



Transfer Station Self-Haul Survey Results

Prepared for:

**Metro
Portland, Oregon**

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EXECUTIVE SUMMARY

Introduction

One of the primary responsibilities of Metro's Solid Waste & Recycling Department (SWR) is to oversee solid waste management and disposal within the region. Metro owns and operates two transfer stations—one in the industrial section of the City of Portland (Central) and one in Clackamas County at the south end of the region (South). In addition to local hauling companies, Metro's transfer stations serve approximately 300,000 self-haul customers each year including construction trade contractors, various businesses, and individuals hauling waste from homes and businesses. As use of the transfer stations increases, Metro must decide whether to expand the current transfer facilities, work diligently to convince users to manage their waste more efficiently, or both.

Metro contracted with the Gilmore Research Group to conduct intercept surveys of self-haul customers at the Metro Central and Metro South Transfer Stations to help the agency understand:

- Who uses the transfer stations
- Reasons why they haul their own waste rather than using local hauling companies
- The frequency with which they haul waste to the transfer station
- The type and amount of waste they haul
- The amount of waste (tonnage) they haul

Methodology

Gilmore Research Group conducted intercept interviews at the Metro Central and Metro South locations in the fall and winter of 2007 as follows:

Metro Central: 531 interviews conducted October 24-28
499 interviews conducted December 5-9

Metro South: 547 interviews conducted October 31 – November 4
525 interviews conducted December 12-16

Interviews were conducted across all hours the transfer stations were open to avoid bias by time of day. To encourage participation in the survey, self-haul customers at the Metro Central location were given a voucher for \$5 off the cost of dumping their loads in exchange for completing the interview. Traffic volume at Metro South was high enough that incentives were not used at this location. Data on type of vehicle and trailer was collected by observation. When possible load weights were recorded and matched back to respondent vehicles.¹

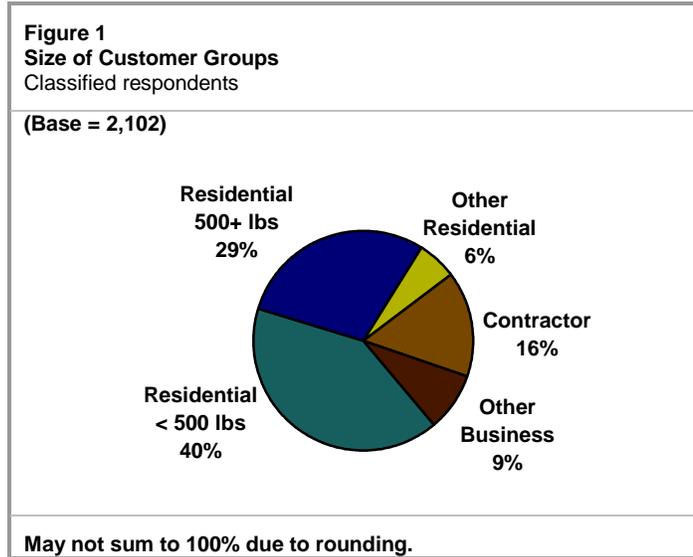
¹ Respondents did not always submit a weight card to the scale house for recording. Weights were not recorded for loads containing only recycling or hazardous materials.

Customer Profiles

By Customer Type

Research findings resulted in four clearly defined customer groups based on their reasons for bringing waste to the transfer station and the amount of waste they haul:

- Residential customers hauling less than 500 pounds
- Residential customers hauling 500 pounds or more
- Contractors
- Other business (non-contractor) customers



A fifth group, “Other Residential Customers” was not subjected to separate analysis because of the weight of their load was known, they would have been classified into one of the other two residential customer categories. It is assumed this group shares characteristics with both of the residential groups that were analyzed (Figure 1).

Residential Customers Hauling Less than 500 Pounds

Four in ten transfer station users (40%) were individuals hauling less than 500 pounds of waste from a home. They were equally likely to use the Metro Central and Metro South Transfer stations. Most respondents in this group (61%) said they use the transfer station less than once a month. The majority brought mixed waste (48%) or household waste (31%), usually on weekends (67%), often hauling it in a pickup truck (74%) without a trailer. The average load weight for respondents in this group was 284 lbs.

Residential Customers Hauling 500 Pounds or More

Almost three in ten respondents (29%) were individuals hauling loads that weighed at least 500 pounds. These customers were slightly more likely to visit the Metro Central Transfer Station (53%) than Metro South (47%). Most (60%) said they come to the transfer station less than three times a year. Over half the respondents in this category (51%) reported hauling mixed waste and 28% brought in construction demolition waste. Just 15% of customers in this group were hauling household waste. The majority of these respondents (66%) visited the transfer stations on the weekend, usually hauling their waste in a pickup truck (76%). They were significantly more likely than other Residential Customers to use a trailer (30% compared to 10% of those hauling less than 500 pounds). The average load weight for respondents in this group was 965 pounds.

Contractors

About one in six respondents (16%) was hauling waste for a Contractor. Contractors were more likely to use the transfer stations in fall (54%) than in winter (46%) and were slightly more likely to

use the Metro South Transfer Station (54%) than Metro Central (46%). Most Contractors (84%) said they use the transfer stations at least once a month including 38% who come at least once a week or even daily. Contractors tended to haul waste in pickup trucks (71%) or in box or step vans (15%). The 36% of Contractors who used a trailer often used either a single-axle trailer or one that was self-dumping. Most Contractors (76%) were hauling construction debris which the majority brought to the transfer station on a weekday (75%). The average load weight for this group was 1,126 pounds.

Other Business Customers

Nine percent of respondents (9%) were in this mixed group of customers that includes individuals who hauled waste for non-contractor businesses, small hauling companies like 1-800-GOTJUNK?, were hauling waste from both residential and business locations. These customers were more likely to use the transfer stations in the fall (57%) than the winter (43%) and their frequency of use varied widely. Four in ten respondents in this group (40%) reported using the transfer stations only a handful of times a year, 33% said they visit every month and 24% said they come at least once a week. They brought their waste in pickup trucks (66%) or box or step vans (14%). Not quite half the members of this group (48%) were carrying mixed waste and 24% were hauling construction demolition debris (46%). Of the four customer types, this group was the most likely to pay with a Metro account (8%). The average load weight for members of this group was 809 pounds.

By Transfer Station

Metro Central and Metro South Customers

With the exception of where transfer station users come from, there was almost no difference in customer profiles between those who used the Metro Central and Metro South transfer stations. For the most part, customers used the transfer station closest to their location. The breakout of the four customer types discussed above was similar at both locations. Half of all customers (50%) said they visited the transfer stations less than once a month and 12% said they visited the stations weekly. More than four in ten customers at both locations reported hauling mixed waste (47% at Metro Central and 41% at Metro South). Three in ten customers at both locations were hauling construction debris. Fewer Metro Central customers reported hauling household waste as compared to Metro South (15% and 26% respectively). The reverse was true for yard debris (9% Metro Central and 3% Metro South). There was very little difference in average load weight for Metro Central customers (667 pounds) compared to Metro South customers (679 pounds).

Key Findings

- Three-quarters (74%) of respondents were hauling waste from a residence, 17% were hauling waste from a business and 9% were hauling waste from both a residence and a business. One seasonal difference was noted at the Metro South Transfer Station where the percentage of respondents who reported hauling waste from both a home and a business dropped from 11% in the fall to 5% in the winter.
- Mixed waste was the most common type of waste brought to the transfer stations (44%) followed by construction demolition (29%) and household waste (21%). Six percent (6%) of

respondents were hauling yard debris. The percentage of respondents hauling mixed garbage decreased significantly between fall and winter for Metro South customers while the percentage carrying household waste showed a corresponding increase.

- There was a strong correlation between frequency of visits to the transfer station and waste type. Survey findings showed respondents who said they use the transfer station at least once a week were significantly more likely to be hauling construction demolition materials than those who use the transfer stations less often (57% compared to 31% of those who visit the transfer station one or two times a month and 22% of those who said they use the station less often). Conversely, respondents who said they come to the transfer station once or twice a month were significantly more likely to be hauling mixed waste or household than those who visit on a weekly basis.
- In answer to a multiple response question, respondents at both Metro Central and Metro South who were bringing waste from a home, most commonly said their reason for use the transfer station was “having a large amount of waste” (58%) followed by having items that were too big for the can (34%), recycling (32%) and bringing waste from a home building or remodeling project. Eighty-six percent (86%) of these respondents said they have collection service at their residence and 19% said they looked into alternative disposal options.
- Customers who brought waste from a business also cited a “having a large amount of waste” as their reason for coming to the transfer station (64%) followed by new home construction/remodeling (54%) and then recycling (27%).² Customers who were asked why they do not have collection services at their places of business most commonly said the reason they don’t have collection service is that they move around a lot and/or have a variety of work sites (22%).³ This was especially true for Contractors, farmers and landscapers.
- Frequency of transfer station use was similar between the two locations. Half of all respondents said they (50%) visit the transfer station between one and three times a year and 43% said they visit at least once a month including 11% who reported coming one or more days per week. Six percent of respondents (6%) said the day of the interview was the first time they had used a transfer station. Contractors were the most frequent transfer station visitors (84% said they visit at least once a month compared to 33% of Residential Customers and 56% of “Other Business” customers).
- Three-quarters of those who hauled waste to the transfer station brought it in a pickup truck either alone (59%) or towing a trailer (14%). One in eight transfer station customers (12%) drove a passenger car towing a trailer and 7% carried the waste in their vehicle. The remaining customers used a box van, step van, flatbed or other type of truck. At Metro South, more respondents used pickup trucks in the fall than in the winter (79% and 71% respectively) while at Metro Central, vehicle choice remained constant between the two seasons (72% in both fall and winter).

² Contractors were more likely than other customer types to cite dumping home construction debris as their primary reason for coming to the transfer station (71%).

³ This question was asked of those who listed their business as office, farm/ranch, automotive, restaurant or grocery, or light industrial (n=241).

- Trailer use varied by type of respondent. Nine in ten Residential Customers with loads under 500 pounds (89%) and 66% of Residential Customers with loads of 500 pounds or more, did not use a trailer. Residential customers who did use a trailer tended to use single-axle trailers more than any other kind. This pattern was also true for “Other Business” customers (69% did not use a trailer and 22% used a single-axle trailer). Just over half of the Contractors (56%) did not use a trailer, 24% used a single-axle trailer and 14% used one that was self-dumping.
- The average load weight for all respondents was 673 pounds with Metro South experiencing slightly, but not significantly, larger loads on average than Metro Central (679 pounds and 667 pounds respectively). Consistent with the higher percentage of Residential customers, about half of all loads at both locations were less than 500 pounds. The average load weight did not differ significantly by season at either the Metro Central or Metro South location.
- Although construction demolition was the second most common category of waste, these loads weighed the most on average. The average load of construction demolition weighed 949 pounds compared to average weights of 621 pounds for mixed waste, 433 pounds for household waste and 577 pounds for yard debris.
- Contractors carried more weight on average than Residential customers (1,126 pounds and 568 pounds respectively). The average weight of loads brought by Residential Customers hauling more than 500 pounds (965 pounds) was 86% of the average Contractor load weight and roughly four times the average for Residential Customers hauling smaller loads (284 pounds on average).
- Consistent with findings that Contractors had the heaviest loads and visited the transfer stations most frequently, the average load weight for respondents who said they come to the transfer station at least once a week was 1,023 pounds compared to average loads of between 540 and 725 pounds for those who said they come less often.
- Again, consistent with when Contractors come to the transfer stations, load weights were higher on weekdays than on weekends. Weekday loads averaged 754 pounds when 61% of those using the transfer stations were Residential Customers whereas weekend loads averaged 615 pounds when Residential Customers comprised 87% of transfer station users.
- Just under half of all respondents at both locations (47%) had items for recycling in their load. Respondents who brought waste from both a home and a business were the most likely to be carrying recyclable material (57%) while contractors were the least likely (43%). There were no significant differences in the percentage of customers carrying recyclable materials by season.
- Just 2% of all the customers who participated in the winter survey used a Metro account to pay for their load. Within each customer type, 6% of Contractors, 8% of “Other Business” customers and 1% of Residential Customers paid using a Metro account.

Conclusions

Differences between those who use the Metro Central Transfer station and those who use Metro South appear to be very minimal as do seasonal differences for most variables of interest. However, there are differences in the characteristics of transfer station users, the waste they haul, and the frequency with which they haul it. The three broad customer groups (Residential Customers, Contractors and “Other Business” customers) have very different needs.

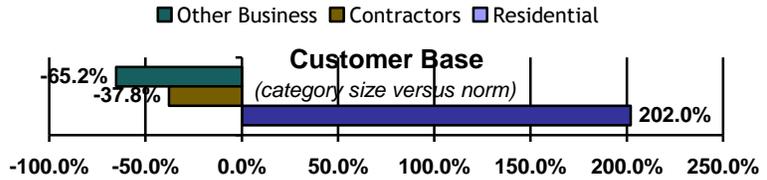
Those hauling the smallest loads tend to be Residential Customers who bring mixed garbage and household waste to the transfer stations on an infrequent basis when they have more than will fit in a garbage can. Residential customers hauling heavier loads also come to the transfer stations infrequently, but are hauling substantially larger loads many of which include construction demolition. For Residential Customers weekend access to the transfer stations is essential.

Contractors bring large volumes of construction debris to transfer stations during the week. Most Contractors haul waste to the transfer station at least once a month and many bring materials one or more times a week.

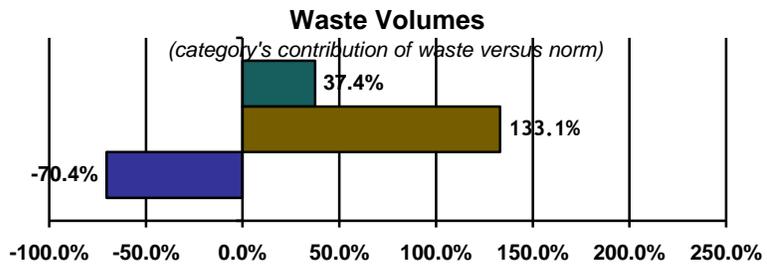
Since “Other Business” customers are a diverse group of people, they also have diverse needs. Like Residential Customers, many of these customers haul materials from their business a few times a year and the materials they haul tend to be a mixture of construction demolition and household waste. Like Contractors, some “Other Business” customers are from small clean-up firms like

Figure 2
Indices Based on Waste Volume and Frequency of Trips to Transfer Station
 All respondents with recorded waste loads

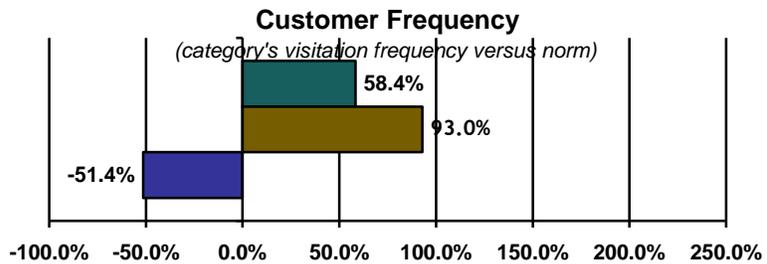
(Base = 1,970)



Norm



Norm



Norm

Indices based on responses within individual customer categories against the average of valid responses.

1-800-GOTJUNK? or landscaping companies that need to dispose of waste on a more frequent basis.

The graphics on the preceding page are indices of the customer base. The first chart shows the size of each customer category relative to the average of all customers (e.g., the “Other Business” category is 65% smaller than the norm). The second chart shows the amount of waste (tonnage) contributed by each customer category based on their average load weight and self-reported frequency of transfer station visits projected over a one year period (e.g., from this “snapshot” in time, it is estimated that “Other Business” customers contribute 37% more waste than the average customer). The third chart represents customer visitation frequency; again based on self-reported frequency of use projected over a one-year period (e.g., “Other Business” customers tend to visit the transfer station 58% more times than the average customer). Essentially, these charts reflect the 80/20 rule. In this case, roughly 24% of the customers (Contractors plus “Other Business”) bring in a projected 93% of the total waste over the course of one year.

Finally, survey data suggest that nearly all respondents regardless of type are cash customers or at least do not pay with a Metro account. It is possible that some Contractor and “Other Business” employees are unaware of the type of account their employer has with Metro and may not know it is a “Metro” account. A question on the survey instrument clarifying how customers plan to pay for their loads may reveal substantially more account customers than found in the winter survey.

Recommendations

Recommendations based on survey findings from the fall and winter surveys fall into two areas: refinements to the research methodology and recommendations for outreach efforts to transfer station customers.

Research Methodology

A few tweaks to the survey instruments and intercept methods would help to better understand customers who use the transfer stations as well as to group them into the appropriate customer categories. These recommendations are:

1. Spread surveys far enough apart to pick up on true seasonal differences. Gilmore recommends conducting surveys during the following time frames:
 - Winter: Late January/Early Feb
 - Spring: Late March/Early April
 - Summer: Late July/Early August
 - Fall: Late September/Early October
2. Re-order the responses in Question 5 (What type of waste are you hauling?) in the survey to make sure waste is correctly categorized.
3. Revise the survey instrument to include demographics of transfer station customers, specifically:
 - Age
 - Gender (by observation)

- City where waste is coming from (especially important for those bringing waste from multiple locations)
4. Revise survey instrument to include the following clarification questions:
- Ask respondents how they will pay for their load (cash, debit/credit card, or account) to make sure all “Metro account” customers are identified.
 - For respondents who bring waste in a truck—do they/does their company own the truck or is it borrowed from a friend or relative?
 - For respondents hauling waste from someone else’s home—are they doing a favor for a friend or is it part of their job?

INTRODUCTION

One of the primary responsibilities of Metro's Solid Waste & Recycling Department (SWR) is to oversee solid waste management and disposal within the region. Metro owns and operates two transfer stations—one in the industrial section of the City of Portland and one in Clackamas County at the south end of the region. In addition to local hauling companies, Metro's transfer stations serve approximately 300,000 self-haul customers each year including construction trade Contractors, various businesses, and individuals hauling waste from homes and businesses. As use of the transfer stations increases, Metro must decide whether to expand the current transfer facilities, work diligently to convince users to manage their waste more efficiently or both.

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Methodology

Data Collection

Gilmore Research Group conducted intercept interviews at the Metro Central and Metro South locations in the fall and winter of 2007 as follows:

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Interviews were conducted across all hours the transfer stations were open to avoid bias by time of day. To encourage participation in the survey, self-haul customers at the Metro Central location were given a voucher for \$5 off the cost of dumping their loads in exchange for completing the interview. Traffic volume at Metro South was high enough that incentives were not used at this location.

Data on type of vehicle and trailer were collected by observation. Load weight information was gathered by giving each respondent a card with a number corresponding to the number on the interview form. Respondents then turned in this card to the scale house operator as they left the transfer station. The operator recorded the load weight for the respondent onto the card. Gilmore staff collected the weight cards at the end of each day of interviewing. Load weights were entered into Excel and then matched to the SPSS database of survey information using the interview form number as a unique ID.

A total of 109 respondents did not turn their weight card in to the scale house, and 23 respondents brought only hazardous waste materials or recycling which Metro does not track by weight. Thus, the weights of these loads were not included in the data. Some of the load weight data for the

Metro South location on October 31, 2007 was determined to be erroneous. To correct this data, load weights determined to be more than three standard deviations above the mean weight for each customer type (not including data for 10/31 data) was discarded (n=42).

Analysis

Cross-tabulation tables were developed to allow analysis of the data by location (Metro Central, Metro South), by customer type (residential, contractor, other), by season (fall, winter) and by type of waste among other variables.

Transfer station customers were divided into five groups as follows:

- Contractors
- Other Business Customers
- Residential Customers with loads of less than 500 pounds
- Residential Customers with loads of 500 pounds or more
- Residential Customers for with no weight recorded (Other Residential)

Throughout this report, references made to “All Residential Customers” include respondents for whom no weight was recorded (“Other Residential”). Since the load weight of these respondents is unknown, it is assumed respondents in this category share characteristics of those with loads above and below 500 lbs. Thus, the Other Residential segment was not subjected to separate subgroup analysis.

All statistically significant differences in this report are reported at the 95% confidence level unless otherwise noted. The maximum margin of error for a sample of 500 (the approximate size of the sample at each location in each season) is ± 4.4 percentage points at the 95% confidence level.

Demographic information was extrapolated from Census data based on the zip code information provided by respondents. Metro created the maps in this report based on zip code information provided by respondents.

DETAILED FINDINGS

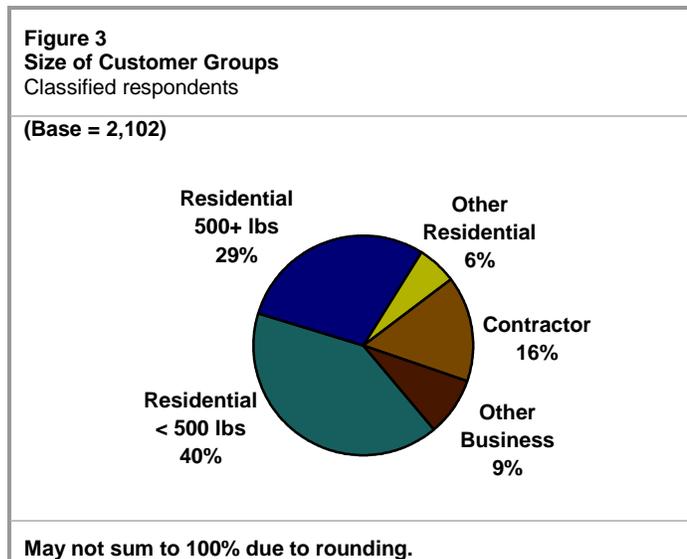
Respondent Profile

Respondents were profiled based on customer type and load weight as well as by which transfer station customers use.

Profiles by Customer Type

Four customer groups emerged based on type and load weight (Figure 3):

1. Residential customers hauling less than 500 pounds
2. Residential customers hauling 500 pounds or more
3. Contractors
4. Customers who were not Contractors, hauling waste for a business or from a residence as part of a business enterprise (Other business)



A fifth group, “Other Residential Customers” was not subjected to separate analysis because of the weight of their load was known, they would have been classified into one of the other two residential customer categories. It is assumed this group shares characteristics with both of the residential groups that were analyzed.

Characteristics of each customer group are presented in Table 1. Narrative descriptions of these groups are presented below.

Residential Customers Hauling Less than 500 Pounds

Four in ten transfer station users (40%) were individuals hauling waste from a home and carrying loads of less than 500 pounds on average. Half of the respondents in this group brought their waste to the Metro Central transfer station (50%) and half to Metro South (51%). Most respondents in this group (61%) said they use the transfer stations less than once a month not counting the 8% who used a transfer station for the first time on the day of the interview. More than two-thirds of these customers (67%) visited the transfer station on the weekend. When asked what type of waste they were carrying, the most common response was mixed waste (48%) followed by household waste (31%). Respondents most commonly brought their waste in a pickup truck (74%) and most did not use a trailer (90%). The average load weight for respondents in this group was 284 pounds.

Table 1
Respondent Transfer Station Use Characteristics
 All respondents

	Total	CUSTOMER TYPE					
		RESIDENTIAL CUSTOMERS				Contractors	Other Business
		Total	< 500 pounds	500+ pounds	Other		
(Base)	(2,102)	(1,592)	(859)	(614)	(119)	(327)	(183)
Season							
Fall	51%	50%	48%	47%	82%	54%	57%
Winter	49	50	52	53	18	46	43
Day							
Weekday	44%	35%	33%	34%	61%	75%	60%
Weekend day	56	65	67	66	39	25	40
Transfer Station							
Central	49%	49%	49%	53%	28%	46%	54%
South	51	51	51	47	72	54	46%
Frequency of Visits							
Today is 1 st time	6%	7%	8%	5%	7%	3%	4%
1 time/year	10	12	14	12	6	2	7
2-3 times/year	40	48	47	48	53	10	33
1-2 times/month	32	28	27	30	30	46	33
1 time/week	5	3	2	3	3	18	8
2-5 times/week	5	2	2	2	2	18	9
1+ times/day	1	1	1	1	0	2	6
Vehicle Type							
Passenger car	19%	21%	24%	17%	20%	12%	16%
Pickup Truck	74	75	74	76	79	71	66
Box van /Step van/ U-haul	5	3	2	5	2	15	14
Flatbed/stake truck/dump truck	1	1	<1	2	0	2	5
Trailer Type							
None	78%	81%	90%	70%	72%	64%	75%
Single axle	17	17	10	25	25	19	18
Double axle	2	2	<1	4	2	5	4
Self-dumping	3	1	<1	2	1	12	4
Load Weight¹							
No weight recorded	8%	8%	0%	0%	100%	10%	14%
0 to 300 lbs	27	31	57%	0	0	13	18
301 to 499 lbs	21	23	43	0%	0	11	18
500 to 900 lbs	26	26	0	67	0	26	24
901 to 2000 lbs	14	10	0	27	0	28	24
More than 2000 lbs	4	12	0	6	0	12	4
<i>Average load weight*</i>	<i>673 lbs</i>	<i>568 lbs</i>	<i>284 lbs</i>	<i>965 lbs</i>	<i>---</i>	<i>1,126 lbs</i>	<i>809 lbs</i>
Type of Waste							
Mixed waste	44%	49%	48%	51%	40%	20%	48%
Construction demolition	29	20	14	28	24	76	24
Household waste	21	25	31	15	31	2	16
Yard debris	6	7	7	6	4	2	8
Hazardous waste/Recycling	1	<1	<1	0	1	1	4
Does Load Contain Recycling?							
Yes	47%	48%	48%	45	55%	43%	49%
No	53	52	52	55	45	57	51
Pay w/Metro Account²							
Yes	2%	<1%	1%	<1%	0%	6%	8%
No	98	100	99	100	100	94	92

¹Average load calculated based on respondents with a recorded weight (n=1,926).

²Metro Account question was added to Winter survey (n=1,024).

May not sum to 100% due to rounding.

Residential Customers Hauling 500 Pounds or More

Almost three in ten transfer station customers (29%) were individuals hauling loads of waste weighing 500 pounds or more from home. These respondents were similar to other Residential Customers in that they were about as likely to use Metro Central as Metro South (53% and 47% respectively) and most said they come to the transfer station less than once a month (60%). Over half of the respondents in this category (51%) reported hauling mixed waste followed by construction demolition materials (28%). Just 15% of customers in this group were hauling only household waste. Two-thirds of respondents in this category (66%) brought their waste to the transfer station on the weekend. They were as likely as those who bring smaller loads to haul waste in a pickup truck (76%), but were significantly more likely than others to use a trailer (30% compared to 10% of Residential Customers with loads less than 500 lbs). Their average load weight of 965 pounds is more than three times that of Residential Customers who brought in loads of less than 500 pounds.

Contractors

About one in six transfer station users (16%) was hauling waste for a Contractor. Proportionately more Contractors used the transfer stations in fall than in winter (54% and 46% respectively) and more Contractors used the Metro South Transfer Station than the Metro Central one (54% and 46% respectively). The vast majority of Contractors said they use the transfer station at least once a month (84%) including 38% who come at least once a week or even daily. Contractors were most likely to haul waste in pick-up trucks (71%) or in box or step vans (15%). Those who used a trailer (36%) tended to use either a single-axle trailer or one that is self-dumping. Most Contractors hauled waste to the transfer station on weekdays (75%). On the day they were interviewed, most Contractors (76%) were hauling construction demolition waste. The average load weight for this group was 1,126 pounds.

Other Business Customers

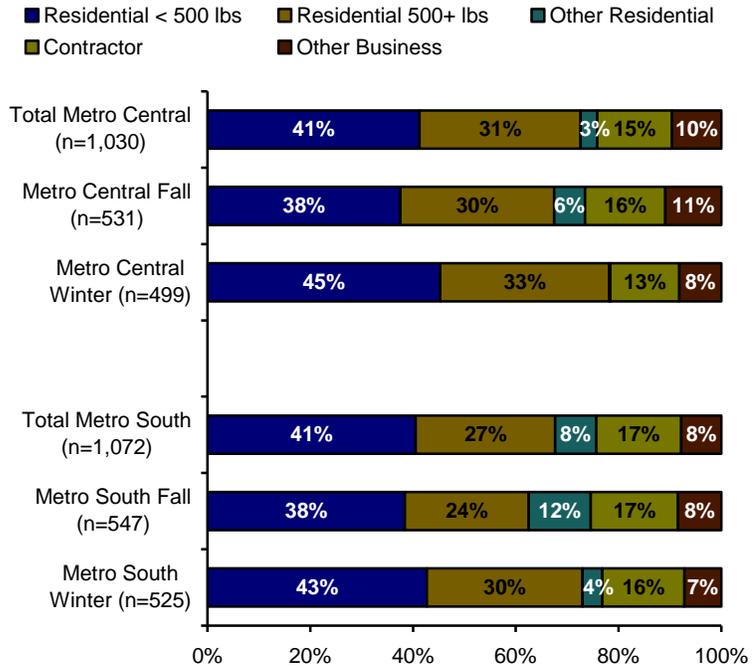
Almost one in ten transfer station customers (9%) were classified as “Other Business”. This is a mixed group comprised of individuals who were hauling waste for non-contractor businesses, small hauling companies like 1-800-GOTJUNK?, or were hauling waste from both residential and business locations. Proportionately more respondents in this group visited a transfer station in the fall than in the winter (57% and 43% respectively). They were divided in terms of how often they visit the transfer stations with 40% coming only a handful of times a year, 33% visiting every month, and 23% visiting at least once a week. Two-thirds of the members of this group brought their waste in a pickup truck (66%) and 14% brought it in a box van or step van. Most respondents in this category brought their waste to the transfer station on a weekday (60%). Not quite half of the members of this group were carrying mixed waste (48%) and 24% were hauling construction demolition materials. Of the four customer types, this group was the most likely to pay using a Metro account (8%). The average load weight for members of this group was 809 pounds.

Seasonal Variation

There was very little variation in the mix of customers by season or location. The only statistically significant difference noted was that there were more Residential Customers with loads greater than 500 lbs. at the Metro South transfer station in the winter (30%) than in the fall (24%) and fewer “Other Residential” customers (12% and 4% respectively). Thus, this difference is a reflection of the inability to categorize residential customers based on load weights and is not a true seasonal difference (Figure 4).

Figure 4
Source of Waste by Location and Season
 All respondents

(Bases Listed Below)



Question 2: Is this waste from a home or a business?

*Significantly different from Metro Central Winter.

May not sum to 100% due to rounding.

Profiles by Transfer Station

The research design for the survey dictated that approximately half of the interviews each season would be completed at the Metro Central location and half at the Metro South location. With the exception of where transfer station users come from, customer profiles for the two stations are similar (see Figure 5 on following page).

As Table 2 shows, virtually all respondents (99%) came to the transfer centers from Oregon locations—most commonly Portland (62%). Zip code data collected from the study shows respondents coming from as far north as Everett, Washington, as far west as Seaside, as far east as Wasco County and as far south as Klamath Falls. Figure 6 on page 17 shows the distribution of transfer station users for both locations based on combined responses from the fall and winter surveys. Additional maps showing the distribution of customers by location for each season are included in the Appendix.

Average age and income distributions for the zip codes recorded in the survey are also included in the Appendix. This information is based on data from the U.S. Census Bureau and is not necessarily reflective of the population of transfer station users.

Metro Central Transfer Station Customers

Almost nine in ten Metro Central Transfer Station customers came from locations within the City of Portland (88%) followed by Beaverton (6%) and a few other locations in Washington, Columbia, or Clark Counties (Table 2). Three-quarters of these patrons (76%) were Residential Customers, 15% were Contractors and 10% were in the “Other Business” category. Just over half (51%) of customers at this location said they visit the transfer station less than once a month, 31% visit the station once or twice a month and 12% come down at least once a week. The majority of Metro Central customers brought waste to the station in a pickup truck (72%) and most (82%) did not use a trailer. Nearly half of the Metro Central customers (47%) said they were hauling mixed waste, 28% were hauling construction demolition debris on the day they were interviewed and 15% were hauling household waste. About half of the respondents (49%) were carrying a load that contained recycling.

Table 2
Transfer Station Catchment Area Based on Zip Codes
Respondents who provided zip codes

	Total	Metro Central	Metro South
(Base)	(2,078)	(1,023)	(1,055)
Oregon (Net)	99%	99%	99%
Portland	62	88	36
Beaverton	4	6	2
Lake Oswego	3	1	5
Hillsboro	1	1	<1
Scappoose	1	1	<1
Beaver Creek	1	0	2
Canby	1	0	2
Clackamas	1	0	3
Damascus	1	0	3
Gresham	1	0	2
Happy Valley	1	0	2
Mollala	1	0	2
Mulino	1	0	1
Wilsonville	1	0	1
Oregon City	8	<1	16
Milwaukie	4	<1	8
Gladstone	2	<1	4
Tualatin	2	<1	3
West Linn	2	<1	4
Estacada	1	<1	2
Other Oregon	3	2	4
Washington (Net)	1%	1%	1%
Vancouver, WA	1	1	1
Other Washington	<1	<1	<1

City name extrapolated from responses to Question 1: What is your zip code?

Cities mentioned by fewer than 10 respondents are included in the “Other Oregon” and “Other Washington” categories.

May not sum to 100% due to rounding.

Metro South Transfer Station Customers

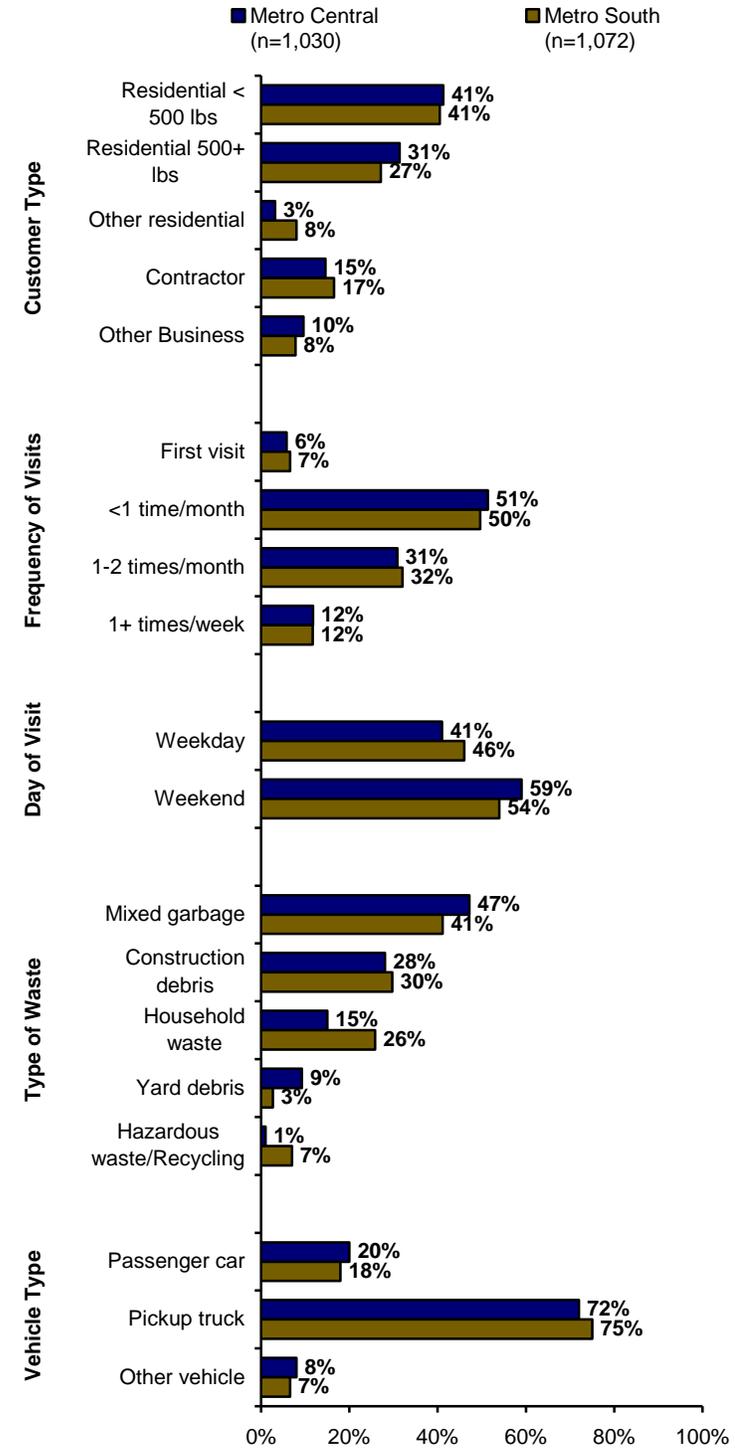
While Portland was the most common origin of trips to the Metro South Transfer Station (36%), it drew significantly fewer respondents from Portland than the Metro Central Station. Oregon City was the second most common originating location (16%) followed by Milwaukie (8%) and numerous Clackamas County locations (Table 2). Three-quarters of Metro South interviewees (76%) were Residential Customers, 17% were Contractors and 8% were classified as “Other Business.”

Half of the respondents at this location (50%) said they visit the transfer station less than once a month, 32% visit the station once or twice a month and 12% said they come down about once a week. The majority of Metro Central customers bring waste to the station in a pickup truck (75%) and most (74%) do not use a trailer.

On the day they were interviewed, 41% of the Metro South customers were hauling mixed waste, 30% were hauling construction demolition debris and 26% were hauling household waste. Just under half (47%) of the respondents were carrying recycling in their load.

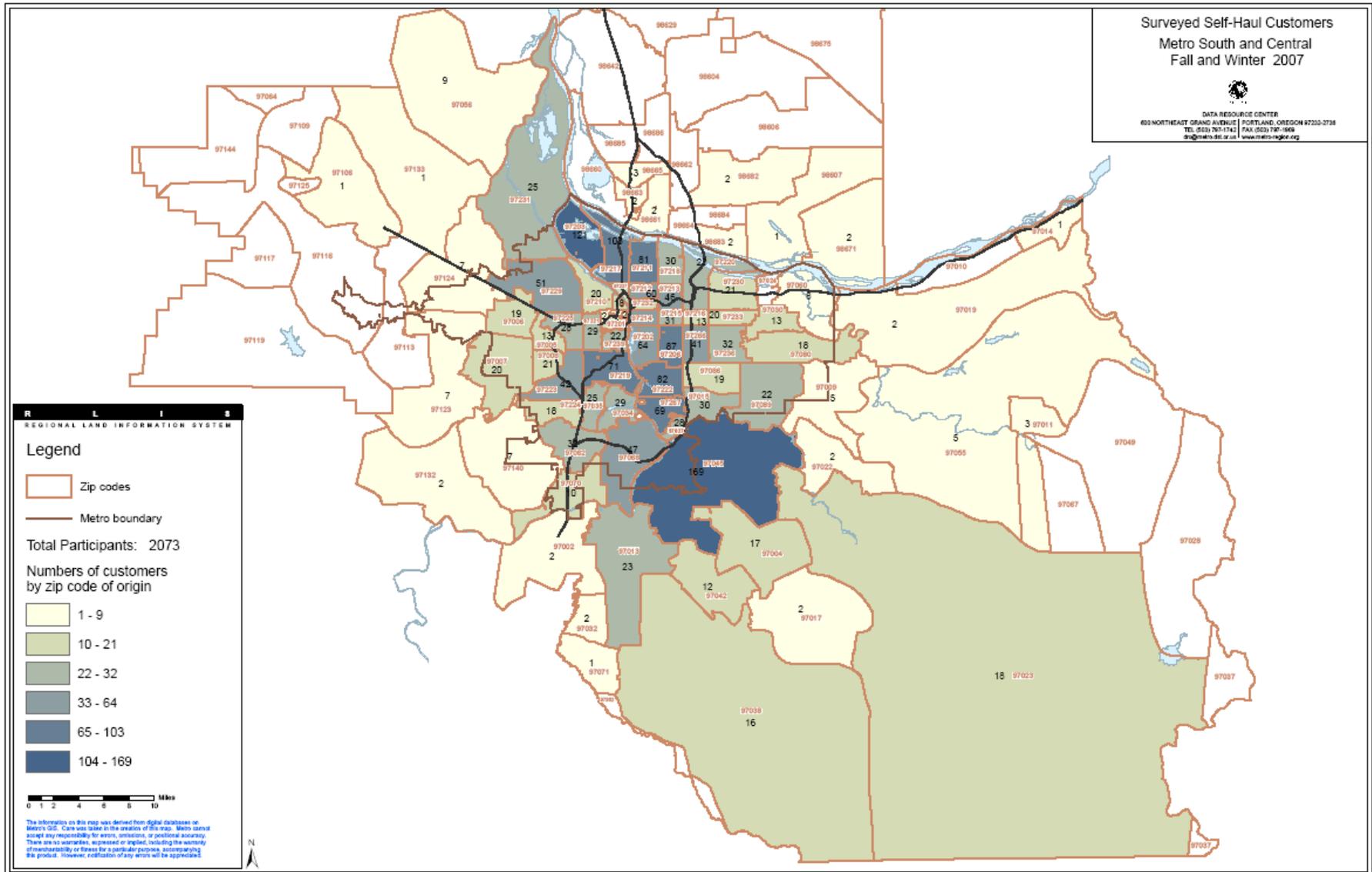
Figure 5
Profiles of Metro Central and South Transfer Station Users
 All respondents

(Bases Listed Below)



May not sum to 100% due to rounding.

Figure 6: Catchment Area for Both Metro Central and Metro South Transfer Stations



Reasons for Using the Transfer Stations

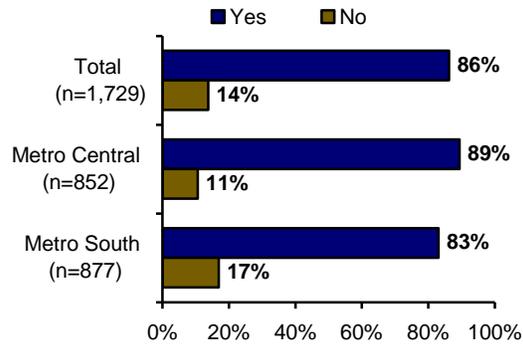
Customers Bringing Waste from a Home

Nearly nine in ten customers hauling waste from a home (86%) said they have garbage and recycling service at their residence (Figure 7). A significantly higher percentage of Metro Central customers have garbage service compared to Metro South customers (89% and 83% respectively). Customers who visit the transfer stations only a few times a year were significantly more likely than those who come more often to have residential garbage and recycling service (92% and 76% respectively).

Relatively few of these customers (19%) looked into alternative disposal options like putting out extra cans or renting a dumpster from the local hauler. Respondents who said they come to the transfer station about once a year (28%), Metro Central customers (24%), and those hauling construction debris (27%) were more likely than average to have considered alternative disposal methods.

Figure 7
Use of Residential Recycling Service
Respondents hauling waste from a home

(Bases listed below)



Question 2B: Do you have garbage and recycling service at your residence?

May not sum to 100% due to rounding.

Table 3
Reasons for Coming to the Transfer Station
Respondents hauling waste from a home

	Total	Metro Central	Metro South
(Base)	(1,728)	(852)	(876)
Large amount of garbage	58%	65%	52%
Items too big for can	34	41	26
Recycling	32	33	31
New home construction/remodeling	30	33	28
Cleaning home or business	22	25	18
Cheaper than curbside	17	19	15
No garbage service	11	7	16
Moving home or business	8	8	7
Did not want to wait for garbage day	2	3	1
Yard debris	1	1	0
Close to our business	<1	<1	<1
Convenience (general)	<1	<1	<1
Hazardous waste	<1	<1	0
Other	2	1	2

Q3: What is your reason for coming to the transfer station today?

May sum to > 100% due to multiple responses.

The most common reason for coming to the transfer station was to haul “a large amount of garbage” (58%) followed by “items too big for can” (34%), bringing in recycling (32%) and bringing debris from new home construction or remodeling (30%) (Table 3). These four reasons were the ones most frequently mentioned for both the Metro Central and Metro South locations. Metro Central customers were significantly more likely to mention “large amounts of garbage” and “items too big for can” than were Metro South customers.

It is interesting to note that just 21% of those who said coming to the transfer station was “cheaper than curbside” actually looked into alternative disposal methods.

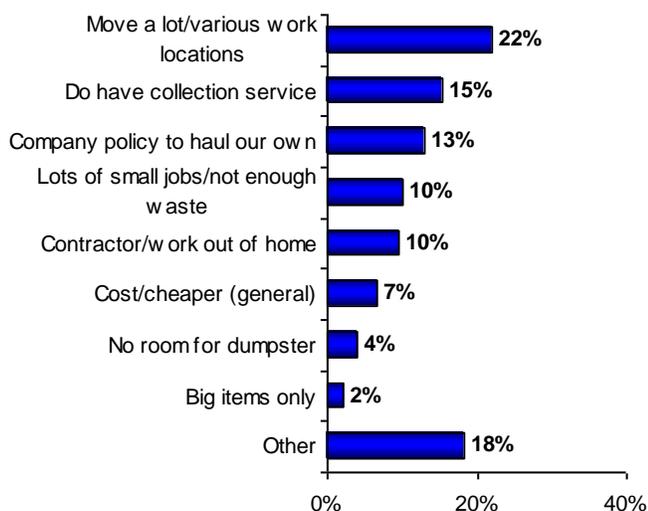
Customers Bringing Waste from a Business

When asked why they do not have collection service at their places of business, the most common response was that they move around a lot and have a variety of work sites (22%). About a third of Contractors, farmers, and landscapers gave this response. Fifteen percent (15%) of respondents who hauled waste from a business to the transfer station said they do have collection service at their business location. Figure 8 shows a list of reasons respondents gave for not having waste collection services in descending order of mention.

When asked their reason for coming to the transfer station on the day they were interviewed, respondents in this category most commonly mentioned bringing in a large amount of garbage (64%) followed by new home construction/remodeling (54%).

Figure 8
Reasons for Not Having Collection Service at Business Location
Respondents hauling waste from a business*

(Base = 241)



Question 2d1. Why don't you have collection service at your place of business?

*Asked of those who listed their business as office, farm/ranch, automotive, restaurant or grocery, or light industrial.

Table 4
Reasons for Coming to the Transfer Station
Respondents hauling waste from a business

	Total (538)	Metro Central (262)	Metro South (276)
Large amount of garbage	64%	69%	59%
New home construction/remodeling	54	50	57
Recycling	27	28	26
Items too big for the can	19	26	11
Cleaning home or business	14	17	10
Cheaper than curbside	12	15	9
No garbage service	9	10	9
Moving home or business	3	5	2
Did not want to wait for garbage day	2	2	1
Close to our business	<1	1	1
Convenience (general)	<1	<1	0
Hazardous waste	<1	1	0
Yard debris	<1	1	0
Other	3	3	3

Q3: What is your reason for coming to the transfer station today?

May sum to > 100% due to multiple responses.

This is not surprising given that 61% of those hauling waste from a business are Contractors. The four most commonly mentioned reasons were the same for both transfer station locations (Table 4).

All Customers by Type

Although there is some fluctuation in the percentages, the number one reason for hauling waste to the transfer station for all customers except Contractors was having a large amount to dispose of. For Contractors, home construction/remodeling debris was the most common reason (71%) followed closely by large amounts of garbage (68%). Contractors were significantly more likely than any other customer type to cite these two reasons while

Residential customers (all categories) and Other Business customers were more likely than Contractors to mention most of the other reasons shown in Table 5.

Table 5
Reasons for Coming to the Transfer Station by Customer Type
 All respondents

	Total	Residential				Contractors	Other Business
		Total	<500 lbs.	500+ lbs.	Other		
(Base)	(2,085)	(1,579)	(852)	(609)	(118)	(326)	(180)
Large amount of garbage	59%	57%	53%	64%	53%	68%	58%
New home construction/remodeling	36	29	22	39	30	71	26
Items too big for the can	31	35	35	34	39	13	31
Recycling	30	32	32	30	41	22	32
Cleaning home or business	20	22	23	20	21	8	25
Cheaper than curbside	15	16	15	17	20	9	18
No garbage service	11	5	11	11	15	9	8
Moving home or business	7	8	9	7	10	2	6
Did not want to wait for garbage day	2	2	2	2	1	1	3
Yard debris	1	1	1	1	0	0	1
Close to our business	<1	<1	<1	<1	1	1	1
Convenience (General)	<1	<1	<1	<1	0	<1	0
Hazardous waste materials	<1	1	<1	<1	0	<1	1
Other	2	2	2	2	1	3	4

Q3: What is your reason for coming to the transfer station today?

May sum to > 100% due to multiple responses.

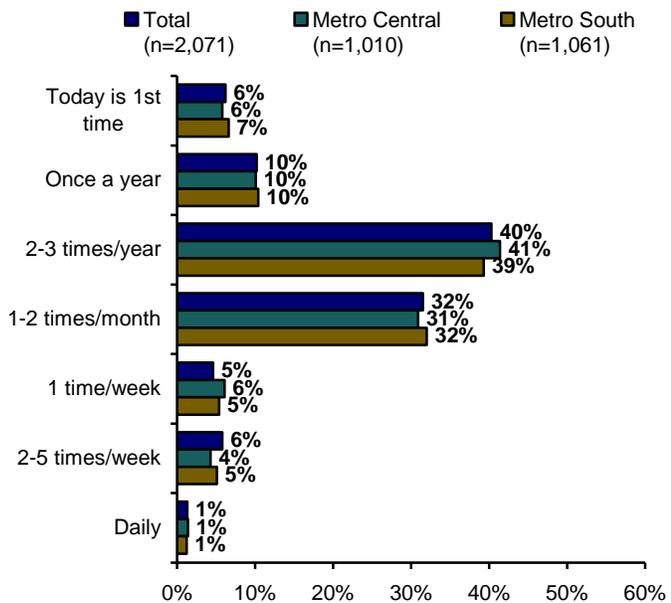
Frequency of Transfer Station Visits

Figure 9 shows a similar pattern of trips to the transfer station for both the Metro Central and Metro South locations. Half of all respondents (50%) visit the transfer station between one and three times a year and 43% visit at least once a month including 11% who come one or more times a week. For 6% of respondents, the day they were interviewed was the first time they had used the transfer station. Survey data shows very little fluctuation in these percentages between the fall and winter surveys.

Several significant differences were noted in frequency of use between different types of customers. As Table 6 shows, Contractors are the most frequent transfer station visitors (84% visit at least once a month compared to 33% of Residential customers and 56% of “Other Business” customers.

Figure 9
How Often Respondents Visit Transfer Station
 All respondents

(Base = 2,085)



Question 4: How often do you visit a transfer station?

May sum to >100% due to multiple responses.

Table 6
Frequency of Transfer Station Use by Customer Type
 All respondents

	Total (2,071)	Residential			Contractors (323)	Other Business (180)	
		Total (1,568)	<500 lbs. (847)	500+ lbs. (606)			Other (115)
Today is first visit	6%	7%	8%	5%	7%	3%	4%
Once a year	10	12	14	12	6	2	7
2-3 times/year	40	48	47	48	53	10	33
1-2 times/month	32	28	27	30	30	46	33
1 time/week	5	3	2	3	3	18	8
2-5 times/week	5	2	2	2	2	18	9
At least once a day	1	1	1	1	0	2	6

Question 4: How often do you visit a transfer station?

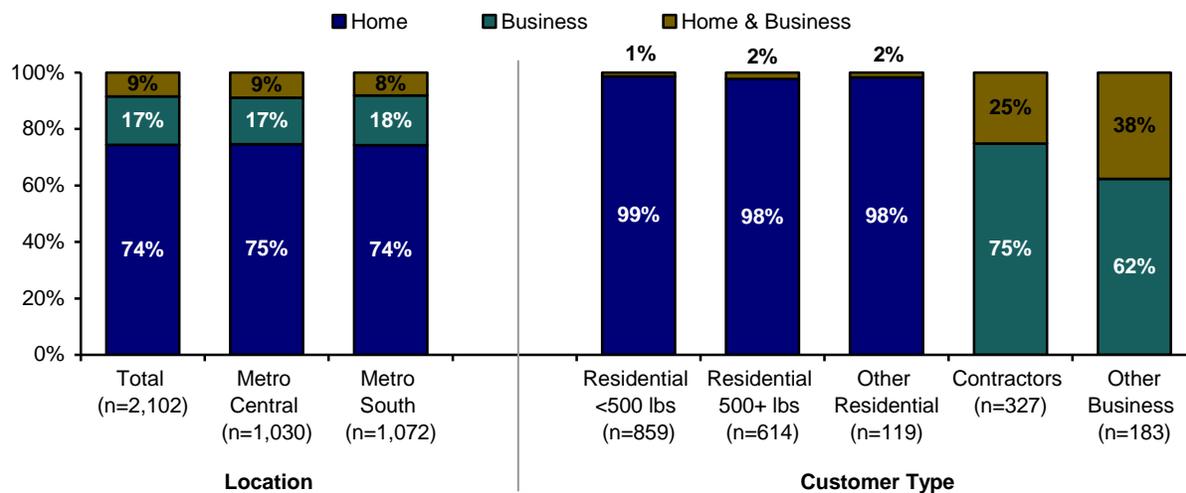
May sum to >100% due to multiple responses.

Source of Waste

Three-quarters of respondents at both Metro Central and Metro South indicated they were hauling waste from a home. The majority of Contractors (75%) and those classified as “Other Business” (62%) were predominantly carrying waste from a business (Figure 10).

Figure 10
Source of Waste by Location and Customer Type
 All respondents

(Bases Listed Below)



Question 2: Is this waste from a home or a business?

May not sum to 100% due to rounding.

With one exception, the source of waste brought to the transfer stations did not differ significantly by location or by season. As Figure 9 shows, the percentage of respondents who said they were hauling waste from both homes and businesses dropped in half at the Metro South Transfer Station from 11% in the fall to 5% in the winter with a corresponding increase in the percentage who were bringing waste from a business only.

Customers Hauling Waste from a Residence

The majority of respondents who were hauling waste from a home said it was from their own home (85%), 11% were hauling waste for someone else and 4% were bringing waste from their own home as well as

someone else's. There appears to be some seasonality associated with whose waste respondents were hauling. A greater percentage of respondents indicated they were hauling waste for others in the fall than in the winter (14% and 9% respectively when looking at data combined for both locations). The same pattern was true at both the Metro Central (12% fall and 9% winter) and Metro South Transfer Stations (15% fall and 9% winter).

Customers Hauling Waste from a Business

When asked, approximately two-thirds (65%) of the customers who said they were bringing waste from a business (including those who also brought waste from a home) worked for a Contractor. The remainder worked in a variety of industries as shown in Table 7. As shown, there were few differences in types of business by location. Significantly more Metro Central business customers worked for cleanup/hauling or companies or for an office than Metro South business customers.

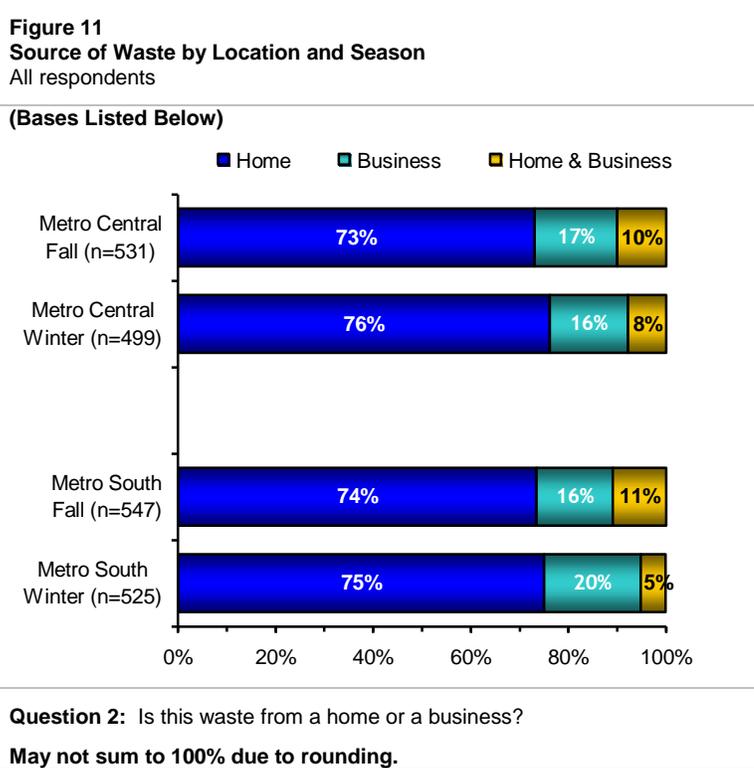


Table 7
Type of Business
 Respondents who were hauling waste from a business

	Total (504)	Metro Central (246)	Metro South (258)
(Base)			
Contractor	65%	61%	69%
Light Industrial	7	7	7
Rental/Property Mgmt.	7	7	8
Cleanup/Hauling Company	4	7	2
Office	4	6	2
Landscaper	3	4	2
Restaurant/Grocery	2	4	1
Church/School	1	2	1
Automotive	1	1	1
Farm/Ranch	1	1	1
Other	4	2	6

Q2D: Which of these categories best describes your business?
 May not sum to 100% due to rounding.

Type of Waste

Mixed waste was the most common type of waste brought to the transfer stations (44%) followed by construction demolition (29%) and household waste (21%). As Figure 12 shows, there does not appear to be a seasonal component to the type of waste brought to the transfer stations.

The percentage of respondents hauling mixed garbage decreased significantly between fall and winter for Metro South customers (from 46% to 37%) while the percentage of respondents carrying household waste increased (from 22% to 30%). A similar pattern for mixed garbage was noted at Metro Central, but the change was not statistically significant (Table 8).

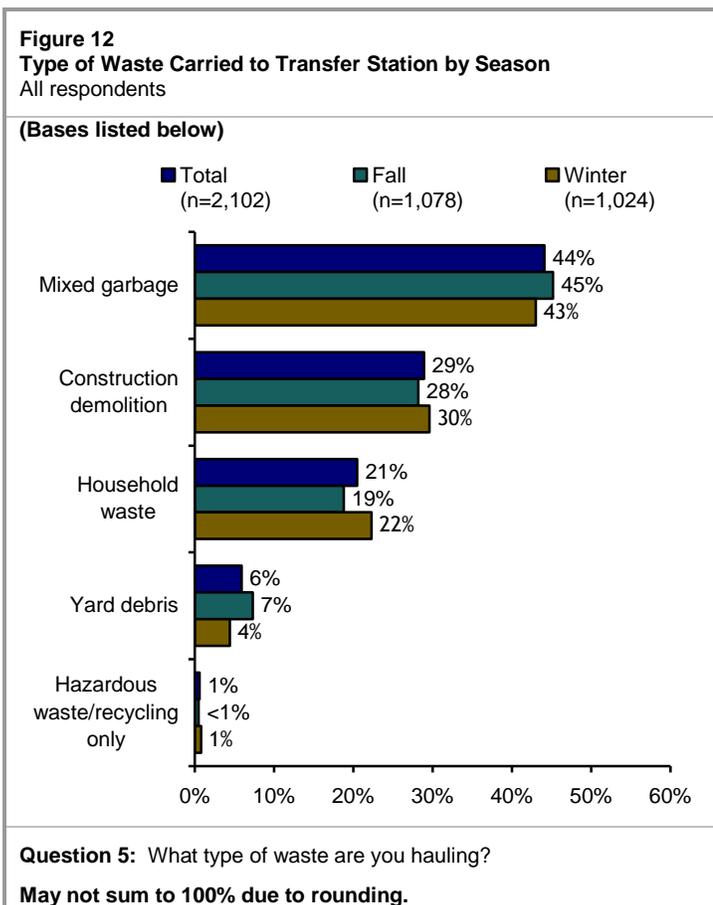


Table 8
Type of Waste by Season and Location
 All respondents

	Total	Metro Central		Metro South	
		Fall	Winter	Fall	Winter
(Base)	(2,102)	(531)	(499)	(547)	(525)
Mixed garbage	44%	45%	50%	46%	37%
Construction demolition	30	28	29	29	31
Household waste	21	16	14	22	30
Yard debris	6	11	7	4	2
Hazardous/toxic waste	1	<1	0	0	1
Recycling only	<1	0	1	<1	<1

Question 5: What type of waste are you hauling?
 May not sum to 100% due to rounding.

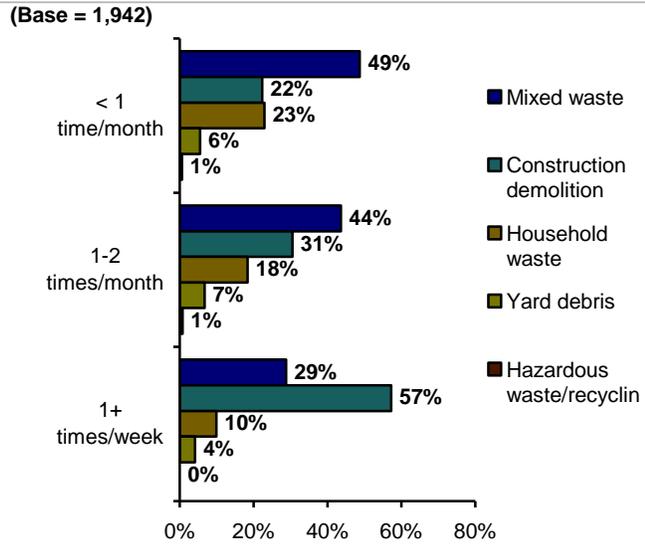
There was a strong correlation between the frequency with which respondents visit the transfer stations and the type of waste they bring. As Figure 13 shows, the more frequently respondents use the transfer station, the more likely they are to be hauling construction demolition and the less likely they are to be hauling mixed waste or household waste.

As shown, more than half (57%) of respondents who use the transfer station at least once a week were hauling construction demolition compared to 22% of those who use the transfer station less than once a month.

Several significant differences were noted in the types of waste brought in by the disparate customer groups (Table 9).

Contractors were more likely than any other group to be hauling construction demolition materials (76%) and Residential customers with loads of less than 500 lbs. were less likely than any other group to be hauling construction debris (14%). These Residential customers were significantly more likely than others to be hauling household waste (31% compared to 15% of Residential Customers with loads over 500 pounds, 16% of “Other Business” customers and 2% of Contractors). Residential Customers with loads greater than 500 pounds were more likely than Residential Customers with smaller loads to be hauling construction debris to the transfer station (28% and 14% respectively).

Figure 13
Types of Waste by Frequency of Trips to Transfer Station
Respondents for whom this is not the first trip



Question 5: What type of waste are you hauling?

May not sum to 100% due to rounding.

Table 9
Type of Waste Hauled by Customer Type
All respondents

	Total	Residential				Contractors	Other Business
		Total	<500 lbs.	500+ lbs.	Other		
(Base)	(2,102)	(1,592)	(859)	(614)	(119)	(327)	(183)
Mixed waste	44%	49%	48%	51%	40%	20%	48%
Construction demolition	29	20	14	28	24	76	24
Household waste	21	25	31	15	31	2	16
Yard debris	6	7	7	6	4	2	8
Hazardous waste/recycling	1	<1	<1	0	1	1	4

Question 5: What type of waste are you hauling?

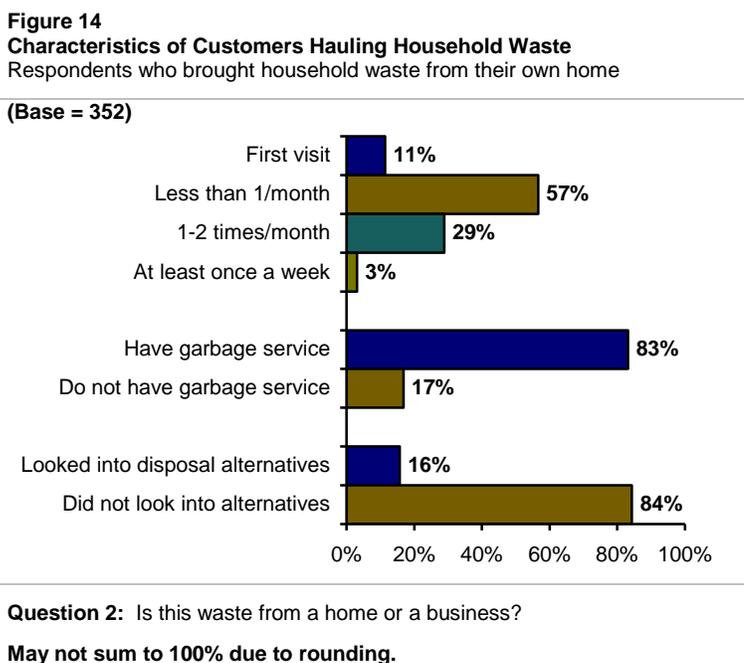
May not sum to 100% due to rounding.

A Closer Look at Household Waste

Altogether, 352 respondents reported hauling household waste from their own homes (17% of the entire sample regardless of season and location). These respondents most commonly said the reason for their visit to the transfer station was because they had a large amount of garbage (42%) and 38% had items too large for the can.

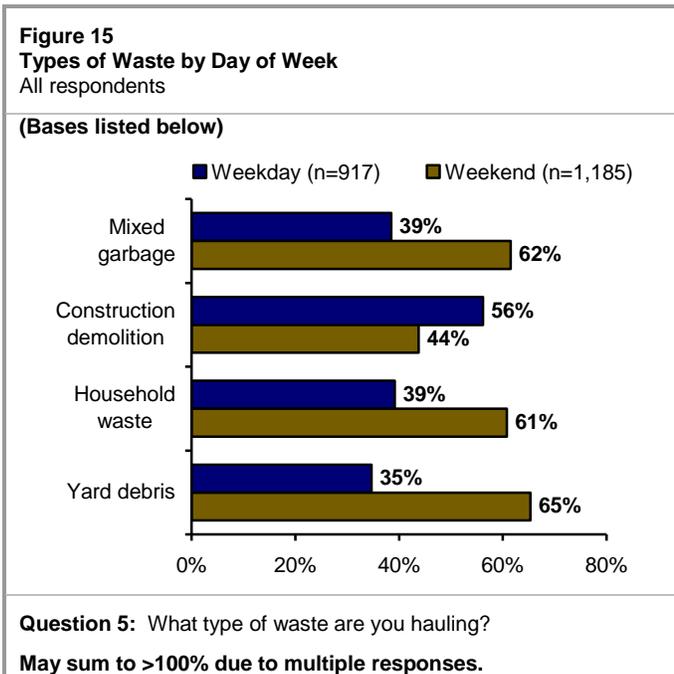
Most of these respondents (83%) have garbage and recycling service, but only 16% looked into alternatives for disposing of their household waste (Figure 14).

Looking just at the 32% of respondents in this group who said they come to the transfer station at least once a month shows a similar pattern. Nearly two out of three respondents in this subgroup (64%) have garbage and recycling service, but only 11% looked into disposal options other than hauling waste themselves.



Types of Waste by Day of Week

Proportionately more respondents brought construction demolition materials on weekdays than on weekends. This information is consistent with the finding that Contractors and “Other Business” customers are more likely to visit the transfer station during the week. Waste brought in on weekends reflects the higher percentage of Residential customers on those days as shown in Figure 15.



Vehicle Used to Haul Waste

Nearly three-quarters of respondents (74%) used pickup trucks and 19% used passenger cars (Figure 14). Just 7% of respondents used vans (box, step, U-haul) or other types of trucks (stake trucks or dump trucks).

At Metro South, more respondents used pickup trucks in the fall than in the winter (79% and 71% respectively) while at Metro Central, vehicle choice remained steady between the two seasons.

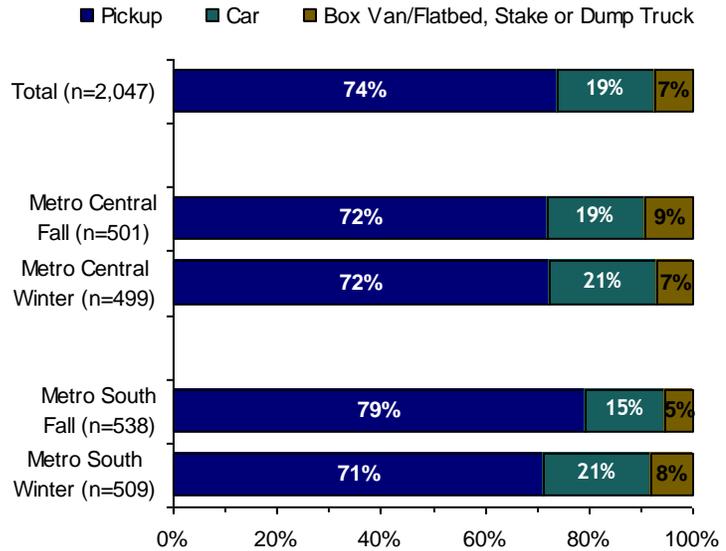
Most respondents (78%) did not bring a trailer to the transfer station. As Table 10 shows, respondents in passenger cars were more likely to use a trailer (usually single-axle) than any other type of vehicle. Respondents coming to the Metro Central location were more likely to use a trailer than those coming to Metro South (80% and 74% respectively).

Figure 16

Vehicle Used to Haul Waste by Location and Season

All respondents

(Bases listed below)



Vehicle types were recorded based on interviewer observation.

May not sum to 100% due to rounding.

Table 10

Trailers Associated with Vehicles

All respondents

	Total	Passenger Car	Pickup Truck	Box Van, Step Van, U-haul	Flatbed, Stake Truck, Dump Truck
(Base)	(2,047)	(387)	(1,510)	(120)	(30)
Trailer Type					
None	78%	64%	80%	85%	93%
Single axle	17	34	14	12	7
Double axle	2	2	3	1	0
Self-dumping	3	1	3	3	0

Trailer type was recorded based on interviewer observation.

May not sum to 100% due to rounding.

Significant differences were noticed in vehicle and trailer use between the different customer groups. As Table 11 shows, Residential customers with loads of less than 500 pounds were significantly more likely to bring their waste to the transfer station in a passenger car than Residential customers with larger loads, Contractors or “Other Business” customers. While pickup trucks were the preferred vehicle for all respondent groups, Contractors and Other Business customers were more likely than Residential customers to bring waste to the transfer station in a box van, step van or flatbed truck.

Contractors were also significantly more likely to have a pickup with a trailer (usually single-axle) than were Residential customers.

Table 11
Type of Vehicles and Trailers Used by Customer Type
All respondents

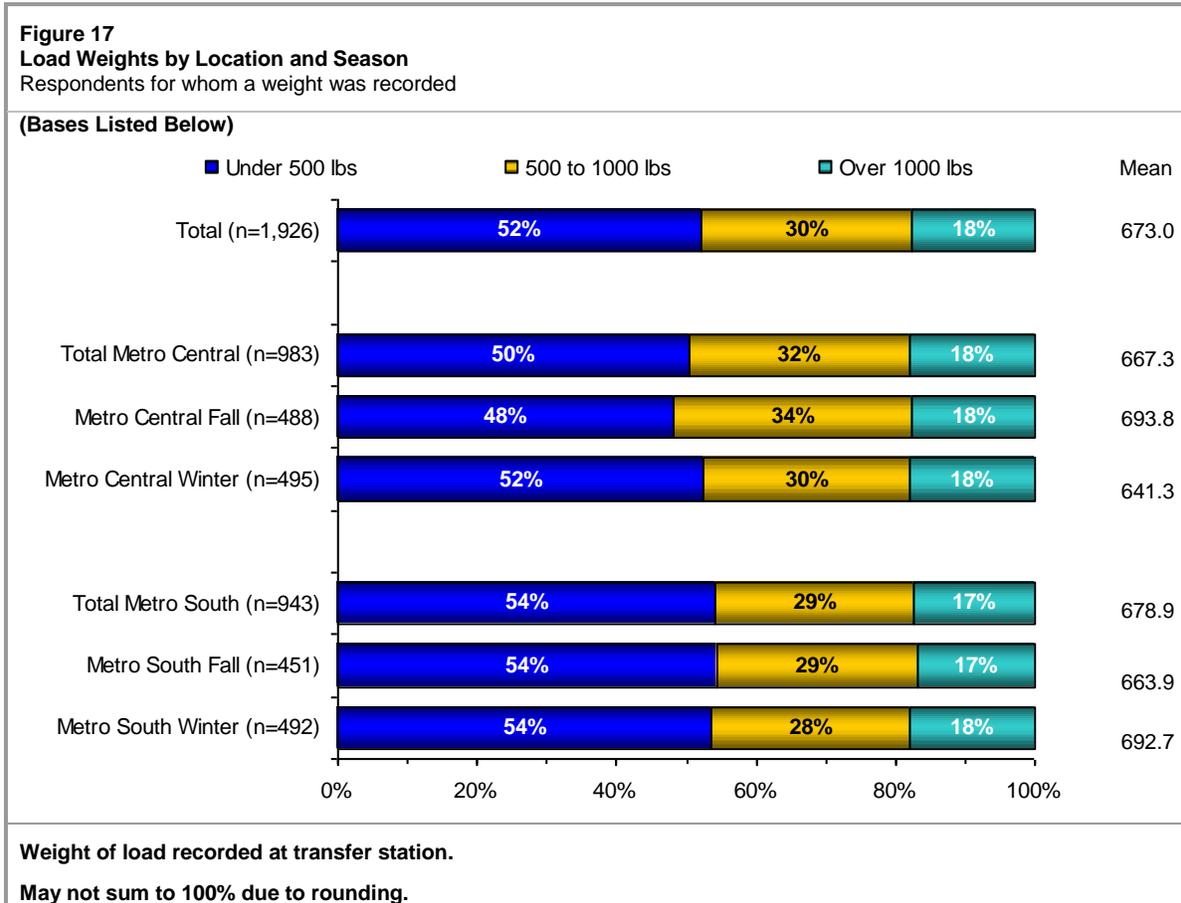
	Total	Residential			Contractors	Other Business
		Total	<500 lbs.	500+ lbs.		
(Base)	(2,047)	(1,554)	(848)	(594)	(112)	(320)
<u>Passenger car (Net)</u>	19%	21%	24%	17%	20%	12%
Car only	12	14	19	7	13	6
Car with trailer	7	7	5	10	6	9
<u>Pickup Truck (Net)</u>	74%	75%	74%	76%	79%	71%
Truck only	59	64	70	56	57	43
Truck with trailer	14	12	5	19	21	28
<u>Box van /Step van/ U-haul</u>	5%	4%	2%	5%	2%	15%
<u>Flatbed/stake truck/dump truck</u>	1%	<1%	0%	2%	0%	2%
Trailer Type	(2,047)	(1,554)	(848)	(594)	(112)	(320)
None	78%	81%	90%	70%	72%	64%
Single axle	17	17	10	25	25	19
Double axle	2	2	<1	3	2	5
Self-dumping	3	1	<1	2	1	12

Vehicles and Trailers were recorded based on interviewer observations.

May not sum to 100% due to rounding.

Load Weights

The average load for all respondents was 673 pounds with very little difference in average load weight between Metro Central and Metro South (667 lbs. and 679 lbs. respectively). About half all loads at both locations were less than 500 pounds which is consistent with the high percentage of Residential customers (Figure 17). The average load weight did not differ significantly by season at either the Metro Central or the Metro South location.⁴



⁴ As noted in the Methodology section, a substantial amount of load weight data for the Metro South location was recorded incorrectly on October 31, 2007. Load weight data for 10/31 that was more than three standard deviations above the mean weight was discarded.

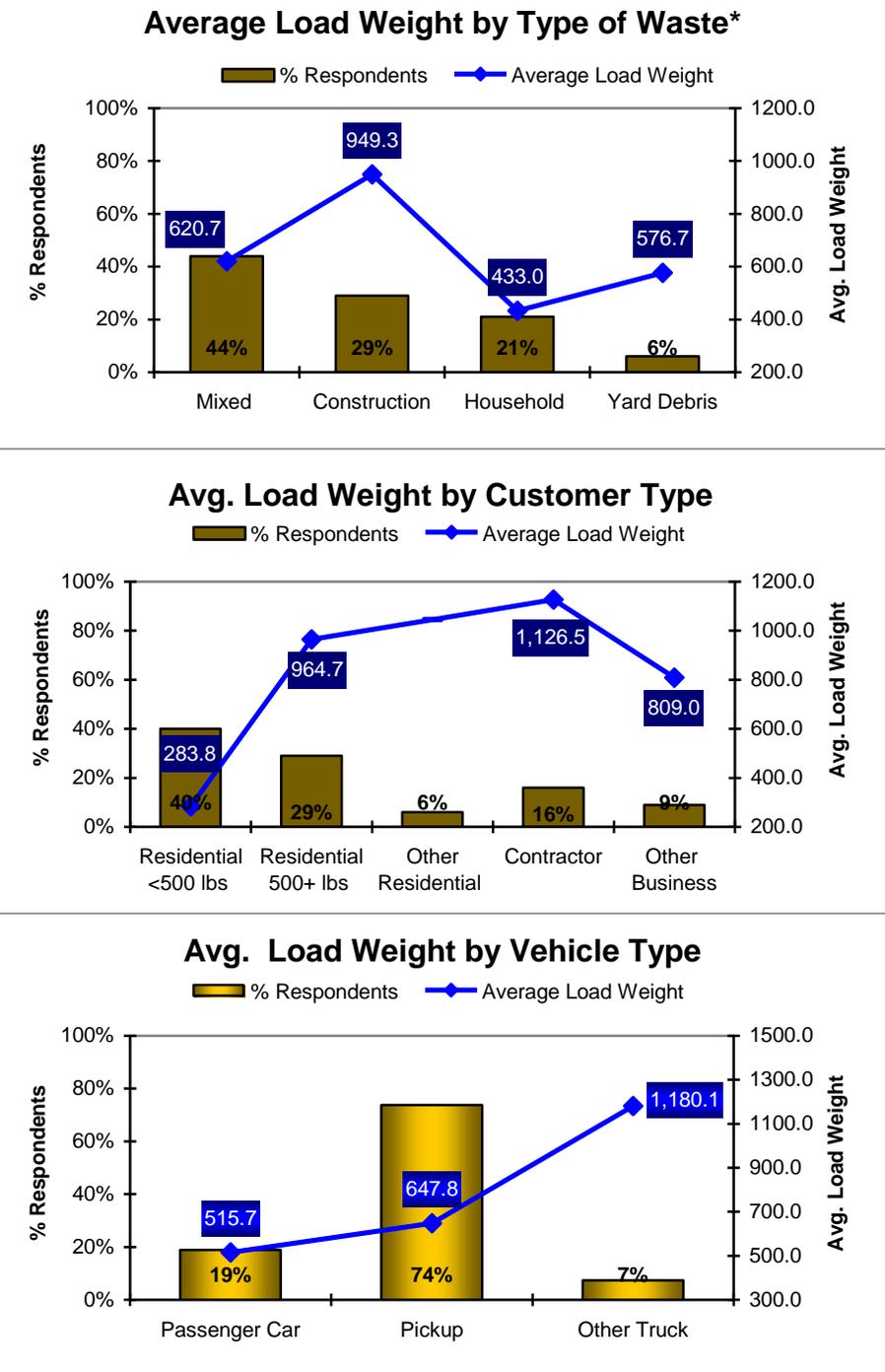
Although construction demolition was the second most common category of waste, these loads weighed the most on average. As Figure 18 shows, the average load of construction demolition weighed 949 pounds—35% more than the average weight for mixed waste (621 lbs.) and 54% more than the average load of household waste (433 lbs.). The average load of construction demolition material was significantly higher than all other load types. Mixed waste was significantly heavier than yard debris which weighed significantly more than household waste.

Contractors carried significantly more weight on average than Residential and “Other Business” customers. The average weight of loads brought by Residential Customers whose loads exceeded 500 pounds was 86% of the average Contractor load weight and roughly four times the average for Residential customers with loads under 500 pounds.

There was a direct correlation between the type of vehicle used and the amount of waste brought to the transfer station. Passenger cars (including those with trailers)

Figure 18
Load Weights by Waste Type, Customer Type and Vehicle Type
 Respondents for whom a weight was recorded

(Base = 1,926)



Weight of load recorded at transfer station.

*Waste types are not discrete.

May not sum to 100% due to rounding.

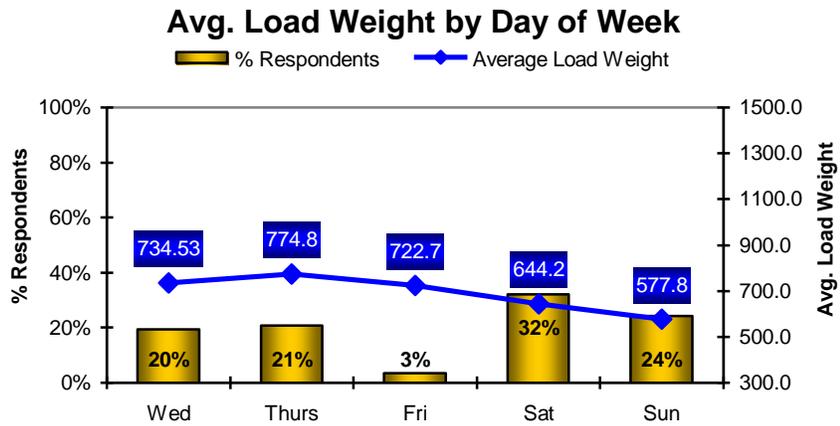
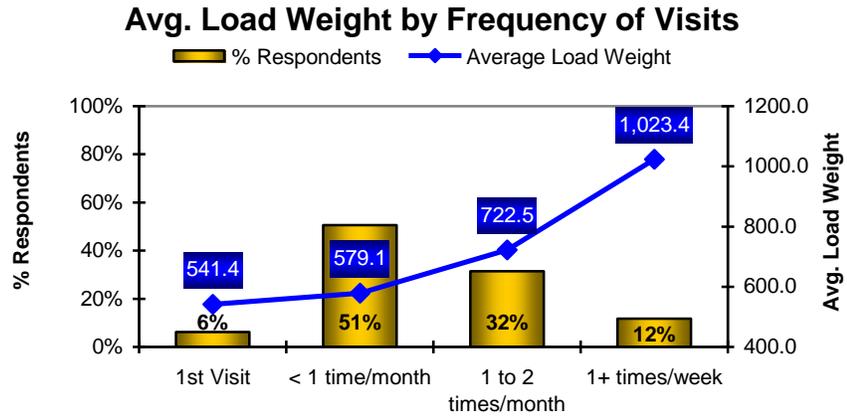
carried lighter loads on average, pickup trucks (including those with trailers) were in the middle and other vehicles such as box vans, flatbed trucks and dump trucks carried significantly larger loads.

Consistent with findings that Contractors have the heaviest loads and visit the transfer stations most frequently, the average load for respondents who said they come to the transfer station at least once a week are the heaviest (1,203 lbs. on average). Respondents who come less often averaged between 540 and 725 pounds regardless of visitation frequency (Figure 19).

Again, consistent with when Contractors come to the transfer stations, load weights were higher on weekdays than on weekend days with the lightest loads recorded on Sunday when 89% of those using the transfer station were Residential Customers.

Figure 19
Load Weights by Frequency and Day of Week
 Respondents for whom a weight was recorded

(Base = 1,926)



Weight of load recorded at transfer station.

May not sum to 100% due to rounding.

Recycling

As Figure 20 shows, just under half of all respondents (47%) said they had items for recycling in their load. There was no difference in recycling activity between the two locations. However, customers were significantly more likely to bring recycling to the Metro Central Transfer station in the winter (50%) than in the fall (43%).

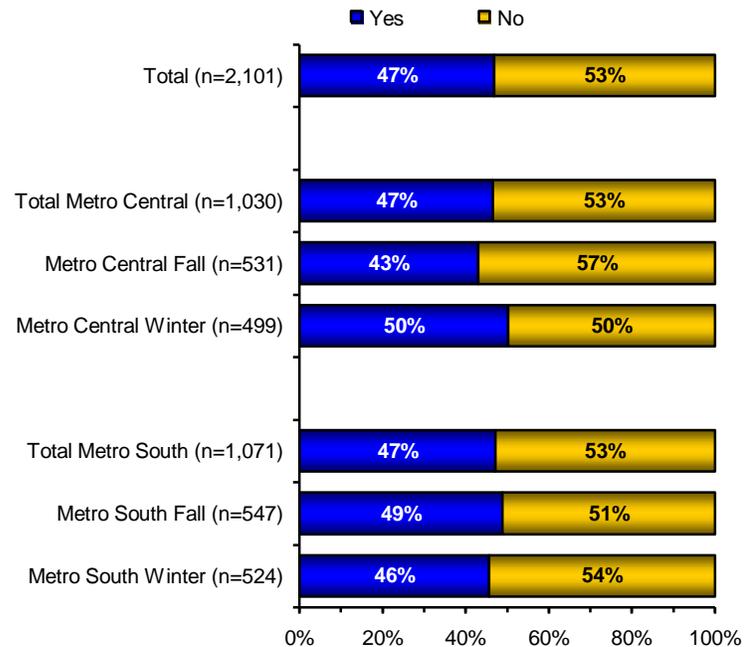
Respondents bringing waste from both a home and a business were the most likely to be carrying recyclable material (57%)—significantly more than those bringing waste from a business only (40%) or from a home only (47%). Contractors were less likely than average to be hauling materials for recycling (43%).

Looking at recycling by the type of waste being carried found that respondents carrying mixed garbage were the most likely to be carrying recycled materials (51%) followed by those hauling household waste (48%).

The survey did not capture data on the proportion of materials in each load that were recyclable. There were no significant differences in the percentage of customers carrying recyclable materials by location or by season.

Figure 20
Recycling Activity
All respondents

(Base = 2,101)



Question 6: Are you recycling items in your load today?

May not sum to 100% due to rounding.

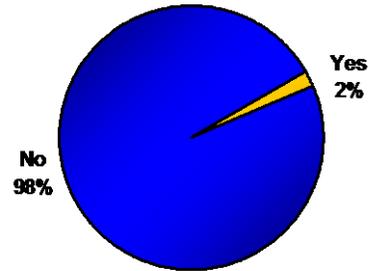
Use of Metro Accounts

Very few of the respondents surveyed (2%) used a Metro account to pay for their load on the day of the interview (Figure 21). It is possible that some customers (especially those working for Contractors or “Other Business” employers) may not have been aware their employer has a Metro account, thus the percentage using a Metro account may be underrepresented. Respondents most likely to pay with a Metro account were:

- Metro South customers (3% compared to <1% of Metro Central customers)
- Those hauling materials from a business only (8% compared to 1% of those hauling from a home only)
- Customers who come to the transfer station at least once a week (7% compared to 1% of those who come less often)
- Contractors and “Other Business” customers (6% and 8% respectively, compared to 1% of Residential Customers)

Figure 21
Payment Using a Metro Account
Winter survey respondents

(Base = 1,024)



Question 7: Are you using a Metro Account to pay for your load today?

May not sum to 100% due to rounding.

APPENDIX

Demographic Information

The demographic information below is based on U.S. Census data drawn from the zip codes identified in the survey as locations where respondents were coming from when they visited the transfer stations. The age estimates are biased toward younger ages because they are based on the average age of all respondents in a given zip code. These data indicate that more than half of respondents were from zip codes where the mean

age was between 35 and 39 years old. Mean income data from these customer zip codes suggests the average income for most transfer station customers is between \$31,000 and \$50,000 per year.

By location, there is a probability that Metro Central customers are, on average, younger and less affluent than Metro South customers.

	Total (1,994)	Metro Central (996)	Metro South (998)
(Base)			
Median Age			
Younger than 35	30%	40%	21%
35 to 39	57	49	63
40 to 44	13	10	15
45 or Older	<1	0	1
Average Income			
Less than \$30,000	2%	4%	<1%
\$31,000 to \$40,000	27	38	15
\$41,000 to \$50,000	32	25	39
\$50,000 or More	39	33	45
Question 1: What is your zip code?			
Source: www.census.gov			

Maps

Metro Central and Metro South Fall 2007

Metro Central and Metro South Winter 2007

Metro Central Fall 2007

Metro Central Winter 2007

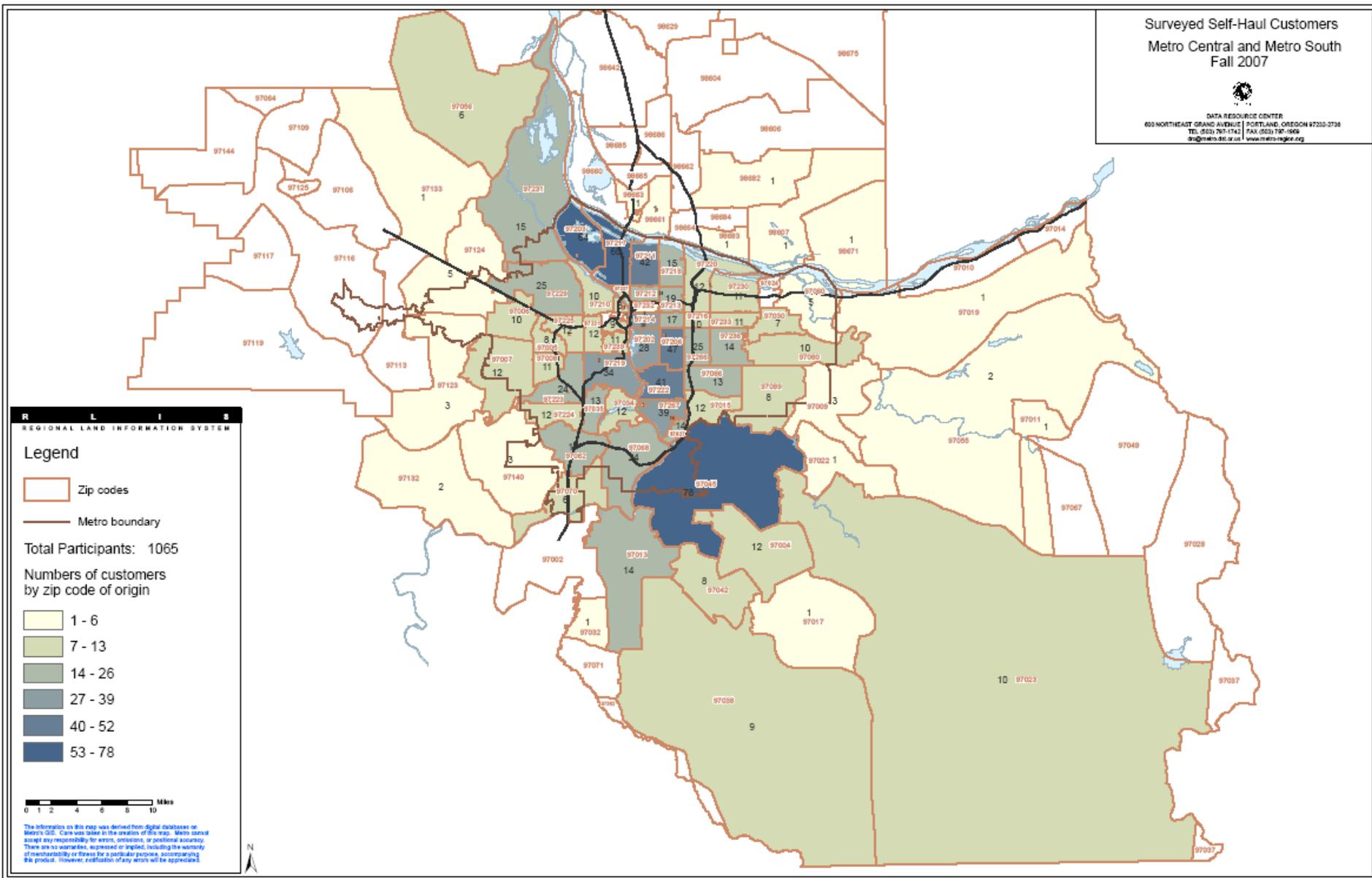
Metro South Fall 2007

Metro South Winter 2007

Surveyed Self-Haul Customers
Metro Central and Metro South
Fall 2007



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R L I S
REGIONAL LAND INFORMATION SYSTEM

Legend

- Zip codes
- Metro boundary

Total Participants: 1065

Numbers of customers
by zip code of origin

- 1 - 6
- 7 - 13
- 14 - 26
- 27 - 39
- 40 - 52
- 53 - 78



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Surveyed Self-Haul Customers
Metro Central and Metro South
Winter 2007



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R L I S
REGIONAL LAND INFORMATION SYSTEM

Legend

- Zip codes
- Metro boundary

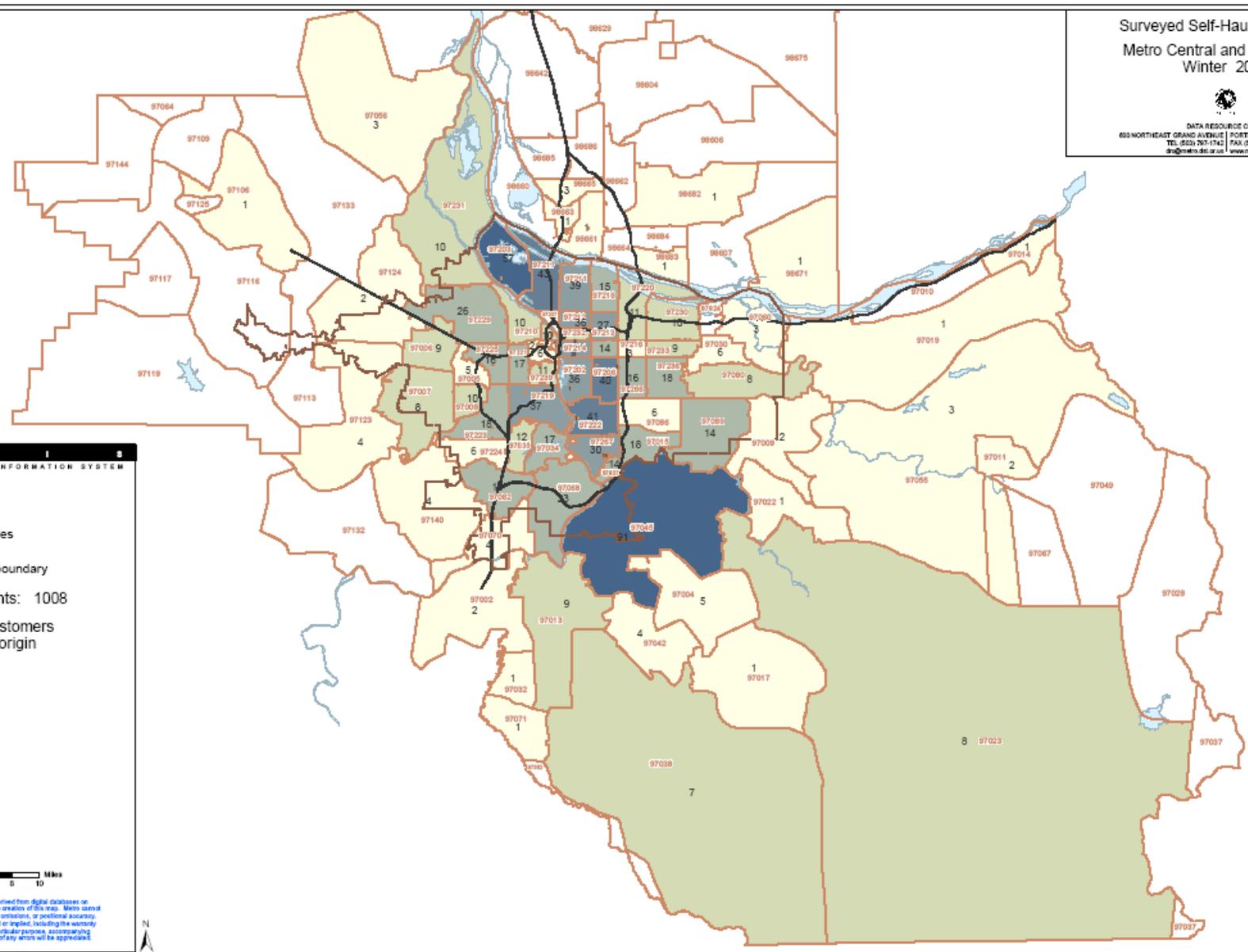
Total Participants: 1008

Numbers of customers by zip code of origin

	1 - 6
	7 - 13
	14 - 26
	27 - 39
	40 - 52
	53 - 91

0 1 2 4 6 8 10 Miles

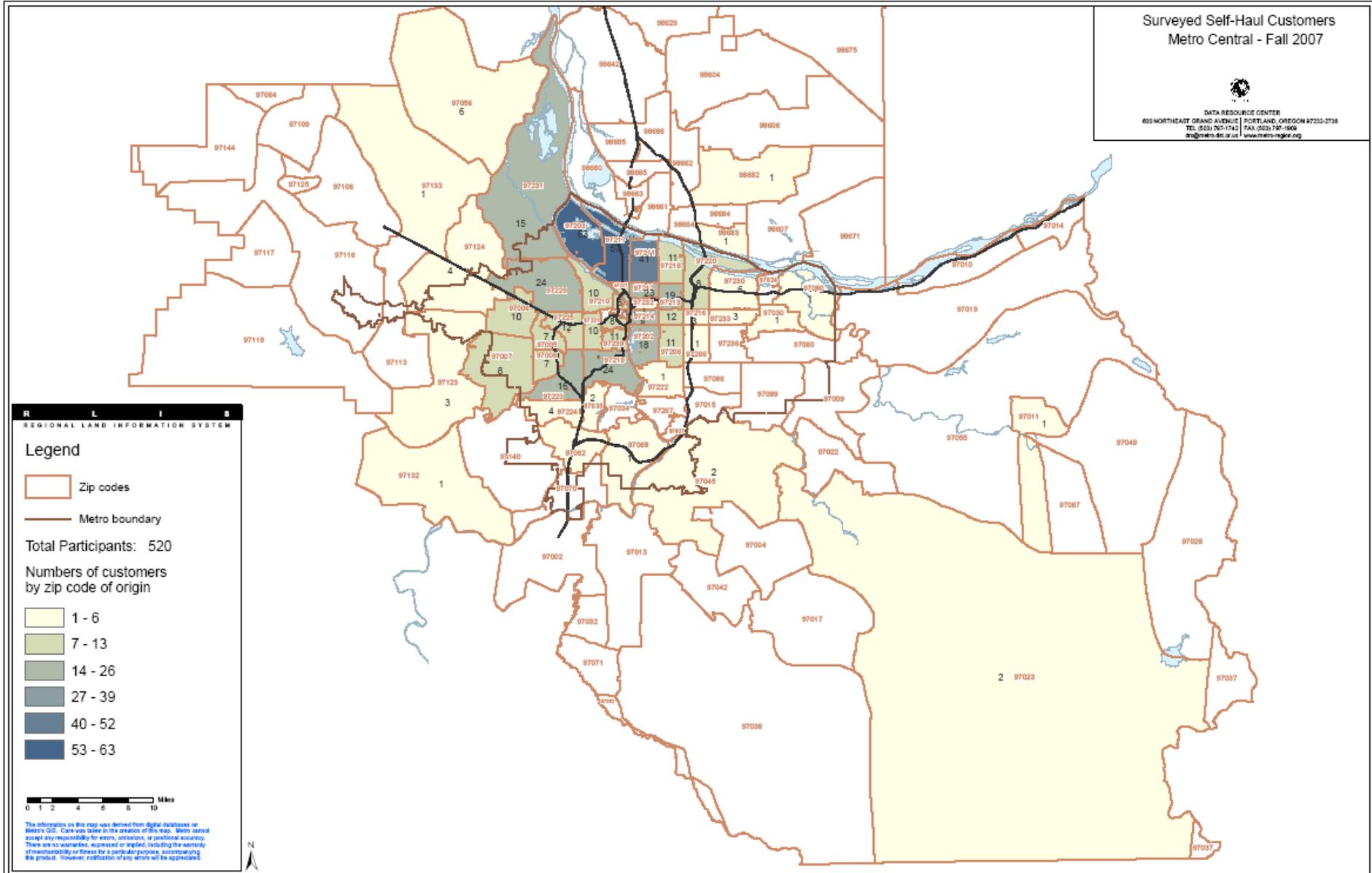
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Surveyed Self-Haul Customers
Metro Central - Fall 2007



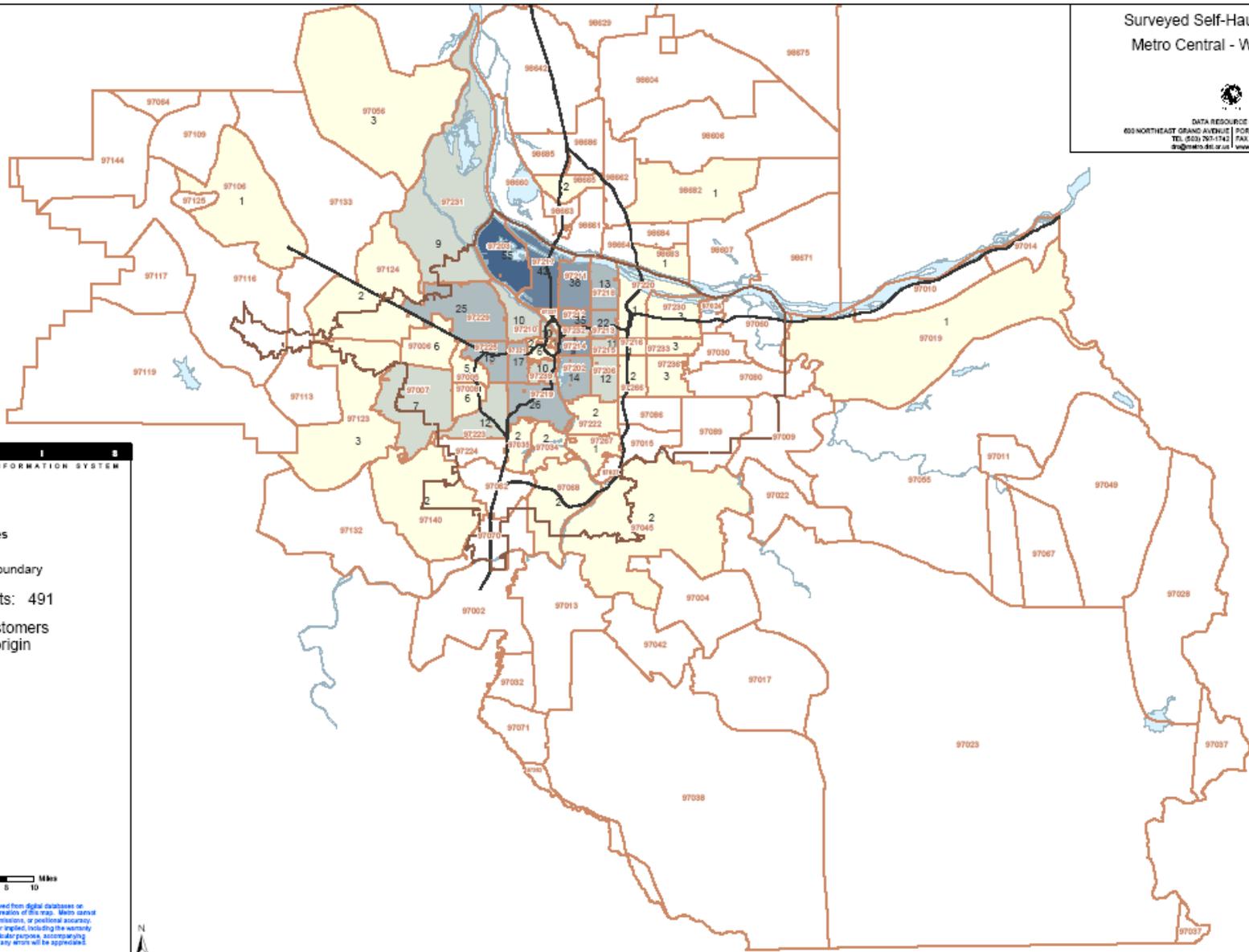
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Metro Central - Winter 2007



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R L I S
REGIONAL LAND INFORMATION SYSTEM

Legend

- Zip codes
- Metro boundary

Total Participants: 491

Numbers of customers by zip code of origin

- 1 - 6
- 7 - 13
- 14 - 26
- 27 - 39
- 40 - 52
- 53 - 55

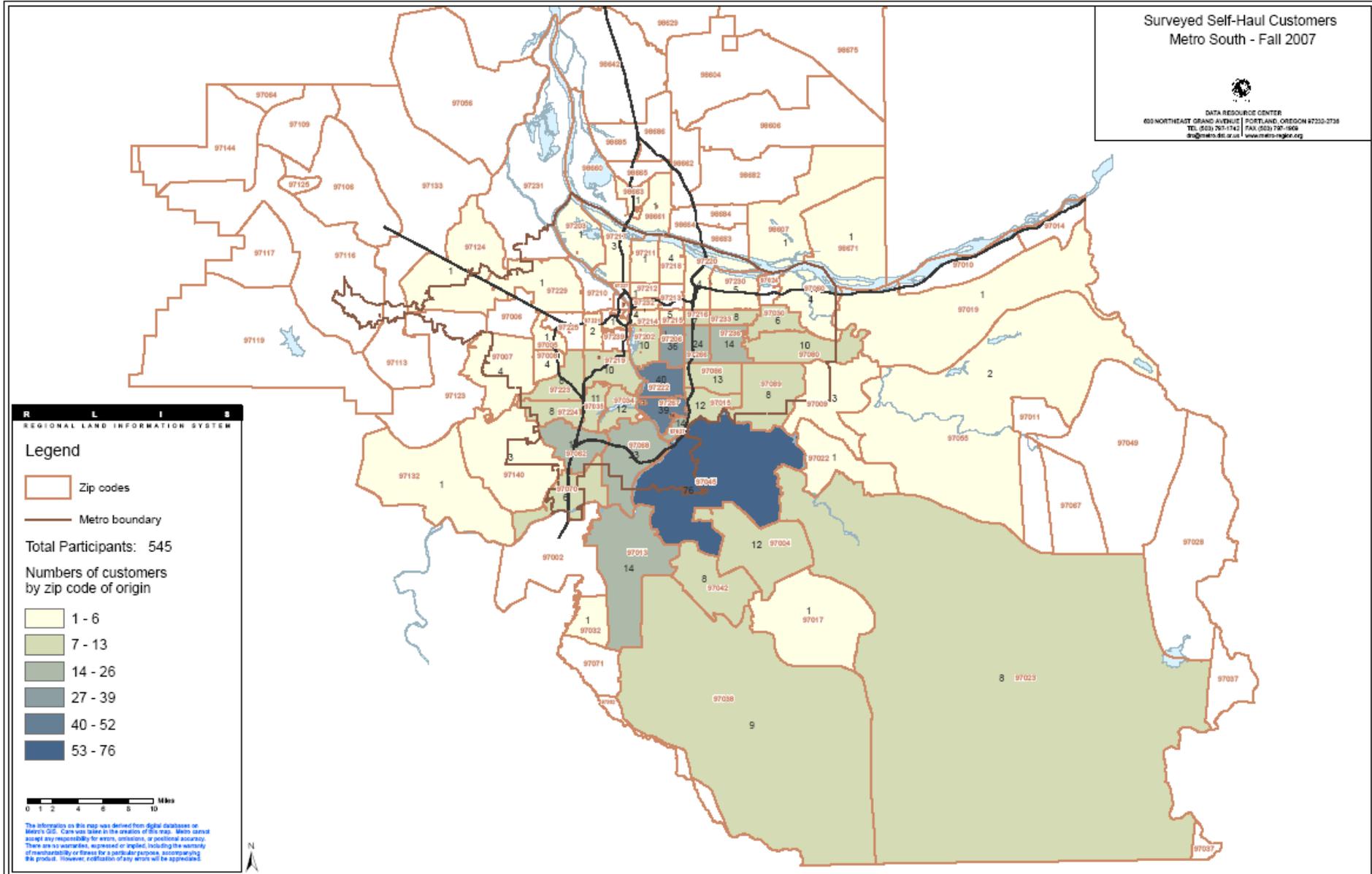
0 1 2 4 6 8 10 Miles

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Surveyed Self-Haul Customers
Metro South - Fall 2007



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R L I S
REGIONAL LAND INFORMATION SYSTEM

Legend

- Zip codes
- Metro boundary

Total Participants: 545

Numbers of customers by zip code of origin

- 1 - 6
- 7 - 13
- 14 - 26
- 27 - 39
- 40 - 52
- 53 - 76

0 1 2 4 6 8 10 Miles

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Surveyed Self-Haul Customers
Metro South- Winter 2007



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R E G I O N A L L A N D I N F O R M A T I O N S Y S T E M

Legend

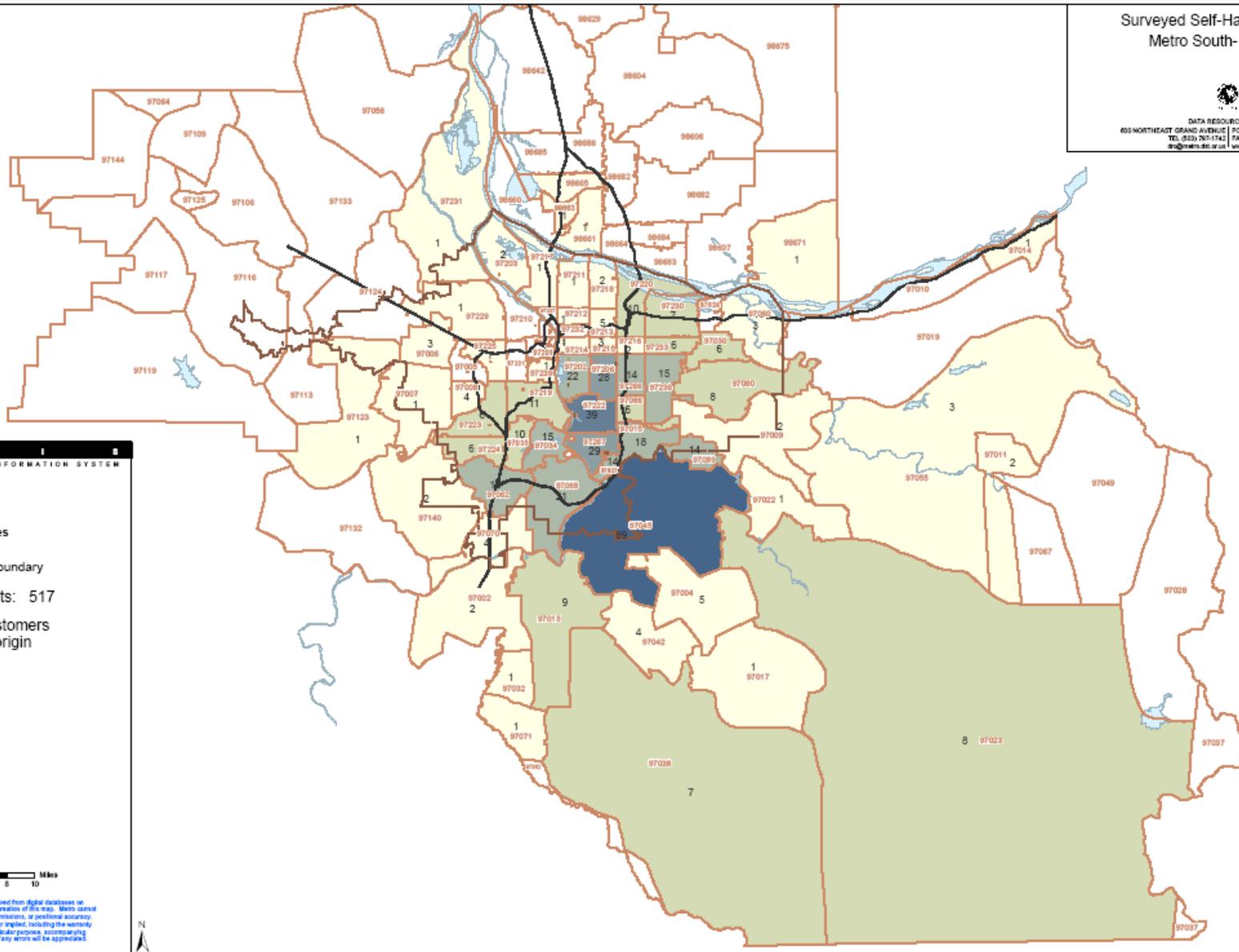
- Zip codes
- Metro boundary

Total Participants: 517

Numbers of customers by zip code of origin

	1 - 6
	7 - 13
	14 - 26
	27 - 39
	40 - 52
	53 - 89

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Customer Type Development

Residential Respondents

- Answered “Home” to Question 2 **OR**
- Answered “Both” to Question 2 and “Respondent’s home” to Question 2a and did not answer Question 2D
- Residential respondents were further subdivided into groups of <500 pounds, 500+ pounds or “no weight recorded” based on their individual load weights

Contractors

- Answered “Business” to Question 2 and “Contractor” to Question 6 **OR**
- Answered “Both” to Question 2 and Contract to Q6

Other Business

- Answered “Business” to Question 2 and NOT “Contractor” to Question 6 **OR**
- Answered “Both” to Question 2 and NOT “Contractor” to Question 6 **OR**
- Answered “Both” to Question 2 and “Hauling for someone else” to Question 2A and did not answer Question 2D

Survey Instrument



METRO

Transfer Station Self-Haul Survey

Date: _____

Interviewer: _____

Vehicle Type:

- Passenger Car
(SUV, Minivan, Sedan, Coupe, Crossover)
- Pickup Truck (Avalanche, Ridgeline)
- Box Van, Step Van, U-Haul, Budget moving truck
- Flatbed, stake truck
- Dump truck
- Other (Describe) _____

Trailer :

- None
- Single-axle
- Double-axle
- Self-dumping

1. What is your zip code? _____
2. Is this waste from a home or from a business?
 - Home → **ASK Q2A-C, THEN SKIP TO Q3**
 - Business → **GO TO Q2D**
 - Both → **ASK Q2A-D**
- 2a. **[IF HOME]** Is this waste from your home or are you hauling it for someone else?
 - Respondent's home
 - Hauling for someone else
 - Other _____
- 2b. **[IF HOME]** Do you have garbage and recycling service at your residence?
 - Yes
 - No
- 2c. **[IF HOME]** Before deciding to come here today, did you look into other disposal options like putting out extra cans or renting a dumpster from your local hauler?
 - Yes
 - No
- 2d. **[IF BUSINESS]** Which of these categories BEST describes your business? **[READ LIST]**
 - Office
 - Farm/Ranch
 - Automotive
 - Restaurant or Grocery
 - Light industrial, fabrication, welding, woodshop

 - Contractor
 - Landscaper
 - Cleanup or hauling company (1-800-GOTJUNK, Clean it up Mark, etc.)
 - Or something else _____
- 2d1. **[IF 2d = 1 THRU 5]** Why don't you have collection service at your place of business?

3. What is your reason for coming to the Transfer Station today? **[CHECK ALL THAT APPLY]**
- | | |
|--|---|
| <input type="checkbox"/> Items too big for the can | <input type="checkbox"/> Large amount of garbage |
| <input type="checkbox"/> Cheaper than curbside | <input type="checkbox"/> Remodeling |
| <input type="checkbox"/> Moving home or business | <input type="checkbox"/> Cleaning home or business |
| <input type="checkbox"/> Recycling | <input type="checkbox"/> Did not want to wait for garbage day |
| <input type="checkbox"/> No garbage service | <input type="checkbox"/> Other_____ |
4. How often do you visit a Transfer Station? **[PROBE TO FIT]**
- | | | |
|--|---|---|
| <input type="checkbox"/> Today is 1 st time | <input type="checkbox"/> One or two times a month | <input type="checkbox"/> Once a day |
| <input type="checkbox"/> Once a year | <input type="checkbox"/> Once a week | <input type="checkbox"/> More than once a day |
| <input type="checkbox"/> Two or three times a year | <input type="checkbox"/> 2 to 5 times a week | |
5. What type of waste are you hauling?
- | | | |
|--|--|--|
| <input type="checkbox"/> Household waste | <input type="checkbox"/> Yard debris | <input type="checkbox"/> Hazardous/toxic waste |
| <input type="checkbox"/> Construction demolition | <input type="checkbox"/> Special waste (PCS) | |
| <input type="checkbox"/> Mixed garbage | | |
6. Are you recycling any items in your load today?
- Yes No
7. Are you using a Metro Account to pay for your load today?
- Yes No
8. If we do further research on this topic may we contact you?
- No
- Yes → Name_____ Best number to reach you (____)_____

THANK YOU FOR YOUR TIME AND OPINIONS.