
Washington Citizens for Resource Conservation

**Public Opinion Research
on Electronics Recycling**
SoundStats, August 2002

Prepared by:

PRR, Inc. and Northwest Research Group, Inc.

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Executive Summary

In August 2002, Washington Citizens for Resource Conservation commissioned PRR to conduct a consumer survey to gauge attitudes on electronics recycling.

The first objective of the survey was to discover what consumers expect from manufacturers of electronics. Do consumers care about environmentally friendly design that promotes easy recycling and decreased toxicity? Do consumers want manufacturers to provide convenient and inexpensive recycling options?

The second objective addressed consumer willingness to participate in “Product Stewardship” practices involving electronics. How would they like to see recycling fees structured? Where would they like to recycle electronic products? Would recycling fees change their purchasing practices? If they had to pay a fee, would they be willing to recycle?

The survey consisted of seven questions fielded by Northwest Research Group between August 14 and August 18, 2002. The questions were included as part of Northwest Research Group’s SoundStats omnibus phone survey. The total number of respondents was 407. Respondents were randomly selected from among King County households. Those reporting residence by zip code were divided between Seattle (141), North King County (20), East King County (93), and South King County (135).

The demographic profile of the sample group was as follows:

- 55% female, 45% male
- The sample skewed somewhat younger. Of the 390 respondents reporting their age, 30% were between 18 and 34 years of age; 74% were between 18 and 54.
- The sample was somewhat affluent. Of the 341 respondents categorizing their income, 56% have annual household incomes over \$50,000; 33% have incomes over \$75,000.
- The sample was highly educated. 54% reported a college or postgraduate degree. 86% reported at least some college education.
- Over 86% own computers; 80% have home Internet access and 94% have access at home, work, school or another location.
- 55% are married. 32% report children as part of their households.
- 87% are registered voters in the State of Washington

The overall margin of error for the sample is ± 5 percent. In this case *margin of error* means that Washington Citizens for Resource Conservation can be 95% confident that the sample survey results will be identical (within a margin of error of ± 5 percentage points) compared to the results that would have been obtained had we surveyed every household in King County.

Research highlights

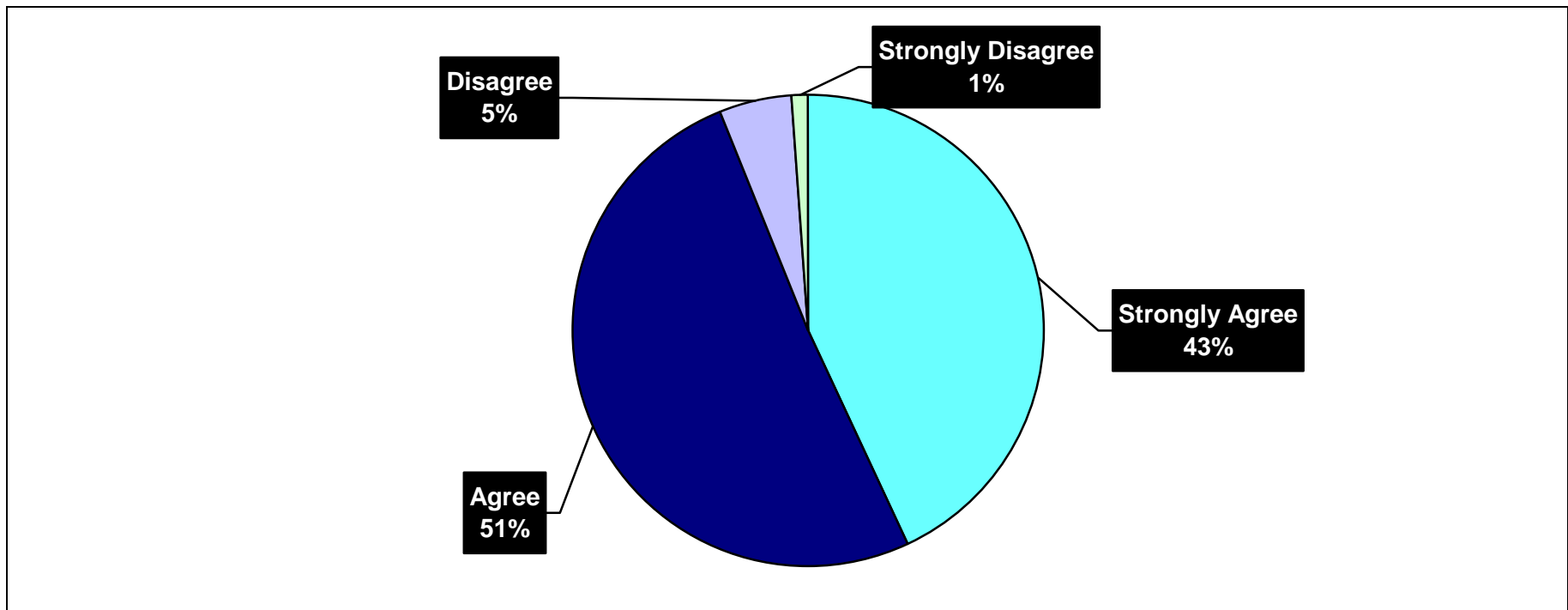
In brief, the study indicates that King County residents overwhelmingly believe that electronics manufacturers should design recyclable, less toxic products. They also want safe, convenient recycling options, preferably ongoing collection at retail outlets. And these same residents are willing to pay a substantial share of the recycling costs.

- 94% of respondents agreed that corporations that make electronic products should be responsible for designing them to be easily recyclable and less toxic. 92% also agreed that when these products contain toxic lead and mercury (as they often do), these corporations should provide a safe and convenient way to recycle them.
- 71% of respondents would prefer that pre-paid recycling costs be included in the retail cost of the product. And at least 61% of respondents would prefer to take their computers and electronic products back to a retailer for recycling, even if free recycling were also offered at local landfills, transfer stations or via shipping to the original manufacturer.
- If respondents were forced to pay for shipping to mail their computers in for recycling, only 5% of sample respondents would choose this method. If free shipping were offered, the percentage of respondents choosing this method increased to 20%. Interestingly, the majority of those who switched their opinion when free shipping was offered came from the group originally preferring a local landfill or transfer station for recycling purposes.
- If a pre-paid recycling fee of \$15 were added to the cost of a television, 86% of survey respondents said they would buy it anyway. Only 8% said they would buy over the Internet to avoid the fee.
- Faced with a \$20 fee to recycle an old computer system, 55% said they would bring the computer in for recycling. In addition, a substantial number of respondents, 34%, preferred to store the old equipment rather than pay an end-of-life recycling fee. Only 4% admitted that they would put it illegally in the garbage. While we might expect some respondents to be less than truthful when asked if they would break the law by illegally dumping a computer, it is reasonable to expect they might report that they plan to store the computer, or refuse to answer the question.

Findings

Q1 – Corporations that make electronic products should be responsible for designing them to be easily recyclable and less toxic.

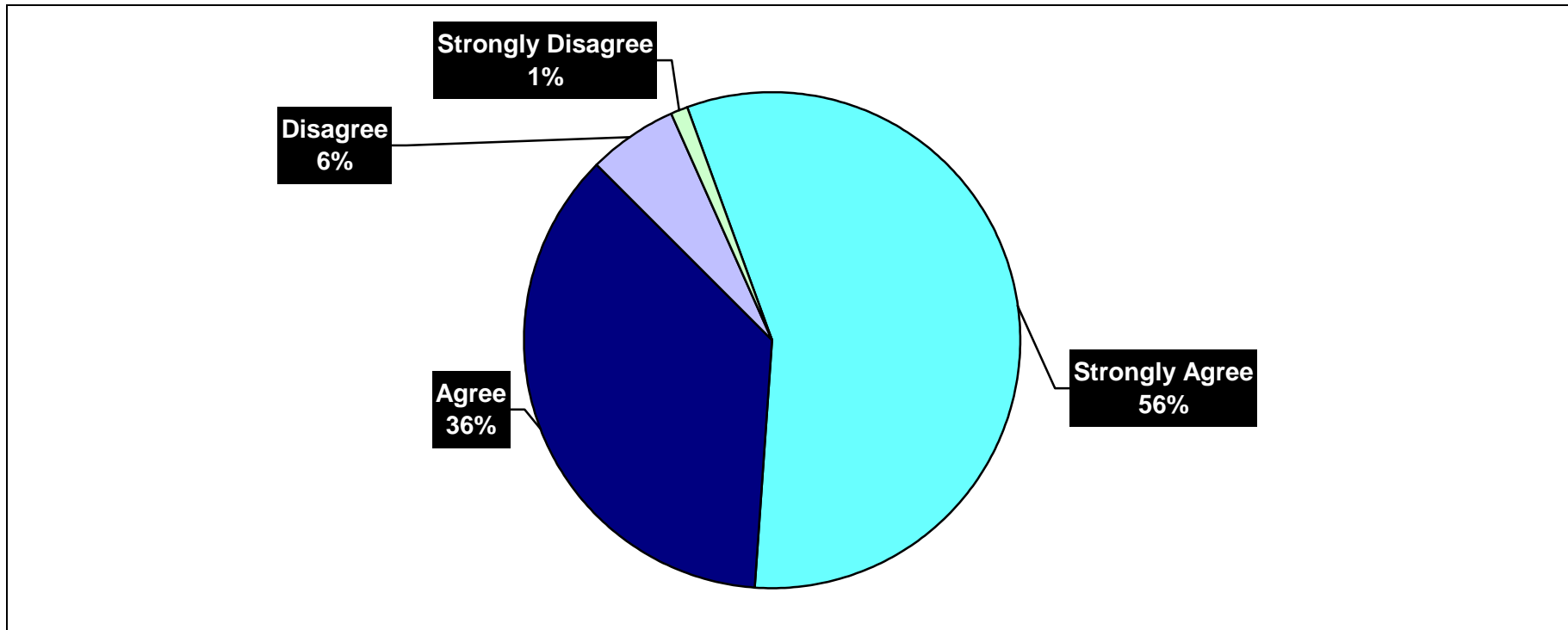
(Base = All Respondents [n=407])



- The majority (94%) of respondents “strongly agree” or “agree” that companies that make electronic products should be responsible for designing them to be easily recyclable and less toxic.
- Respondents who are younger than 65 are more likely to “strongly agree” to the statement than their older counterparts (46% compared to 26%, respectively).
- Fifty-two percent (52%) of all respondents with annual household incomes of less than \$30,000, 52 percent of respondents in Seattle and 49 percent of non-married respondents “strongly agree” that companies that make electronic products should be responsible for designing them to be easily recyclable and less toxic.

Q2 – Corporations that make products with toxic substances such as mercury and lead should be responsible for providing a safe and convenient way to recycle them.

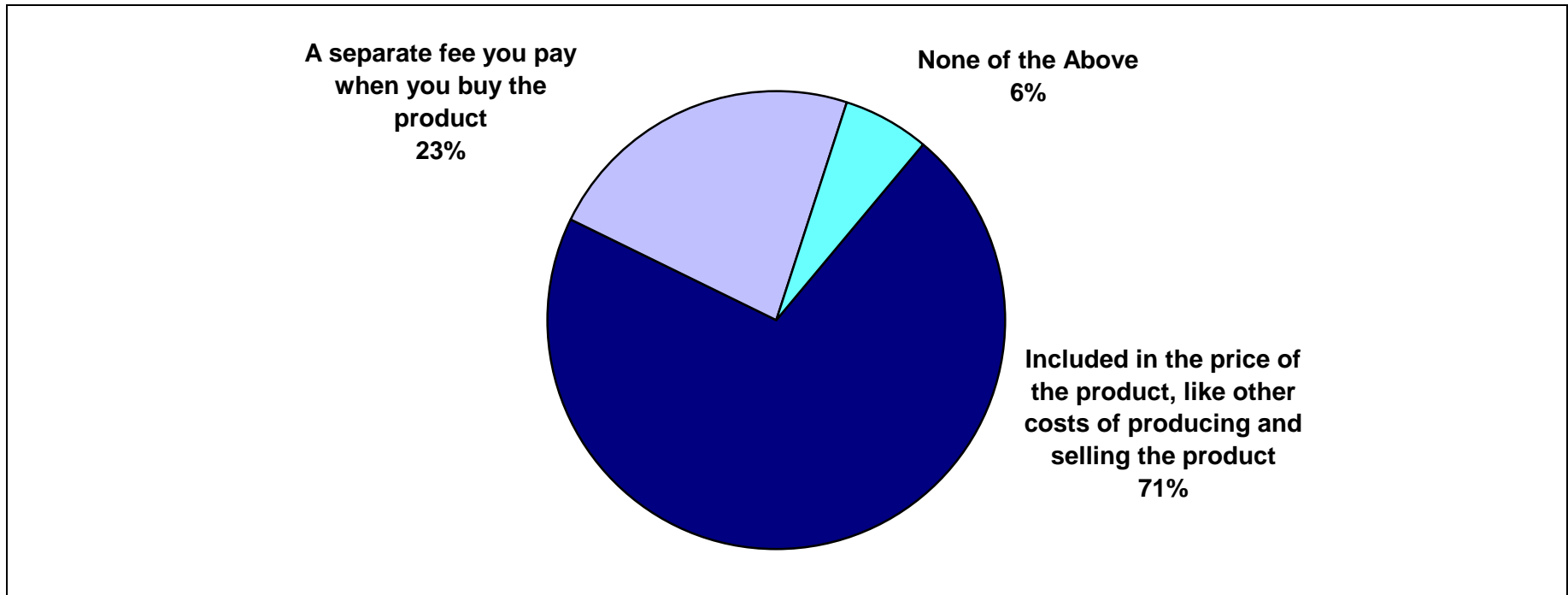
(Base = All Respondents [n=407])



- The great majority (93%) of respondents agree that companies that make products with toxic substances such as mercury and lead should be responsible for providing a safe and convenient way to recycle them.
- Respondents in Seattle are more likely to “strongly agree” with this statement than respondents in South or North King County (66% compared to 51% of South King County respondents and 35% of North King County respondents).
- Eleven percent (11%) of respondents between ages 18 and 34 and eight percent (8%) of respondents with household incomes of \$50,000 or greater “strongly disagree” or “disagree” with this statement (compared to only 2% of those aged 65 or older and 2% of respondents with household incomes of less than \$30,000).

Q3 – In the future, it's possible that the cost of a recycling system for electronic products will be pre-paid when you buy electronic products.
If this happens, do you think the recycling cost should be ...?

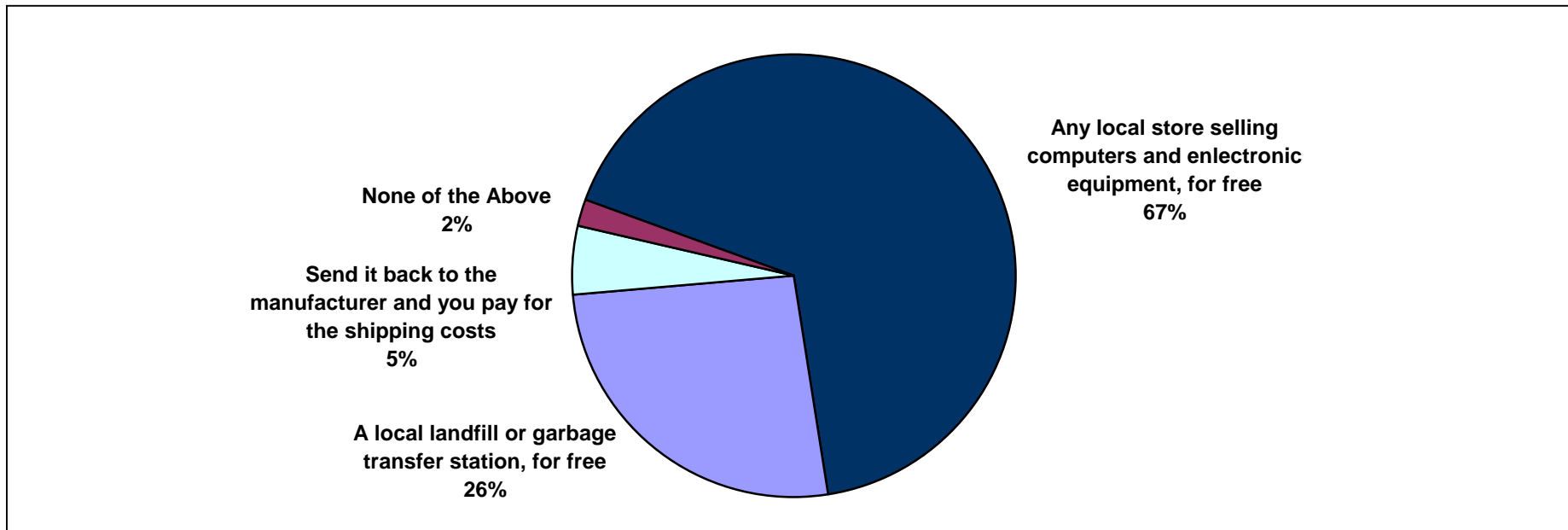
(Base = All Respondents [n=407])



- The majority (71%) of respondents report that the recycling cost should be included in the price of the product, like other costs of producing and selling the product.
- Nearly one-quarter (23%) of respondents say that recycling costs should be a separate fee you pay when you buy the product.
- Respondents between ages 55 and 64 are more likely than their older counterparts to say the recycling costs should be a separate fee you pay when you buy the product. (33% compared to 16%).

Q4 – Assuming that your computer is broken and can't be fixed. If free recycling were available, where would it be most convenient for you to take your computer for recycling? Would you say...?

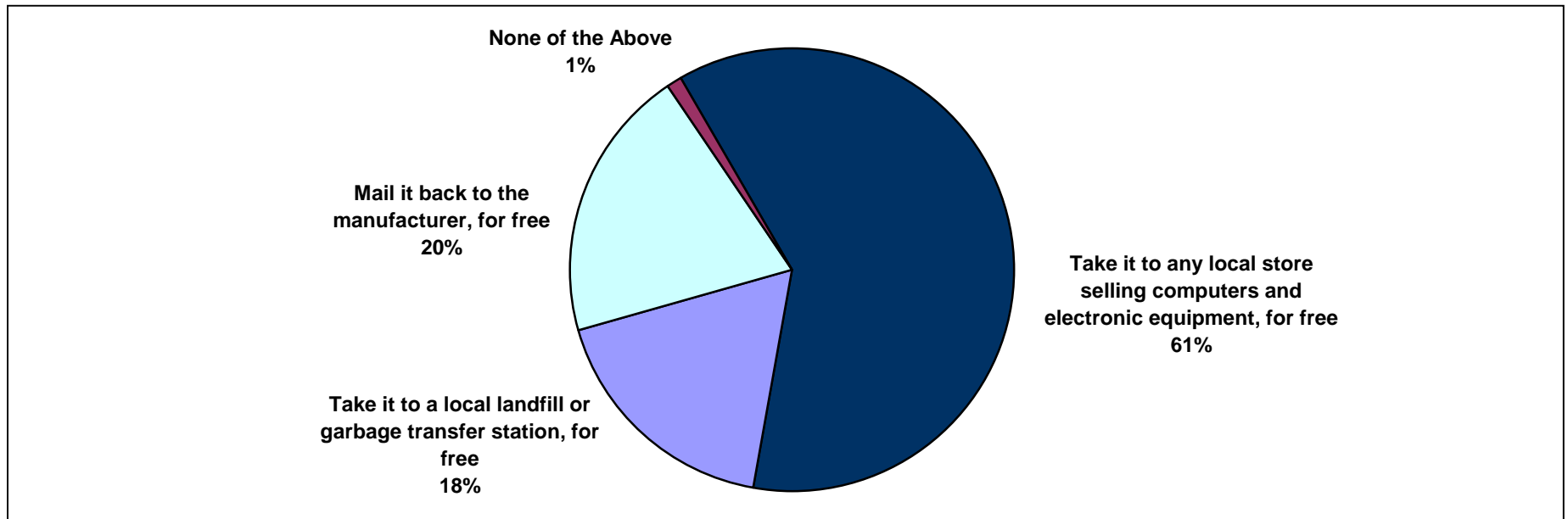
(Base = All Respondents [n=407])



- Sixty-seven percent (67%) of all respondents report that it would be most convenient for them to take the computer to any local store selling computer and electronic equipment for free, while 26 percent say that taking the computer to a local landfill or garbage transfer station for free would be most convenient.
- Only five percent (5%) of all respondents report that sending the computer back to the computer manufacturer and paying for the shipping costs themselves would be most convenient for computer recycling.
- Respondents who live in East and North King County are more likely than respondents in Seattle or South King County to say that taking their computer to any local store selling computer and electronic equipment for free would be most convenient (76% of respondents in East King County and 84% of respondents in North King County compared to 63% of respondents in Seattle or South King County).
- Respondents who are married are more likely to state that taking their computer to a local landfill or garbage transfer station for free would be most convenient (31% compared to 19% of non-married respondents, respectively.)

Q5 – Assuming that the manufacturer paid for both the shipping cost and the recycling if you mailed your computer back to them, would you find it more convenient to...?

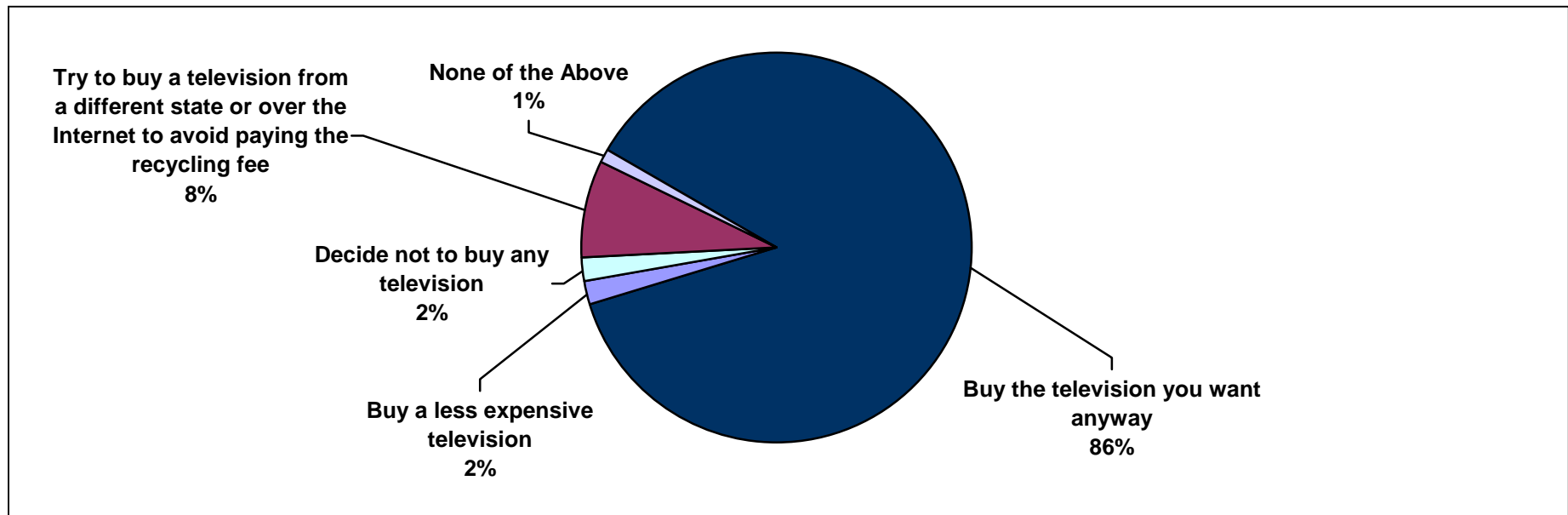
(Base = Respondents Who Prefer Options Other Than Sending Their Computer Back To The Manufacturer And Paying For The Shipping Costs Themselves [n=387])



- Among the respondents who prefer options other than sending their computer back to the manufacturer and paying for the shipping costs themselves, 20 percent say that if the manufacturer paid for both the shipping costs and recycling, mailing their computer back to the manufacturer would be more convenient.
- Sixty-one percent (61%) still say that taking their computer to any local store that sells computer and electronic equipment would be more convenient.
- Respondents who are younger than 45 are more likely than respondents aged 55 to 64 to say if the manufacturer paid for both the shipping costs and recycling, mailing their computer back to the manufacturer would be more convenient (22% compared to 8%, respectively).
- Respondents with high school or less or some college education are more likely than respondents with a college degree or higher to say that if the manufacturer paid for both the shipping costs and recycling, mailing their computer back to the manufacturer would be more convenient (25% compared to 15%, respectively).

Q6 – Suppose that when you go to buy your next television, you find out the television will cost you an extra \$15 because the price includes a prepaid recycling fee. As a result, would you...?

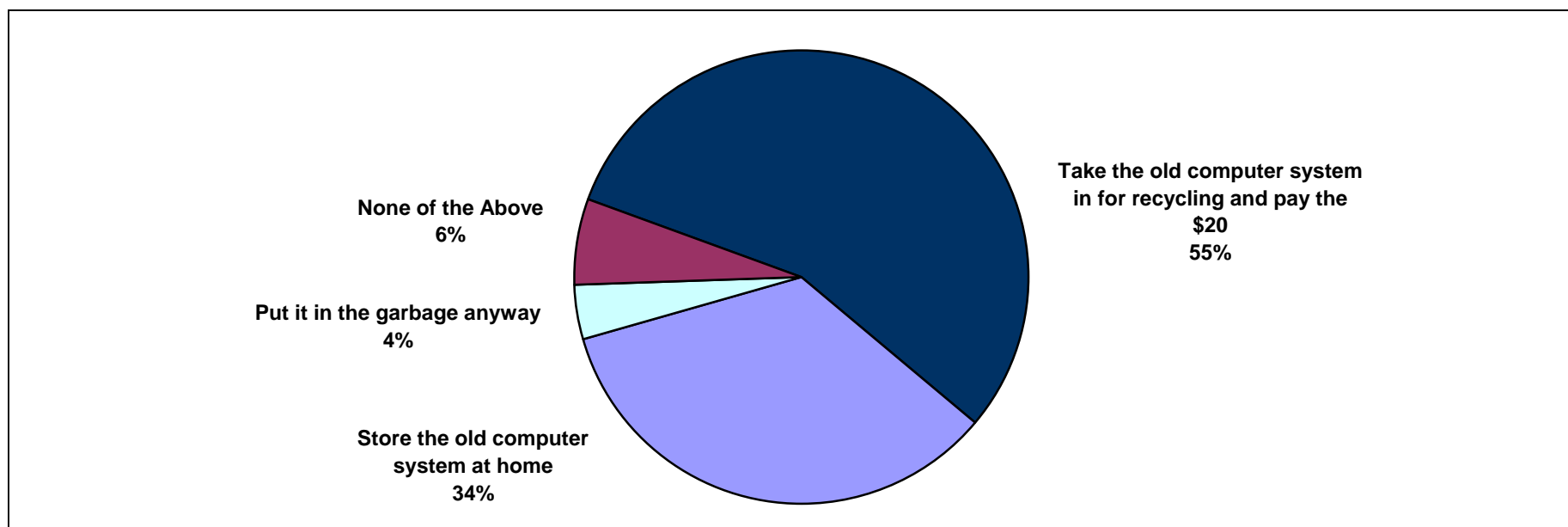
(Base = All Respondents [n=407])



- The majority (86%) of all respondents report that they would buy the television they want anyway even if it would cost extra \$15 because the price includes a prepaid recycling fee.
- Respondents with an annual household income of less than \$30,000 are more likely than respondents with an annual household income between \$30,000 and \$50,000 to say they would buy the television they want regardless of the extra \$15 due to the prepaid recycling fee (94% compared to 80%, respectively).
- Respondents with an annual household income between \$30,000 and \$75,000 are more likely than respondents with an annual household income of less than \$30,000 to say they would try to buy a television from a different state or over the Internet to avoid paying the recycling fee (12% compared to 2%, respectively).
- Respondents with children are more likely than respondents without children to say they would buy a less expensive television (6% compared to 1%, respectively).

Q7 – Suppose you upgrade to a new computer system and no longer want your old one. If you knew that it would cost you \$20 to recycle the old one, and it was illegal to put it in the garbage, would you be more likely to...?

(Base = All Respondents [n=407])



- Over half of all respondents (55%) report that if they were upgrading to a new computer system, they would take their old computer system in for recycling and pay the \$20.
- Female respondents are more likely than male respondents to say they would take their old computer in for recycling and pay the \$20 (60% compared to 50%, respectively).
- One-third (34%) of respondents say that would store their old computer at home.
- Respondents aged 18 to 44 are more likely to store their old computer system at home (37% compared to 19% of respondents aged 55 to 64).

Questionnaire

SoundStats – August 2002

Project # 02-808

PRR

WCRC Poll Questions

INTRO Hello, this is _____ from Northwest Research Group, a public opinion research firm located in Bellevue. Today/Tonight we are conducting a very brief survey and we'd like to include the opinions of your household. Please let me assure you that we are not selling anything. The survey is being conducted for research purposes only and your answers will be kept confidential. For quality purposes this call may be monitored.

[READ IF NECESSARY: The survey will include general questions on a few selected topics.]

[PRESS ANY KEY TO CONTINUE]

[FOR MID-INTERVIEW CALLBACKS]

Hello, this is _____ from Northwest Research Group, a market research firm located in Bellevue. I'm calling back to complete the survey we started.

[PRESS ANY KEY TO CONTINUE]

SCREENER

SCREEN1 Are you 18 years of age or older and a member of the household?

1 YES **[SKIP TO COUNTY]**

2 NO

9 DON'T KNOW / REFUSED **[SKIP TO TKAGE]**

SCREEN2 May I speak to a member of the household who is 18 years of age or older?

[IF PERSON OVER 18 IS TEMPORARILY UNAVAILABLE, PRESS CTRL-END AND SCHEDULE A CALLBACK.]

- 1 YES **[SKIP TO INTRO2]**
- 2 NO, NO ONE OVER 18 IN HOUSEHOLD **[SKIP TO TKAGE]**
- 9 DON'T KNOW / REFUSED **[SKIP TO TKAGE]**

INTRO2Hello, this is _____ from Northwest Research Group, a public opinion research firm located in Bellevue. Today/Tonight we are conducting a very brief survey and we'd like to include the opinions of your household. Please let me assure you that we are not selling anything. The survey is being conducted for research purposes only and your answers will be kept confidential. For quality purposes this call may be monitored.

[READ IF NECESSARY: The survey will include general questions on a few selected topics.]

[PRESS ANY KEY TO CONTINUE]

SCREEN3 Are you 18 years of age or older and a member of the household?

- 1 YES **[SKIP TO COUNTY]**
- 2 NO **[SKIP TO TKAGE]**
- 9 DON'T KNOW / REFUSED **[SKIP TO TKAGE]**

COUNTY What county do you live in?

- 1 KING
- 2 PIERCE **[SKIP TO TKCOUNTY]**
- 3 SNOHOMISH **[SKIP TO TKCOUNTY]**
- 9 OTHER/ DK/ REF **[SKIP TO TKCNTY2]**

GENDER [ENTER RESPONDENT'S GENDER]

- 1 MALE
- 2 FEMALE

PRR – WCRC POLL QUESTIONS

Q1 Computers, cell phones and other electronic products contain toxic materials such as mercury and lead that can create problems when disposed in landfills. Do you strongly agree, agree, disagree, or strongly disagree with the following statement:

Corporations that make electronic products should be responsible for designing them to be easily recyclable and less toxic.

- 1 STRONGLY AGREE
- 2 AGREE
- 3 DISAGREE
- 4 STRONGLY DISAGREE
- 9 DON'T KNOW / REFUSED

Q2 Do you strongly agree, agree, disagree or strongly disagree with the following statement.

Corporations that make products with toxic substances such as mercury and lead should be responsible for providing a safe and convenient way to recycle them.

- 1 STRONGLY AGREE
- 2 AGREE
- 3 DISAGREE
- 4 STRONGLY DISAGREE
- 9 DON'T KNOW / REFUSED

Q3 In the future, it's possible that the cost of a recycling system for electronic products will be pre-paid when you buy electronic products. If this happens, do you think the recycling cost should be...

[READ & ROTATE OPTIONS]

- 1 Included in the price of the product, like other costs of producing and selling the product, or
- 2 A separate fee you pay when you buy the product.
- 3 NONE OF THE ABOVE
- 9 DON'T KNOW / REFUSED

Q4 Assume that your computer is broken and can't be fixed. If free recycling were available, where would it be most convenient for you to take your computer for recycling? Would you say...

[SELECT ONE] [ROTATE OPTIONS]

- 1 Any local store selling computers and electronic equipment, for free
 - 2 A local landfill or garbage transfer station, for free
 - 3 Send it back to the computer manufacturer using UPS or US Postal Service, and **you** pay for the shipping costs.
- [SKIPTO Q6]**
- 4 NONE OF THE ABOVE
 - 9 DON'T KNOW / REFUSED

Q5 **[ASK IF Q4 NE 3]** Assuming that the manufacturer paid for **both** the shipping cost and the recycling if you mailed your computer back to them, would you find it more convenient to...

[ROTATE OPTIONS IN SAME ORDER AS Q4]

- 1 Take it to any local store selling computers and electronic equipment, for free
- 2 Take it to a local landfill or garbage transfer station, for free
- 3 Mail it back to the computer manufacturer, for free.
- 4 NONE OF THE ABOVE
- 9 DON'T KNOW / REFUSED

Q6 Suppose that when you go to buy your next television, you find out the television will cost you an extra \$15 because the price includes a prepaid recycling fee. As a result, would you...

[SELECT ONE]

- 1 Buy the television you want anyway
- 2 Buy a less expensive television
- 3 Decide not to buy any television
- 4 Try to buy a television from a different state or over the Internet to avoid paying the recycling fee
- 5 NONE OF THE ABOVE
- 9 DON'T KNOW / REFUSED

Q7 Suppose you upgrade to a new computer system and no longer want your old one. If you knew that it would cost you \$20 to recycle the old one, and it was illegal to put it in the garbage, would you be more likely to...

[SELECT ONE] [ROTATE OPTIONS]

- 1 Take the old computer system in for recycling and pay the \$20
- 2 Store the old computer system at home in the closet, basement or garage, while you try to find something else to do with it
- 3 Put it in the garbage anyway
- 4 NONE OF THE ABOVE
- 9 DON'T KNOW / REFUSED

DEMOGRAPHICS

EDUC Now I have a few demographic questions which will be used to group your answers. What is the highest level of education that you have had the opportunity to complete? Would it be...

- 1 High school graduate or less,
- 2 Some college, associate degree, or technical/vocational school,
- 3 Bachelor's degree or four-year college graduate, or
- 4 Post-graduate study or degree?
- 9 DON'T KNOW / REFUSED

EMPLOY What is your employment status? Are you...

- 1 Employed full-time,
- 2 Employed part-time,
- 3 Self-employed,
- 4 A student,
- 5 Retired,
- 6 A homemaker, or
- 7 Currently unemployed?
- 9 DON'T KNOW / REFUSED

ETHNIC Which of the following best describes your ethnic background?

- 1 White / Caucasian,
- 2 African-American,
- 3 Asian / Pacific-Islander,
- 4 Native-American, or
- 5 Hispanic?
- 8 OTHER **[SPECIFY]**
- 9 DON'T KNOW / REFUSED

VOTER Are you registered to vote in the state of Washington?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

MARITAL What is your current marital status? Are you...

- 1 Married
- 2 Single [PROBE: "Do you mean never married?"]
- 3 Divorced
- 4 Widowed, or
- 5 Separated?
- 8 OTHER **[SPECIFY]**
- 9 DON'T KNOW / REFUSED

CHILD How many children under the age of 18 currently live in your household?

___ ENTER ACTUAL NUMBER

99 DON'T KNOW / REFUSED

[IF CHILD = 0, SKP ZIPCODE]

CHILD1 How many of these children are under the age of 6?

___ ENTER ACTUAL NUMBER

99 DON'T KNOW / REFUSED

CHILD2 How many of these children are age 6 to 11?

___ ENTER ACTUAL NUMBER

99 DON'T KNOW / REFUSED

CHILD3 How many of these children are age 12 to 17?

___ ENTER ACTUAL NUMBER

99 DON'T KNOW / REFUSED

ZIPCODE What is your home zip code?

_____ ENTER ZIP CODE

99999 DON'T KNOW / REFUSED

TRAVEL What is your primary mode of travel?

- 1 CAR **[PROBE: "Do you drive alone or with at least one other person in the car?"]**
- 2 BUS
- 3 CARPOOL / VANPOOL
- 4 MOTORCYCLE
- 5 BICYCLE
- 6 WALK
- 8 OTHER **[SPECIFY]**
- 9 DON'T KNOW / REFUSED

COMPUTER Do you have a computer at home?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

INTERNET1 Do you currently have access to the Internet at any of the following locations?

[SELECT ALL THAT APPLY]

[PAUSE AFTER EACH RESPONSE, WAIT FOR ANSWER]

- 1 Home?
- 2 Work?
- 3 School?
- 4 Library?
- 5 OTHER **[SPECIFY]:**
- 6 NONE / NO ACCESS **[SKIP TO INCOME]**
- 9 DON'T KNOW / REFUSED **[SKIP TO INCOME]**

INTERNET2 **[FOR EACH 'YES' ANSWER TO INTERNET1, ASK:]** Have you accessed the Internet at **[INSERT LOCATION FROM INTERNET1]** in the last four weeks?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

INCOME Please stop me when I reach the bracket which includes your total annual household income for last year.

- 1 Under \$20,000,
- 2 \$20,000 up to \$30,000,
- 3 \$30,000 up to \$40,000,
- 4 \$40,000 up to \$50,000,
- 5 \$50,000 up to \$60,000,
- 6 \$60,000 up to \$75,000,
- 7 \$75,000 up to \$100,000, or
- 8 Over \$100,000?
- 9 DON'T KNOW / REFUSED

BIRTH In what year were you born?

- _____ ENTER YEAR
- 9999 DON'T KNOW / REFUSED

DIAL And did I dial [PHONE NUMBER]?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

CORRECT What is your correct phone number?

_____ENTER PHONE NUMBER

THANK YOU

THANK That concludes our survey. Thank you very much for your time today, your answers will be very helpful.

[PRESS ANY KEY TO END INTERVIEW]

INTNUM **[PLEASE ENTER YOUR INTERVIEWER NUMBER]**

_____ ENTER NUMBER

999 DON'T KNOW / REFUSED

TKQUOTA Thank you very much for your time, we have already completed our surveys with households in your area.

[PRESS ANY KEY TO END INTERVIEW]

TKAGE Thank you for your time. Today we are looking for households with members eighteen years or older.

[PRESS ANY KEY TO END INTERVIEW]

TKCOUNTY Thank you for your time. Today we are looking for households in King County only.

[PRESS ANY KEY TO END INTERVIEW]

TKCNTY2 Thank you for your time, but I am unable to continue without that information.

[PRESS ANY KEY TO END INTERVIEW]