

REDUCING TRANSFER STATION SELF-HAUL TRIPS:

Lessons Learned from Around the Country

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TOPICS

- Review of Seattle project
- Analysis of options
- How to use this information

SEATTLE, WA

- ❑ Two transfer stations in City limits
- ❑ Both are in relatively dense urban areas
- ❑ Combined saw 375K visits in one year
- ❑ Combined received +394K tons materials in one year



DESCRIPTION OF PROBLEM

- ❑ Rising concern among city staff, elected officials, and residents regarding increased visits
- ❑ High levels of traffic and congestion at certain times of the day/days of the week
- ❑ Increasing diversion and GHG impacts

Goals:

- Research strategies to reduce the number of visits- particularly self-hauls
- Encourage diversion

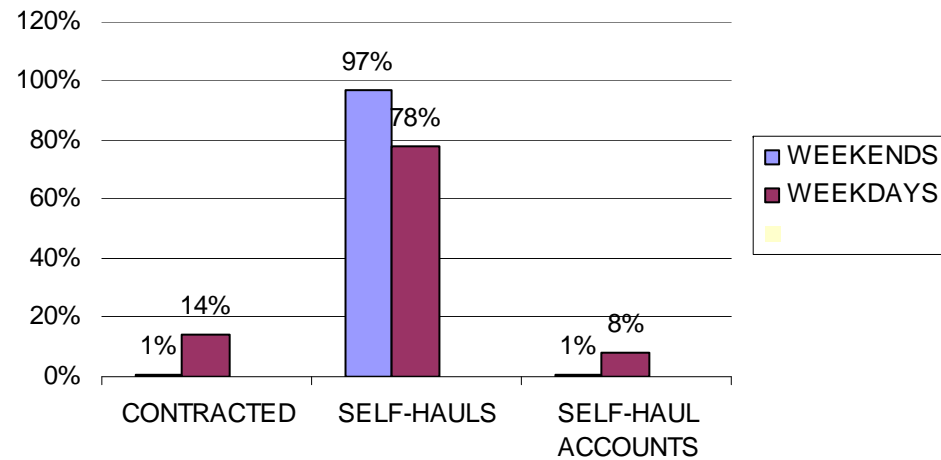
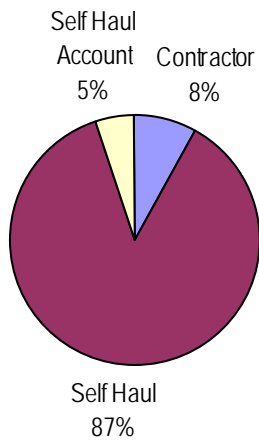


PROCESS

- ❑ Detailed review of existing data (receipts, tickets, records, etc.)
- ❑ Gain a better understanding of the self-haul sector (clipboard surveys/interviews)
- ❑ National research of transfer station programs (interviews, literature review)
- ❑ National research of other industries (interviews, literature review)

EXISTING DATA

- Examined one year of data and a set of data from 4 days (weekend and two weekdays)

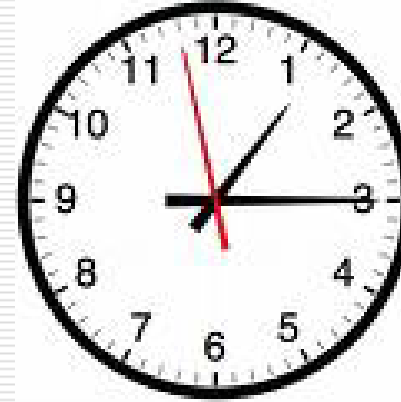


TONNAGE

	Total tons	Weekday	Weekend
Contractor	64%	74%	18%
Self-haul	26%	16%	69%
Self-haul acct.	10%	10%	13%

VISIT DURATION

Commodity	Overall	Weekdays	Weekends
Contractors			
Compost Account	1.91	1.91	
Garbage Account	7.19	7.19	7.27
<i>Total</i>	<i>6.61</i>	<i>6.58</i>	<i>7.27</i>
Self Haul			
Compost Cash	16.87	17.14	16.65
Garbage Cash	15.41	15.28	15.51
Special Appliance	16.35	17.33	15.50
Wood Waste Cash	12.80	12.59	13.31
<i>Total</i>	<i>11.35</i>	<i>11.70</i>	<i>11.06</i>
Self Haul Account			
Compost	12.81	13.21	10.00
Garbage	14.00	14.10	13.67
Wood Waste	14.33	14.33	
<i>Total</i>	<i>13.92</i>	<i>14.04</i>	<i>13.51</i>
Grand Total	11.12	11.16	11.09



EXISTING DATA REVIEW

- So what are the implications of this kind of analysis?
 - Vast majority visits are self haul
 - Contracted haulers don't visit on the weekends
 - Although most visits (traffic) are self haul, most tonnage (income) is contracted haulers
 - Compost cash and special appliance self hauls take the longest
 - Alternatives do exist for these materials and should be explored

SELF-HAULERS

□ Who are the self haulers?



WHO ARE THE SELF-HAULERS

- 4 days of on site clipboard surveys at both locations
 - 2 weekdays and one weekend
- 428 total surveys collected
- Every 5th vehicle was approached
- Detailed statistical analysis of data including analysis of sub-groups

SURVEY INSTRUMENT

Time _____ Date _____ North South Initials _____
0. IF LARGE COMPACTING HAULING TRUCK: Is this material from:
 ___% Residential ___% Multifamily ___% Gov't ___% Comm'l ___% Other _____
 From City or elsewhere? ___% City ___% Other _____

ALL OTHERS:

1. Are you dropping off your own materials or are you coming here as part of your job?

- My own materials from our house (other houses too? Y/N) Materials from my job
 ... a. *If coming as part of a job, what type of company?*
- Landscaping Restaurant/Catering
 - Bldg/Roof Contractor Office
 - Janitorial Other _____
 - 1(800)Got-Junk Type (skip 4& 6)

2. What are the main types of materials you are disposing today? (Check all that apply)

The majority of your materials are....	Some of your materials are....
<input type="checkbox"/> Household trash	<input type="checkbox"/> Household trash
<input type="checkbox"/> Construction & Demolition	<input type="checkbox"/> Construction materials
<input type="checkbox"/> White goods (washer, fridge, etc)	<input type="checkbox"/> White goods (washer, fridge, etc)
<input type="checkbox"/> Bulky items (couch, furniture)	<input type="checkbox"/> Bulky items (couch, furniture)
<input type="checkbox"/> Yard waste (limbs, leaves, etc)	<input type="checkbox"/> Yard waste (limbs, leaves, etc)
<input type="checkbox"/> Electronics	<input type="checkbox"/> Electronics
<input type="checkbox"/> Oil	<input type="checkbox"/> Oil
<input type="checkbox"/> Recyclables	<input type="checkbox"/> Recyclables
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____

a. *Is this a typical load for you?* Yes 1st Visit (skip 3&5) No → if no, what is?

3. How often do you visit the City's transfer stations?

North T/S		South T/S	
<input type="checkbox"/> Daily (___multiple)	<input type="checkbox"/> About every other month	<input type="checkbox"/> Daily (___multiple)	<input type="checkbox"/> About every other month
<input type="checkbox"/> Weekly (___multi)	<input type="checkbox"/> 4-5 times/yr	<input type="checkbox"/> Weekly (___multi)	<input type="checkbox"/> 4-5 times/yr
<input type="checkbox"/> Every other week	<input type="checkbox"/> 2-3 times/yr	<input type="checkbox"/> Every other week	<input type="checkbox"/> 2-3 times/yr
<input type="checkbox"/> 1-2 times/month	<input type="checkbox"/> Once a year	<input type="checkbox"/> 1-2 times/month	<input type="checkbox"/> Once a year
<input type="checkbox"/> 1/month	<input type="checkbox"/> Never	<input type="checkbox"/> 1/month	<input type="checkbox"/> Never

- a. *Do you visit more in certain seasons? N/Y → which? ___spring; ___summ; ___fall; ___winter*
 b. *Days of week you visit most? ___Weekdays ___Weekends ___Changes every time*
 c. *Which ones? ___M; ___Tu; ___W; ___Th; ___F; ___Sat; ___Sun*
 d. *Most common time of day (range or time) _____AM; _____PM; ___changes every time*
 e. *Do you plan visits around times that are less busy? ___always; ___sometimes; ___no*
 f. *What percent of visits do you have to wait in line at all → ___%; a "long time" → ___%?*
 g. *How long do you usually have to wait? _____minutes*
 h. *Your usual cost per visit? (range ok) \$ _____*

4. Why are you bringing your materials to the transfer station (as opposed to disposing of it in some other way) and why did you come today instead of some other day?

(Residential Only) **4a. Are you aware of other options to get rid of materials? Do you already use them (U)?** Curbside Bulky Y/N/U 1(800)Got-Junk Y/N/U Charities Y/N/U Craig's List or exchanges Y/N/U OTHER _____
 b. *If they don't use but are aware, why don't they use?* Hours Location Don't take needed materials 1 trip for all materials Other _____

5. Assuming busy times and long lines are a problem, how would you feel about some possible solutions?

	2 favorites	Most disliked
Limited hours / Banning small vehicles during busy/peak times weekdays?		
... (same) during peak times weekends?		
Higher fees to visit during peak weekday times?		
... (same) during peak/busy weekend times?		
Lower fees or reduced minimum charges on specific slow days?		
Limited number of visits per household/yr – limited coupons		
Different lines /lanes for trucks vs. cars		
Special lines/lanes for recycling only		
Other ideas/suggestions?		

6. If you knew it was more expensive to come to the transfer station during peak hours (for example, Saturdays or weekday afternoons), would you try to come during times when it was cheaper (off peak)?

Put an "X"	Twice as much per trip at busy times	If \$20 more per trip at busy times	If \$10 more per trip at busy times
Definitely avoid peak			
Will try to avoid			
No change/ effect			
Already avoid peak			
Other (specify)			

d. ***If you knew it was half as much cost to come to the transfer station during less busy times would you try to come during slower times? → ___ definitely; ___ try; ___ No change; ___ already off peak*
 e. ***If it cost \$15 less during slow times? → ___ definitely; ___ try; ___ No change; ___ already off peak*

7. How far do you typically drive to visit this transfer station?

- 0 to 2 miles 7.6 to 10 miles How many minutes did it take to drive today?
- 2.1 to 5 miles 10.1 to 15 miles How long usually?
- 5.1 to 7.5 miles Over 15 miles

... What are your cross streets? _____

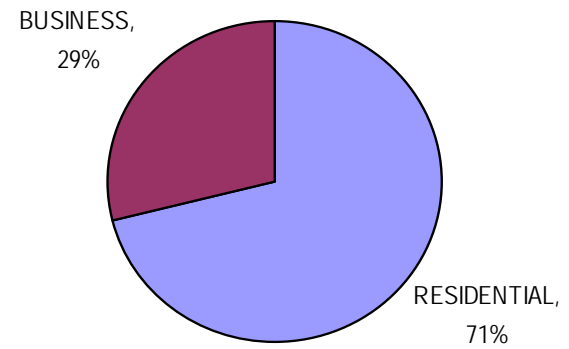
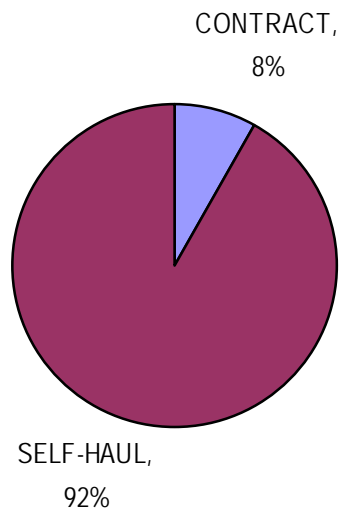
8. To Driver... How do you prefer to identify yourself: (read)

- Spanish/Hispanic/latino: white/caucasian black or African-american American Indian or Alaskan native asian pacific islander or native Hawaiian other refused (don't read)

9. DO NOT PUSH... Income: IF YOU don't mind, for statistical purposes, can I ask your approximate HH income? Is it less than 30K; to 50K; to 75K; to 100K; above?

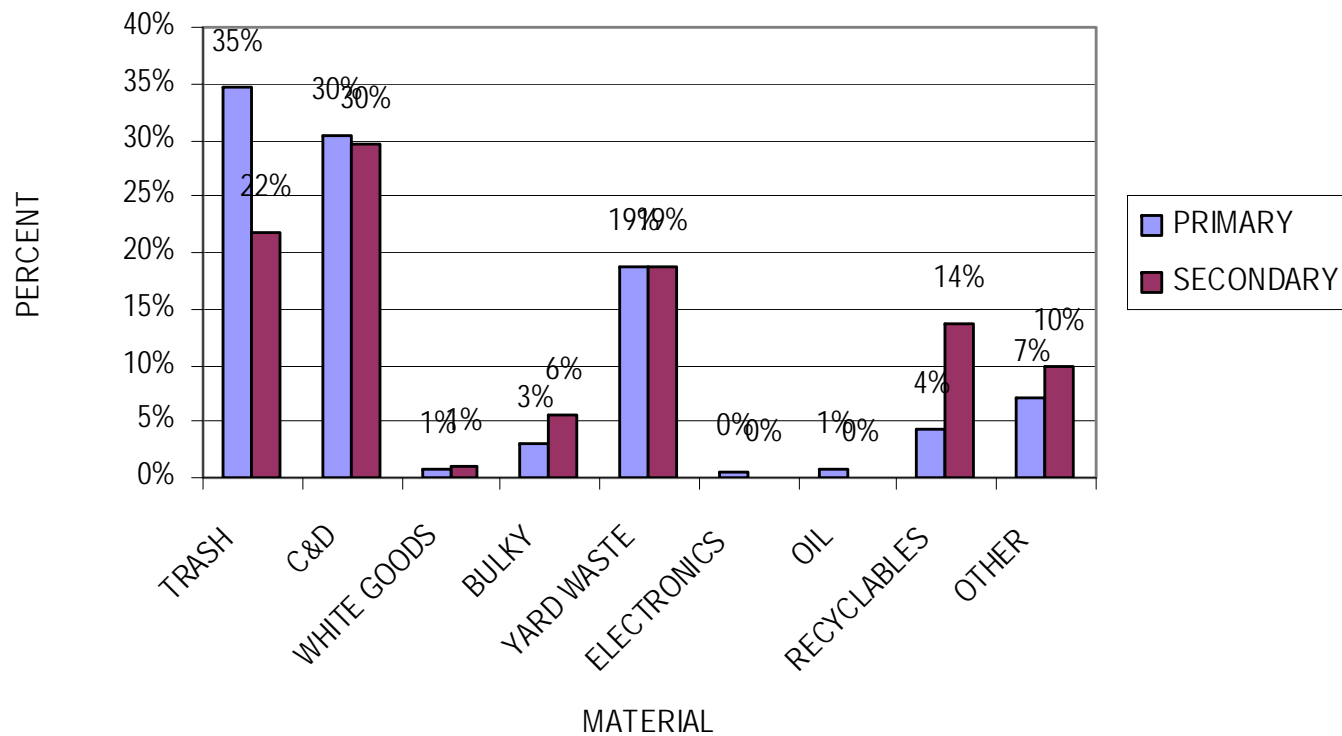
10. Other Comments? (on back)

RESULTS OF ANALYSIS



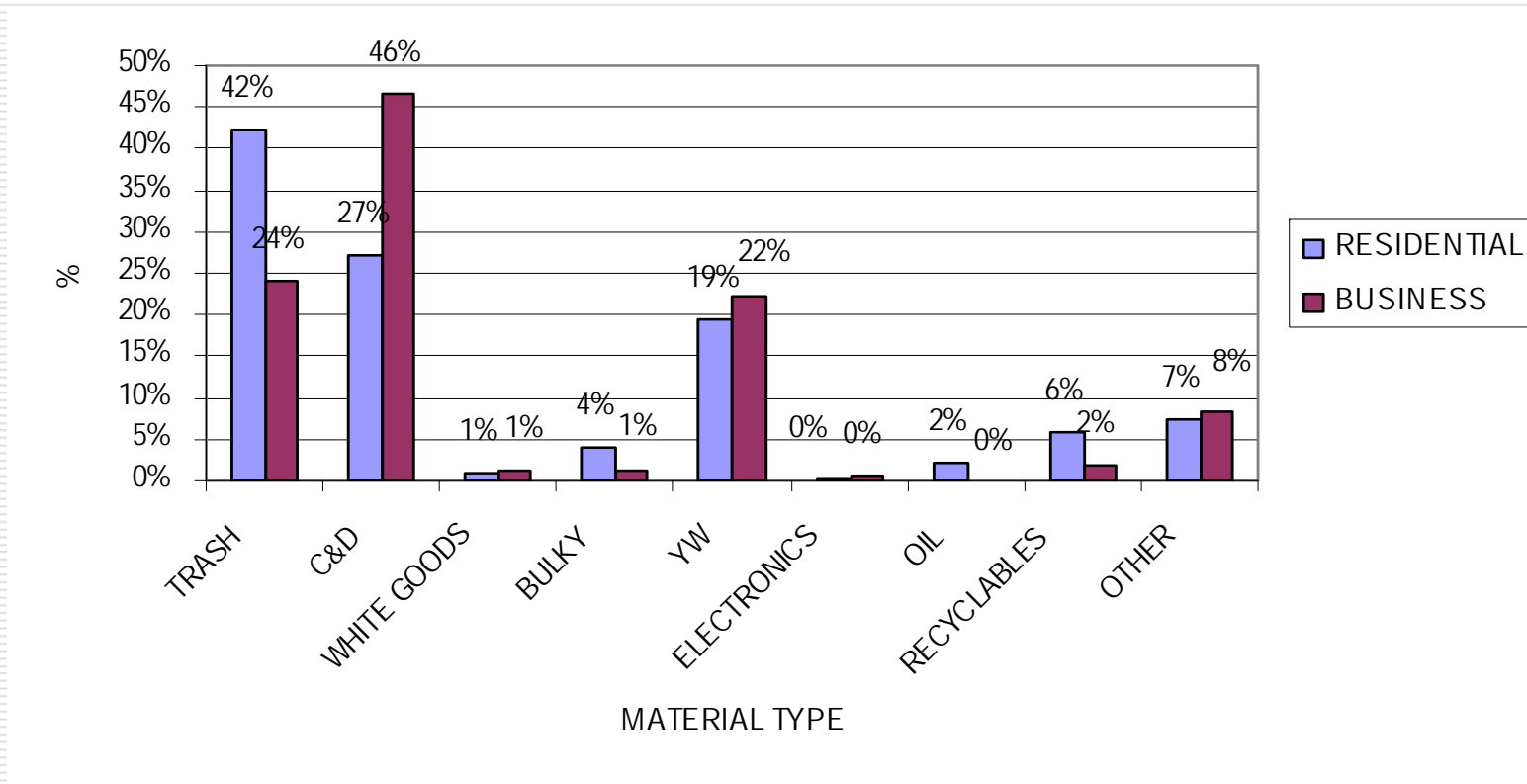
RESULTS OF ANALYSIS

Material Type



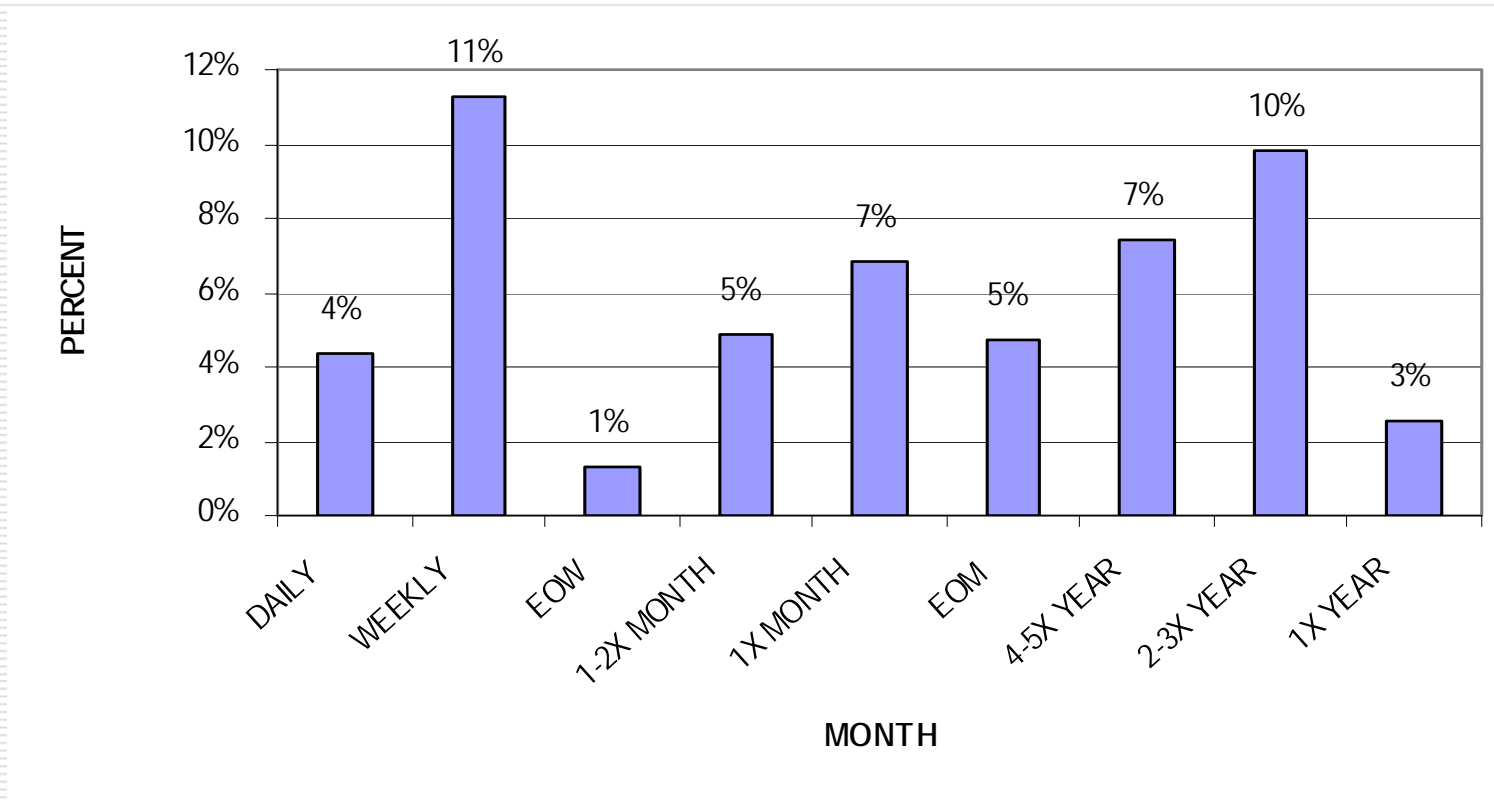
RESULTS OF ANALYSIS

Material Type by Self-haul Type



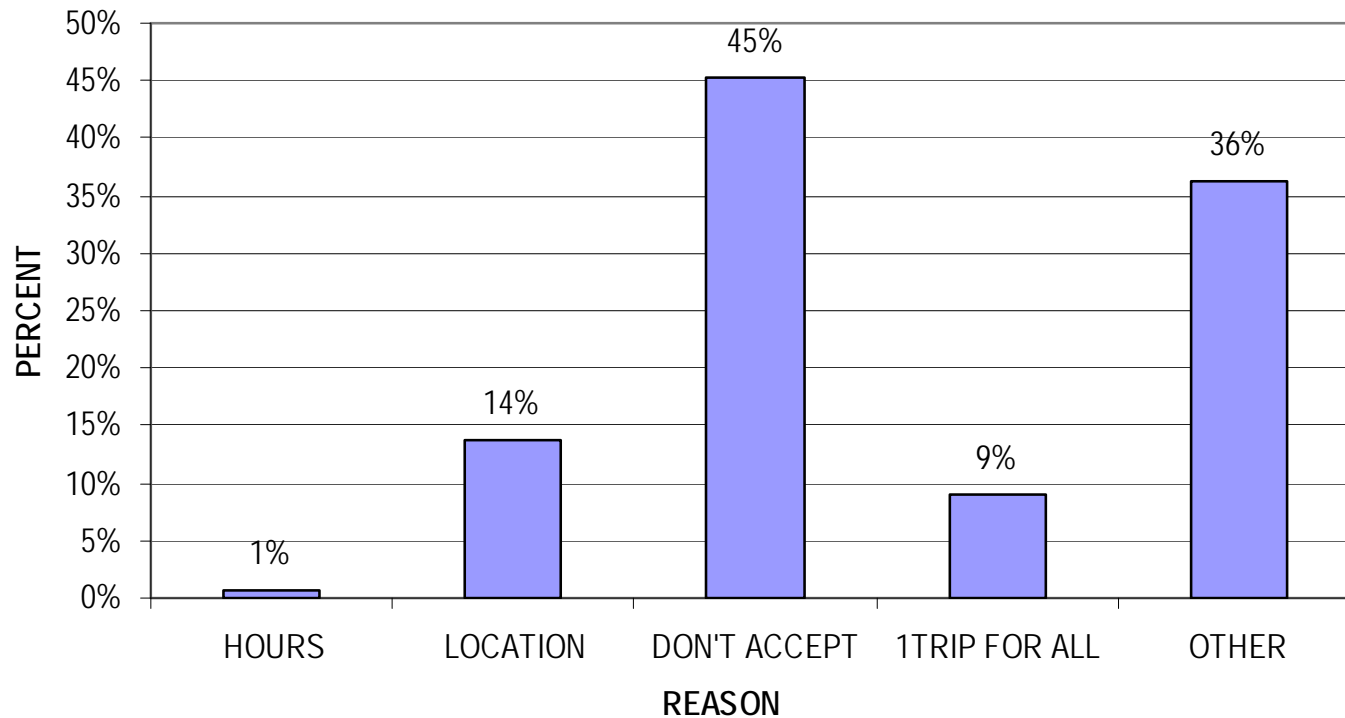
RESULTS OF ANALYSIS

Frequency of Visits



RESULTS OF ANALYSIS

Reason for not using Alternatives



SELF-HAUL ANALYSIS

- So what does it all mean?
 - Majority of self-haul trips are from the residential sector (only 29% business related)
 - One-fifth of all customers visit less than 4x per year- these are ones to target and they are...
 - Residential self-hauls
 - Visit due to convenience
 - Live close by
 - Unaware of alternatives for disposal
 - Used WTP to find out what economic signal would be needed to change behaviors
 - Convenience is king

STRATEGIES

- ❑ Contacted/interviewed over 100 communities nationwide (pop 10K to over 1M)
- ❑ Detailed literature review
- ❑ Interviews with regional and national hauling companies/TS operators
- ❑ Review of other industries



STRATEGIES

- Split up the findings into two groups
 - Time saving/wait time reduction strategies
 - Trip reduction strategies

STRATEGIES CONT'D

- Line/wait reduction
 - Less aggressive
 - U-hooks (Thanks Gary!)
 - Digital signs
 - Web-cameras
 - More aggressive
 - Design changes
- Trip Reduction
 - Less to medium aggressive
 - Rates
 - "Free" pick-ups
 - Appointments/tickets
 - More aggressive
 - Bans and facilities



WHATS HAPPENING NOW

- Implemented less aggressive wait time strategies
- Deciding on medium aggressive trip reduction strategies to implement next

WRAP-UP

- Look at existing tonnage data, receipts, etc to find:
 - Visitor types
 - Tonnage sources
 - Pass thru times (if possible)
- Clipboard surveys to:
 - Understand your customers
 - Segmentation analysis
 - Willingness to pay
 - Program preferences
- Use national data and your resources (like SWANA) to develop programs that will address gaps and needs

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