Curbside Recycling Analysis

Purpose

The purpose of this information paper is to provide the Ashland Board of Commissioners an analysis of implementing and maintaining a voluntary curbside recycling program for city residents. The paper consists of background, recycle survey results, recycle center data, and estimated costs.

Executive Summary

Of **7,353 households** who receive garbage pick-up from the City of Ashland, approximately **11% (816)** returned the survey in favor of curbside recycling and **2.9% (213)** are not in favor of curbside recycling. **Of the 816 households** who are interested in curbside recycling are **80% are willing to pay** for the service. Of those respondents, **362 (44%)** would be willing to pay between **$1-$4.99 per month** and **16 households are willing to pay over $15 a month**.

Assuming 816 households sign up, the **annual cost would be approximately $ 231,972 ($284.28 /per year per household ($23.69 per month)) after the setup costs of $296,150 ($362.93 per household).** Setup costs do not include depreciation.

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Background

Curb-side recycling has been a topic of conversation in Ashland for several years, coming up in various Board of Commissioners (BoC) meetings and other venues. City of Ashland staff have supported these discussions by analyzing cost and resources required to implement various recycling program ideas and concepts. In June 2017 an unofficial survey was conducted with approximately 300 citizens responding. In August 2017, The City received a single bid for conducting recycling. The cost of this bid ranged from $576,000-$638,000 per year depending on number of households participating. In November 2017, during a Commission meeting, the BoC decided to table the idea due to the looming pension crisis.

The topic of a curbside recycling program resurfaced via a Social Media post on May 1st, 2018 in the "Build Ashland" group on Facebook, citing concerns for the drop-off sites such as illegal dumping, convenience, and perceived safety issues. Recognizing the issue and with the intention of addressing the concerns, City staff met and generated a proposed solution in the form of a monitored drop off location under the Ohio River bridges.

On May 10th, 2018, the proposed solution to address the illegal dumping of non-recyclables and the concerns from citizens regarding safety was presented to the BoC. The BoC approved moving forward with this as an interim solution. The newly monitored centralized recycle location was officially opened under the Bridges (13th Street) June 28th, 2018. This facility includes a locked gate, 20 recycle bins, a small guard shack, and seasonal employees. Hours of this facility were initially Thursday/Friday 3pm-7pm and Saturday 8am – 4pm. An addition of morning hours began on July 31st, 2018, adding Tuesday morning from 6am-10am.

Initial setup cost of the facility was ~ $23,899 (not including city labor). Annual sustainment cost is approximately $10,000[1] for manpower and facilities. Annual recycle pick-up costs from Rumpke are $19,116 ($1,593 per month.)

Also, at the May 10th, 2018 BoC meeting, Commissioner Gute proposed a survey of all customers to gauge interest for curbside recycling. Then a motion was made by Commissioner Perkins, and after lengthy discussion, passed unanimously to begin a full investigation by city staff into the cost of an in-house voluntary curbside recycling program, to include a citizen survey to gauge community interest.

[1] Not including electric costs.

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An online/mobile version of the new, more detailed Recycle Survey was added to the City of Ashland web site on June 4th, 2018 and marked to close July 31st, 2018 at midnight. Hard copies of the survey were included with the June 20th and July 5th 2018 utility bill. Customer Service Representatives collected hard copy surveys and encouraged citizens who call in payments to complete the survey online.

The recycle interest survey was designed by the Public Information Officer to include:

- Required citizen address, to ensure respondent is a City of Ashland Sanitation customer
- Opinion on curb-side recycling
- Demographic data to ensure the sampling is large enough to provide a correlated sample of the population and possibly for use in grant funding

The staff does anticipate a curbside recycle program will reduce the current cost of garbage fees based on tonnage, but it is not feasible to determine that exact sum at this time. This reduction will not reduce staff costs, as routes and number of pickups will remain the same.

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Recycle Survey Results

The Recycle Survey had two requirements:

a. Street Address
b. Opinion ***for*** or ***against*** curbside recycling; all other questions were voluntary.

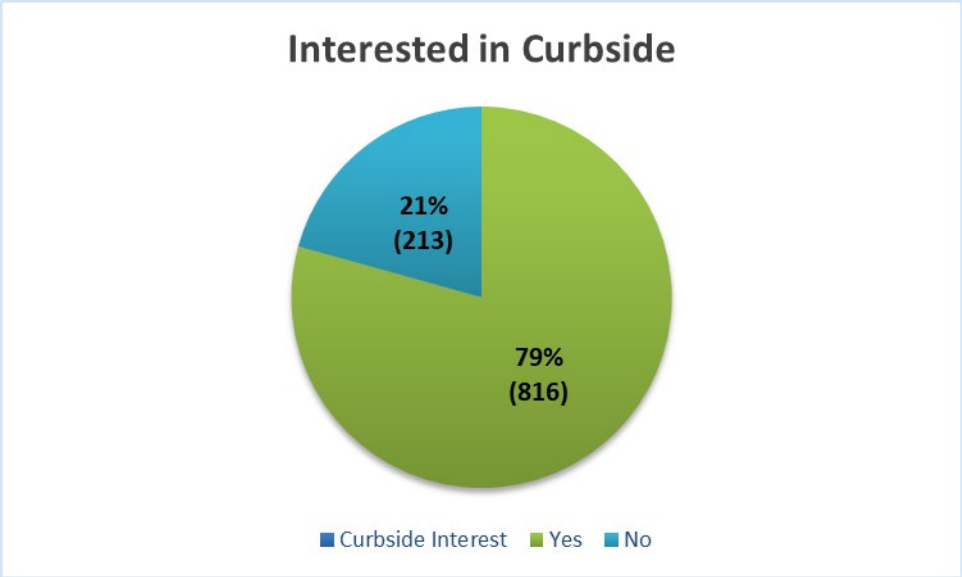
Of the surveys sent out:

- 1,691 were returned either via the web site or in printed format.
- 398 were returned without addresses (printed only)
- 264 were not within City of Ashland city limits

The follow data is derived from the remaining **1,029** surveys from **7,353** households who currently pay for garbage pickup. (**14.0%** response rate)

A. Would you be interested in a curbside recycling program?

Of the 1,029 surveys - 816 said YES; 213 said NO



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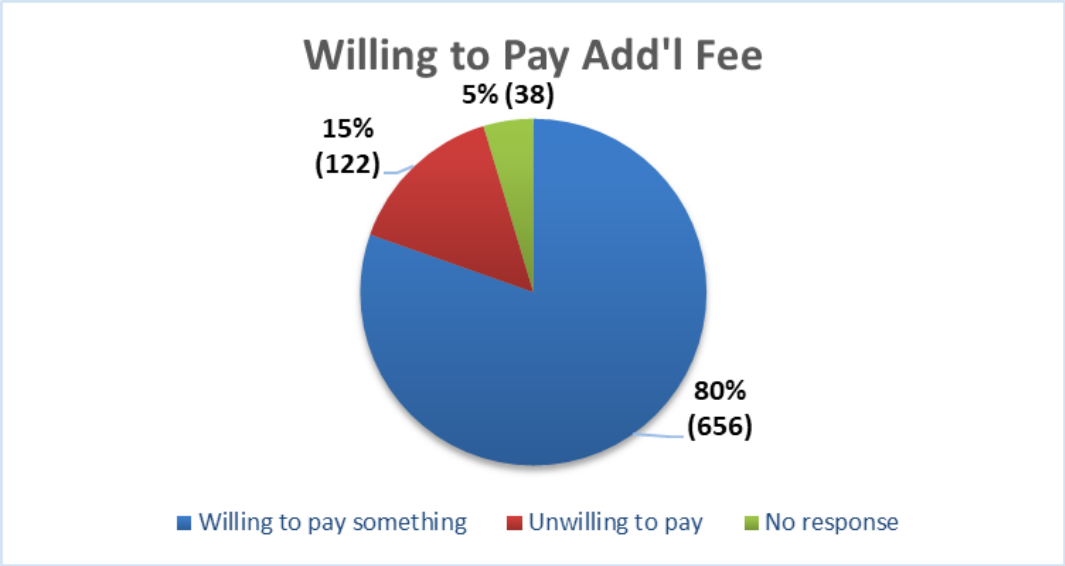
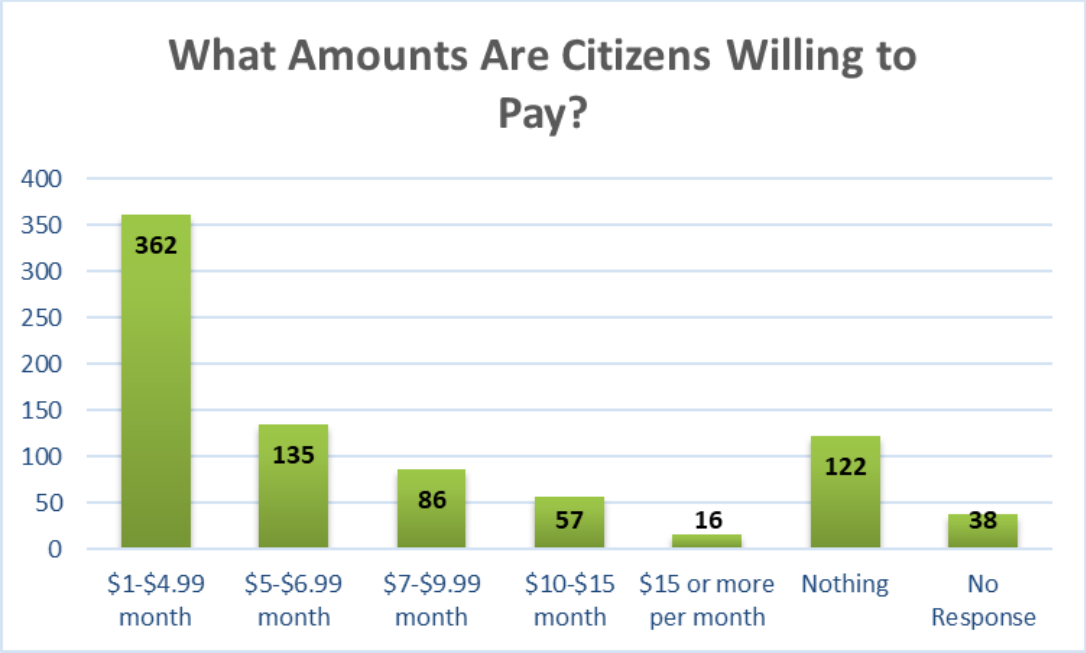
B. Of the 816 who responded yes, what percentage are willing to pay an additional fee for the service?

656 – willing to pay ($1-$15 per month); **122** unwilling to pay; **38 no response**



C. Of those who responded yes, what amounts are citizens willing to pay to implement the Curbside Recycling Program?



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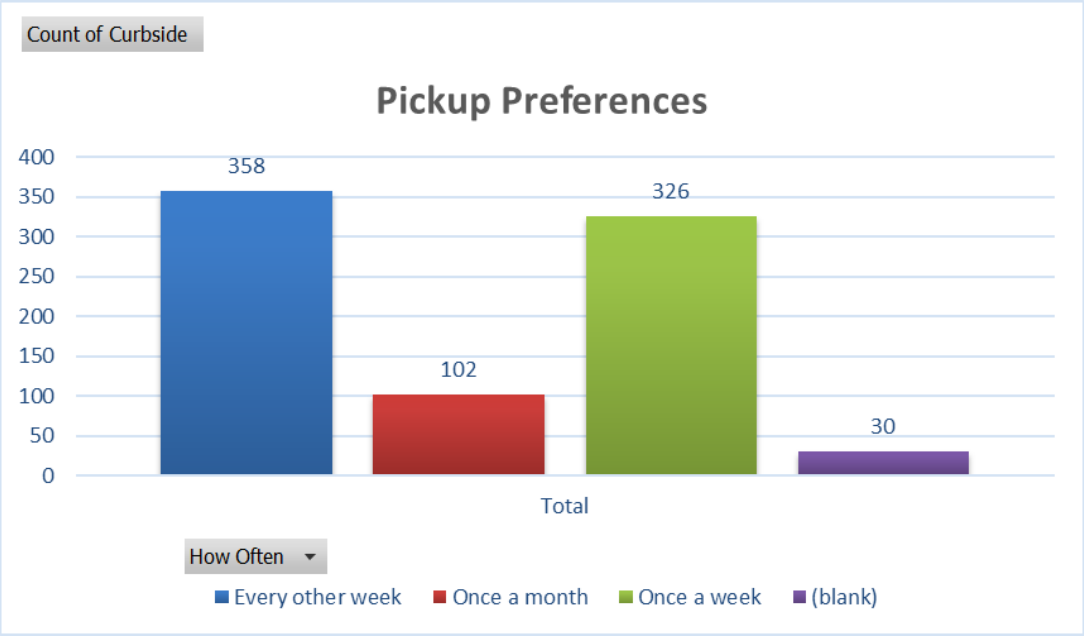
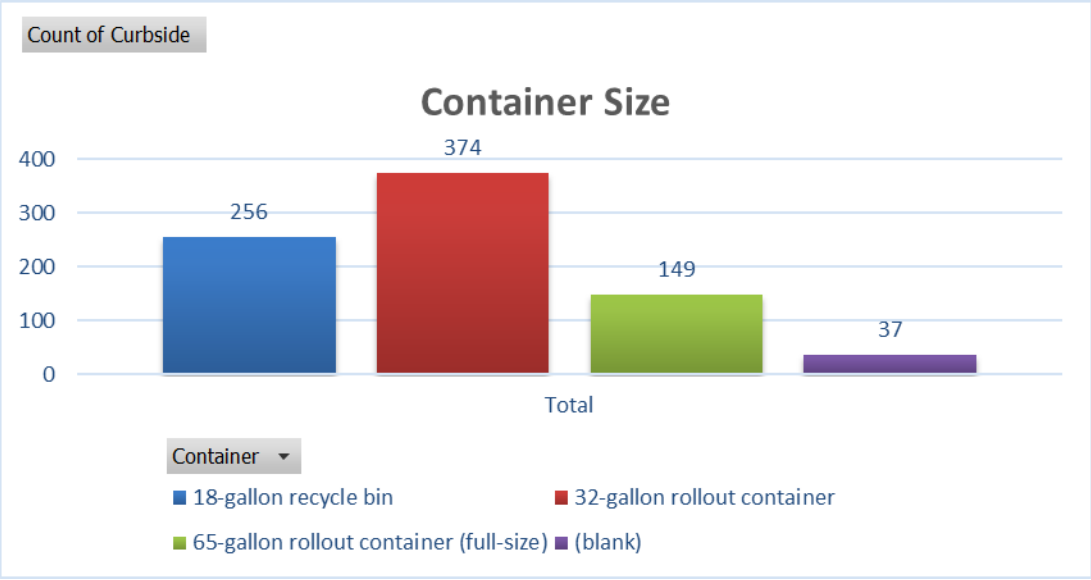
D. How often would you need recycling pick-up to make it worth your time and the space in your home required to collect your recycling? (multiple choices



E. What size container would you need to accommodate your recycling needs if picked up every other week?



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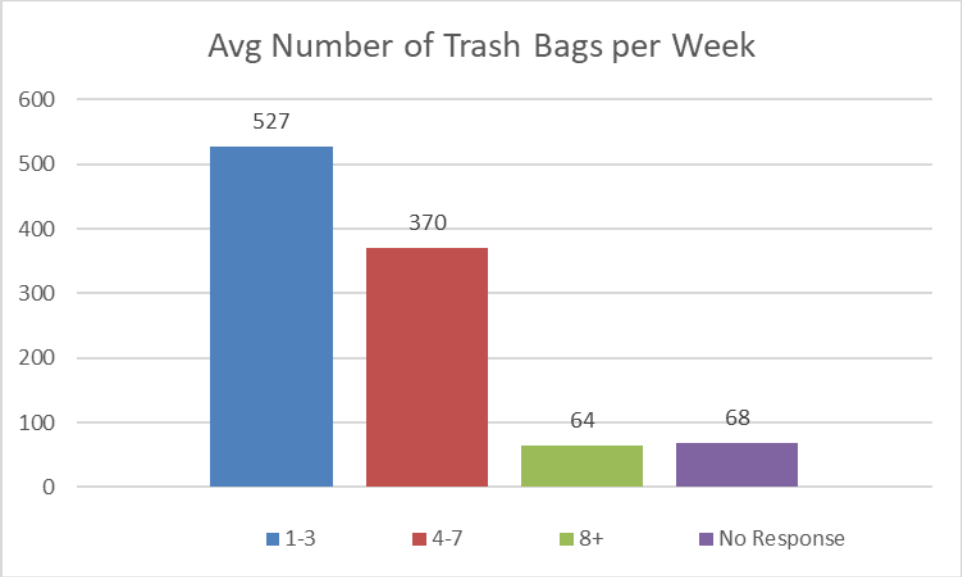
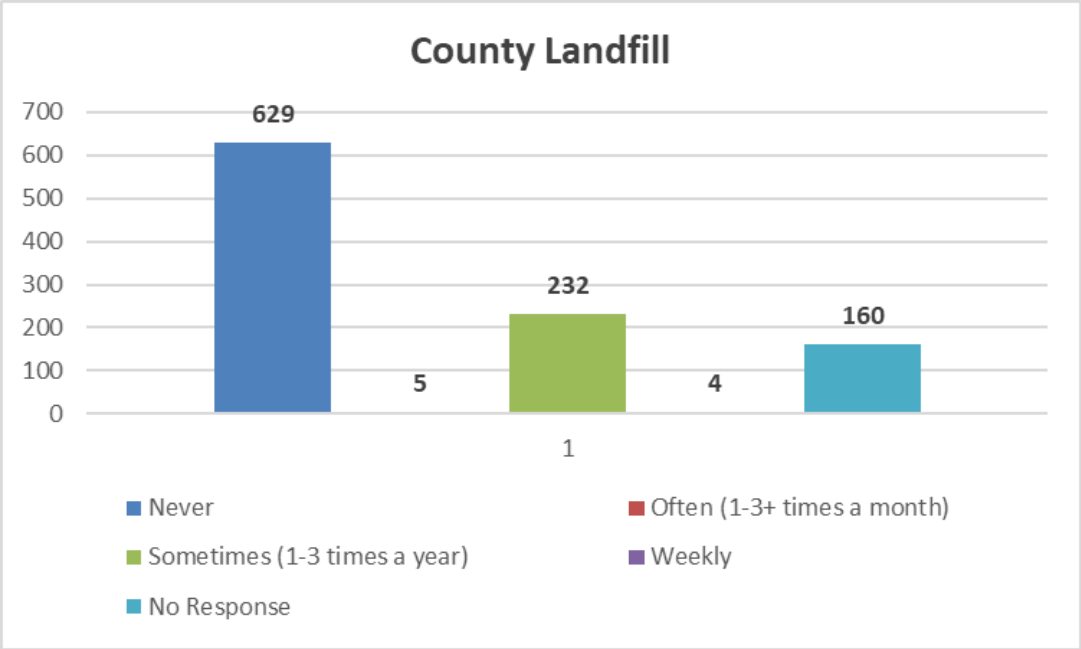
F. On average, how many bags do you typically put out for garbage collection each week?



G. Do you take waste to the county landfill facility?



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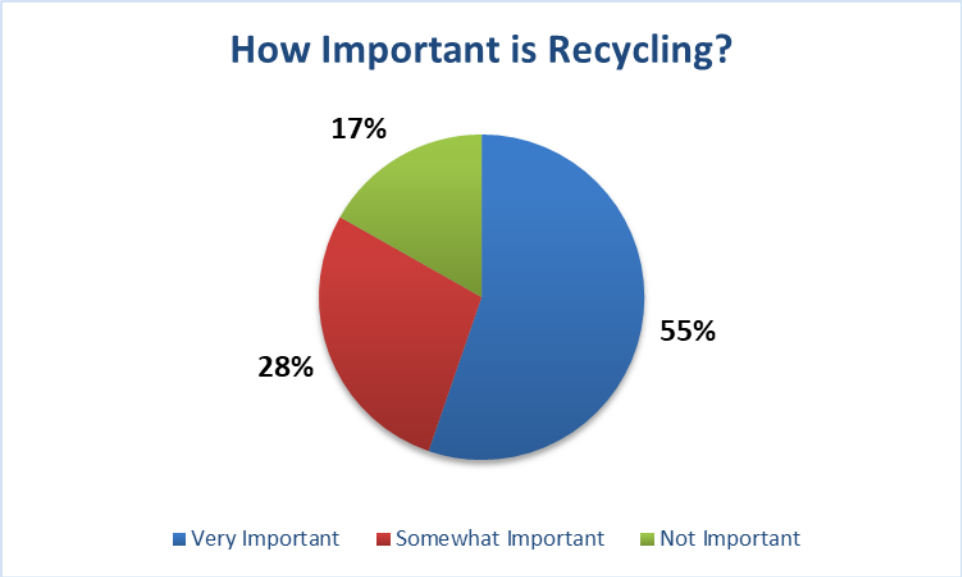
H. How important is recycling to you?



Very Important	569
Somewhat Important	287
Not Important	173

I. 340 Citizen Comments are attached to this document. Samples include:

- I always recycle. I can't get it through my head why the city/ residents need to pay for recycling. Does the recycling place not sell to companies after they recycle? They charge the city to pick up then sell the recycled material? So it sounds like they get payed twice. My sister lives in Fairfield, Oh. They have curb side recycling but says she does not pay extra for it
- You've just limited the hours and days to take to recycle. Boooooo. Don't limit us. Government at its worst. No way would I pay more to recycle at the curb. Ashland Taxes us enough and now I can't recycle at a convenient time for me.
- Would love curbside recycling. Have recycled for years.
- I think city funds would be better used elsewhere. We already have a recycling option.
- I do my best to recycle and it would be extremely helpful to have curbside pick-up, but I would like to have some proof that it's actually being taken care of like it should. The area under the bridge was always scary, but since the fence has been put up, I feel much safer. So, that isn't as big a deal now.

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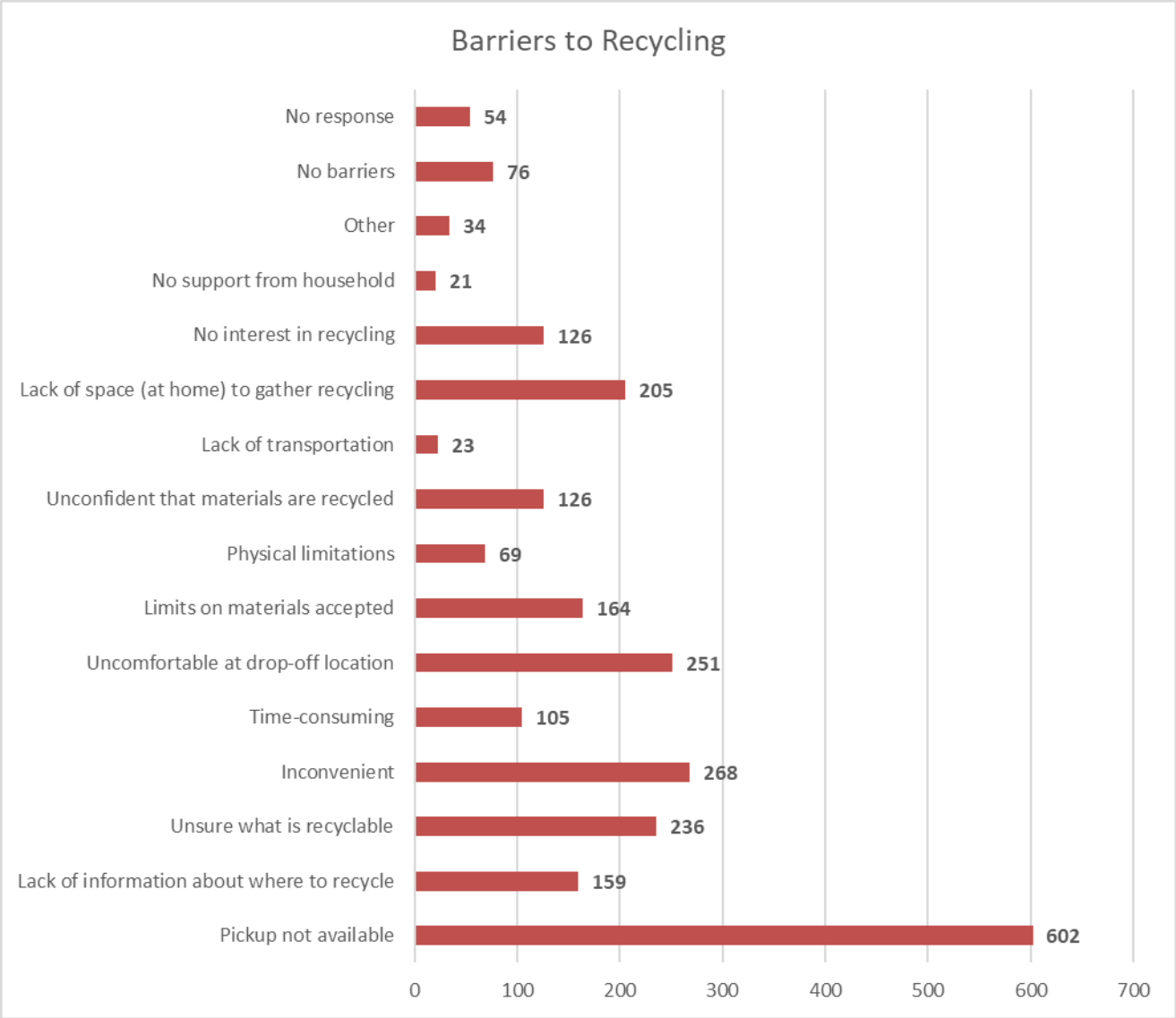
J. What are your top 3 barriers to recycling?



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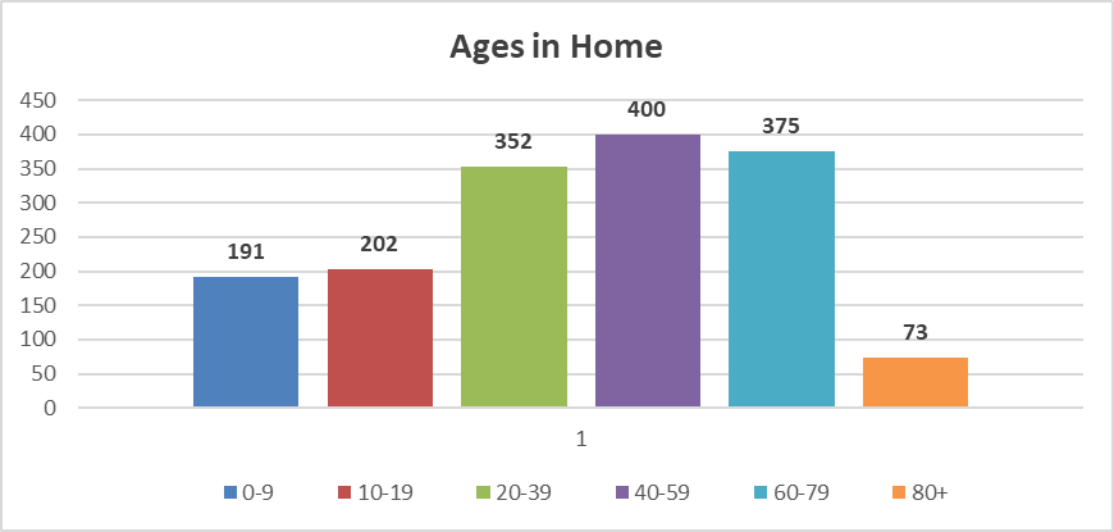
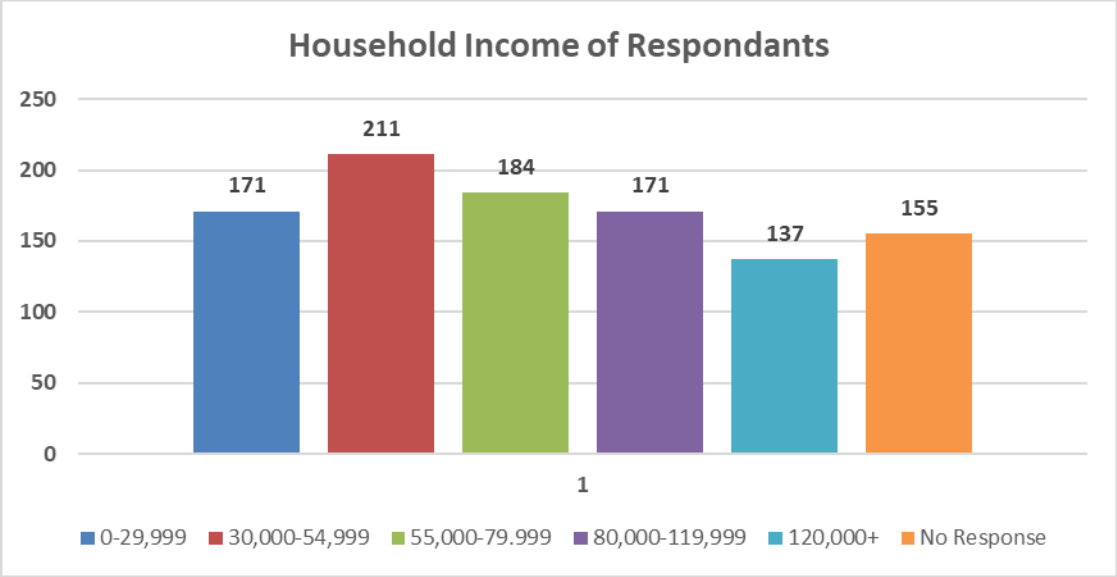
Demographic Data

Demographic data from the survey was recorded to ensure that the results were proportionate to the population of the City of Ashland and for use in grant writing efforts. Of the approximately 7,353 households who currently receive garbage pickup, 1,029 surveys were returned; a 14.0% response rate. The follow demographic data supports the survey as a clean sampling of the population.

Ashland population (2014) – 21,335/ Media Age - 39.2 / Persons per household - 2.3/ Median household income -$39,742[2]





[2] Per https://censusreporter.org **Census data:** ACS 2016 5-year unless noted.

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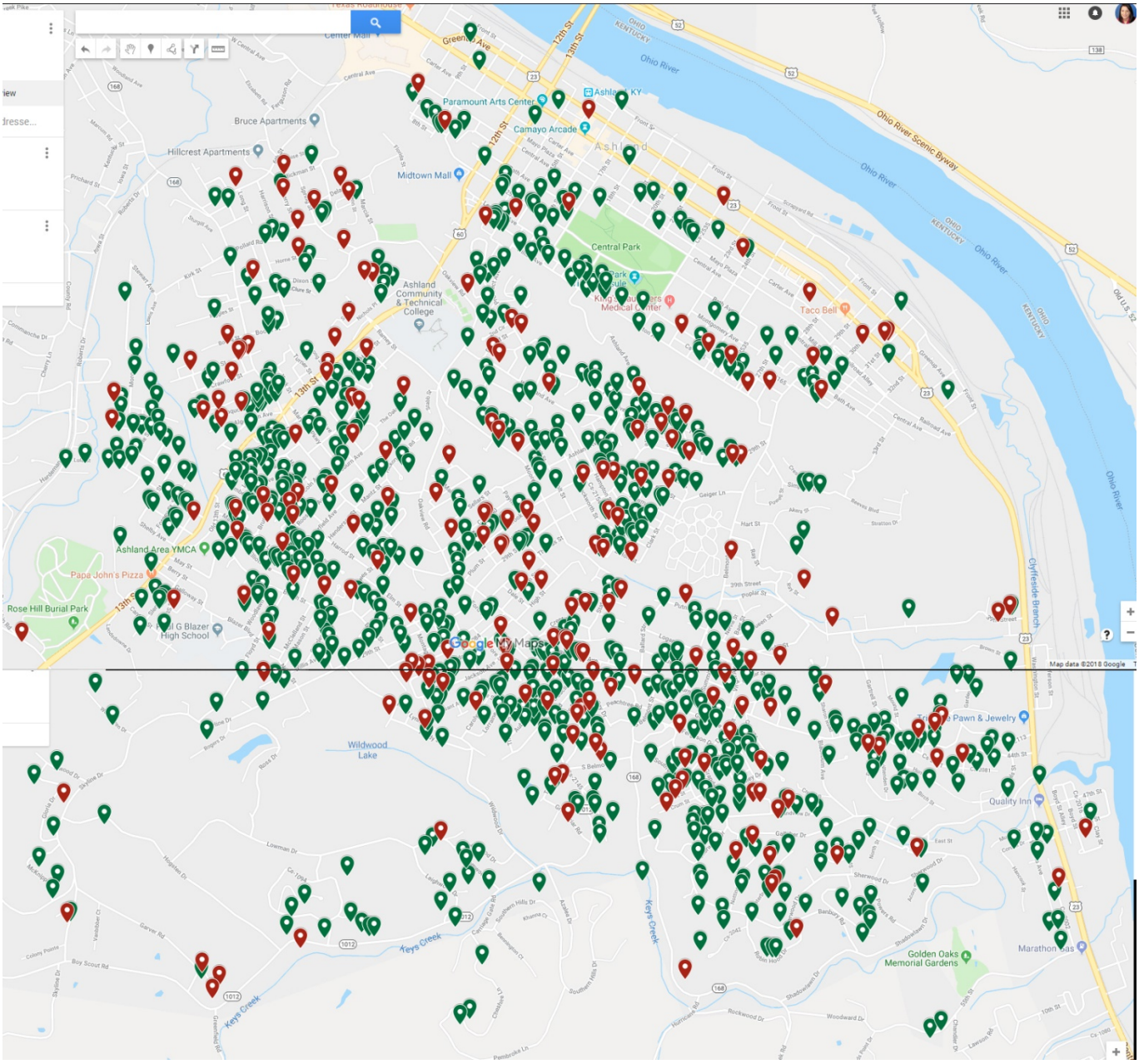
Survey Map

Noted on the Survey Map are the households who responded to the Question: Would you be interested in a curbside recycling program?

YES in green and **NO** in red.



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In conclusion, the Recycle Survey data finds that of the **7,353 households** who receive garbage pick-up from the City of Ashland, approximately **11% (816)** returned the survey in favor of curbside recycling and **2.9% (213)** not in favor of curbside recycling.

Of the 816 households, **80% are interested** in curbside recycling and are **willing to pay** for the service. Of those respondents, 362 (**44%**) would be willing to pay between **$1-$4.99 per month**. The majority of respondents in favor of curbside chose either every other week (44%) or weekly pickup (40%) and would prefer a 32-gallon container (46%.)

Of the 527 (65%) responding in favor of curbside recycling state that they typically put out from 1-3 bags of trash each week, 77% (629) have never visited the county landfill or the landfill's free recycle facility.

Of all survey respondents 569 (55%) consider recycling to be Very Important and cite "Pickup Not Available" (58.5%) and "Inconvenient" (26%) as their top barriers to recycling.

Recycle Center Data

As mentioned in the background section of this information paper, a monitored, centralized recycle location was officially opened under the Bridges (13th Street) in late June 2018. This facility includes a locked gate, 20 recycle bins, a small guard shack, and seasonal employees. Current hours of this facility are: Tuesday morning from 6am-10am, Thursday & Friday 3pm-7pm and Saturday 8am – 4pm. Initial setup cost of the facility was $23,899 (not including city labor). **Annual sustainment cost is approximately $10,000**[3] for manpower and facilities. **Annual recycle pick-up costs (Rumpke dumps all 20 dumpsters 2 times a week) are $19,116 ($1,593 per month.) Of note, the City of Ashland paid $525 a month for recycle pick-up costs when the program started in 2007. In December of 2017, the cost was $1,408 per month. City staff contacted four other trash providers who stated they do not provide pick-up recycling services or they use Rumpke as part of their efforts.**

Recycle center data was gathered from opening on June 28th, however initial data was inconsistent. Below is the data from July 31 to Aug 18th, 2018.

Average Customers per Week				
	Total Customers	Claim Ashland Residency	Boyd Tags	Other Tags
Tuesday	29	27	26	3
Thursday	95	86	87	8
Friday	91	75	81	10
Saturday	143	118	127	16
Weekly	358	306	321	37

[3] Not including electric costs.

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At best case, we estimate that 90% of those that utilize the drop-off location are City of Ashland customers. It is near impossible to determine how many users are Ashland Sanitation customers without the requirement of a City of Ashland Utility Bill showing Sanitation charges for each drop-off.

Estimated Costs

Curbside recycling costs are broken down into one-time setup costs and annual costs. Costs are assuming 816 customers sign-up, 4 full routes which are conducted every other week (26 weeks), 1 small-road route conducted every other week (26 weeks; mini-packer), a 3-man crew to ensure coverage, and an administrator to manage sign-ups, scheduling and maintenance. Costs do not include price to dump at recycle facility, as that number was not readily available without a bid process.

A. One-time Setup Costs*

1.	Full Size Truck	$ 149,000
2.	Mini-packer	$ 98,000
3.	Container w/lid ($61 each)	$ 48,800
4.	Container Hot Stamp	$ 350
		$ 296,150*

* Does not include depreciation

Sanitation Department Route Estimate:

4 routes = approximately 200 miles per week x 26 weeks = 5,200 miles per year
1 mini-packer route = approximately 60 miles per week x 26 weeks = 1,560 miles per year
3 dump visits = approximately 210 miles per week x 26 weeks = 5,460 miles per year
Total estimated mileage per year = 12,220 miles

B. Annual Costs*

1.	3-man crew (full-time, per year) **	$ 150,000
2.	Administrative (full-time, per year) **	$ 50,000
3.	Fuel cost (.64 per mile)	$ 7,821
4.	Maintenance cost (.81 per mile)	$ 9,898
5.	Rumpke 47.51 per ton (est.300 ton yr.)*	$ 14,253
		$ 231,972

* Cost of delivering recyclables to the Rumpke Facility in Hanging Rock, Ohio based on drop-off location averages. **This number is likely to be higher**

** Includes benefits

An additional full-size truck and mini-packer truck are necessary as 40% of the current fleet have reached or are reaching the end of their lifecycle (8-10yrs), with all backup fleet vehicles being over 10 years old. Of the 8 trucks, 3 are not operational. Of the remaining 5, 3 are under 8 years old and 2 are past their estimated lifespan.

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Additionally, to be used as both recycle and garbage pickup, current fleet would have to be fully sanitized between uses to avoid contamination of recyclables. A 3-man crew is required because a 2-man crew would not be able to support vacation, sick time, or staff turn-over.

These estimates support both weekly and biweekly pickup costs, however assuming 26 weeks of recycle pick-up, non-recycle weeks could be used by Sanitation to:

- Respond to additional citizen requests for garbage pick-up.
- Maintain and repair equipment, containers, facilities, etc. (currently a weak area)
- Fill voids in Sanitation/Central Garage in cases of sickness, vacation, or open positions
- Clean-up illegal roadside dumping, cutting grass, and other Streets/Facility Maintenance
- Relieve Superintendent as only backup CDL driver

Setup Cost $ 296,150 / 816 households = $ 362.93 per household annually (30.24 per month)
Annual Cost $ 231,972 / 816 households = $284.28 per household annually (23.69 per month)

With these estimates, assuming 816 households sign up, the annual cost to the City of Ashland would be approximately $284.28 /per year per household ($23.69 per month) after the setup costs of $296,150.