



Solid Waste Roadmap Intercept Survey Report of Findings

SUBMITTED TO

Metro

Submitted by **PIVOT**

November 2015

Primary Research Objectives

- Completion of 800-1,000 surveys with a mixture of responses generated from customers of Metro facilities and venues and other local events in Washington, Clackamas, and Multnomah counties.
- Determine Metro area citizens' interest and willingness to support different long-term options for managing the region's garbage.
- Gather relevant demographic data to ensure the sample is as representative of the Metro region as possible.



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Methodology

- Intercept surveys with 1,003 Metro area residents between August 14 and October 15, 2015.
- Interviews were conducted on weekdays and weekends in Multnomah, Clackamas, and Washington counties.
- Usually 2 interviewers working at each event/location, and 3 in some situations.
- Length of interview averaged 5 minutes.
- Interviewers are trained on techniques for randomness to ensure the most accurate representation of Metro area residents at the various events and locations where they surveyed.
- Ten surveys were conducted in Spanish; the rest in English.



Survey Locations – Multnomah County Neighborhood Events

| Location / Event | | Location / Event | |
|-------------------------------------|----|-----------------------------------|----|
| Chapman School/Wallace Park | 30 | Oaks Amusement Park | 22 |
| Division-Midway Festival of Nations | 26 | Portland Mercado | 53 |
| GLEAN Art Show | 31 | Southwest Portland Farmers Market | 22 |
| King Farmers Market (NE Wygant) | 49 | | |



Survey Locations – Washington and Clackamas County Neighborhood Events

| Location / Event | | Location / Event | |
|-------------------------------------|-----|----------------------------------|----|
| Beaverton Farmers Market | 70 | Pets on Parade in Lake Oswego | 22 |
| Forest Grove Farmers Market | 59 | Tigard Farmers Market | 21 |
| Hillsboro Neighborhood Cleanup | 101 | Tigard Neighborhood Cleanup | 93 |
| Milwaukie Library and Lunch Concert | 30 | West Linn Music in the Park | 44 |
| Oregon City Farmers Market | 26 | Wilsonville Neighborhood Cleanup | 50 |



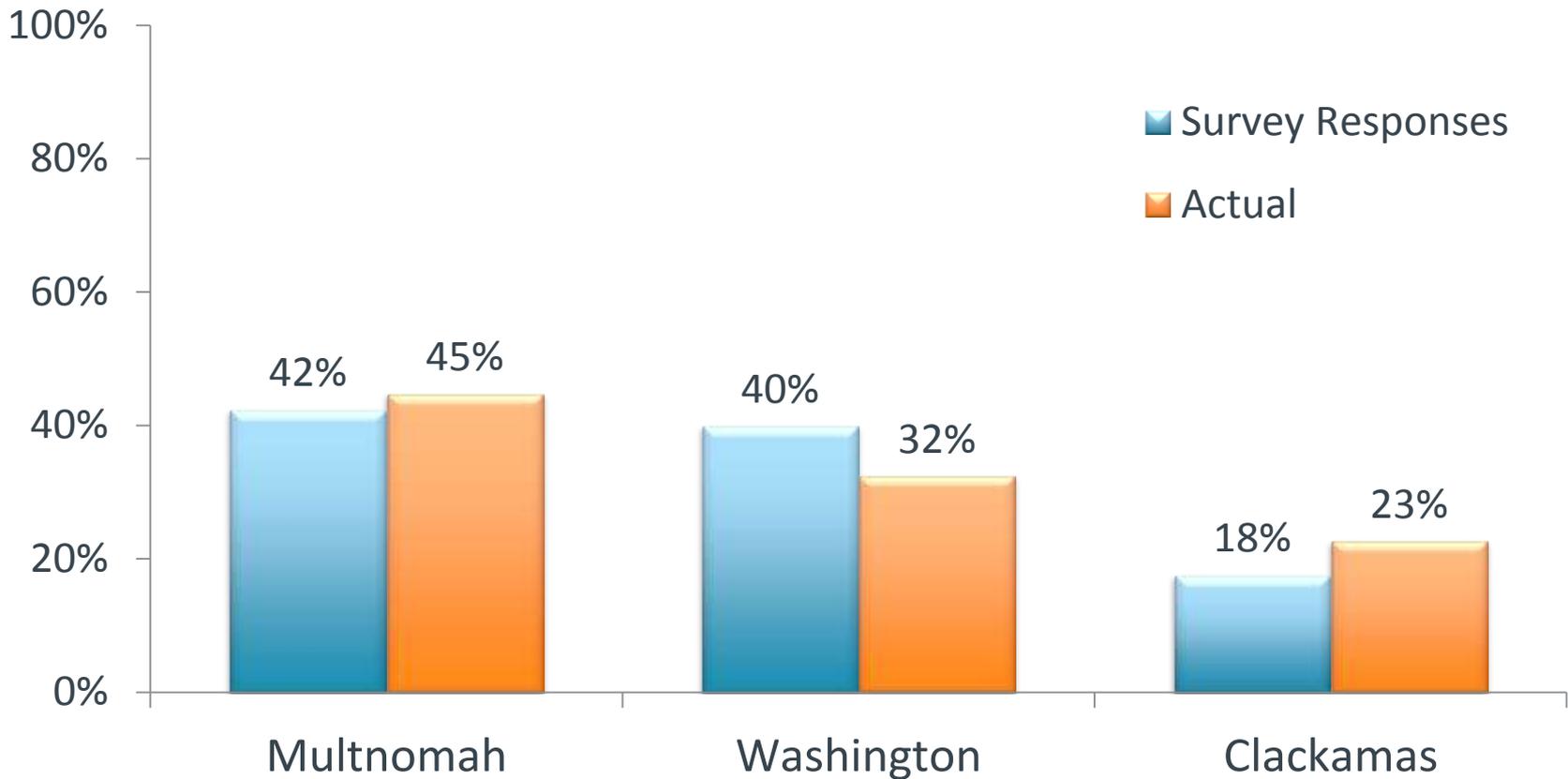
Survey Locations – Regional Mix: Drawing Attendees from Around the Region

| Location / Event | | Location / Event | |
|--|----|--------------------------------|----|
| EcoTrust Trading at the River | 46 | Oregon Zoo | 59 |
| GoGreen Conference | 36 | Metro Central Transfer Station | 72 |
| International Food Festival at Blue Lake | 29 | Newmark Theatre | 12 |



County of Residence

Q1: Which county do you live in?

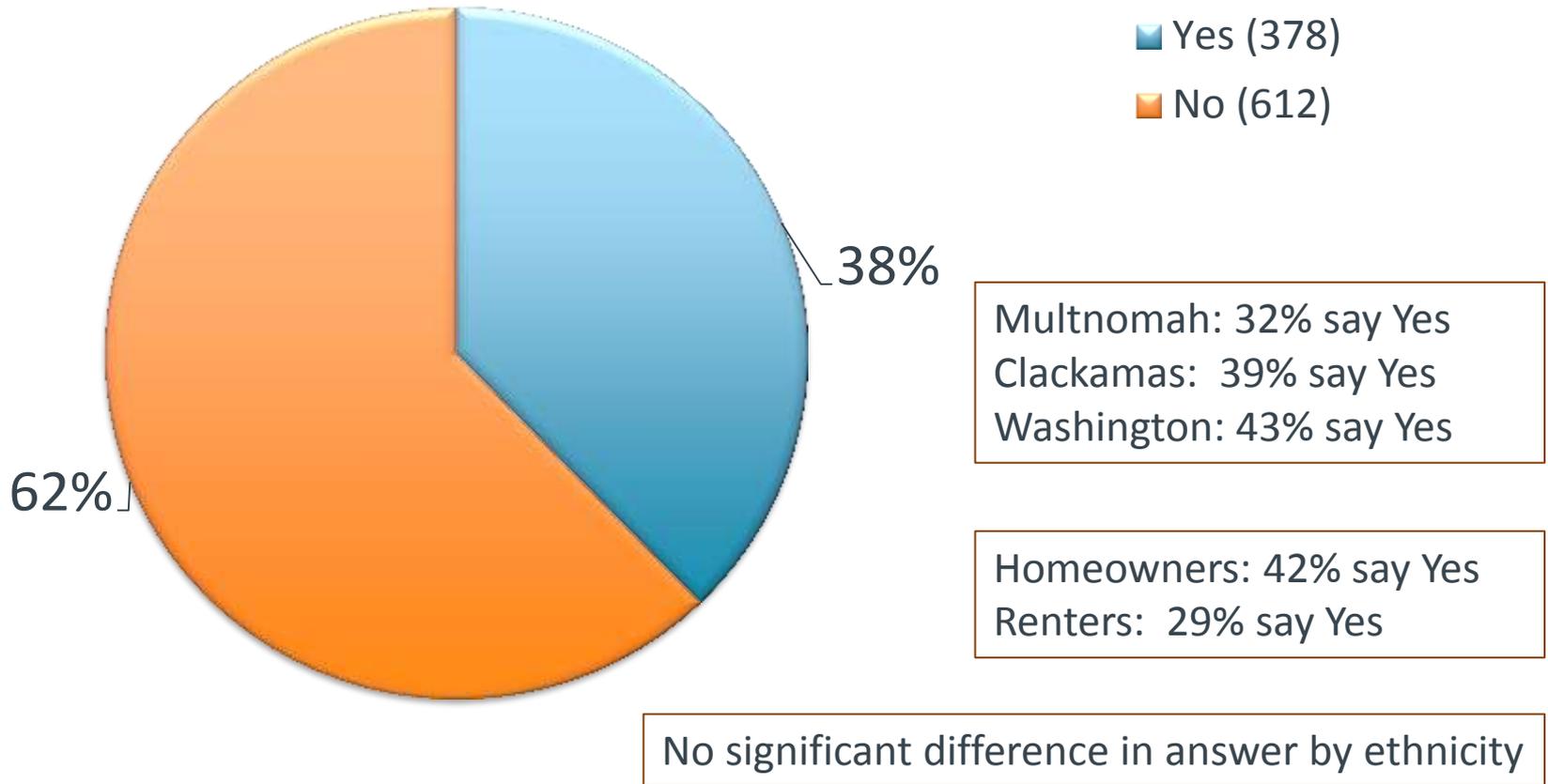


**Do you know where your
garbage goes?**



Over one-third think they know where their garbage ends up

Q2: Do you know where your garbage ends up after it's hauled away by the garbage truck?



Answers from those who say yes

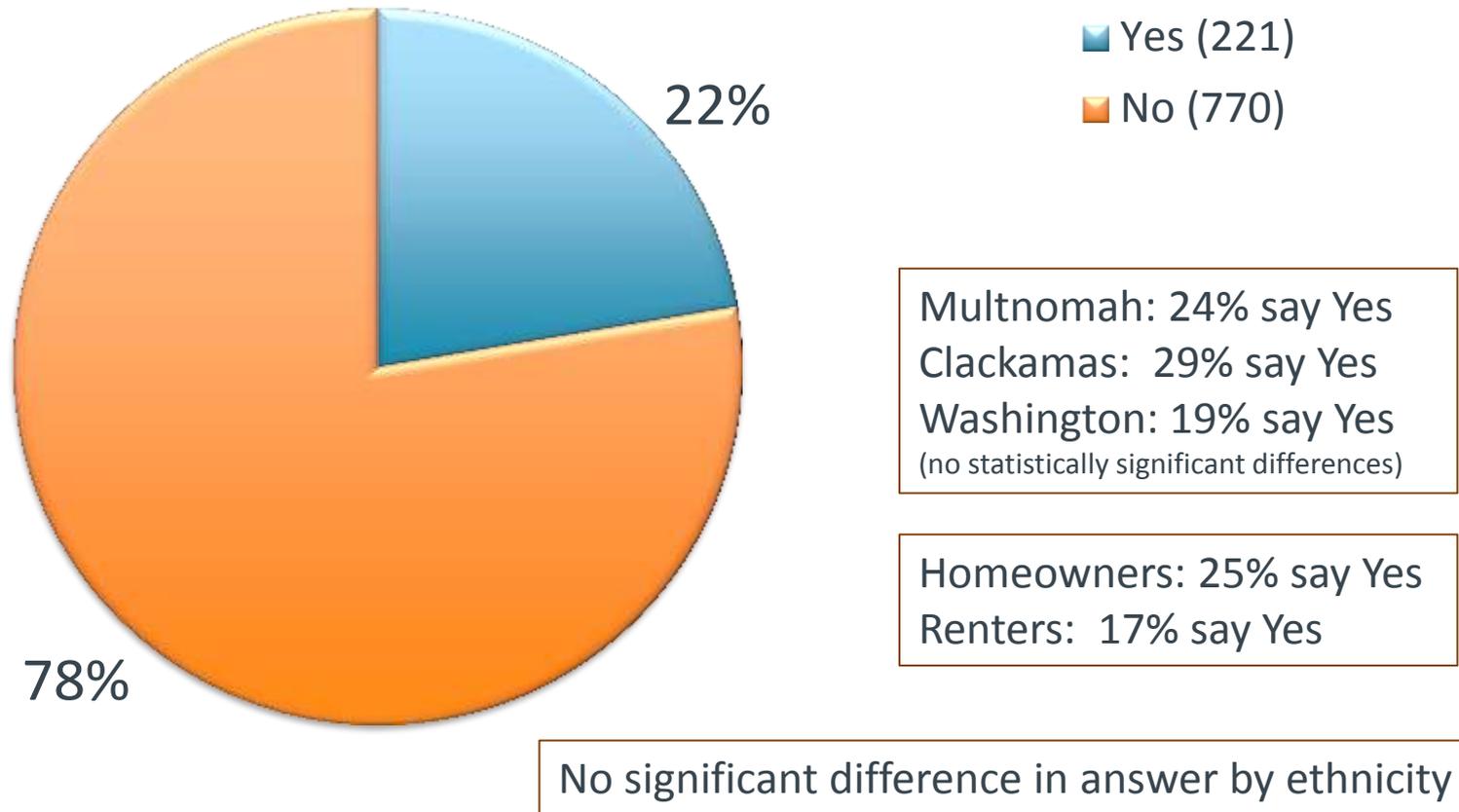
Q2: Do you know where your garbage ends up after it's hauled away by the garbage truck? **If yes, where does it go?** *Most common responses shown here*

- Landfill
- Dump
- Eastern Oregon / East of here
- Arlington
- Transfer station
- Boardman / Umatilla / Wasco County
- Metro / Metro facilities / Metro Transfer Station
- Hillsboro / Hillsboro Dump / Mintor Bridge Road /B Street



22% know their garbage goes to Eastern Oregon for burial

Q3: Do you know that your garbage actually goes to a landfill in Eastern Oregon for burial? (question asked of everyone)

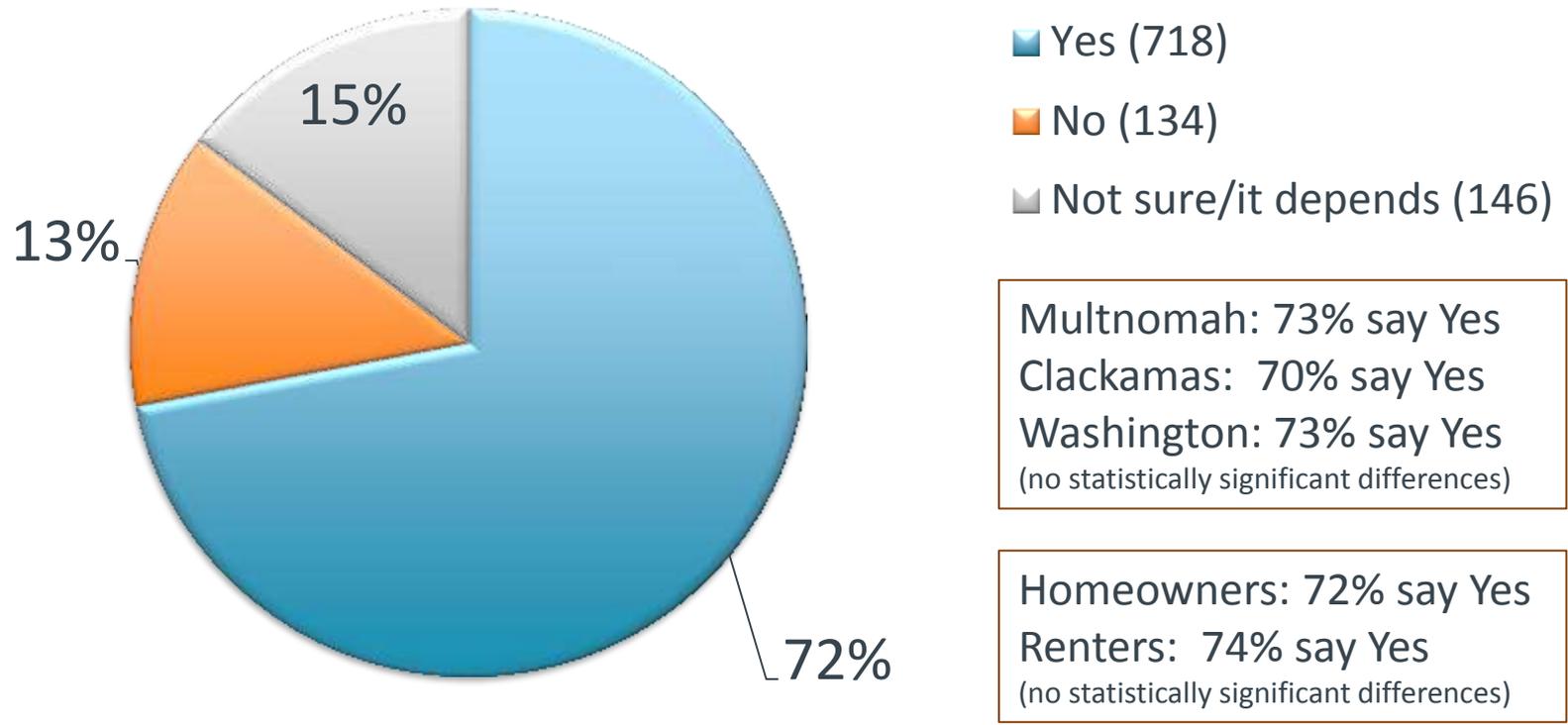


**Would you pay more for
additional items to be
removed and reused from
your garbage?**



72% say they would pay \$5 more for more garbage sorting and removal

Q4: Would you be willing to pay \$5 more per month on your garbage bill if you knew that more items could be reused and recovered from garbage after it is collected?



No significant difference in answer by ethnicity



Main comments with “Yes” responses

Q4: Would you be willing to pay \$5 more per month on your garbage bill if you knew that more items could be reused and recovered from garbage after it is collected? *Of the 718 people who said yes, 148 offered a comment, unprompted. A breakdown of the top comment themes is shown below.*

| Theme | Count |
|--|-------|
| Less waste taking up space in landfills | 27 |
| More sustainable | 23 |
| Already sort through or compost own garbage | 11 |
| Need more information about the process: How will the materials be reused? Who will sort them? | 8 |
| Small price to pay for benefits | 6 |
| Landlord pays for garbage bill, so bill increase won't affect them. | 4 |
| Need more public education about recycling and waste | 4 |
| What materials can be reused? | 3 |
| Does this method expand on what materials are already required recycling? | 3 |
| Need a cost-efficiency analysis. What is the % of garbage that can be recovered? | 3 |
| Would help create more jobs | 3 |

Main comments with “No” responses

Q4: Would you be willing to pay \$5 more per month on your garbage bill if you knew that more items could be reused and recovered from garbage after it is collected?
Of the 134 people who said yes, 58 offered a comment, unprompted. A breakdown of the top comment themes is shown below.

| Theme | Percent |
|---|---------|
| Already sort through or compost own garbage | 22 |
| Pay too much in taxes already | 3 |
| Financial responsibility shouldn't fall on consumers | 3 |
| Need more public education about recycling and waste | 3 |
| Monetary incentives for people who produce less waste—a sliding scale tax | 2 |
| Non-profits already have sorting programs like this | 2 |
| How will the revenue be spent? | 2 |

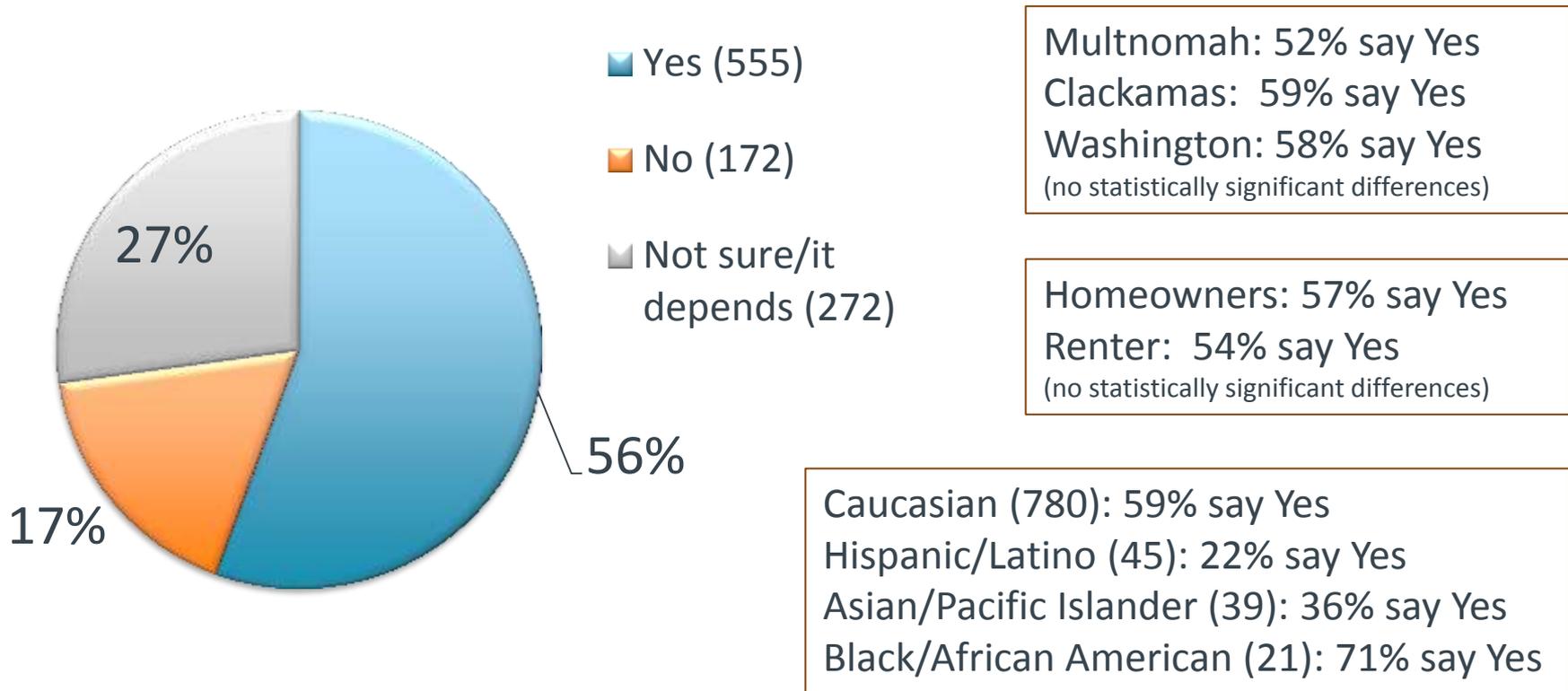


**Would you pay more to send
some of your garbage to an
incinerator?**



Over half would pay \$5 more to send garbage to an incinerator

Q5: Would you be willing to pay \$5 more per month on your garbage bill to send some of it to an incinerator to create electricity, rather than a landfill? This is not in addition to the previous question, it's a separate idea.



Main reasons for “Yes” responses

Q6: What is the main reason you say yes? *Most common themes shown here*

| Theme (N=457) | Percent |
|--|---------|
| Better for the environment | 24% |
| Takes up less physical space | 15% |
| Creates electricity—more useful than sitting in a landfill doing nothing | 12% |
| Cleaner energy alternative | 5% |
| Small price to pay for benefits | 5% |
| Will hopefully lower energy bill | 3% |
| Incineration process similar to what another city/state is already doing | 3% |
| What Scandinavian countries are already doing (Norway, Sweden) | 2% |



Main reasons for “No” responses

Q6: What is the main reason you say no? *Most common themes shown here*

| Theme (N=151) | Percent |
|--|---------|
| Will pollute air / Will pollute air with CO2 / Concerned with pollution | 21% |
| Already pay too many bills | 17% |
| Shouldn't have to pay. The energy created from the garbage should offset the costs | 5% |
| Financial responsibility should fall on government or corporations | 5% |
| Better for the environment | 4% |
| Incineration process similar to what another city/state is already doing | 3% |
| Will release carcinogens or chemicals / Will be toxic | 2% |



Sought-after information

Q7: What information would you need to decide? *Most common themes shown here*

| Theme (N=135) | Percent |
|---|---------|
| Possible air-quality impact on surrounding residential areas (asthma, odor) | 14% |
| Would like a website or flyer with more detailed information and visual aids | 13% |
| What is the amount of CO2 released into the atmosphere? | 8% |
| What governing body or standards are regulating the environmental controls? | 7% |
| Need a cost-efficiency analysis (i.e. the percentage of material being burned vs the total energy output) | 7% |
| The type of incinerator and its process | 6% |
| Environmental cost/benefits vs other energy alternatives | 6% |
| The types of environmental controls in place (i.e. carbon sequestration) | 5% |
| The kind of materials being burned | 5% |

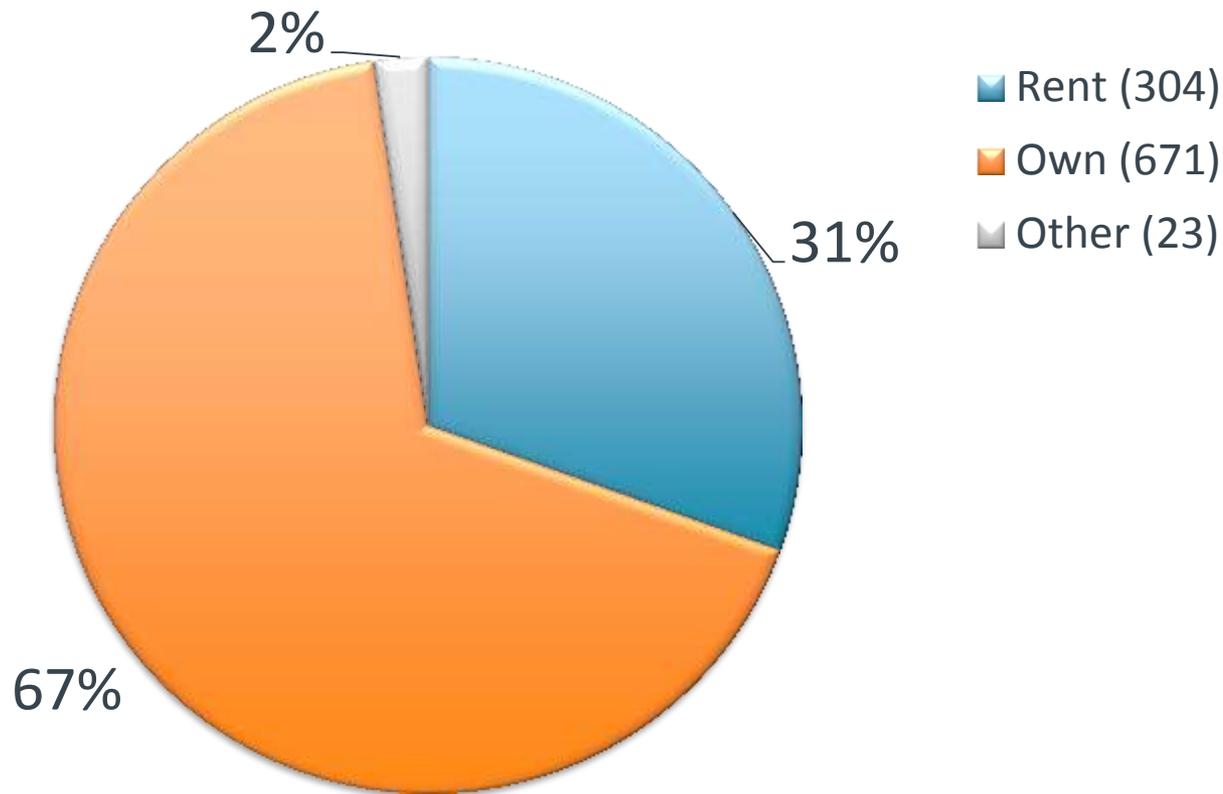


Demographic Characteristics



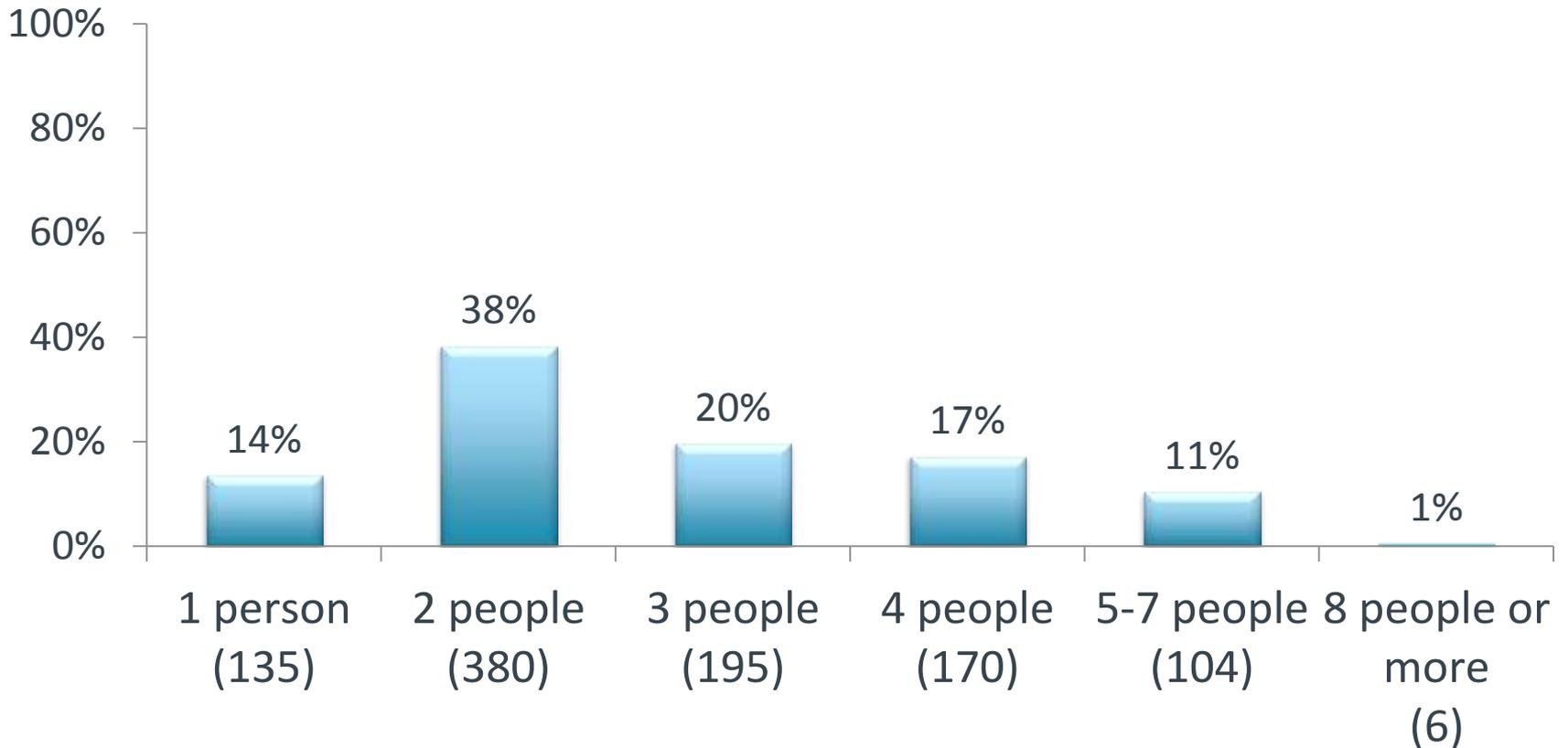
Home Ownership Status

Q9a. Do you rent or own your home?



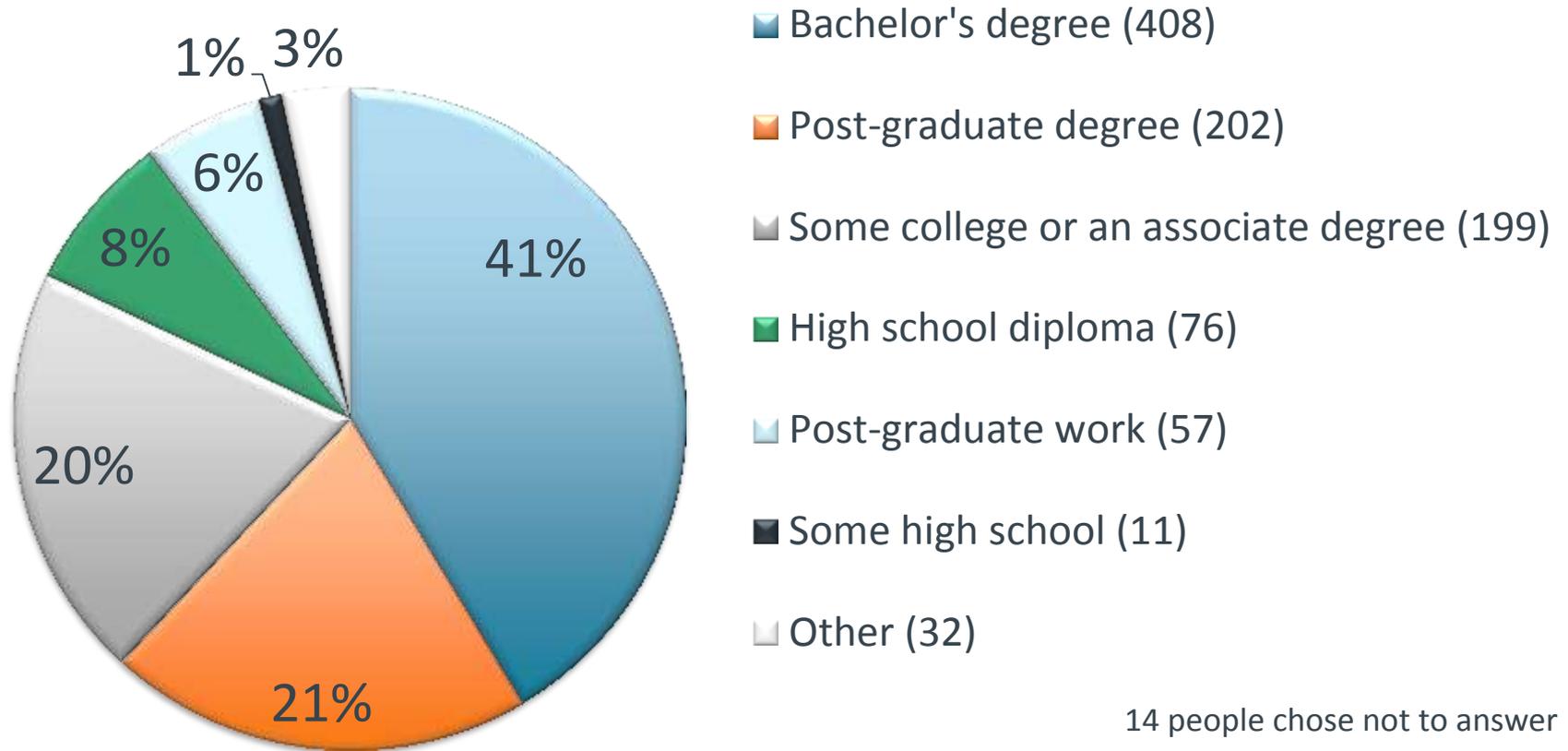
How many people in household

Q8a: How many people live in your household?



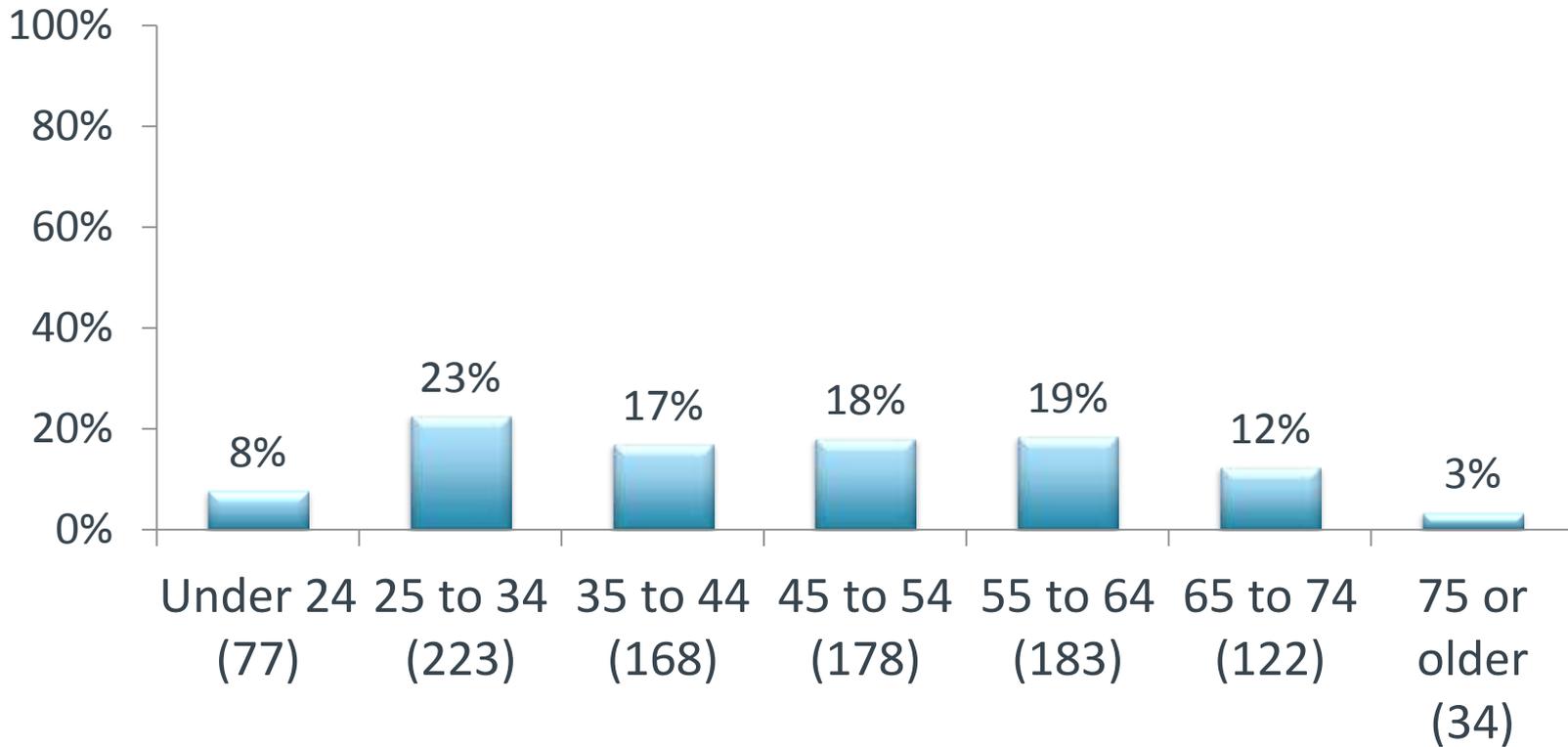
Educational Attainment

Q10. What is the highest level of schooling or education you've completed?



Age

Q11. Which of the following includes your age?

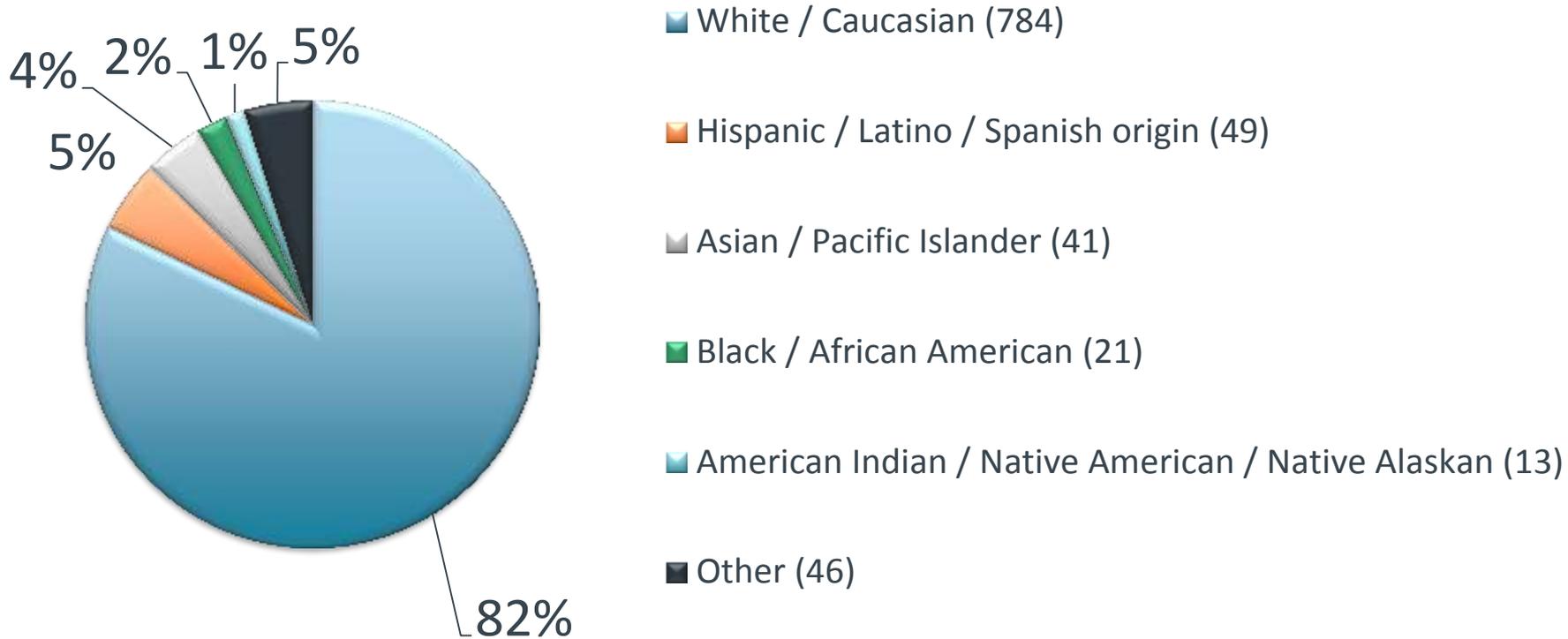


15 people chose not to answer



Race or Ethnicity

Q13. When asked to identify your racial or ethnic identity, how do you identify?

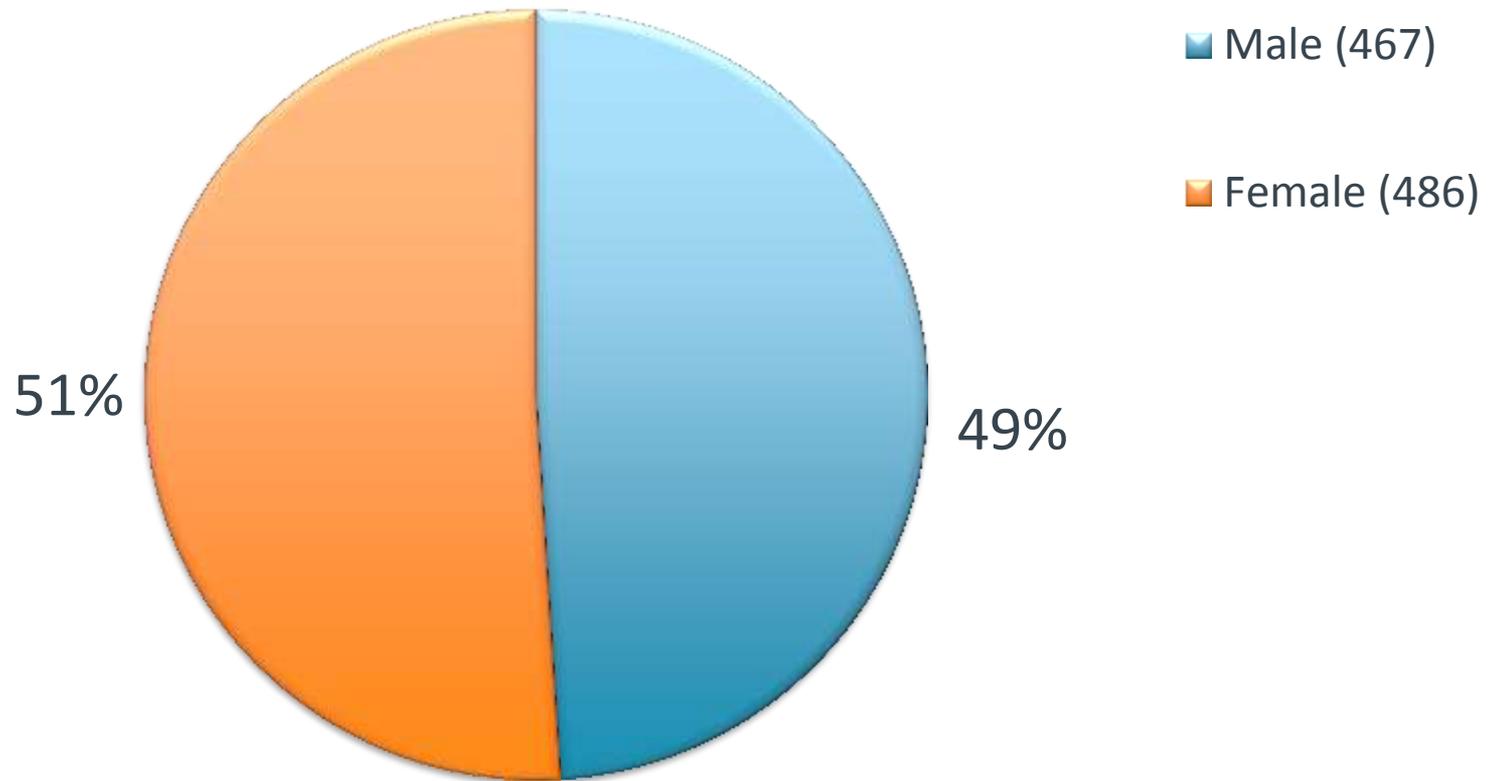


46 people chose not to answer



Gender

Gender. As reported by interviewers



Conclusions Summary



Key Findings

- 38% of survey respondents said they know where their garbage ended up when prompted, but 22% of them actually know it is the landfill in Arlington.
- 72% are willing to pay \$5 more for increased garbage sorting.
- 56% are willing to pay \$5 more for a waste-to-energy incineration plan. Top reasons include:
 - It's better for the environment
 - Taking up less space is a positive
 - Creating electricity from waste is a “no-brainer.”
- 27% aren't sure about the waste-to-energy idea. Their concerns include:
 - Air quality, and pollution
 - Efficiency
 - Many need more information before making a decision either way
- While homeownership impacts whether or not respondents know where their garbage ends up, it does not impact their opinions on ultimate waste disposal options. Neither county of residents nor ethnicity has a significant impact on opinion of waste disposal options presented in the survey.



Appendix: Questionnaire



Hi, my name is ____ and I'm doing a short survey on behalf of Oregon Metro. Just some easy questions about garbage. Are you willing to help us?

1. Which county do you live in? Multnomah Clackamas Washington Other [DISQUALIFY]

2. Do you know where your garbage ends up after it's hauled away by the garbage truck?
 - a. Yes → Where does it go?
 - b. No → Any idea?

3. Do you know that your garbage actually goes to a landfill in Eastern Oregon for burial?
 - a. Yes
 - b. No

READ VERBATIM:

It's true – most of our garbage gets sent on trucks to a landfill south of Arlington, about 150 miles east of Portland. Metro is responsible for the ultimate disposal of our garbage and is looking at alternatives to landfills and ways to get more out of our garbage as a resource.

One of the approaches Metro is considering is setting up facilities where items that can be reused are picked out of garbage. This would reduce what ultimately gets disposed of, but we don't have any facilities like this currently, so there would be extra costs to set them up and operate them.

4. Would you be willing to pay \$5 more per month on your garbage bill if you knew that more items could be reused and recovered from garbage after it is collected?
 - a. Yes
 - b. No
 - c. Not sure/it depends



4. Would you be willing to pay \$5 more per month on your garbage bill if you knew that more items could be reused and recovered from garbage after it is collected?
 - a. Yes
 - b. No
 - c. Not sure/it depends

Now I'm going to read some information about a different approach, and then ask a similar question.

While some garbage will always go to landfills, there are ways we can use our garbage as a resource. One way involves burning some of our garbage in an incinerator to create electricity. Modern garbage incinerators have strict environmental controls and operate safely, but they are more expensive than burying garbage in distant landfills, which are cheaper and more readily available.

5. Separate from the first question, and that \$5: Would you be willing to pay \$5 more per month on your garbage bill to send some of it to an incinerator to create electricity, rather than going to a landfill? **[IF NEEDED]** This is not in addition to the previous question, it's a separate idea.
 - a. Yes
 - b. No
 - c. Not sure/it depends
6. What is the main reason you say [yes/no]?

[looking for any issues beyond the \$5 such as aversion to burning, or that some will still go to landfills anyway, or that they would need more information...]

7. **[If they are not sure or need more information, ask]:** What information would you need to decide?



We're almost finished! We just have a few basic questions that will help us better understand the types of people who took the survey.

8. How many people live in your household? _____
9. a. Do you rent or own your home? Rent Own Other: _____
- b. What is your home zip code? _____
- [Prefer not to answer] *DON'T READ*
10. What is the highest level of schooling or education you've completed? *READ LIST*
- | | |
|--|---|
| <input type="checkbox"/> Some high school | <input type="checkbox"/> Post-graduate work |
| <input type="checkbox"/> High school diploma | <input type="checkbox"/> Post-graduate degree |
| <input type="checkbox"/> Some college or an associate degree | <input type="checkbox"/> Other: <i>DON'T READ</i> _____ |
| <input type="checkbox"/> Bachelor's degree | <input type="checkbox"/> [Prefer not to answer] <i>DON'T READ</i> |
11. Which of the following age ranges includes your age? Stop me when I reach your age. *READ LIST*
- | | |
|-----------------------------------|---|
| <input type="checkbox"/> Under 18 | <input type="checkbox"/> 45 to 54 |
| <input type="checkbox"/> 18 to 24 | <input type="checkbox"/> 55 to 64 |
| <input type="checkbox"/> 25 to 34 | <input type="checkbox"/> 65 to 74 |
| <input type="checkbox"/> 35 to 44 | <input type="checkbox"/> 75 or older |
| | <input type="checkbox"/> [Prefer not to answer] <i>DON'T READ</i> |
12. What is the primary language spoken in your home? *DON'T READ LIST*
- | | |
|----------------------------------|---|
| <input type="checkbox"/> English | <input type="checkbox"/> Vietnamese |
| <input type="checkbox"/> Spanish | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Russian | <input type="checkbox"/> [Prefer not to answer] |



13. When asked to identify your racial or ethnic identity, how do you identify? *DON'T READ LIST*

- | | |
|---|---|
| <input type="checkbox"/> White / Caucasian | <input type="checkbox"/> Asian / Pacific Islander |
| <input type="checkbox"/> Black / African American | <input type="checkbox"/> Hispanic / Latino / Spanish origin |
| <input type="checkbox"/> American Indian / Native American / Native Alaskan | <input type="checkbox"/> Other: _____ |
| | <input type="checkbox"/> Prefer not to answer |

Those are all the questions I have for you! Do you have any final comments?

Would you be interested in joining Metro's Opt In online research panel, where you'd be invited to take more surveys like this via email? The surveys would be regarding topics like public services, housing, and transportation in the region, **[IF YES]** Could you give me your name and email address so I can send you an invitation? Your survey responses will be kept anonymous and not tied to your name/ email.

Email address:

Full name:

Thank you very much for taking the time to give us your feedback!

Gender (Interviewer reported): Male Female Don't Know

Interviewer Initials: __ Date: __/__/15 Event/Location: _____



Hola, me llamo ____ y estoy haciendo una breve encuesta de parte de *Oregon Metro*. Solamente son unas preguntas fáciles sobre la basura. ¿Está dispuesto a ayudarnos?

1. ¿En cuál condado vive? Multnomah Clackamas Washington ● Otro [DESCALIFIQUE]

2. ¿Sabe usted a dónde va a parar su basura después de que la recoge el camión de la basura?
 - a. Sí → ¿A dónde va a parar?
 - b. No → ¿Tiene alguna idea?

3. ¿Sabe usted que la basura realmente va a un vertedero o basurero en el este de Oregón para ser enterrada?
 - a. Sí
 - b. No

LEA TEXTUALMENTE:

Es verdad – la mayoría de nuestra basura se envía en camiones a un vertedero/basurero al sur de Arlington, a unas 150 millas al este de Portland. Metro es el responsable de la eliminación final de nuestra basura y está considerando alternativas a usar basureros y otras formas de sacar más provecho de nuestra basura como recurso.

Uno de los métodos que Metro está considerando es establecer instalaciones para sacar de la basura los artículos que se pueden volver a utilizar. Esto reduciría lo que se deshecha al final, pero no tenemos ninguna instalación como esa actualmente, de manera que habría costos adicionales para establecerlas y operarlas.

4. ¿Estaría usted dispuesto a pagar \$5 más al mes en su cuenta de la basura si supiera que más artículos podrían ser reutilizados y recuperados de la basura después de que se recoge?
 - a. Sí
 - b. No
 - c. No estoy seguro/depende



Ahora voy a leer algo de información sobre un método diferente, y después voy a plantearle una pregunta similar.

Aunque algo de basura siempre irá a parar a los basureros, hay maneras en las que podemos utilizar nuestra basura como un recurso. Una manera consiste en quemar un poco de nuestra basura en un incinerador para crear electricidad. Los incineradores de basura modernos tienen controles ambientales estrictos y funcionan de manera segura, pero son más caros que enterrar la basura en basureros distantes, los cuales son más baratos y más fácilmente disponibles.

5. Aparte de la primera pregunta y de aquellos \$5 dólares, ¿estaría usted dispuesto a pagar \$5 dólares más al mes en su cuenta de la basura para enviar parte de la basura a un incinerador para crear electricidad en vez de que vaya a un basurero? **[SI ES NECESARIO]** No se trata de algo adicional a la pregunta anterior. Esta es una idea independiente.
 - a. Sí
 - b. No
 - c. No estoy seguro/depende

6. ¿Cuál es la razón principal por la que dice que [sí/no]?

[Trate de averiguar si algún problema que no sea los \$5 dólares, tales como la aversión a quemarla, o que de todas maneras algo de la basura iría a los basureros o que necesitarían más información ...]

7. **[Si no están seguros o necesitan más información, haga esta pregunta]:** ¿Qué información necesitaría para tomar una decisión?



¡Ya casi terminamos! Sólo tenemos unas pocas preguntas básicas que nos ayudarán a entender mejor los tipos de personas que contestaron la encuesta.

8. ¿Cuántas personas viven en su casa? _____

9. a. ¿Alquila o vive en casa propia?

Alquila es dueño(a) Otro: _____

[Prefiero no contestar] *NO LO LEA*

b. ¿Cuál es el código postal de su casa? _____

10. ¿Cuál es el nivel más alto de educación que ha completado? *LEA LA LISTA*

algunos estudios de secundaria/preparatoria

Trabajo de posgrado

diploma de estudios secundarios/preparatoria

Título de posgrado

algunos estudios universitarios o título de 2 años

Otro: *NO LO LEA* _____

Una licenciatura

[Prefiere no contestar] *NO LEA ESTO*

11. ¿Cuál de los siguientes rangos de edades incluye su edad? Páreme cuando llegue a su edad. *LEA LA LISTA*

menor de 18 años

de 45 a 54 años

de 18 a 24 años

de 55 a 64 años

de 25 a 34 años

de 65 a 74 años

de 35 a 44 años

de 75 años o mayor

[Prefiere no contestar] *NO LEA ESTO*

12. ¿Cuál es el idioma principal que hablan en su casa? *NO LEA LA LISTA*

inglés

vietnamita

español

otro: _____

ruso

[Prefiere no contestar]



13. Cuando le preguntan cuál es su raza o identidad étnica, ¿cómo se identifica usted? **NO LEA LA LISTA**

- | | |
|--|---|
| <input type="checkbox"/> blanco / caucásico | <input type="checkbox"/> asiático / isleño del Pacífico |
| <input type="checkbox"/> negro / afro americano | <input type="checkbox"/> hispano / latino / de origen español |
| <input type="checkbox"/> Indio americano / Indio nativo americano / nativo de Alaska | <input type="checkbox"/> otro: _____ |
| | <input type="checkbox"/> prefiero no contestar |

¡Esas son todas las preguntas que tengo para usted! ¿Tiene algún comentario final?

¿Estaría usted interesado en participar en el panel de estudios en línea 'Metro's Opt In', en el que lo invitarían por medio de correo electrónico a participar en más encuestas como esta? Las encuestas serían sobre temas de servicios públicos, vivienda y transporte en la región. **[Sí la respuesta es sí]** ¿Me puede dar su nombre y dirección de correo electrónico para que yo pueda enviarle una invitación? Sus respuestas a la encuesta se mantendrán anónimas y no serán vinculadas a su nombre/correo electrónico.

Dirección de correo electrónico:

Nombre completo:

¡Muchas gracias por tomarse el tiempo para darnos su opinión!

Sexo (reportado por el entrevistador): masculino femenino No sé

Iniciales del entrevistador: __ Fecha: __/__/15 Evento/Lugar: _____

