



# Town of China

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## Municipal Solid Waste and Recycling Transfer Station Program Review November 2019

Reviewed by Transfer Station Committee

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## Executive Summary

In January 2012 the results of a 2011 survey of the Town of China Transfer Station were published. That survey had as its primary purpose to gain insight of residents for proposed changes intended to mitigate cost increases for disposal of municipal solid waste. (Survey, 2012) This survey is geared more toward gathering both quantitative and qualitative responses that reflect on the services of the Transfer Station. While there are no pending proposals for change, the data collected by this survey could be used toward future proposals for adjusting staffing or service schedule, plant improvements, or disposal and recycling policies.

Formulation and release of the survey was overseen by the 7-member Transfer Station Committee, comprised of residents of both China and Palermo as well as two employees of the Transfer Station. The town manager participates as an ex-officio but non-voting member of the committee. Survey questions went through three iterations prior to final approval and initiation of the survey campaign. The survey was conducted from September 6 to October 15, 2019 to afford ample time and opportunity for participation. The online survey platform was allcounted.com (<https://www.allcounted.com/share?view=summary&cid=s9nmt7rz0mvuv>), and numbered/colored paper surveys were made available for those either unable or unwilling to complete the online survey. Total responses were as follows: online-159, China (orange) paper-62, Palermo (blue) paper-36. Online responses were limited to one per browser as a means of preventing duplication. The grand total of responses was 245.

Unlike the 2011 survey, this survey was not selectively distributed to a limited population. All users of the Transfer Station were encouraged to participate in either the online survey or by completing a paper survey available at either the China or Palermo town office and at the China Transfer Station. This approach was selected as a means of mitigating any perception of bias in the survey and to maximize participation. Against a combined adult population of 4,496 (China—3,306 and Palermo—1,190), the total responses received of 233 from those two municipalities represents a 5.18% participation rate (China-5.38% and Palermo-4.62%). (FactFinder, 2010) Twelve additional responses were received from outside China and Palermo, including Albion (2), Winslow (1) and West Gardiner (1); 8 others declined to identify their location.

### Quantitative results show the following:

- 95% use the transfer station
- 92% recycle
- 6% of respondents bring trash/recycling from rental properties
- 10% of respondents bring trash/recycling from seasonal properties
- 69% of respondents use the transfer station every week
- 82.5% of respondents dispose of both trash and recycling
- 49% prefer access every day of the week, while 35% prefer Saturday
- 36% prefer late morning (9 – 11 am) and 34% prefer afternoon (3 – 5 pm) access
- 70% say their primary reason for recycling is for environmental concerns
- For the 8% who do not recycle, inconvenience and lack of space are equal responses
- 63% prefer notifications of closings via the Internet (Facebook, Twitter, etc.)

- 13% use contract curbside trash collection services

Qualitative results show the following:

- On a scale of 1 to 5, with 1 being “worst” and 5 being “best” service regularly received at the transfer station, the average rating is 4.66. 31 respondents rated 3 and below, while 198 respondents rated 4 and above.
- When given the opportunity to express their greatest frustration with the transfer station, 119 responses were received. 102 respondents were unhappy with the current schedule, saying the transfer station closes too early, is not open long enough on Saturday, or is not open on Monday. 17 responses were frustrations with a variety of processes for handling recycling and trash.
- When given the opportunity to express their greatest compliment of the transfer station, 153 responses were received; 51-Friendly, 45-Helpful, 25-Clean, 18-Great Staff, and 14-Organized.
- When given the opportunity to suggest a single improvement to the transfer station, 122 responses were received. 73 respondents suggested a change to the schedule to lengthen current hours or open on days currently closed. 20 respondents suggested making recycling easier, and 29 respondents made various other suggestions related to the layout or processes of the transfer station.

## Background

In 2011 a 5-question customer survey was conducted to assess possible policy and procedural changes to mitigate rising costs at the Town of China Municipal Solid Waste Transfer Station. That survey was mailed to 318 residents (30 known renters and every 11<sup>th</sup> residence as listed on the town's property records—288 residences). An additional 2,400 surveys were placed in copies of the Town Line newspaper for general circulation in the community, and surveys were available at the town office, libraries and transfer station for pickup. Prizes were offered as an incentive for participation and for providing their identifying information to the town. The total responses to the survey at its completion in August 2011 was 524. The survey report acknowledges that duplication of responses was likely but could not be accurately assessed. The final report of the survey was published in January 2012. (Survey, 2012)

Shortly following the arrival of the new town manager on June 1, 2018, the Select Board approved a change to the transfer station schedule. The new schedule opened the transfer station Tuesday through Saturday each week at 7 o'clock AM and closing at 3 o'clock PM each day except Thursday when it remains open until 5 o'clock PM. Prior to this change, the transfer station was open Tuesday, Wednesday, Friday and Saturday from 7 o'clock AM to 5 o'clock PM. Workers at the transfer station rarely saw a day off for a holiday since most holidays occurred when the transfer station was closed. The schedule change worked to afford an extra day of the week for users to access the facility and for workers to participate in holiday scheduling. Morale at the transfer station improved considerably.

In late 2018 it was suggested that another survey should be conducted in 2019 for assessing customer satisfaction with the transfer station.

## Preparing for the Survey

In August 2019 work began to formulate the survey questions with two questions carried forward from the 2011 survey. The Transfer Station Committee reviewed questions through three draft iterations before approving the final version of the survey in early September 2019. A copy of the survey is at Appendix A.

Considerable discussion surrounded the method for conducting the survey. Reflections from Transfer Station Committee members on the 2011 survey suggested that the outcome was too biased by the method (incentives, prizes) that was used to encourage participation. This concern is validated in the research of Gary Hsieh and Rafal Kocielnik who found that the mere offering of incentives could put some people off from participating in a survey, while the style of incentive(s) could narrow the participation to those who are attracted by a type of incentive. Their research showed that while the incentives might increase participation, the results could be biased toward an ideological leaning. (Hsieh & Kocielnik, 2016) It was against this research that this survey was decidedly void of incentives and relied on volunteer participation alone. Although participation bias was a concern, this approach made sense since it was anticipated the respondent pool would reliably represent the user community in their answers to the survey questions.

Additionally, it was acknowledged that many users of the transfer station may not have access to the Internet, so use of a combined online and paper survey would ensure better participation. Internet survey platform Allcounted.com was used and a limit was placed on one survey per browser associated with a given Internet Protocol (IP) address. This meant that a household with more than one computer could participate more than once, since there could be more than one adult transfer station user at each home. A review of the data showed that eight (8) IP addresses originated two responses each and one (1) IP address originated three responses. Paper surveys were color-coded and numbered to ensure the ability to identify their origin (China or Palermo) and to avoid duplication.

## Conducting the Survey

From September 4-5, 2019, the online survey at Allcounted.com (<https://www.allcounted.com/share?view=summary&cid=s9nmt7rz0mvuv>) was tested by members of the Transfer Station Committee to reveal any shortcomings. Skip rules were adjusted to ensure those respondents who declared they do not use the transfer station were skipped ahead to the last question of the survey. Also, those who declared they do use the transfer station were skipped past the question about why they do not use the transfer station. The online survey campaign began September 6, 2019.

Paper surveys were made available at the China Town Office and the transfer station, and also at the Palermo Town Office. China residents saw orange paper surveys numbered from 1001 to 1200, and Palermo residents saw blue paper surveys numbered from 1001 to 1100. The China Town Office had a sealed cardboard box available for respondents to drop their survey through a slot in order to preserve their anonymity. Surveys collected at the transfer station were also dropped in this box. Palermo surveys were delivered to the China Town Office at the conclusion of the survey campaign by one of their select board members that serves on the Transfer Station Committee.

The survey campaign spanned 39 days and concluded on October 15, 2019. Table 1 shows the distribution of online responses by week. Table 2 shows paper responses by location.

Week	Dates	Responses
1	9/6 to 9/12/2019	9
2	9/13 to 9/19/2019	11
3	9/20 to 9/26/2019	116
4	9/27 to 10/3/2019	7
5	10/4 to 10/10/2019	15
6	10/11 to 10/15/2019	1

*Table 1 – Response Distribution by Week*

Location	Color	Responses
China	Orange	62
Palermo	Blue	36

*Table 2 - Paper Survey Responses by Location*

## Survey Responses

Figure 1 provides the numbers of responses for each question and available selections:

1. Where is your principal place of residence?	
a. China	191
b. Palermo	56
c. Albion	2
d. Winslow	1
e. Vassalboro	0
f. Other	9
2. Do you use the China Transfer Station?	
a. Yes	244
b. No (skip to Question 17)	13
3. Is the trash and/or recyclables you bring to the transfer station from a rental property?	
a. Yes, full time	11
b. Yes, seasonal	3
c. No	229
4. Is the trash and/or recyclables you bring to the transfer station from a seasonal property in either China or Palermo?	
a. Yes	23
b. No	219
5. How often do you use the Transfer Station?	
a. Every week	167
b. Every month, but less than every week	59
c. Occasionally, but less than every month	15
6. Which of the following services do you use at the Transfer Station? (check all that apply)	
a. Dispose of trash and recyclables	212
b. Dispose of trash only	21
c. Dispose of recyclables only	15
d. Dispose of bulky items such as demolition debris, whitegoods, metals	133
e. Other (please describe)	24
7. Which day of the week would you most prefer to use the Transfer Station?	
a. Tuesday	10
b. Wednesday	11
c. Thursday	6
d. Friday	11
e. Saturday	87
f. All of the above	121
8. Which part of the day would you most prefer to use the Transfer Station?	
a. Early morning – 6:30 to 8 AM	50
b. Late morning – 9 to 11 AM	94
c. Midday – 12 to 2 PM	29
d. Afternoon – 3 to 5 PM	87

Figure 1--Survey Responses

9. Do you recycle?							
a. Yes						220	
b. No (Skip to Question 11)						18	
10. If you do recycle, select the reasons that apply. (Skip to Question 12)							
a. Environmental concerns						180	
b. I use fewer bags on a pay-per-throw basis (Palermo residents)						25	
c. I want to reduce taxes						127	
d. Other: _____						18	
11. If you do not recycle, select the reasons that apply.							
a. Inconvenient						11	
b. Takes too much time						6	
c. Not enough space at home						11	
d. Recyclables go into the landfill anyway						4	
12. When finding out about closings or holiday schedules of the Transfer Station, how would you like to be notified? Select all that apply.							
a. Internet (Facebook, Twitter, town website, etc.)						163	
b. Signs posted at the Transfer Station						140	
c. Newspaper						59	
d. Digital sign or bulletin board						102	
13. On a scale of 1 to 5, with 1 being worst and 5 being best, please rate the quality of service you regularly receive at the Transfer Station. (Check the box below your choice)							
	Worst				Best		
	1	2	3	4	5		
	9	3	19	52	146		
14. Please use the space provided to share your greatest frustration with the Transfer Station. (optional)						119	
15. Please use the space provided to share your greatest compliment with the Transfer Station. (optional)						153	
16. If money were no object, what one thing would you do to improve the Transfer Station? (optional)						122	
17. Do you use curbside or dumpster trash collection services?							
a. Yes						31	
b. No						207	

Figure 1--Survey Responses

Survey Analysis – Figure 2 provides charted analysis of the survey questions.

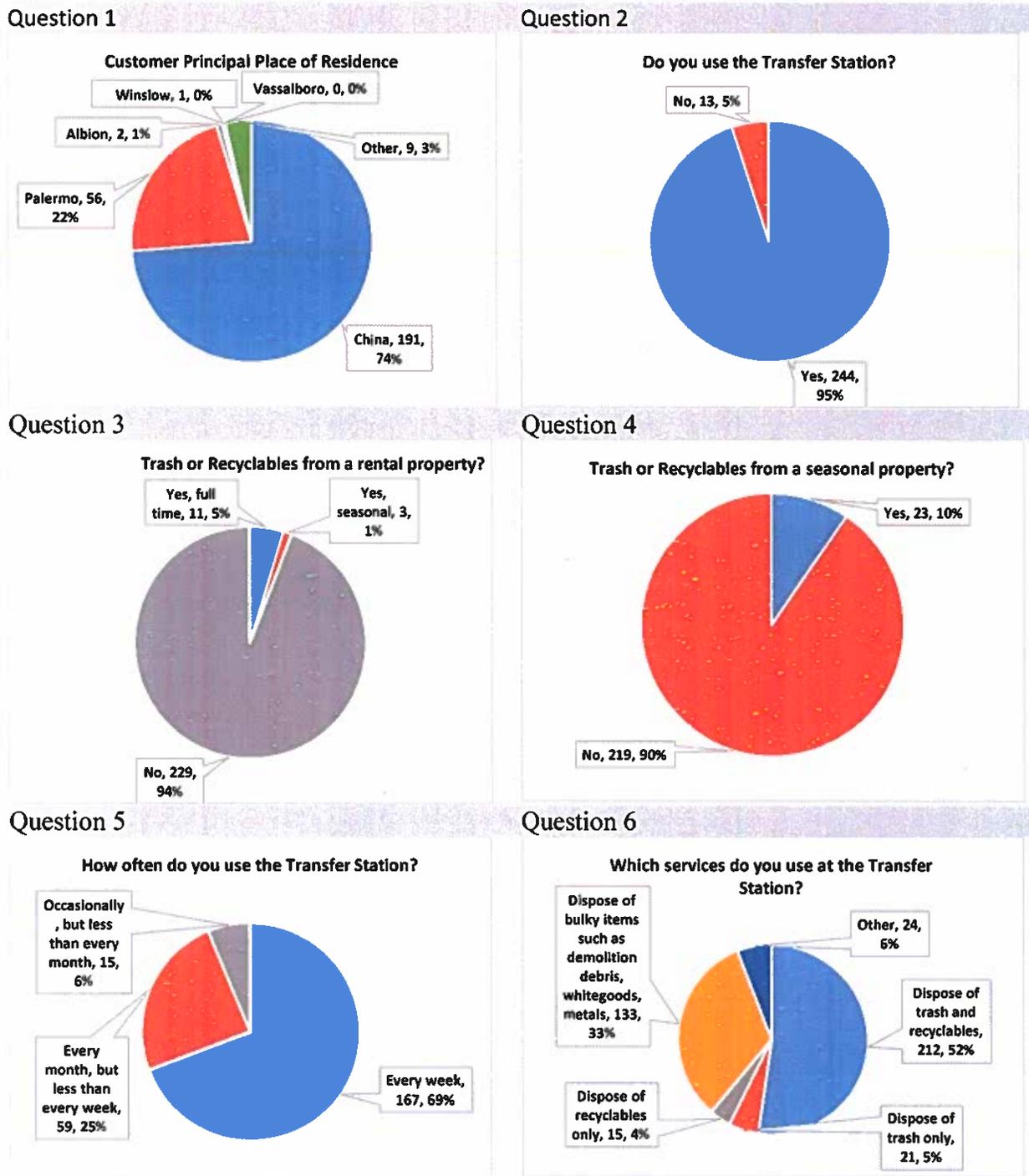
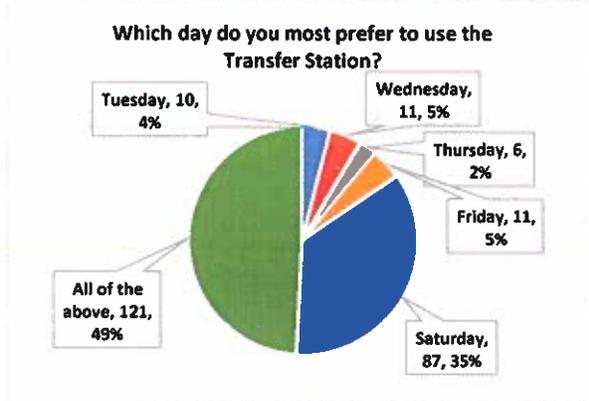
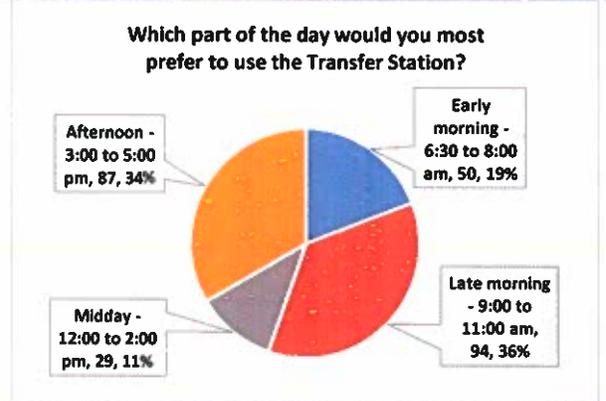


Figure 2-Survey Analysis

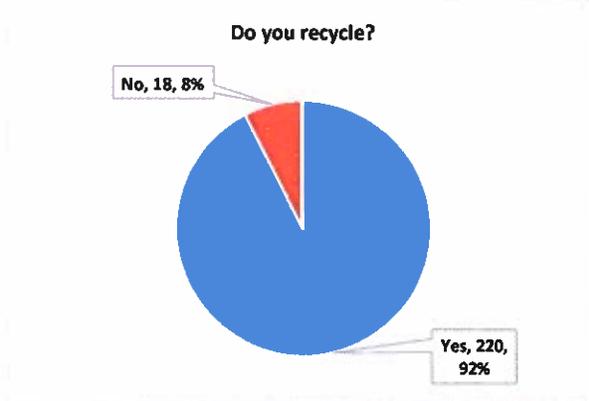
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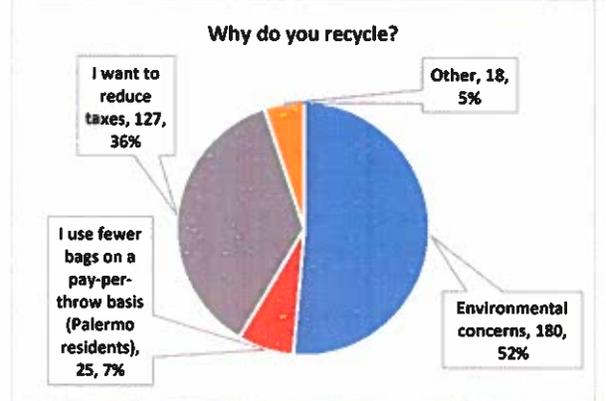
Question 8



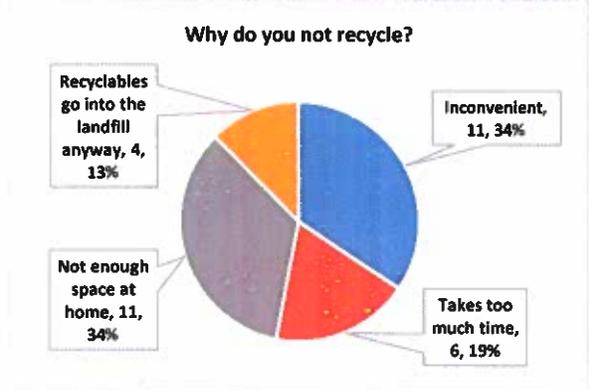
Question 9



Question 10



Question 11



Question 12

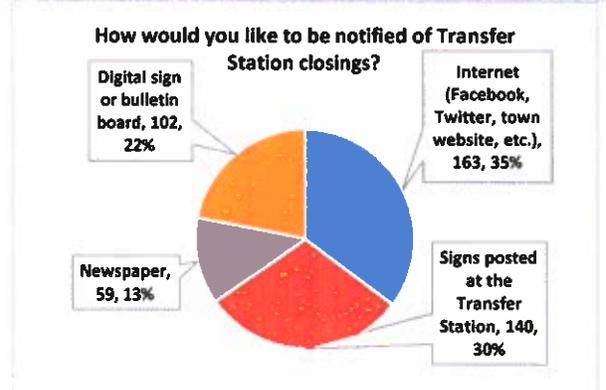
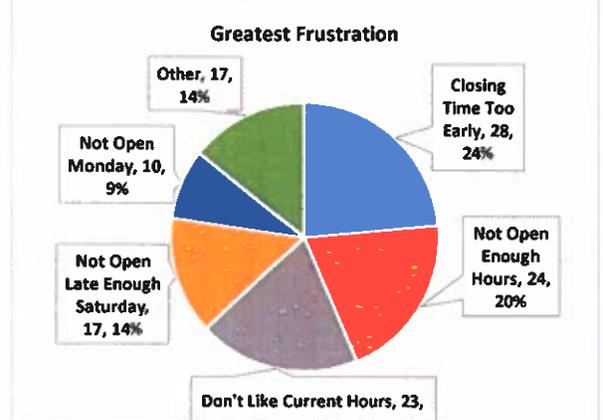


Figure 3-Survey Analysis

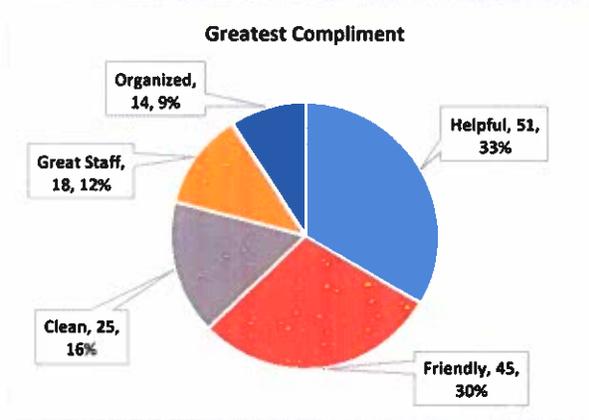
Question 13



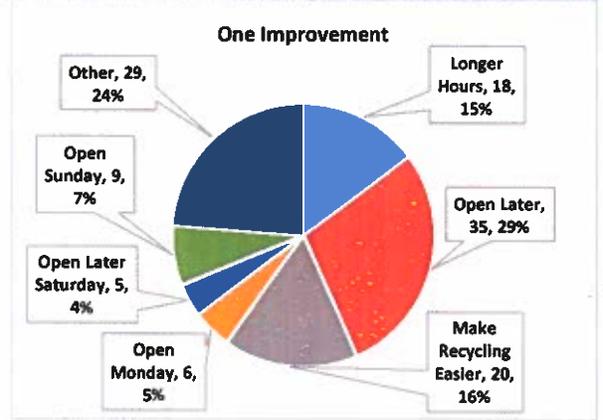
Question 14



Question 15



Question 16



Question 17

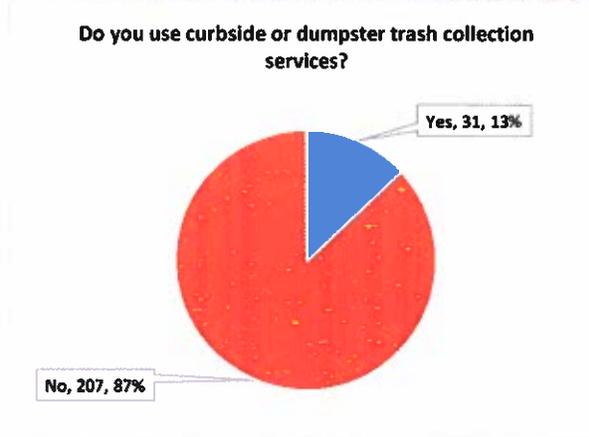


Figure 4 Survey Analysis

## What do the results say about the Transfer Station?

The results of the survey reveal first and foremost that residents of China, Maine care about the environment and want to do their part to protect it by recycling as much as possible. The vast majority of respondents (95%) say they use the Transfer Station and most are using it at least every week (69%). 92% of all respondents are recycling.

Not surprisingly, the vast majority of those responding to the survey had good things to say about the Transfer Station. The terms friendly, helpful, great staff, organized, and clean dominated the compliments.

The greatest frustration expressed and the predominant improvement recommendations had to do with the Transfer Station schedule. Several respondents suggested keeping the Transfer Station open every day and late in the day.

As was reflected in the 2011 survey, residents expect that the services of the Transfer Station should be available at their convenience without burdensome cost to themselves. Taking their trash and recyclables to the Transfer Station is seen as a way to reduce their property tax burden. Part of the management challenge is in helping residents understand that providing convenience in the Transfer Station schedule causes an increase in staff costs which must be supported through property taxes.

## What comes next?

The current operating schedule has the Transfer Station open 42.5 hours each week, which requires 170 staff hours to sustain optimal services. The FY19-20 budget allows 134 staff hours, leaving a deficit of 36 staff hours. Indications are that the FY20-21 budget will propose adjustments to eliminate the deficit of staff hours and extend hours another weekday to 5 PM.

The Maine Department of Environmental Protection (DEP) approved a grant proposal from the Transfer Station to employ a Radio Frequency ID sensor system to collect data on the use of the Transfer Station. This system will provide information on how many people in China and Palermo use the Transfer Station, as well as when and at what times they are using it. It is intended to compare the data with survey data for validation of results. Additionally, reporting the data to the Maine DEP is anticipated to assist the State in more accurately measuring achievement of recycling goals. (Madore, 2019) Operational testing of the system is ongoing and implementation of the RFID system is slated to begin January 2020, with RFID placards to be issued beginning in January 2019.

## References

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- China Transfer Station Survey (Manual for Decision Making)*. (2012). Town of China, Maine. Retrieved from [https://china.govoffice.com/vertical/sites/%7B57BBD0A3-55D7-4C7C-8E42-8D085FC781A3%7D/uploads/transfer\\_station\\_survey\\_results\\_2011\(1\).pdf](https://china.govoffice.com/vertical/sites/%7B57BBD0A3-55D7-4C7C-8E42-8D085FC781A3%7D/uploads/transfer_station_survey_results_2011(1).pdf)
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- Madore, David (2019). *DEP awards second round of grants for recycling and organics management initiatives*. Maine Department of Environmental Protection. Augusta, ME. Accessed at <https://www1.maine.gov/dep/news/news.html?id=1317374>

## Appendix A

### TOWN OF CHINA, MAINE TRANSFER STATION USER SURVEY

This survey is being conducted to collect information on usage of and user satisfaction with the Transfer Station only. No proposal is being considered in association with this survey that would change the operations. This survey is conducted with the recommendation and oversight of the Transfer Station Committee with the approval of the Select Board. A report with the results of the survey will be provided to the Select Board and Transfer Station Committee, and will be shared with the community by posting it to the Town's website at china.govoffice.com. A paper copy of the report may be obtained at the Town Office for a fee.

1. Where is your principal place of residence?

- a. China
- b. Palermo
- c. Albion
- d. Winslow
- e. Vassalboro
- f. Other \_\_\_\_\_

2. Do you use the China Transfer Station?

- a. Yes
- b. No (skip to Question 17)

3. Is the trash and/or recyclables you bring to the transfer station from a rental property?

- a. Yes, full time
- b. Yes, seasonal
- c. No

4. Is the trash and/or recyclables you bring to the transfer station from a seasonal property in either China or Palermo?

- a. Yes
- b. No

5. How often do you use the Transfer Station?

- a. Every week
- b. Every month, but less than every week
- c. Occasionally, but less than every month

6. Which of the following services do you use at the Transfer Station? (check all that apply)

- a. Dispose of trash and recyclables
- b. Dispose of trash only
- c. Dispose of recyclables only
- d. Dispose of bulky items such as demolition debris, whitegoods, metals
- e. Other (please describe) \_\_\_\_\_

7. Which day of the week would you most prefer to use the Transfer Station?

- a. Tuesday
- b. Wednesday
- c. Thursday
- d. Friday
- e. Saturday

f. All of the above

8. Which part of the day would you most prefer to use the Transfer Station?

- a. Early morning – 6:30 to 8 AM
- b. Late morning – 9 to 11 AM
- c. Midday – 12 to 2 PM
- d. Afternoon – 3 to 5 PM

9. Do you recycle?

- a. Yes
- b. No (Skip to Question 11)

10. If you do recycle, select the reasons that apply. (Skip to Question 12)

- a. Environmental concerns
- b. I use fewer bags on a pay-per-throw basis (Palermo residents)
- c. I want to reduce taxes
- d. Other: \_\_\_\_\_

11. If you do not recycle, select the reasons that apply.

- a. Inconvenient
- b. Takes too much time
- c. Not enough space at home
- d. Recyclables go into the landfill anyway

12. When finding out about closings or holiday schedules of the Transfer Station, how would you like to be notified? Select all that apply.

- a. Internet (Facebook, Twitter, town website, etc.)
- b. Signs posted at the Transfer Station
- c. Newspaper
- d. Digital sign or bulletin board

13. On a scale of 1 to 5, with 1 being worst and 5 being best, please rate the quality of service you regularly receive at the Transfer Station. (Check the box below your choice)

Worst				Best
1	2	3	4	5

14. Please use the space provided to share your greatest frustration with the Transfer Station. (optional)

15. Please use the space provided to share your greatest compliment with the Transfer Station. (optional)

16. If money were no object, what one thing would you do to improve the Transfer Station? (optional)

17. Do you use curbside or dumpster trash collection services?

- a. Yes
- b. No