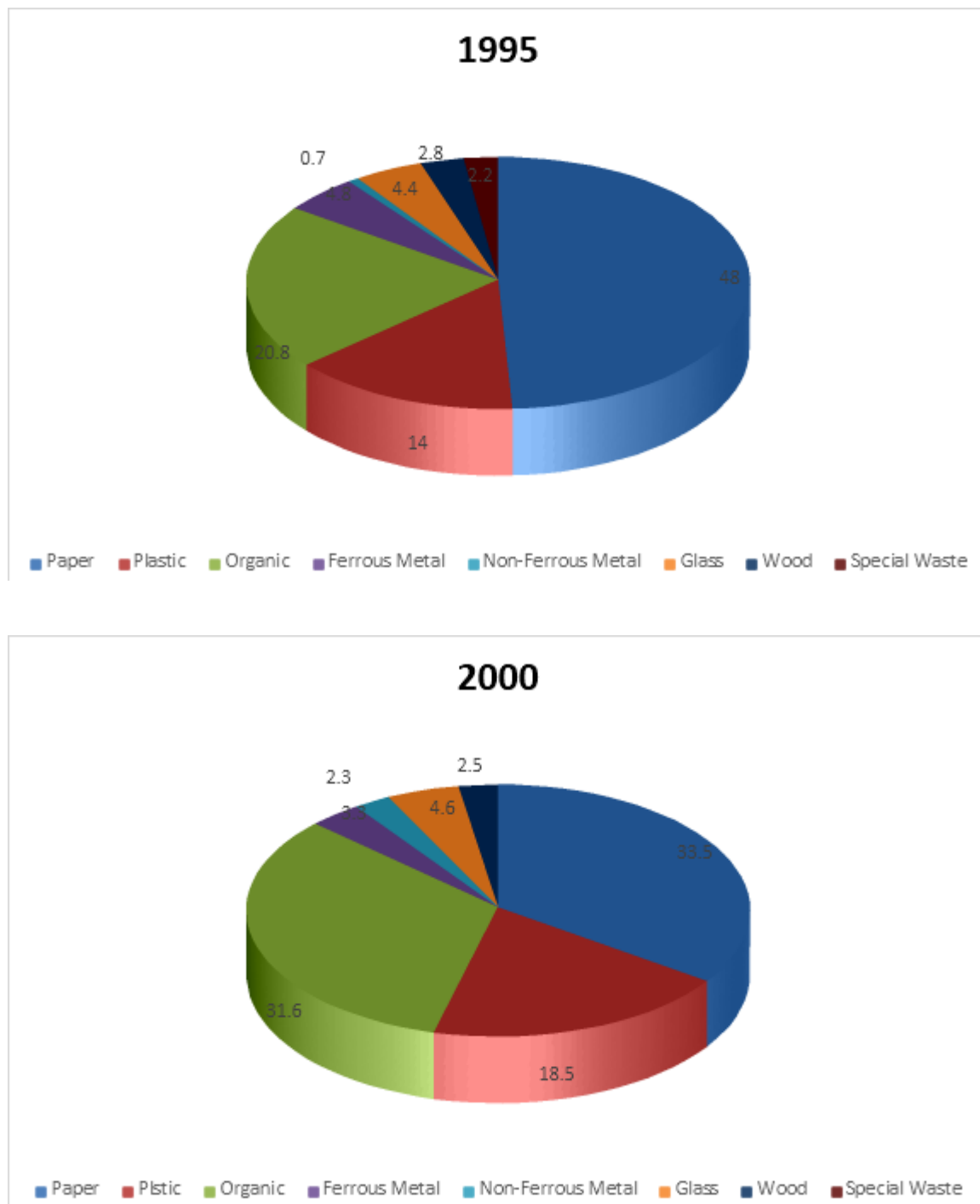
3.4 Commercial MSW

Table 3-8 compares the annual commercial MSW composition in the present WCS to previous WCS results. [\[specify the years: 1995–2017\]](#) [\[see that en dash? Coolness!\]](#)

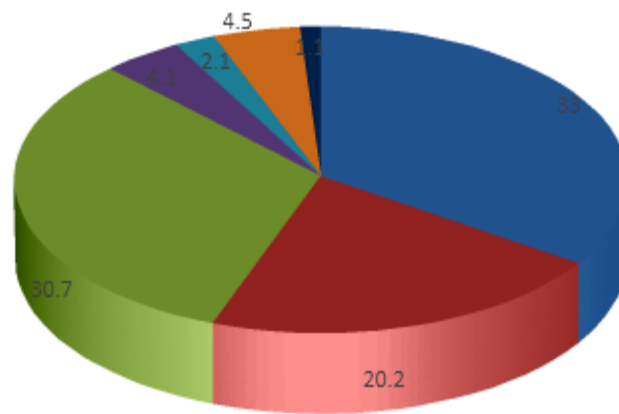
Key findings from the commercial data include:

- Total paper composition has decreased 19.4%.
- Total Plastic composition has increased 6.7%.
- Total Organics composition has increased 15.1%.
- Total Ferrous Metal composition has decreased 3.1%.
- Total Non-Ferrous Metal composition has increased 0.7%.
- Total Glass composition has decreased 1.3%.
- Total Wood composition has increased 1.2%.
- Total Special Waste composition has decreased 0.1%

Figure 3-4: Annual Composition of Commercial MSW

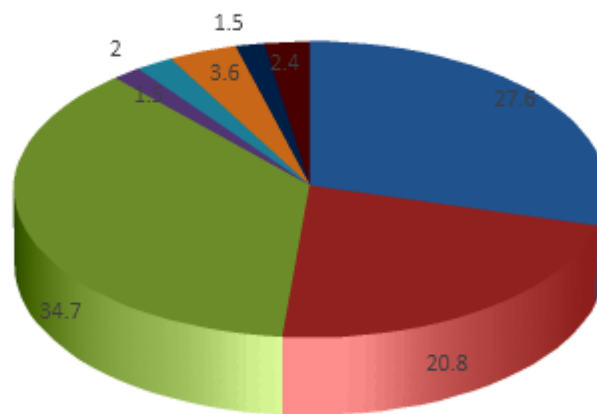


2005



Paper Plastic Organic Ferrous Metal Non-Ferrous Metal Glass Wood Special Waste

2010



Paper Plastic Organic Ferrous Metal Non-Ferrous Metal Glass Wood Special Waste

Present Study

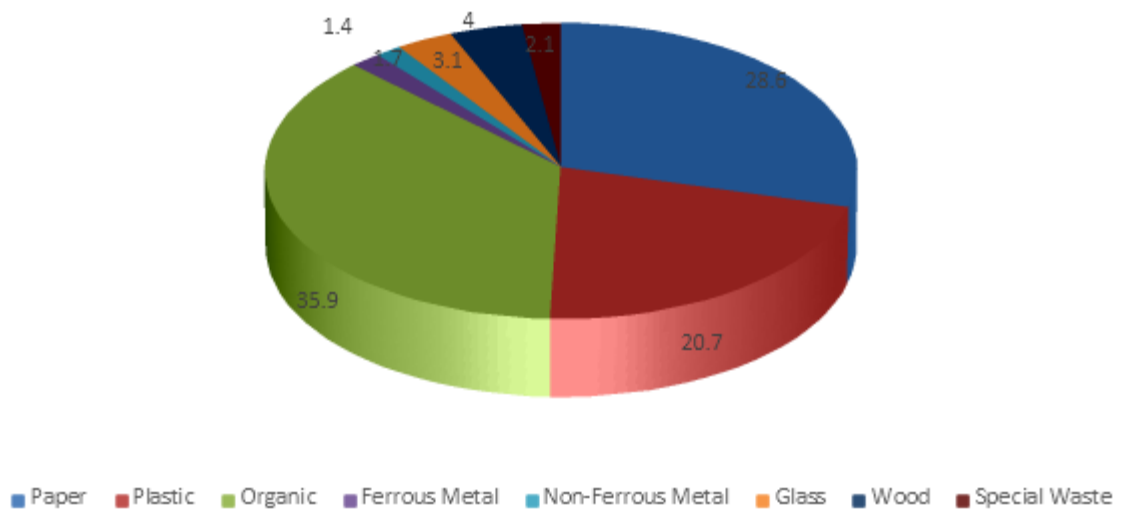


Table 3-8: Comparison of Commercial MSW to Previous WCS Results

Material Components	1995	2000	2005	2010	Present Study
Newspaper	6.1%	4.7%	3.4%	3.0%	0.7%
Glossy Magazines	2.8%	2.5%	2.4%	0.8%	0.6%
Corrugated Cardboard	10.7%	3.5%	3.1%	2.6%	3.6%
Waxy Cardboard	N/A	1.8%	1.8%	0.4%	0.5%
Phone Books	N/A	<0.1%	<0.1%	<0.1%	0.1%
Paperboard	N/A	3.5%	2.2%	2.2%	2.4%
Other Books	N/A	1.9%	<0.1%	0.4%	0.2%
White Ledger	N/A	2.6%	4.2%	1.6%	1.4%
Mixed Recyclable Paper	3.3%	3.2%	2.8%	2.2%	3.3%
Low-Grade Paper	25.1%	9.5%	13.0%	14.5%	15.1%
Aseptic Containers	N/A	N/A	N/A	N/A	0.9%
Total Paper	48.0%	33.5%	33.0%	27.6%	28.6%
All Plastic Bottles	2.2%	3.4%	3.4%	3.2%	3.2%
Plastic Film	4.8%	7.8%	6.0%	9.5%	9.3%
All Cups & Tubs	0.8%	2.9%	1.9%	2.2%	1.6%
All Other Plastics	6.2%	4.4%	8.8%	5.8%	6.5%
Total Plastics	14.0%	18.5%	20.2%	20.8%	20.7%
Food Waste	12.2%	20.4%	23.7%	25.5%	24.9%
Textiles/Leather	2.7%	5.0%	3.5%	3.5%	4.3%
Diapers	1.4%	2.1%	1.1%	2.3%	3.1%
Other Organics & Rubber	4.5%	4.1%	2.4%	3.5%	3.6%
Total Organics	20.8%	31.6%	30.7%	34.7%	35.9%
Tin/Steel Cans	1.6%	1.2%	1.7%	0.8%	0.7%
Aerosol Cans	N/A	0.5%	0.3%	0.2%	0.2%
Other Ferrous	3.2%	1.6%	2.1%	0.6%	0.8%
Total Ferrous Metal	4.8%	3.3%	4.1%	1.5%	1.7%
Aluminum Cans	0.7%	1.2%	0.7%	0.8%	0.7%
Aluminum Foil	N/A	0.8%	1.0%	0.8%	0.4%
Other Non-Ferrous	N/A	0.2%	0.5%	0.4%	0.4%
Total Non-Ferrous Metal	0.7%	2.3%	2.1%	2.0%	1.4%
Glass Bottles and Jars	4.0%	3.8%	3.5%	3.4%	2.2%
Other Glass	0.4%	0.8%	1.0%	0.2%	0.9%
Total Glass	4.4%	4.6%	4.5%	3.6%	3.1%
Wood Pallets	N/A	0.5%	<0.1%	<0.1%	0.8%
Wood Lumber	1.6%	1.7%	1.1%	1.1%	1.0%
Painted/Treated Wood	1.2%	0.3%	<0.1%	0.3%	2.2%
Stumps/Branches	N/A	<0.1%	<0.1%	<0.1%	0.0%
Total Wood	2.8%	2.5%	1.1%	1.5%	4.0%
Brick/Concrete/Dirt	1.4%	1.5%	1.0%	2.2%	1.1%
Yard Waste	0.8%	1.3%	0.4%	2.7%	0.9%
Lead Acid Batteries	N/A	<0.1%	<0.1%	<0.1%	0.0%
Dry Cell Batteries	N/A	0.2%	<0.1%	<0.1%	0.1%
Oil Filters	N/A	<0.1%	<0.1%	<0.1%	0.0%
Other Hazardous Waste	1.5%	<0.1%	<0.1%	<0.1%	0.5%
Infectious Waste	0.7%	NA	1.8%	2.0%	1.0%
Reusable Waste	N/A	<0.1%	<0.1%	0.3%	0.5%
Total Special Waste	2.2%	0.3%	2.0%	2.4%	2.1%
Electronic Waste	N/A	0.6%	1.1%	1.1%	0.4%
TOTALS	100%	100%	100%	100%	100%

Note: Columns may not appear to calculate correctly due to rounding. Plastic film includes Plastic Film and Retail Bags & Stretch Film. All Cups & Tubs includes Mixed Plastic Containers and Dairy Plastic Containers.

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Table D-2: Commercial Sample Results (% by weight) – Spring (April 2017) (cont.)