

RESEARCH DATA SERVICES, INC.

405 NORTH REO STREET • SUITE 100
TAMPA, FLORIDA 33609
TEL (813) 254-2975 • FAX (813) 254-2986

2005 Pinellas County Recycling Awareness Survey



Prepared for:
Pinellas County Utilities
Department of Solid Waste Operations

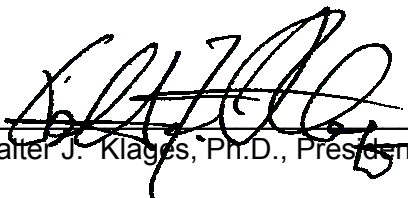
Prepared by:
Walter J. Klages, Ph.D.
President
Research Data Services, Inc.
www.KlagesGroup.com

June 23, 2005

CERTIFICATION

RESEARCH DATA SERVICES, INC., hereby certifies that, except as otherwise noted in this report:

1. We have no present or contemplated future interest in the project that is the subject of this study.
2. We have no personal interest or bias with respect to the subject matter of this report or the parties involved.
3. To the best of our knowledge and belief, the statements of fact contained in this report, upon which analyses, opinions, and conclusions expressed herein are based, are true and correct.
4. This report sets forth all of the limiting conditions (imposed by the terms of our assignment or by the undersigned) affecting the analyses, opinions, and conclusions contained in this report.
5. The underlying assumptions are based on present circumstances and information currently available.
6. Because circumstances may change and unanticipated events may occur subsequent to the date of this report, the reader must evaluate the assumptions and rationale of this report in light of the circumstances then prevailing.
7. The 2005 research results detailed in the attached were obtained by **Research Data Services, Inc.** and are based on a stratified random telephone survey of 602 interviews. Comparisons with similar survey findings for prior years (1996 – 2000) are based on data provided by **The Pinellas County Department of Solid Waste Operations**. No representation is made as to the completeness or accuracy of this information.



Walter J. Klages, Ph.D., President

June 23, 2005

Date

RESEARCH BACKGROUND AND METHODOLOGY

Florida's 1988 Solid Waste Management Act mandates that all counties in the State of Florida recycle many recoverable solid waste materials. To assist in the attainment of this objective, Pinellas County initiated a public information program. This effort is designed to educate County residents about the benefits of recycling and to expand participation in recycling programs. Since 1989, public opinion surveys have been conducted among adult Pinellas County residents to measure and track the progress of the educational campaign and to assess their level of recycling awareness and program participation.

The 2005 study was undertaken at the request of the **Pinellas County Department of Solid Waste Operations**. The survey's respondents (602 surveys) were drawn as a stratified random sample from the general population of Pinellas County households. Sample selection was based on a two-stage, random digit dialing procedure, which maximizes access to both listed and unlisted numbers.

On the first level, the survey population was defined as the universe of households in Pinellas, listed in terms of telephone exchanges serving the County. To insure the integrity and representativeness of the survey data, the study's research procedure had to give all adults (21 years of age or older) residing in a household, a known (non-zero) chance of being included in the sample. To this end, a probability-based selection process was developed for including respondents in the sample. This systematic selection process provides for the inclusion of a specific resident within a household on the basis of known probability, regardless of the number of respondents listed for that household.

A rigorously designed sampling plan (call backs, replacement calls, control groups, etc.) was implemented. To eliminate potential bias introduced by non-response, telephone numbers that could not be reached on the first call were subjected to four (4) call backs. At completion of the survey, the remaining non-response numbers were pooled and a 10% random sample "control group survey" was conducted with this population.

The results of the "control group survey" were compared with those of the main survey to measure the representativeness of the survey's findings. Such comparisons revealed no significant differences in the response matrices of the two groups.

The 2005 Recycling Awareness Survey results are based on 602 completed telephone interviews, completed during the months of March, April, and May 2005. All surveys/interviews were conducted by **Research Data Services'** staff, trained and supervised by senior professionals.

At the 95% level of confidence, the standard error of the probability sample underlying this study has a precision of $\pm 3.9\%$. This means that if a sample of 593 respondents resulted in a specific response of 36.6% who recall seeing, hearing, or reading a waste reduction or recycling message over the past year, one can be sure 95 times out of 100 that, if all members of the population were surveyed, the percentage would fall between 32.7% and 40.5%.

EXECUTIVE SUMMARY: FINDINGS AND CONCLUSIONS

The 2005 study was commissioned to track and rate the usage Pinellas County residents make of recycling and waste reduction and to gauge their images and opinions about the programs. Many questions from the 2005 **Pinellas County Recycling Awareness Survey** are not comparable to similar questions in previous survey flights, because of changes in questionnaire wording, logic flow, and order.

The principal findings and conclusions of the 2005 tracking study are summarized in the following:

- Some 69.0% of survey respondents report living in a single family home or a duplex/triplex {Q4}. These residents were asked what they typically do with their grass clippings {Q5 - *volunteered multiple response*}:

<u>Disposal of Grass Clippings</u>	<u>2004</u>	<u>2005</u>
Leave on the lawn	64.5%	69.4%
Bag and put in the garbage	14.8	17.1
Have taken away by a lawn service	15.0	15.4
Put on a compost pile	1.2	6.1

RESIDENTS LIVING IN A SINGLE FAMILY HOME/DUPLEX/TRIPLEX WHO PAY FOR GARBAGE PICKUP

- Of the residents living in a single-family home/duplex/triplex, the majority (97.6%) say they pay for garbage pick up {Q6}. These residents:
 - Report a city sanitation department (47.1%), Waste Management (24.3%), and Waste Services of Florida/BFI (9.5%) as the primary organizations that pick up their garbage {Q7}.
 - Are, on balance, satisfied with the services they receive {Q7a}. Satisfaction levels are as follows:

<u>Satisfaction with Waste Collection Service</u>	<u>2005</u>
Very Satisfied	37.3%
Satisfied	56.6
Somewhat Satisfied	4.0
Dissatisfied	2.0
Very Dissatisfied	N/A

Interestingly, residents aged 65 plus, people who have curbside recycling, and people in the Greater Seminole area have a significantly higher likelihood to be "Very Satisfied" with their service.

- Have twice a week collection (97.0%) {Q8}.
- Report at the 45.9% level that the company that picks up their garbage offers curbside collection of recyclables. This represents some 30.9% of all households (2004: 25.7%) {Q9}. Residents in the greater Dunedin/Clearwater/Safety Harbor/Largo/Highpoint/Feather Sound area are most likely to have curbside recycling service, with 70.5% of these residents reporting service availability. Likewise, Greater Seminole area residents are also significantly more likely to have curbside recycling (59.2%).

- ◇ Of those residents with curbside recycling services, 87.4% report participating in the program (2004: 83.0%) {Q9a}. They recycle the following items {Q13}:

<u>Items Recycled Curbside</u>	<u>2005 Base: All Residents with Curbside Recycling</u>	<u>2005 Base: Those Residents who Recycle Curbside</u>
Newspapers	76.5%	87.5%
Aluminum	63.9	73.1
Plastic bottles	59.6	68.1
Glass containers	27.9	31.9
Plastic bags	23.5	26.9
Cardboard	4.4	5.0
Steel cans	2.2	2.5

- Only 6.2% of respondents who participate in curbside recycling say that there are materials they know they can recycle, but don't {Q13a}. Reasons given include inconvenience, the hauler not collecting that item, thinking it is not important, and limited containers to collect recyclables {Q13b}.
- ◇ Only 11.5% of the residents with curbside recycling say they do not recycle {Q9a}. Primary reasons given include inconvenience, the service being too expensive to use, and taking recyclables to a buy back center {Q13c}. Not having time, thinking the recyclables are just thrown away, being disabled, not knowing what can be recycled, and having a relative who works for a recycling organization are also mentioned.
- ◆ Additionally, say their company offers yard waste collection (83.5%) {Q10} and bulky item pick up 75.9% {Q11}. These percentages both represent a substantial increase from 2004 (2004 yard waste: 58.3%; 2004 bulky item: 56.2%).
- ◇ Only 6.9% of those respondents who have curbside recycling, yard waste collection, or bulky item pick up, pay an additional fee for these services, a decrease from 2004's 21.9% {Q12}.
- ◆ Residents who are dissatisfied with their service relate the following concerns {Q7b}:

Reasons for Dissatisfaction -- Hauler:

Won't take everything	Should charge less for less frequent pickup
Does not provide curbside recycling	Is too expensive for the service provided
Won't pickup large items	Expense should be covered by taxes
Is messy/doesn't pick up spills	Does not come at a consistent time
Doesn't pick up when they are supposed to	

RESIDENTS WHO DO NOT HAVE CURBSIDE RECYCLING

3. Almost half (49.8%) of the people who do not have curbside recycling (including those in multi family residences) take recyclables to drop off collection centers {Q14}. This represents some 34.4% of all Pinellas residents (2004: 30.9%). The reported use of drop off centers is surprisingly uniform throughout the County.

- ◆ The majority of the respondents using drop-off collection centers choose county or municipal bins (61.8%). Some 30.9% mention school/group/community bins, 26.5% say grocery store bins, and 16.7% reference donation or charity bins {Q14a}.

- ◆ Materials dropped off for recycling are {Q14b}:

<u>Items Recycled at Collection Centers</u>	<u>2004</u>	<u>2005</u>
Newspapers	81.0%	74.0%
Aluminum cans	47.3	69.1
Plastic bottles	50.5	41.7
Paper or plastic bags	13.6	24.5
Glass bottles	38.0	18.6
Cardboard	9.8	4.4

- ◆ Reasons for not using drop off collection centers include {Q14c}:

<u>Reasons for not using drop-off centers</u>	<u>2005</u>
Inconvenient/Too much trouble	51.5%
Don't have a drop off center near by/Too far	22.0
Have a recycling bin in complex/building (MF)	15.5
Do not know locations of drop off centers	6.5
Don't have recyclables	6.0
Lack of time	5.0
Do not drive	4.5
Don't have enough room to store recyclables	3.5

ALL RESIDENTS

4. Some 36.6% of Pinellas residents have seen or heard information about how to “reduce, reuse, or recycle” waste in the past year (2004: 35.0%) {Q15}. Interestingly, residents in the Greater Seminole area are much more likely (53.8%) to report having seen, heard, or read recycling messages. Primary sources of recycling information are {Q15a}:

<u>Sources of recycling information</u>	<u>2004</u>	<u>2005</u>
Newspaper	25.5%	39.2%
On TV	38.0	31.3
In a brochure	19.7	26.7
In their utility bill	3.8	16.1
On the radio	1.4	7.8
Word of mouth	1.4	6.9

- ◆ In the 2005 study, five respondents cited special events, including a city event, the Florida State Fair, and the Green Thumb Festival.

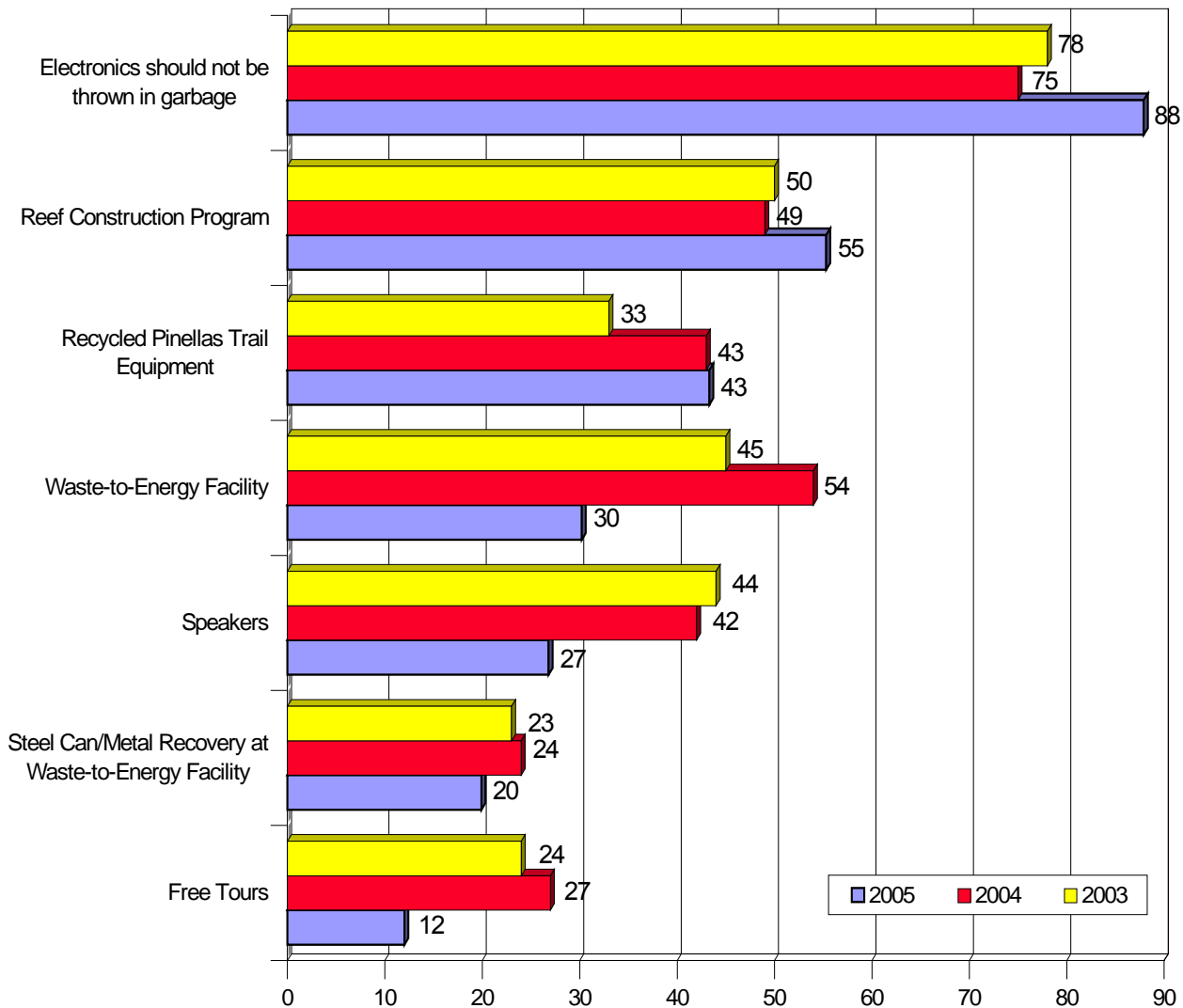
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5. Only 12.9% of residents agree that changing their shopping habits would reduce the amount of garbage that their household throws away {Q16}.
6. One of every four residents (24.6%) looks for items that are made from recycled materials or have recycled content (2004: 32.1%) {Q16a}. Women and college graduates are significantly more likely to shop for items made from recycled materials.
7. Seven (7) core survey questions address residents' awareness about recycling programs and services in Pinellas. (Note: over the years, significant changes in question wording and structure have occurred, affecting the comparability of tracking data.)

Specific **awareness levels** for the programs and services are as follows {Q17}:

Recycling Programs	2005	2004	2003	2000	1999	1998	1997
Speakers on recycling and reducing garbage are available for schools, civic organizations, or homeowners association programs.	26.8%	42.0%	44.0%	26%	22%	32%	33.1%
Pinellas County has a waste-to-energy facility that converts garbage into electricity through incineration.	30.2	53.6	45.1	39	47	54	48.7
Steel cans and other metals in your garbage are recovered at the waste-to-energy facility and recycled.	19.9	24.4	22.6	24	20	23	19.8
Free tours of the waste-to-energy facility, landfill, yard waste recycling area, and the household electronic and chemical collection programs are available.	12.0	26.7	24.1	14	19	20	24.4
The benches and picnic tables on the Pinellas Trail are made from recycled plastic.	43.3	43.4	33.1	36	32	38	36.0
Pinellas County has a reef construction program in the Gulf of Mexico that recycles concrete and other large inert material to build marine habitats.	55.3	48.9	50.1	58	47	47	53.0
Computers, televisions, and other household electronic products should not be thrown away with your regular garbage because they contain lead and other hazardous materials.	87.9	74.8	78.3	67	N/A	N/A	N/A

2003 / 2005 Awareness of Pinellas County Recycling Programs/Services (in rank order)



8. The majority (56.0%) of residents are aware that Pinellas County operates a free collection center for household electronics, computers, TVs, and chemicals like pesticides and paint so they can be disposed of in an environmentally-safe manner (2004: 45.4%) {Q18}. Some 48.5% of these report bringing household electronics or chemicals to the center (2004: 37.8%) {Q18a} within the following time period {Q18b}:

<u>How recently used center</u>	<u>2004</u>	<u>2005</u>
Past three months	21.6%	13.0%
Past six months	11.8	19.9
Past year	29.4	55.3
More than one year ago	30.4	11.2
Don't recall	6.9	0.6

9. Two of every five Pinellas residents (22.8%) are aware that mobile collections for household electronics and chemicals are routinely held on Saturdays (2004: 19.8%) {Q19}, but only 12.6% of these say they have attended a mobile collection {Q20}.
10. Pinellas residents “always” or “almost always” use the following ways of reducing their level of garbage {Q21}:

<u>Method of Reducing Garbage</u>	<u>2004</u>	<u>2005</u>
Buying products with little or no packaging	30.6%	12.0%
Buying products in larger containers	36.2	24.4
Donating used clothing or furniture to charitable organizations	91.8	93.3
Leaving grass clippings on the lawn and not bagging them (Note: Single Family/ Duplex/Triplex Residents Only)	70.5	73.3
Composting organic waste such as, food scraps, yard waste, etc. (Note: Single Family/ Duplex/Triplex Residents Only)	N/A	16.4

11. Some 6.3% of all households (including multi-family) that are not actively involved in backyard composting express an interest {Q22}. However, 13.1% of the residents who are not currently composting say they would participate if assistance such as educational programs or containers were provided {Q22a}.
12. One third of all residents (33.7%) are aware that mulch made from recycled yard waste is available to Pinellas County homes and businesses free of charge {Q23}. One of every ten respondents (10.8%) is aware that there are over 20 locations distributing the recycled mulch {Q24}. Some 14.8% of Pinellas households have used the recycled mulch program {Q25}. Respondents who are aware of the program, yet have not used it, cite the following {Q25a}:

<u>Reasons for not using free recycled mulch</u>	<u>2005</u>
Need assurance that it is safe and bug free	32.8%
Would like mulch to be delivered	23.0
Don't have a need for it	13.9
Need loading assistance	6.6
Simply not interested in program	4.9
Need to know locations to get it	4.1
Would use if it was bagged and not do messy	2.5
Don't know enough about it	1.6

13. Fully 97.1% of Pinellas residents donate unneeded clothing, furniture, or other items (2004: 96.0%) {Q26}.

14. One in seven residents (14.5%) reports changing their own oil (2004: 15.0%) {Q27}, with 84.9% of these recycling used oil (2004: 89.9%) {Q27a}.

15. Some 54.1% of the survey response population hold either full or part time employment (2004: 53.5%) {Q28}. Almost half of these (46.1%) report having a recycling program at their work place {Q30}.

<u>Recycling program at work</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>
Has recycling program	46.1%	48.7%	53.5%	56%	62%	52%	65.6%
Does not have recycling	37.7	39.9	37.0	32	32	33	26.0
Don't know	16.2	11.3	9.5	12	6	15	8.4

◇ The most commonly recycled materials at the workplace are paper [58.1%], newspaper [50.0%], aluminum [46.6%], cardboard boxes [28.4%], plastic [27.0%], and ink/laser cartridges [16.9%] {Q30a}.

◆ Only 5.9% of employed respondents know that Pinellas County offers free waste reduction assistance to businesses {Q29}.

◆ Some 36.1% of employed respondents are aware that their place of business purchases products made from recycled materials {Q31}.

<u>Recycled materials at work</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>
Workplace purchases products made with recycled materials	36.1%	38.7%	39.9%	45%	n/a	n/a	43.1%
Workplace does not purchase recycled products	28.3	30.5	25.6	13	n/a	n/a	19.3
Don't know	35.5	30.8	34.5	42	n/a	n/a	37.6

◇ Respondents volunteer copier paper [46.6%], paper towels [44.4%], office supplies (such as folders, etc.) [32.8%], toilet paper [31.0%], toner cartridges [15.5%], letterhead [13.8%], cardboard [9.5%], and plastics [5.2%] as recycled products their companies buy {Q31a}.

16. In 2005, 20.1% of the households interviewed report having children (grades K through 12) who attend school in Pinellas County {Q32 -- 2000 U.S. Census comparable: 22.1%}. Of these respondents, 48.7% know that their children recycle in school {Q33} and 68.9% are aware their children learned about recycling or waste reduction in school {Q33a}.

<u>School Recycling Programs</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>
Know children learned about recycling or waste reduction in school this past year (% yes)	68.9%	53.4%	50.4%	66%	64%	63%	58.4%

◇ Kindergarten, first, second, and fifth are most commonly mentioned as grades where children learn about recycling {Q33b}. Over half of parents (53.8%) recall their child bringing home recycling information such as brochures or newsletters {Q33c}.

17. Respondents volunteer educational initiatives as being the number one factor that would increase recycling in Pinellas County {Q38}. Primary suggestions are as follows (*multiple response*):

<u>Suggestions</u>	<u>2005</u>
Provide education	49.9%
Make curbside recycling available to everyone	40.8
Provide incentives for people to recycle	13.7
Make recycling bins more available	5.6
Advertise on radio, T.V., and billboards	5.2
Have containers in mobile home/apartment/condo complexes	2.7
Offer separate/colored/labeled bins	2.2

In addition to the other responses detailed in the database tabulations, respondents volunteered the following "other" comments and suggestions:

- ◇ *Let us know what they're collecting*
- ◇ *Pinellas County should have business recycle their rainwater and air-conditioning water for lawns.*
- ◇ *Better if Pinellas County did own recycling instead of detailing it to private companies*
- ◇ *Sending out brochures in the mail.*
- ◇ *If Pinellas County would send out speakers to mobile home parks or apt. complexes.*
- ◇ *City parks should have recycling bins...seen parents throwing recyclables into regular garbage bins*
- ◇ *Could kitty litter be recycled in special bins?*
- ◇ *More sanitation, no litter signs etc, enforcement*
- ◇ *Recycling week*
- ◇ *Explain how to process your newspapers etc properly*
- ◇ *Likes that they don't have to separate the different recyclables.*
- ◇ *More specific information provided more often through different medias*
- ◇ *Food stores could pack bags to be efficiently used. I've had people put one item in a bag.*
- ◇ *Make it more affordable for people in condos, especially for those who are on a limited income.*
- ◇ *There was a private recycling company that used to service this area. I wish they would start again.*
- ◇ *Set up a day once a month where they'll pick up anything you put out to the curb.*
- ◇ *Have information available in the mail in both languages*
- ◇ *More focus on children education in recycling*
- ◇ *Have the county pick it up.*
- ◇ *People should be aware of the consequence of not recycling.*
- ◇ *We should have one place that we can bring everything to recycle.*
- ◇ *Make businesses provide recycling bins so that more can be recycled*
- ◇ *Pay for recycling ... like .02 or .03 a can or bottle as they do in New England*
- ◇ *Pinellas should have someone pickup*
- ◇ *Have leaflets distributed from time to time to let people know about recycling*
- ◇ *Thinks recycling costs more and County would do it more if it were profitable*
- ◇ *More people would compost if containers were provided*
- ◇ *Do an article on this recycling plant.*
- ◇ *Put out recycling equipment at parks and busy corner blocks.*
- ◇ *We need a few more drop off locations in each area.*
- ◇ *Leaflets in the mail about recycling*
- ◇ *If bins were provided in neighborhoods for different recyclables*
- ◇ *When they sludge in the Gulf of Mexico instead of dumping in the ocean they should landfill low area*
- ◇ *Trash cans should not be thrown around after pick-up*
- ◇ *They took away the bins that were nearby*
- ◇ *Make better guidelines as to what can be recycled at curbside bins*
- ◇ *Make children more aware of recycling ... T.V. - radio - signs because they would alert parents to recycle.*
- ◇ *Have different sanitation companies all participate in recycling*
- ◇ *State specifically what and how to recycle*
- ◇ *Make recycling profitable like up in Massachusetts having machines all over that issue money*
- ◇ *Have deposits for bottles and cans and newspapers so more people would recycle ... eg. New York and Mass.*
- ◇ *Have deposits for items that are recyclables*
- ◇ *Make people more aware of all recycling rules as to locations and info.*
- ◇ *Make people more aware of positive reasons for recycling*
- ◇ *More bins available all over Pinellas---shopping centers--churches--etc.*
- ◇ *Should advertise on grocery bags about recycling ... that's what got her to recycle*
- ◇ *What does the county do with the profits of recycling? Let people know if there's a loss.*
- ◇ *Has been waiting for bins several months.*
- ◇ *Make each community aware of the benefits for recycling*

Demographics

The following is a short synopsis of key demographic variable characteristics of the survey population:

18. Live within city's boundaries or in the unincorporated part of Pinellas County:

<u>Live in</u>	<u>2005 Survey</u>	<u>BEBR 2002 Est.</u>
City Limits	69.0%	69.4%
Unincorporated Pinellas	31.0	30.6

19. Age of respondent:

<u>Age Category</u>	<u>2005 Survey</u>	<u>2000 U.S. Census</u>
18 - 24 years	4.3%	5.7%
25 - 34 years	12.6	14.9
35 - 44 years	17.9	19.8
45 - 54 years	20.8	17.8
55 - 64 years	14.1	13.2
65 - 74 years	15.7	13.3
75 years or older	14.7	15.3

20. Gender:

<u>Gender</u>	<u>2005 Survey</u>	<u>2000 U.S. Census</u>
Male	43.0%	46.8%
Female	57.0	53.2