



Solid Waste Roadmap Opt In Survey Report of Findings

SUBMITTED TO

Metro

Submitted by **PIVOT**

November 30, 2015

Primary Research Objectives

- Identify the values, beliefs, and ideas that Metro area citizens hold about the disposal of garbage
- Identify options held by the citizens of the region on the best choices for Metro to manage the region's garbage
- Append and analyze relevant demographic data from the Opt In panel recruitment survey to better understand the sample in relation to the actual makeup of the region



Report Contents

1. Methodology
2. Satisfaction with Garbage Service
3. Priorities with Garbage Management
4. Opinion of Status Quo
5. Opinion of Burning Garbage for Energy
6. Willingness to Pay \$5 More for Garbage Incineration
7. Preference for Garbage Management
8. Respondent Demographics



Methodology

- Survey invitation was sent by email to the Opt In panel (hosted by Decipher), of approximately 22,000 people, on Oct. 13. A reminder was sent Oct. 19. The survey closed Oct. 28.
- A link to the survey was also made available on social media platforms.
- We collected 2,743 complete responses, for a 12% response rate from the panel.

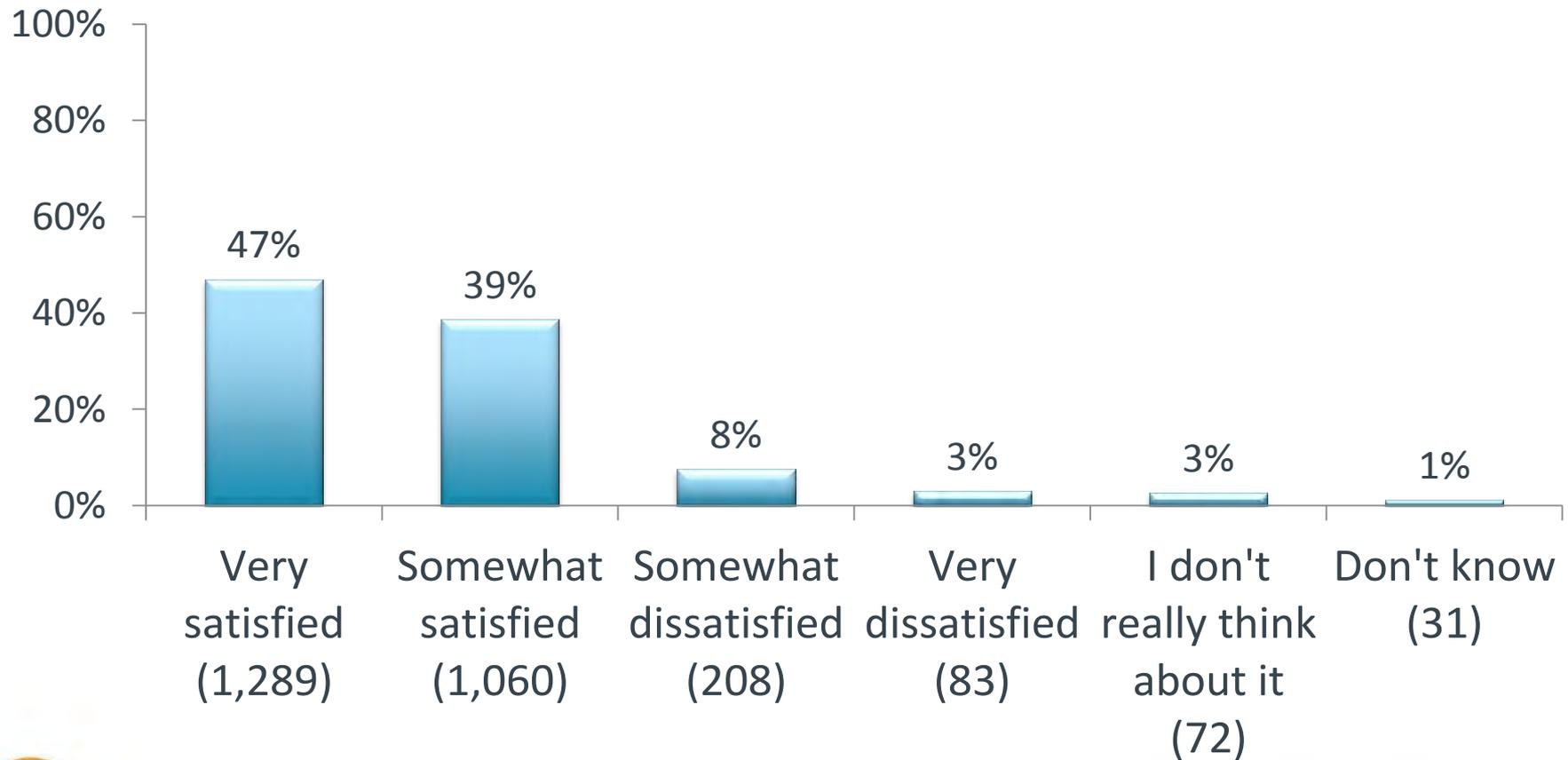


Survey Findings



Satisfaction with Garbage Service

Q1: How satisfied are you with the garbage service in your community?



Priorities for Garbage Management (slide 1 of 2)

Q3: Below is a list of priorities that may guide how garbage is managed in the future. Rank how important you think each priority should be when planning our region's garbage management system. A "1" means it should be the highest priority, and "8" means that it should be the lowest priority.

Respondent-given rankings calculated by mean rank score shown here

1. Protect the environment
2. Protect people's health
3. Use waste as an energy source before burying it in a landfill
4. Promote flexibility and ability to adapt to new technologies for managing garbage
5. Make sure garbage management facilities are located in areas based on their compatibility with surrounding land uses, and without regard to income, race or political influence of those who live in or near a particular community
6. Keep monthly garbage bills as low as possible
7. Create local jobs
8. Dispose of garbage closer to communities from which it comes



Priorities for Garbage Management (slide 2 of 2)

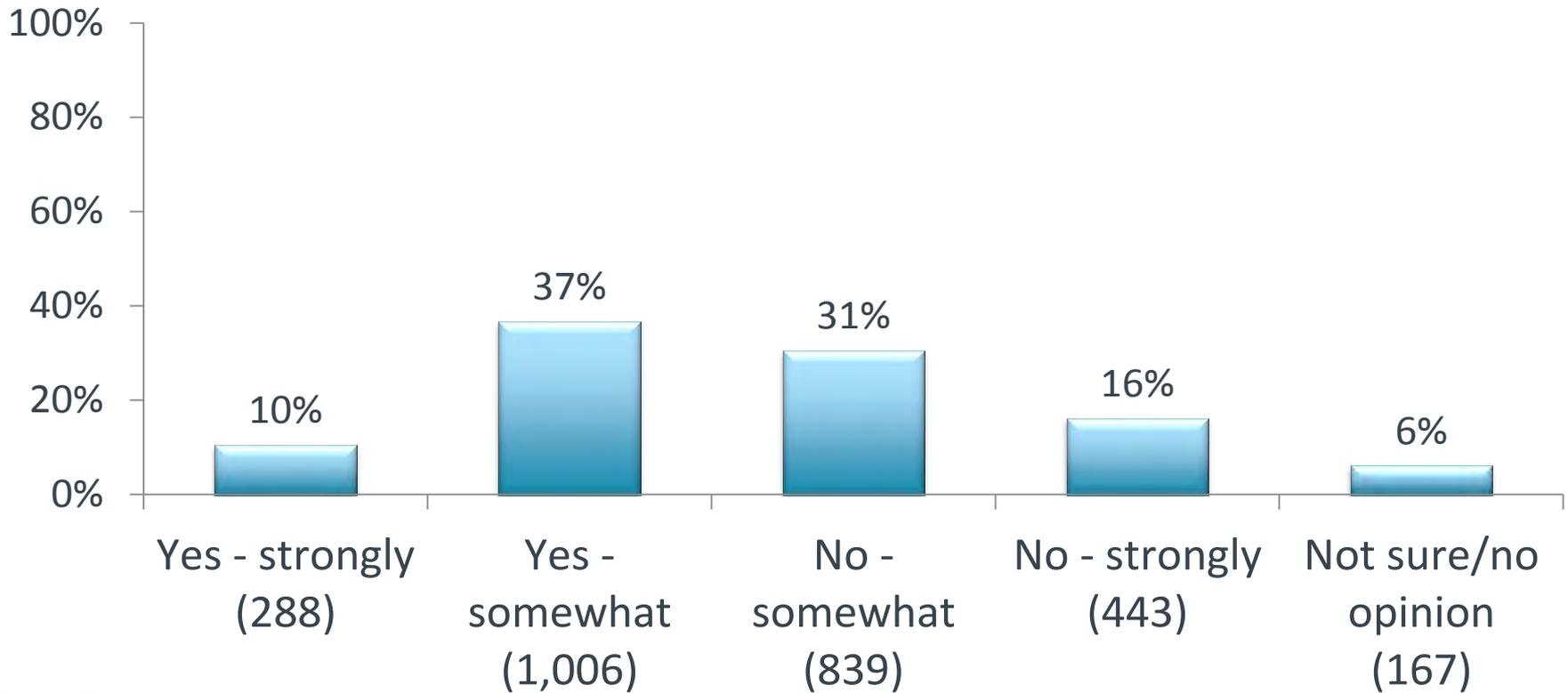
This table provides the results for respondents' ranking of importance of various statements regarding garbage management priorities. (See previous slide for full question wording.) The list is sorted by means with the lowest means representing items ranked as the highest priorities. The percentages represent the percent of times respondents rated the respective factor as the top factor as well as the percent rated as a first or second priority.

| Statement | Mean | % Ranked #1 | % Ranked #1 or #2 |
|--|-------------|--------------------|--------------------------|
| Protect the environment | 2.7 | 30% | 60% |
| Protect people's health | 2.8 | 31% | 54% |
| Use as energy source before landfill | 3.7 | 14% | 31% |
| Promote flexibility/adapt to new tech | 4.5 | 6% | 15% |
| Place facilities based on compatibility | 4.9 | 5% | 13% |
| Keep garbage bills as low as possible | 5.2 | 11% | 17% |
| Create local jobs | 5.9 | 1% | 5% |
| Dispose of garbage closer to origination | 6.3 | 2% | 5% |



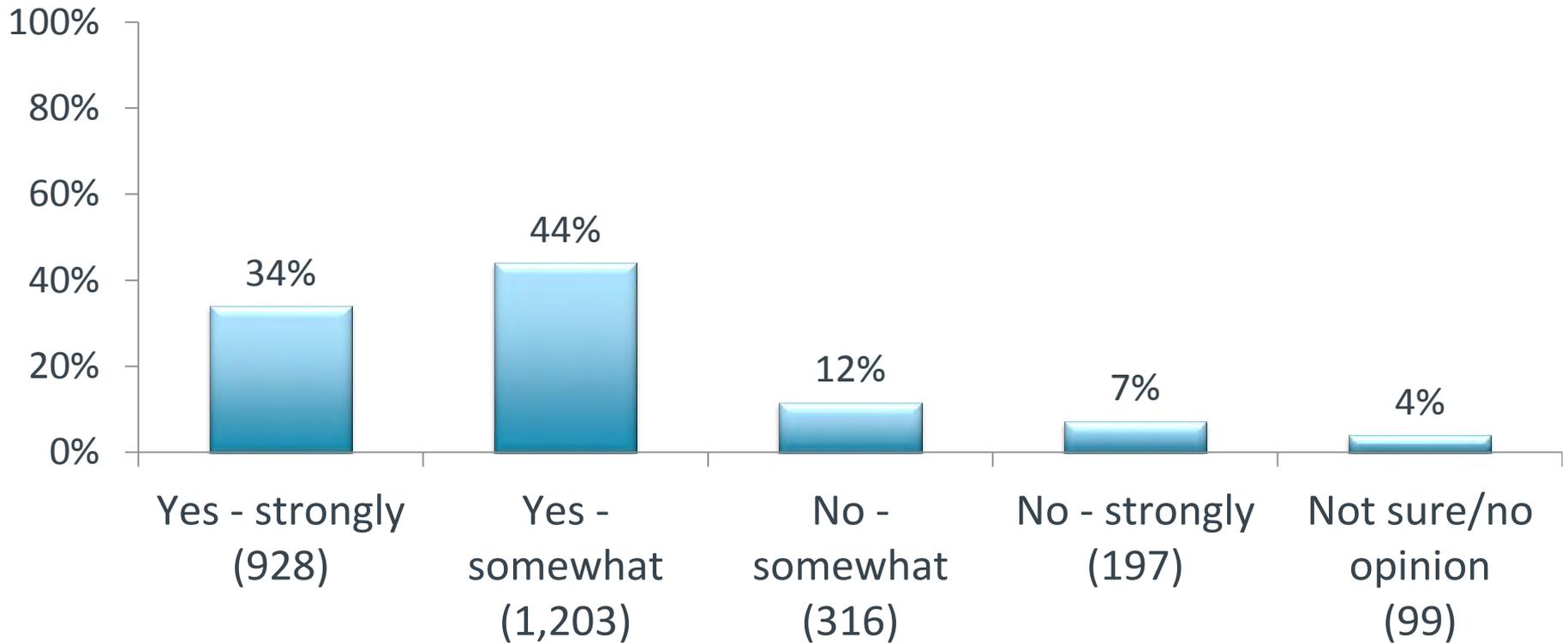
Opinion of “Status Quo”

Q4: Based on this information [regarding the “Status Quo” option of garbage management], do you feel the advantages of this approach outweigh the disadvantages?



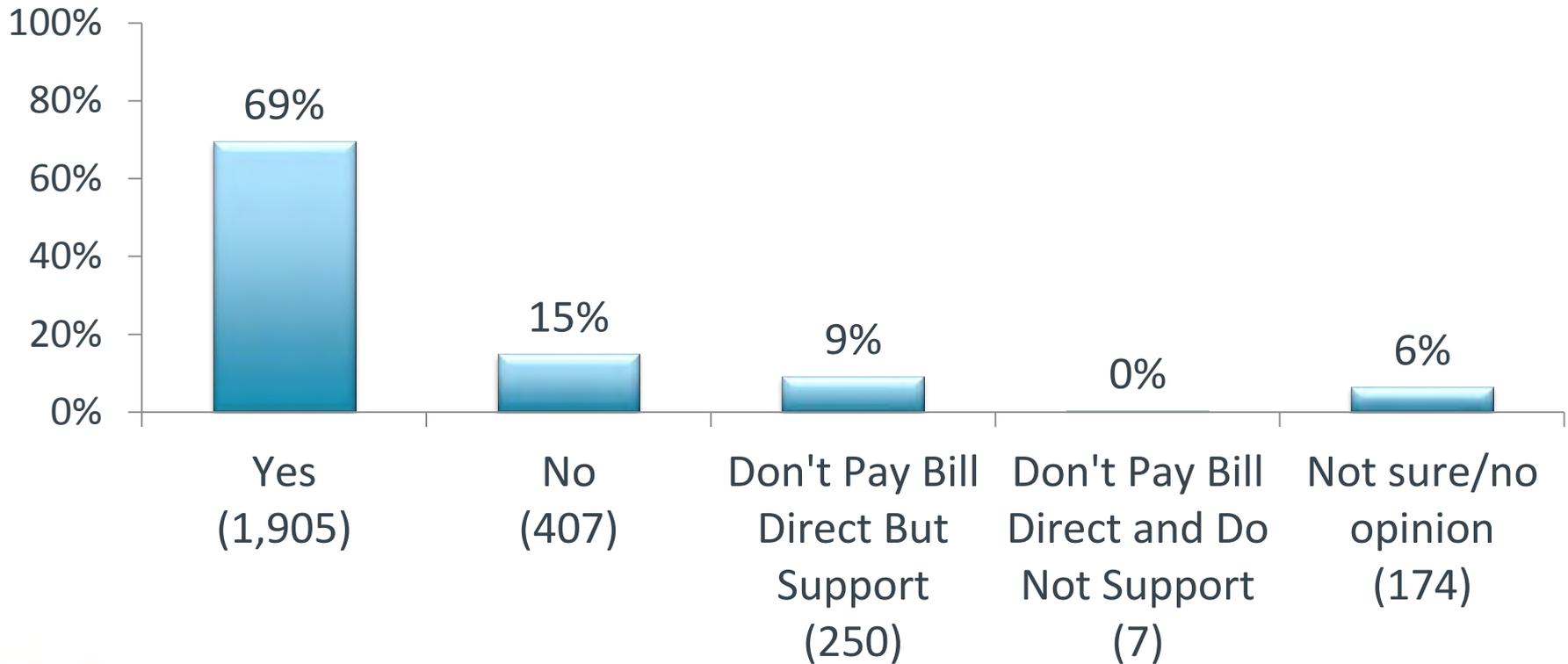
Opinion of Burning Garbage for Energy

Q7: Based on this information [regarding burning garbage to produce energy], do you feel the advantages of this approach outweigh the disadvantages?



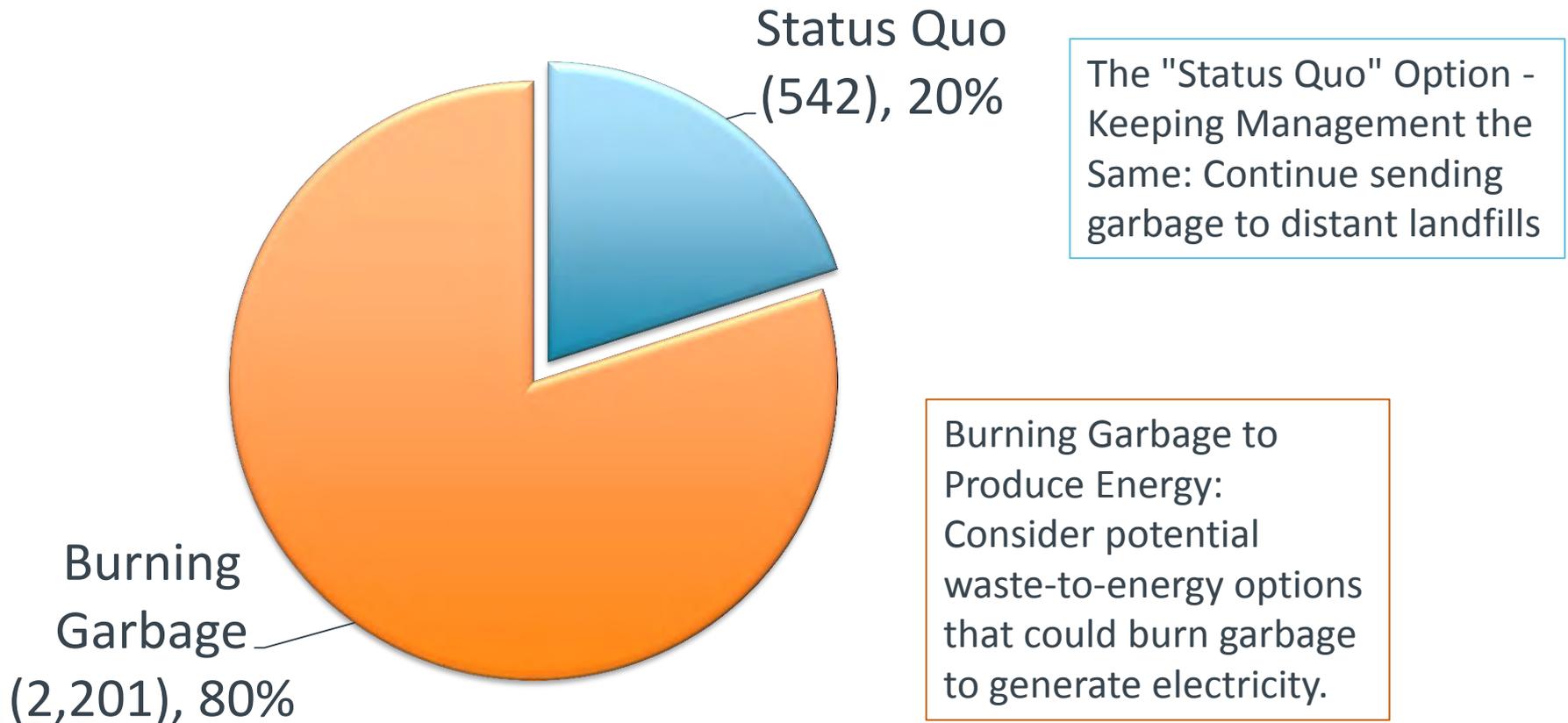
Willingness to Pay \$5 More

Q8: Would you be willing to pay an extra \$5 per month on your garbage bill if some of your garbage could safely generate electricity and reduce the volume of garbage that goes to landfills?



Preference for Garbage Management

Q11: Now that you've learned more about these two options available for managing the Portland area's garbage in the future, please indicate which of these two options you prefer.

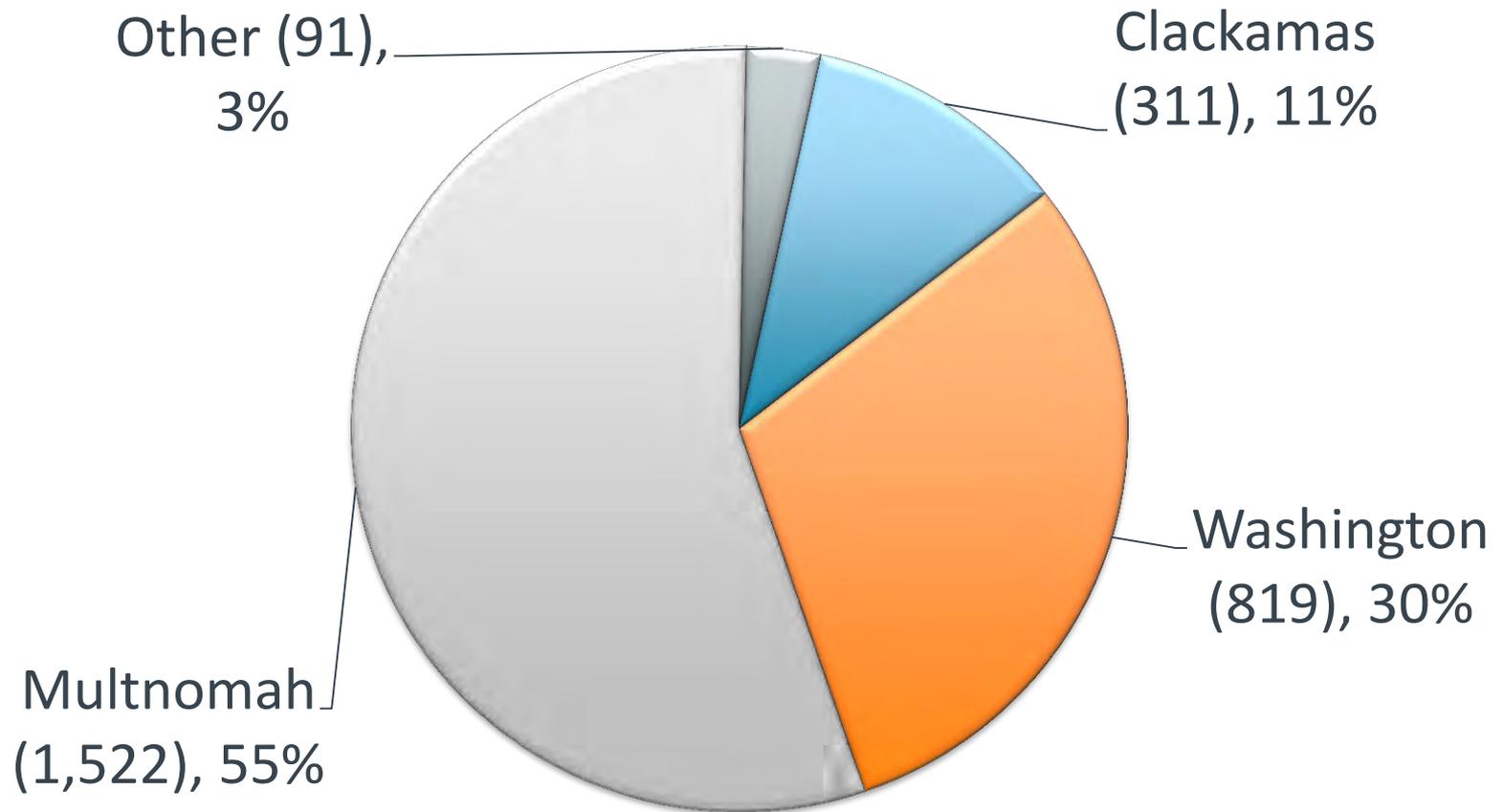


Demographic Characteristics



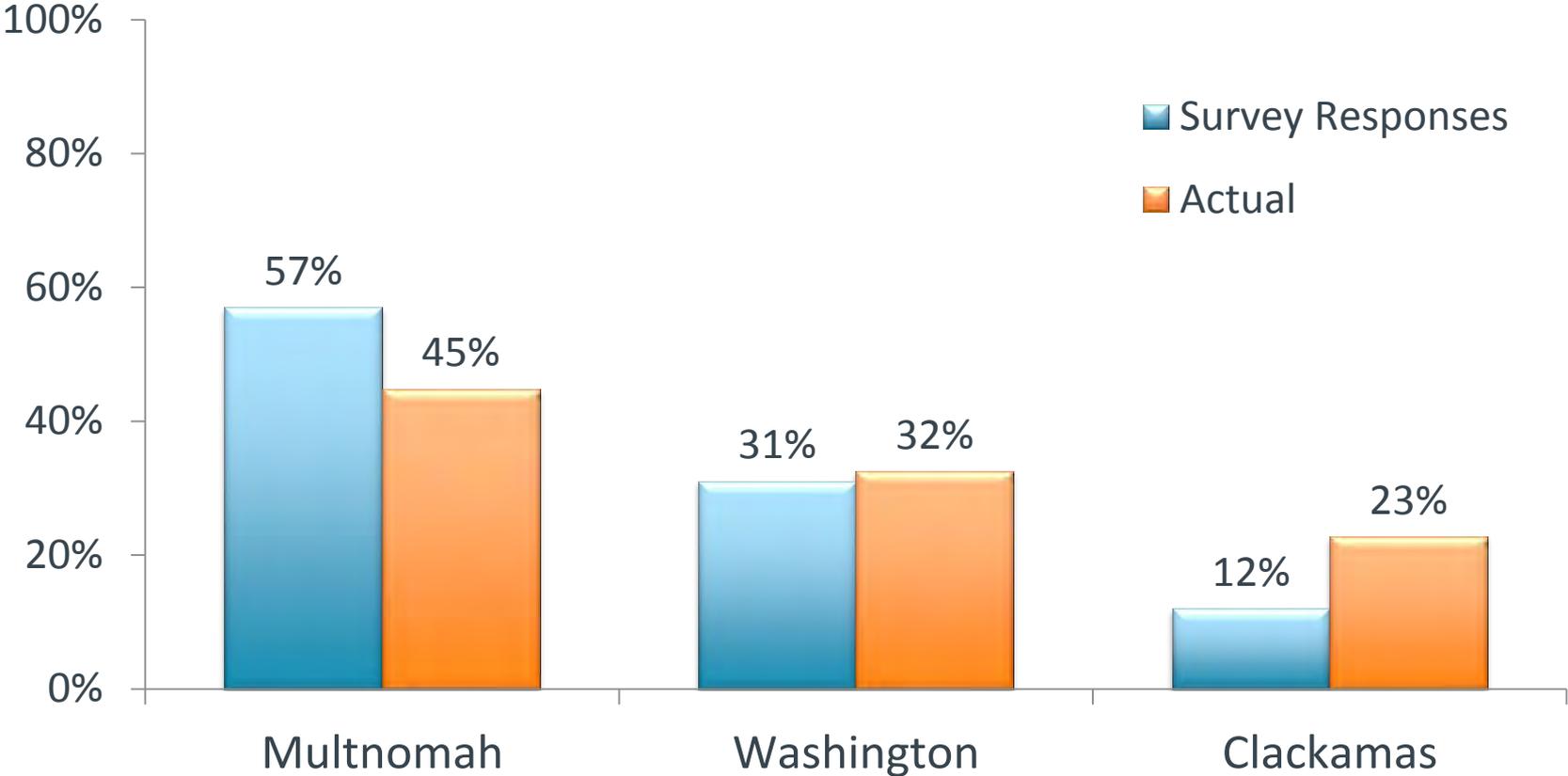
Respondents by County

Which county do you live in? (N=2,743)



Respondents by County, Compared to Actual

Removed "Other" responses to compare to actual county breakdowns. (N=2,652)



Income Level

p_q8: What is your total household income before taxes? (N=1760)

| Income Level | Count | Percent |
|-----------------------|-------|---------|
| Less than \$10,000 | 29 | 2% |
| \$10,000 - \$14,999 | 38 | 2% |
| \$15,000 - \$24,999 | 71 | 2% |
| \$25,000 - \$34,999 | 111 | 6% |
| \$35,000 - \$49,999 | 205 | 12% |
| \$50,000 - \$74,999 | 407 | 23% |
| \$75,000 - \$99,999 | 341 | 19% |
| \$100,000 - \$149,999 | 366 | 21% |
| \$150,000 - \$199,999 | 133 | 8% |
| \$200,000 or more | 92 | 5% |
| No answer | 950 | |



Political Self-Classification

p_q17: When it comes to politics, do you consider yourself more of a Democrat, more of a Republican, or more of an Independent or a member of another party? (N=2585)

| Political Affiliation | Count | Percent |
|------------------------------------|-------|---------|
| More of a Democrat | 1561 | 60% |
| More of a Republican | 261 | 10% |
| More of an Independent/Other party | 763 | 30% |
| No answer | 158 | |



Educational Attainment

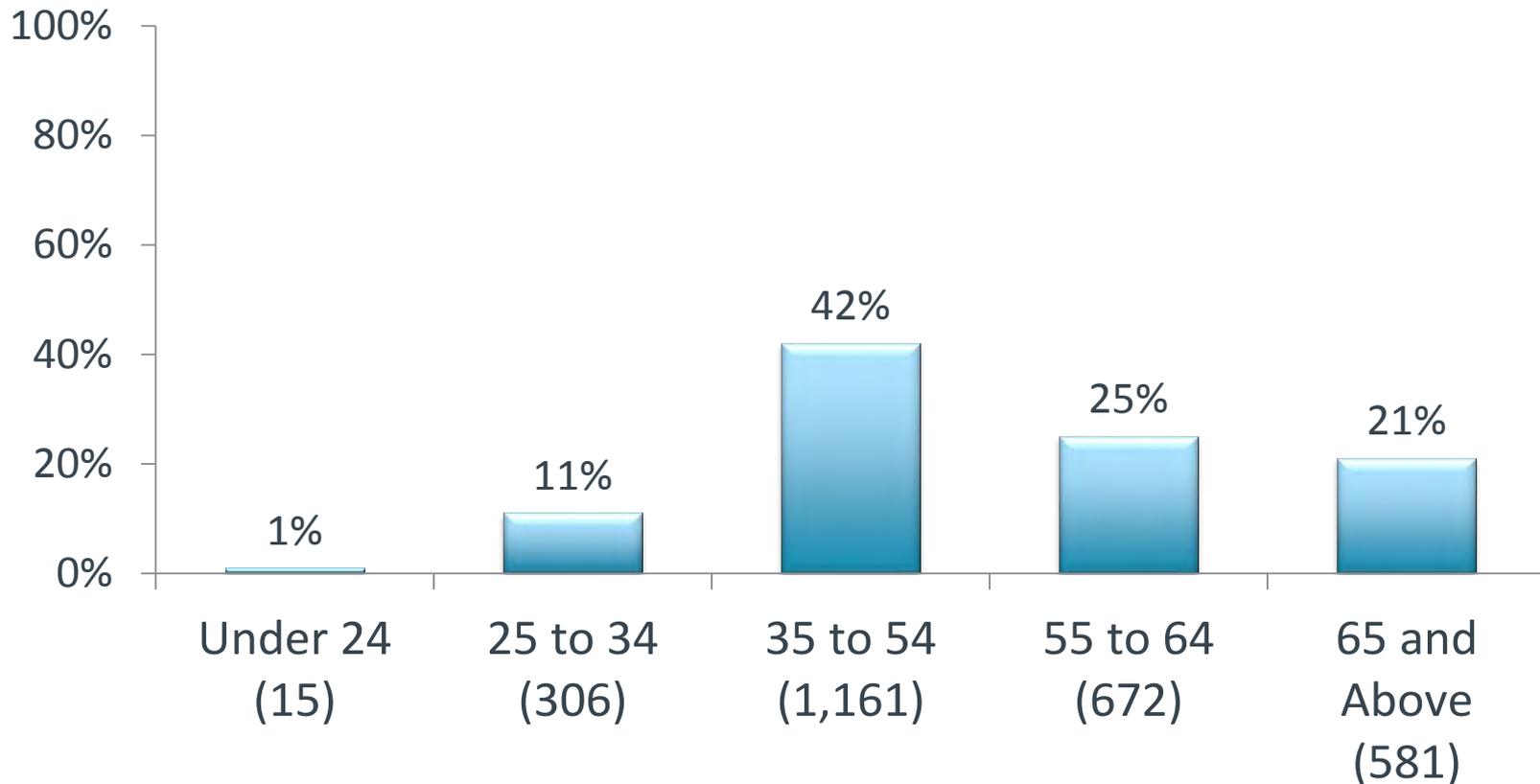
p_q6: What is the highest level of education you have had the opportunity to complete? (N=2,727)

| Educational Attainment | Count | Percent |
|-------------------------------------|--------------|----------------|
| Post-graduate degree | 1191 | 44% |
| Bachelor's degree | 996 | 37% |
| Some college or an associate degree | 449 | 16% |
| Post-graduate work | 57 | 2% |
| High school or less | 34 | 1% |
| No answer | 22 | |



Age

Q11. Which of the following age ranges includes your age?

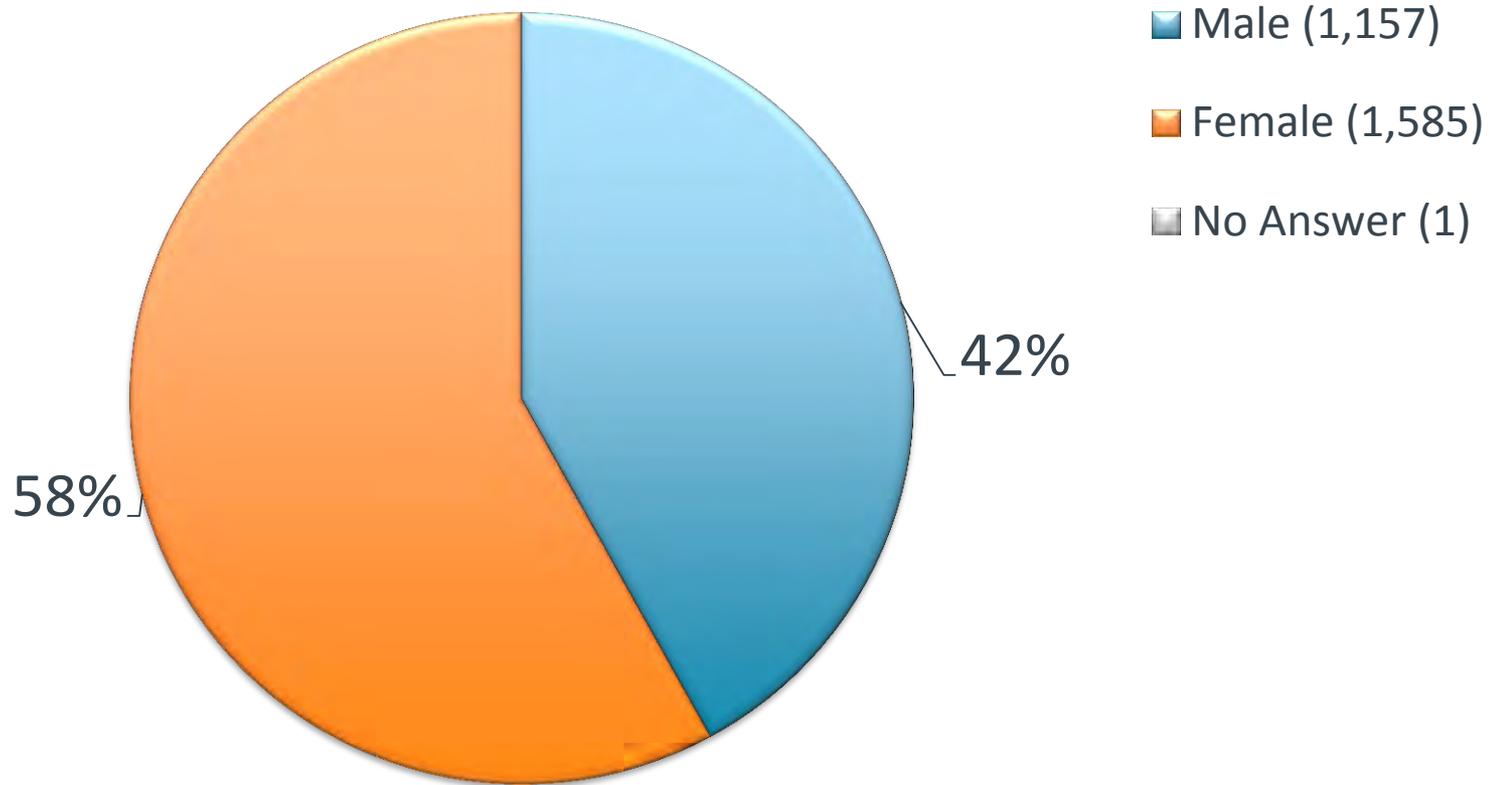


8 respondents provided gave no answer.



Gender

p_q5: What is your gender?



Appendix: Questionnaire



Survey

[exitText] Thank you very much for participating in this survey.

Your views and opinions will guide how Metro plans for the management of garbage in the future.

On Wednesday, November 4, Metro and the Oregon Historical Society will host a discussion about the roles of landfills in dealing with our region's waste. The event is free to attend, and we hope you can join us. More information can be found [here](#).

[Click here](#) to make sure you're signed up for the Opt In panel. We want to continue to invite you to give your opinions about neighborhoods, transportation, recycling, and other issues that affect our community!



[sys_surveyCompleted]

The greater Portland metropolitan area does a great job reducing, reusing, recycling and composting. In 2013, our region recovered 64 percent of its waste – an all-time high.

But even with our great recycling and recovery efforts, the greater Portland area still throws away about 1 million tons per year of garbage. That garbage has to go somewhere, and it is Metro's responsibility to manage the disposal of garbage and do so in a way that protects the environment, protects the public's health, and gets good value for the public's money.

As the Portland metropolitan area grows, Metro is planning for the future of managing the region's garbage. This fall the Metro Council will consider how we deal with

garbage in the future.

This feedback opportunity is about garbage only (not recycling) and meant to do two things: Give you some information about what happens to garbage now and one alternative we have for the future. Get your feedback about current practices and one alternative to inform the Metro Council's future decisions.

We appreciate your time and your views and we hope you find this interesting!



How Garbage Is Currently Managed

Right now, cities and counties arrange for private garbage companies to pick up and haul garbage away from homes and businesses. These garbage companies are called “haulers”.

Your city or county government decides:

How often garbage is picked up The rates that are charged for garbage pick-up The specific residential areas that different haulers will serve How you can recycle or compost items at the curb.

Haulers take garbage to transfer stations that are owned or licensed by Metro. At these transfer stations, garbage is transferred to trucks to be taken to a landfill. Most of the garbage is taken to a landfill near Arlington in Gilliam County (about 150 miles east of Portland), while some is taken to landfills in Benton and Yamhill counties.

Metro is responsible for:

Managing or regulating the transfer stations that haulers take garbage to after pick-up. Taking the garbage to a landfill. Metro contracts with a private company to truck the garbage to landfills, and it also contracts with a private landfill operator to dispose of most of the region’s garbage. And, importantly, **planning for future management of the greater Portland area’s garbage**

Metro has a contract with a private landfill operator through 2019. While the contract doesn’t end for another four years, Metro is planning now for how garbage is disposed of in 2020 and beyond.



[Q1] How satisfied are you with the garbage service in your community?

Please select one

Row:

[r1] Very satisfied

[r2] Somewhat satisfied

[r3] Somewhat dissatisfied

[r4] Very dissatisfied

[r5] I don't really think about it

[r6] Don't know

[Q2] What could be done to improve your satisfaction?

Please be as specific as possible



[Q3] Below is a list of priorities that may guide how garbage is managed in the future. Rank how important you think each priority should be when planning our region's garbage management system. A "1" means it should be the highest priority, and "8" means that it should be the lowest priority.

Please select one for each selection

Row:

[r1] Protect the environment

[r2] Protect people's health

[r3] Make sure garbage management facilities are located in areas based on their

compatibility with surrounding land uses, and without regard to income, race or political influence of those who live in or near a particular community

[r4] Keep monthly garbage bills as low as possible

[r5] Promote flexibility and ability to adapt to new technologies for managing garbage

[r6] Create local jobs

[r7] Dispose of garbage closer to communities from which it comes

[r8] Use waste as an energy source before burying it in a landfill



Starting in 2020, Metro could continue to haul most of our garbage long distances to landfills (remember, most garbage is hauled 150 miles to Gilliam County every day) or send a portion of that waste to a facility that turns garbage into electricity.

Here are a couple of options for the long term management of the Portland metropolitan area's garbage. Each option has its own advantages and disadvantages. Please read each option carefully and provide your feedback.

The "Status Quo" Option – Keeping Management the Same

The current arrangement of local haulers, regional transfer stations, and a distant landfill works well. The landfill near Arlington, Oregon, along with others in Oregon and Southern Washington, are well-maintained and well-managed and are important employers in rural communities.

It currently takes at least 50 trucks per day, five days per week, to haul a large portion of Portland area's garbage to Eastern Oregon and return empty, which is about 4 million round-trip miles per year.



Some of the advantages to this approach are:

This current system is stable and effective. Landfill gas generates some electricity that can be sold. The jobs that are created for managing garbage support rural Oregon's economy. Burying garbage in landfills is a relatively low-cost solution. No up-front investment is needed – the facilities already exist. Garbage is taken to landfills far away from the Portland, so our communities are not affected by the various negative aspects of having a landfill located nearby. A long-term commitment is not necessary. Metro could send loads of garbage to other landfills based on costs, market demand and other factors. Competition for waste from multiple disposal companies helps keep prices down.

Some of the disadvantages to this approach are: Hauling garbage 150 miles away contributes to greenhouse gas emissions and air pollution in the Columbia River Gorge National Scenic Area. Buried garbage generates methane, a potent greenhouse gas. Burying garbage requires long-term monitoring for leaks and other ongoing maintenance. Burying garbage has fewer energy benefits compared to burning waste to create electricity. Hauling garbage far outside of our community may make us less aware of the environmental impacts of our waste and consumption.



[Q4] Based on this information, do you feel the advantages of this approach outweigh the disadvantages?

Please select one

Row:

[r1] Yes - strongly

[r2] Yes - somewhat

[r3] No - somewhat

[r4] No - strongly

[r5] Not sure/no opinion

[Q5] Please share any comments about what you like about this approach.

Please be as specific as possible

[Q6] Please share any comments about what you dislike about this approach

Please be as specific as possible



In the Eastern U.S. and Europe, where landfill space is scarce, many “waste-to-energy” facilities burn garbage to produce electricity.

A garbage burning facility north of Salem has been operating for more than 25 years and creates enough electricity to power a city the size of Woodburn. Its emissions are regulated, and the facility meets state and federal air quality standards. The ash generated from this facility is taken to a landfill, but typically the ash takes up about 90 percent less room than garbage that would have been buried.

If the existing facility near Salem were expanded, or a similar facility was built within an hour’s drive from Portland, it could handle up to 20 percent of the region’s garbage. This facility could produce enough electricity to power up to 8,000 more households.

Some of the advantages to this approach are: Rather than burying garbage for little or no benefit, a portion of the Portland area’s garbage could provide an alternative energy source. An energy facility closer to the Portland area would reduce miles traveled hauling garbage compared to transporting garbage to Eastern Oregon and other places. Waste-to-energy is a proven technology that has been used throughout the world for more than 50 years. Air quality standards are regulated and closely monitored by the Oregon Department of Environmental Quality. Construction and operation of a waste-to-energy facility creates immediate and longer-term jobs.



Some of the disadvantages to this approach are: It is a more expensive option than

sending all of the Portland area's garbage to landfills. This method would still require some landfill space to accommodate the ash that is generated from a facility, though less landfill space than we currently use. This would require a significant long-term commitment to send large quantities of garbage to a waste-to-energy facility over many years to help pay for the large capital investment in that facility. This could increase garbage bills for households and businesses.

[Q7] Based on this information, do you feel the advantages of this approach outweigh the disadvantages?

Please select one

Row:

[r1] Yes - strongly

[r2] Yes - somewhat

[r3] No - somewhat

[r4] No - strongly

[r5] Not sure/no opinion



[Q8] Would you be willing to pay an extra \$5 per month on your garbage bill if some of your garbage could safely generate electricity and reduce the volume of garbage that goes to landfills?

Please select one

Row:

[r1] Yes

[r2] No

[r3] I don't pay my garbage bill directly (it's covered in my rent or other housing costs) but I support generating electricity from garbage

[r4] I don't pay my garbage bill directly and I do not support generating electricity

from garbage

[r5] Not sure/no opinion

[Q9] Please share any comments about what you like about this approach.

Please be as specific as possible



[Q8] Would you be willing to pay an extra \$5 per month on your garbage bill if some of your garbage could safely generate electricity and reduce the volume of garbage that goes to landfills?

Please select one

Row:

[r1] Yes

[r2] No

[r3] I don't pay my garbage bill directly (it's covered in my rent or other housing costs) but I support generating electricity from garbage

[r4] I don't pay my garbage bill directly and I do not support generating electricity

from garbage

[r5] Not sure/no opinion

[Q9] Please share any comments about what you like about this approach.

Please be as specific as possible



[Q10] Please share any comments about what you dislike about this approach.

Please be as specific as possible

[Q11] Now that you've learned more about these two options available for managing the Portland area's garbage in the future, please indicate which of these two options you prefer.

Please select one

Row:

[r1] **The "Status Quo" Option – Keeping Management the Same:** Continue sending garbage to distant landfills

[r2] **Burning Garbage to Produce Energy:** Consider potential waste-to-energy options that could burn garbage to generate electricity



[Q12] Please click continue to submit your survey! If you are not already receiving e-mail updates from Metro on garbage and recycling issues, would you like to be kept informed of

future activities and news relating to Metro's long-range garbage management plans? If so, please include your name and e-mail address below

Your survey responses will be kept anonymous and never be tied to your name or email address.

Row:

[r1] Name:

[r2] E-mail address:

