

Downtown Iowa City Waste Management Study



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May 15th, 2015

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Report Summary

The City of Iowa City and the Iowa City Downtown District (ICDD) are partnering with the Iowa Initiative for Sustainable Communities (IISC) to address the need for trash reorganization amongst Iowa City's alley dumpsters. The end-goal of this process is to implement a Green Alleys program for cleaner and more pedestrian-friendly alleyways. As a first step, this project aims to identify current conditions and potential solutions through case study research, stakeholder meetings, and a downtown business survey.

The downtown Iowa City area is a mixed use of homes, restaurants, retail, and apartment and office buildings. Currently, the alleys between these buildings are cluttered with waste and multi-company dumpsters. The Downtown District is dedicated to improving waste conditions in the alleys in order to provide a cleaner, safer, and more usable space for downtown businesses and patrons.

This report begins by identifying the existing waste management conditions and problems identified by businesses and stakeholders. In order to identify potential solutions, the report investigates two Green Alley programs from other similar communities. Finally, a set of recommendations is provided based on the community input and successful case study program structures.

Downtown Business Survey

A survey was distributed to all downtown businesses in order to better understand the issues facing current downtown waste management and to identify alternative solutions. The downtown business survey was the result of collaboration between the Iowa Initiative for Sustainable Communities, the City of Iowa City, and the ICDD. The survey was distributed online through the Downtown Association weekly newsletter. The survey was open for three weeks, closing on Friday, April 17th with a total of 34 responses. The results of the survey are integrated throughout the report. See Appendix A for a map and table of survey respondents by downtown alley.

Background

Downtown Iowa City includes the main downtown area as well as the Northside Marketplace. The main downtown lies within the area bordered by Clinton Street and Gilbert Street to the east and west, and Burlington Street and Iowa Avenue to the north and south.¹ The Northside Marketplace includes the area between Dubuque Street and Gilbert Street to the west and east, and Jefferson Street and the alley north of Bloomington Street to the south and north. There are over 200 businesses in these two areas serviced by the ICDD. The Old Capitol Town Centre on the west side of Clinton Street also houses over 40 businesses and organizations. See Appendix B for ICDD maps of main downtown and the Northside.



Current Conditions



¹ Image 1: Alley F between Dubuque Street and Linn Street. Photo taken by Author.

² Map of permitted disposal dumpsters in downtown Iowa City. Source: Geoff Fruin, City of Iowa City.

*The large private alley not pictured on the map, located west of Alley F and north of Alley C, is used for waste collection by numerous businesses, but is not listed on the below tables because it does not need a city-issued permit due to its private ownership. The private alley is referenced throughout this report and is part of the waste management study along with the public alleys despite its private status.

In Iowa City’s main downtown area (above map), there are currently 120 waste disposal dumpsters permitted by the City of Iowa City. Seven downtown alleys are included in this area, listed as alley A through G. The following three tables outline the number of dumpster permits each company has per alley. Permit type is broken down into three categories: refuse permits, off row dumpsters, and grease permits. The total number of permits per alley demonstrates the concentrations of waste dumpsters in CBD alleys, ranging from 11 to 30 dumpsters.*

REFUSE PERMITS

Company	A	B	C	D	E	F	G
ABC	3	2	14	4	1	7	0
Hawk	5	0	4	3	2	2	0
Rep	0	8	1	6	4	1	0
JC	0	0	0	0	0	1	0
WM	3	0	0	1	0	4	0
Total Permits	11	10	19	14	7	15	0
							76

OFF ROW DUMPSTERS

Company	A	B	C	D	E	F	G
ABC	0	0	3	1	2	0	9
Hawk	2	0	5	0	0	0	0
Rep	0	0	0	0	1	2	4
JC	0	0	0	0	0	0	0
WM	0	0	0	2	1	0	0
Total Off Row Permits	2	0	8	3	4	2	13
							32

GREASE PERMITS

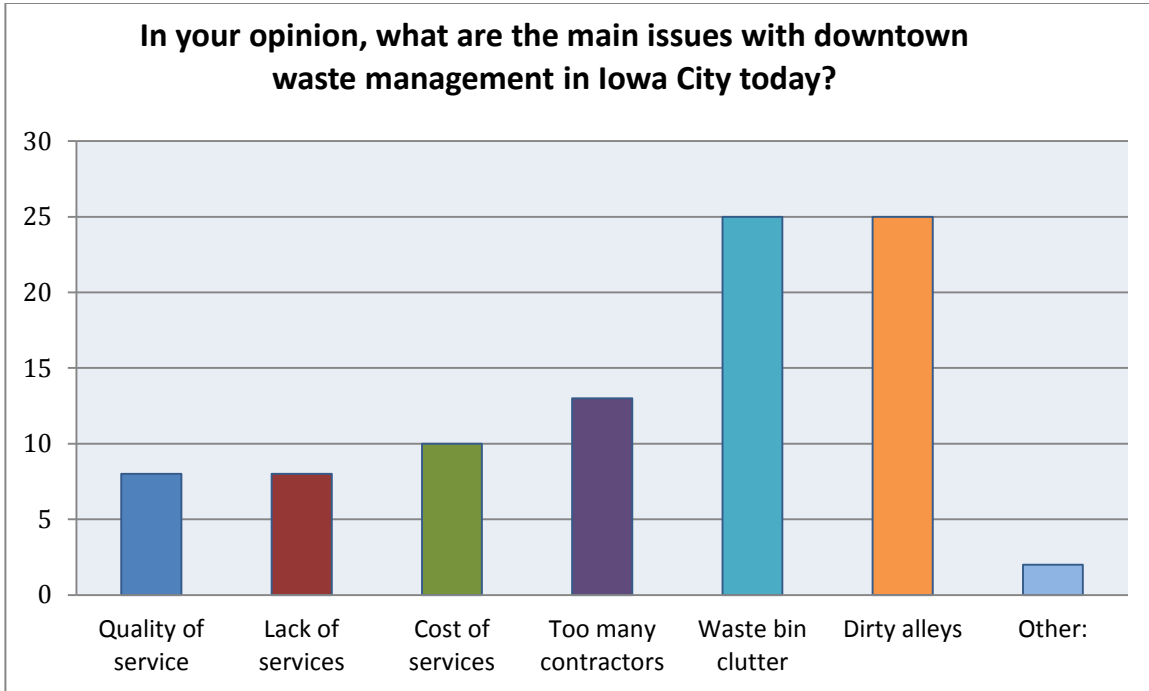
Company	A	B	C	D	E	F	G
Darling	1	2	1	0	0	2	0
KCI	2	0	2	2	0	0	0
Total Grease Permits	3	2	3	2	0	2	0
							12
Total Permits per alley	16	12	30	19	11	19	13

Total Refuse Permits	108
Total Grease Permits	12
Total Permits and Off ROW Dumpsters	120 ³

³ Current Refuse Permits, City of Iowa City.

Current Issues

According to surveyed businesses, the primary issues with waste management in Iowa City are related to the conditions and clutter of the alleyways, the large number of contractors operating, and the lack of a regulated system.



Waste Bin Clutter and Number of Contractors

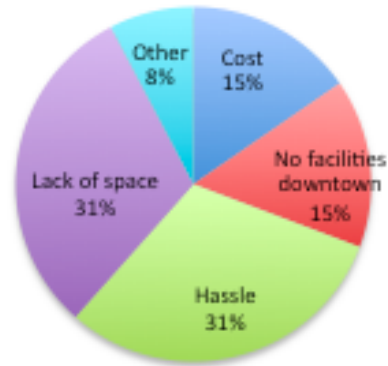
Downtown alleyway waste management in Iowa City is a complex system with numerous waste bins and waste contractors. There are currently 11 contractors serving downtown businesses with a variety of waste services. Some businesses share bins with each other, while others have multiple bins for each waste type. Due to unregulated dumpster uses, a few businesses have invested in signage to indicate which dumpsters they own to deter other users from using the wrong waste bins.

Recycling Services

Businesses either recycle on their own or through their contractor, but only one local contractor provides a recycling service. The City of Iowa City does not have a downtown-recycling program to provide full service for all materials to all businesses. As a result,

recycling among businesses is dependent on whether a business has a contractor that provides the service, or if the business has time to recycle materials on their own.

If you do not recycle, why not?



While 91% of surveyed businesses do recycle, over half of those that recycle do so on their own without a contractor pick up service. Over 65% of those recycling on their own take 1-3 trips of materials to their home or recycling center each week. The pie chart below illustrates some of the barriers to recycling in Iowa City among respondents that do not currently recycle. The majority are burdened by spatial issues, lack of available facilities, and resulting hassle.

Dirty Alleys and Weather Issues

Winter weather and ice buildup prevents businesses and waste contractors from accessing dumpsters or cleaning the areas during certain months. Some businesses use heated bins for their grease dumpsters to make removal easier, but other businesses have to deal with grease freeze and difficult removal.

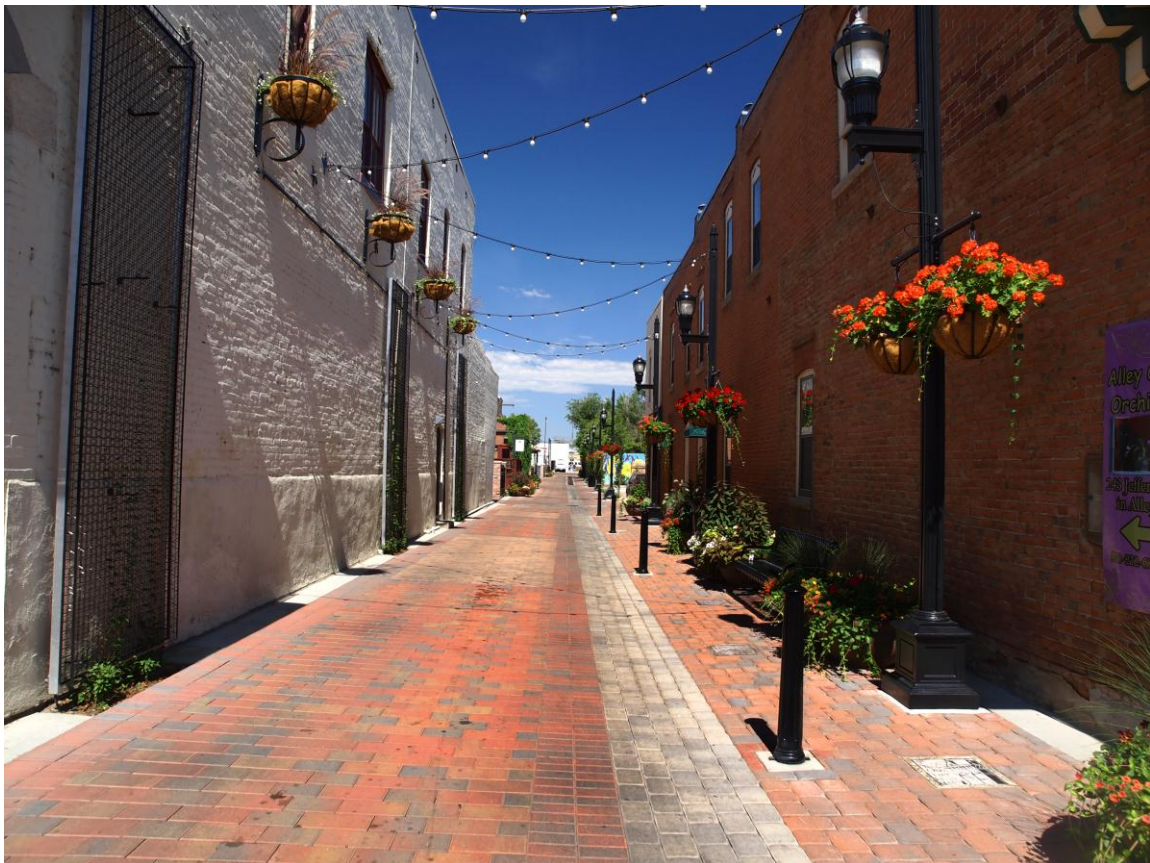
Illicit Dumping

Illicit dumping occurs frequently in downtown businesses' dumpsters by users other than the permitted businesses, such as apartment tenants and other businesses. The dumping causes dumpsters to become prematurely full, sometimes costing businesses extra money to be removed more often. Illicit dumping also occurs on top of closed dumpsters, interfering with space, cost, and garbage removal. It is difficult to catch illegal dumpers in the act of dumping, and prevention and punishment are therefore difficult for the City of Iowa City and the waste contractors to carry out.

Case Studies

Fort Collins, Colorado⁴

The City of Fort Collins was selected as a case study due to the similarity between downtown alleyway waste management program structures and downtown conditions. Fort Collins' existing Green Alleys program resulted from a partnership between the City and their equivalent of a Downtown Association, the Downtown Development Authority (DDA). The Green Alleys program has been primarily run and funded by the DDA.



Pre-Green Alleys Program Waste Issues

Before implementing a Green Alleys program in 2006, the City of Fort Collins faced issues with an unnecessarily complicated waste schedule and no recycling. The Fort Collins

⁴ Information provided from interview with Derek Getto, Programs Administrator at Fort Collins Downtown Development Authority.

⁵ Photo of completed "Green Alley" pilot project in Fort Collins, Colorado. Source: Derek Getto, Fort Collins Downtown Development Authority.

community was interested in enhancing connections between the downtown and the University of Colorado Boulder campus, but the alleyway conditions at the time were not conducive to creating bicycle or pedestrian friendly spaces. The main hurdle to achieving these shared, cleaned alleys was simply the quantity of dumpsters cluttering the space.

Trash Plan

The City and the Downtown Development Authority then drafted a Trash Plan to identify potential strategies for reducing the number of dumpsters, which included:

1. *Downtown Trash District*: Forming a downtown trash district where local waste contractor companies would compete for the single service contract
2. *Alley-Scale Management*: Creating block or half block alley-scale trash and recycling cooperatives, where alley businesses select the services from a single waste contractor through a business-driven bid process

Both strategies would create a central consolidated trash location, which would include an enclosure and public art components. In addition to shared dumpsters, a recycling compactor would be added to encourage recycling, reduce waste in the dumpsters, and compact materials to allow for less frequent pickup. The DDA would also recommend using wheeled trash containers to encourage use of the centralized trash locations by businesses.

Pilot Program

The DDA and City of Fort Collins ultimately selected the Alley-Scale strategy. Instead of addressing all alleyways at once, the DDA designed a comprehensive greening program for individual alleys one at a time. This strategy was more cost-effective and more manageable for the DDA to implement. The incremental, alley-by-alley approach allows the DDA and businesses in the alley to adopt a new waste management system and green alley design unique to the area. The process for each alley includes:

- ❖ A new waste management bid process run by the businesses
- ❖ Trash bin and recycling consolidation
- ❖ Centralized, enclosed, and shared dumpster space
- ❖ Public art, streetscaping, lighting, etc.



Bid Process

The DDA planned to meet with alleyway businesses and waste contractors individually and in groups to first collect information about existing conditions. This included identifying which contractors were used in each alley, what the schedule and costs were, and how much trash was collected in the alley. The DDA could then assist the businesses in drafting a new waste management bid to send to all waste companies.

Consolidation and Centralized Location

The DDA worked with businesses to identify a centralized location in each alleyway. In some cases, the DDA already owned property in the location. In other alleys, the DDA signed a lease license agreement to use a private space. The DDA would cover the cost of the agreement, or sometimes the business would waive the cost in exchange for the DDA

⁶ Photo of completed “Green Alley” pilot project in downtown Fort Collins, Colorado. Source: Derek Getto, Fort Collins Downtown Development Authority.

covering the cost of all necessary improvements to the space. The DDA has successfully completed a greening program in one entirely private alley, where they worked with the owner to expand an existing centralized location with enclosures.*

Completed Projects

In the first few years, two green alley projects were completed as pilot projects. These alleys were selected for ease of implementation, as they did not include any waste bins. As of 2015, three more Green Alley projects, all with waste management programs, have been completed. The businesses in each of the three alleys drafted a new bid for waste contractors, and selected the best-suited contractor on their own.

One of the completed alleys began with 19 waste bins, with only three of the businesses recycling materials. Since the completion of the green alley program in this alley, there are now only 7 waste bins and every business recycles. This incremental strategy has allowed for more immediate successes with alley cleanup and access. There are seven more alleys to complete in the downtown area.

Maintenance

The DDA and businesses contract cleaning services of the greened alleys out to the City of Fort Collins. Daily cleaning inspections include cleanliness checks of all waste containers, and monthly inspections include power washing the paved area as well as the waste bins. The City also maintains alley greenery like flower landscaping.

Dubuque, Iowa⁷

The City of Dubuque implemented a Green Alleys Project as part of their larger Bee Branch Watershed Flood Mitigation Project to reduce the risk of flooding through infiltration and infrastructure projects in Dubuque. Although the City of Iowa City is more focused on waste management than a watershed project, Dubuque’s green alleys project provides insight into alleyway construction costs for an Iowa community and potential external revenue sources.



Project Scope

Like the City of Fort Collins, the City of Dubuque has taken an incremental approach to complete alleys year by year, but on a much larger scale of the total number of alleys and alleys completed per year. The Green Alleys Project is part of the impervious surface reduction strategy within the Bee Branch Watershed project. The total green alleys project cost for converting 240 alleys over 20 years is \$5.7 million. The entire Bee Branch project cost is \$18 million.

⁷ Information obtained from the City of Dubuque, <<http://cityofdubuque.org>>.

⁸ Before and after photo of completed “Green Alley” in Dubuque, Iowa. Source: City of Dubuque.

Funding

The City of Dubuque has sought external funding from multiple sources to complete the project, including the State Revolving Fund, the Iowa Flood Mitigation Board, private donations, general obligations bonds, and the local stormwater utility funds. As of today, \$127 million has been raised for the project, which is equal to over 70 percent of the total Bee Branch Project cost.

In 2014, Dubuque completed 23 alley greening projects, and has 51 more alleys slated for construction in 2015. The average cost of the alleys completed in 2014 was \$64,170 per alley. The images below show two alleyways completed in 2014 before and after construction, including their location and project cost. Dubuque's Bee Branch Watershed Project has an interactive website with images and information on each completed alley and those planned for 2015. An interactive map shows all of their respective locations.



⁹ Before and after photo of completed “Green Alley” in Dubuque, Iowa. Source: City of Dubuque.

Potential Solutions

Surveyed downtown businesses were equally in favor of three potential solutions: streamlining the number of waste contractors and either having the city or the ICDD manage the program. The best method for streamlining waste contractors in downtown Iowa City should be based on case study program structures as well as input from downtown businesses. From this survey, businesses are equally in favor of the City or ICDD managing a new program, indicating that external management in general would be favorable. Additional specific solutions are explored below.

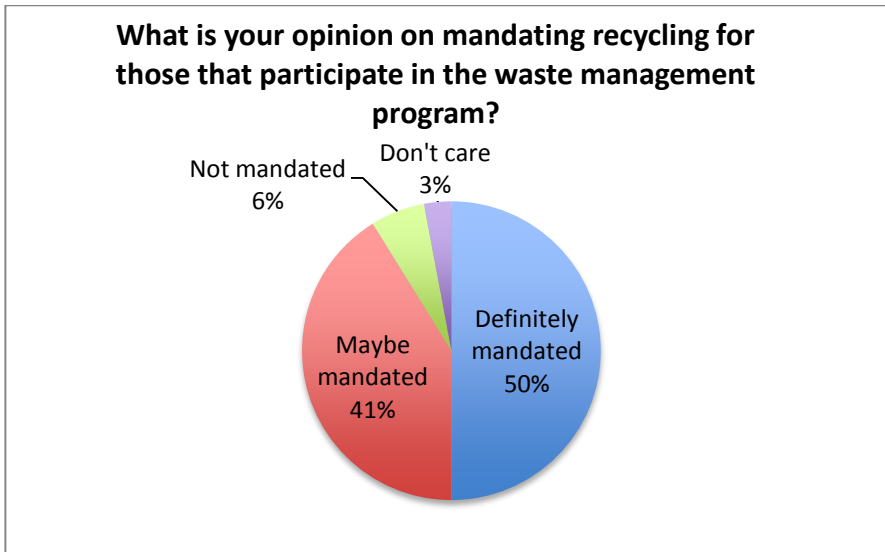


Other ideas from surveyed businesses:

- ❖ More regular cleanup of the alleys, especially in regards to the winter build up
- ❖ City-run or downtown-run recycling program
- ❖ Mandatory recycling and waste removal through a certain service would make it easier for businesses sharing the same dumpster space
- ❖ Road maintenance of alleyways
- ❖ Encourage alley deliveries rather than on-street parking during delivery to avoid crowding on the streets
- ❖ Contractors need to provide all services
- ❖ Add plastics recycling
- ❖ Provide community-wide recycling or add a self-recycling center downtown

Recycling Enforcement

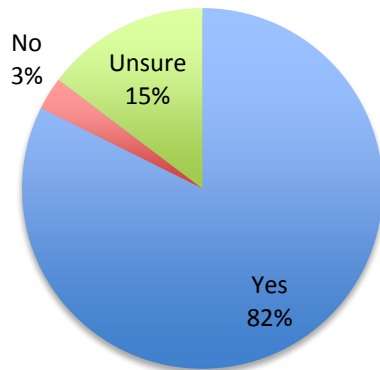
Mandating recycling through a waste contractor would allow all businesses to receive contracted recycling services and ensure participation. However, this option may alienate businesses and be unappealing to those small businesses that do not generate significant recycling. However, for those that currently recycle on their own, environmental dis-benefits associated with multiple personal car trips to the recycling center would be eliminated through a group contractor service.



Common Waste Collection Time

A common waste collection time requirement would ensure a consistent waste pickup schedule to provide consistency in the downtown system. Two or more common times may need to be established to accommodate the difference in needs and hours of operation for restaurants and retail. However, the option is well accepted among surveyed businesses if those stipulations were accommodated.

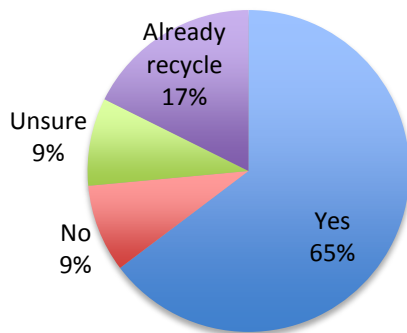
Would you be willing to meet a common waste collection time?



Waste by Weight

Depending on equipment capabilities of local contractors, waste services could be priced by weight, with garbage prices higher than recyclables, in order to encourage recycling and shift costs of garbage removal. Contractors would need to provide both waste and recycling services to participating businesses in this scenario. Responses from surveyed businesses indicate that this option would be well received.

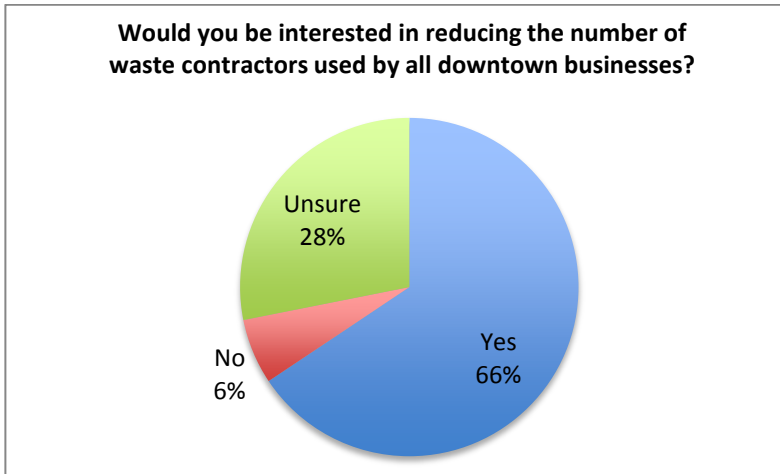
If your waste was measured and priced by weight, would you be inclined to divert more waste into recycling or composting to reduce costs?



Streamlining Contractors per Alley or Block

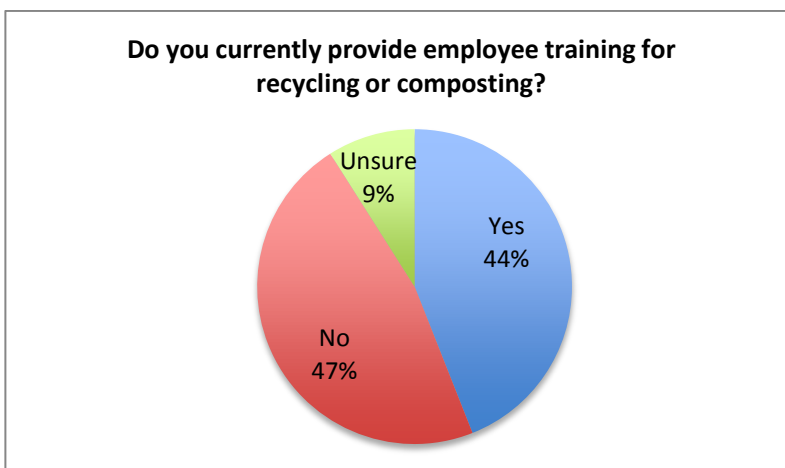
Each Iowa City alleyway is unique, as are the businesses and waste management needs within them. A new block-level or alley-level strategy for downtown waste management may allow contractors to cater to the needs of the businesses in that area, and allow

businesses to work together to better plan their occupied space. The majority of surveyed businesses would be amenable to this type of solution, as shown below.

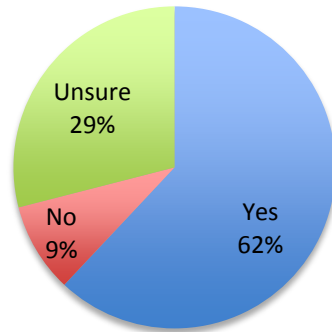


External Recycling Training for Employees

Some downtown Iowa City businesses are already providing some recycling training for their employees, and the majority of surveyed businesses would utilize more employee training services for recycling if provided to them by an external party. Downtown businesses would likely participate in more recycling programs if recycling services, and potentially training, were offered more readily to those businesses.



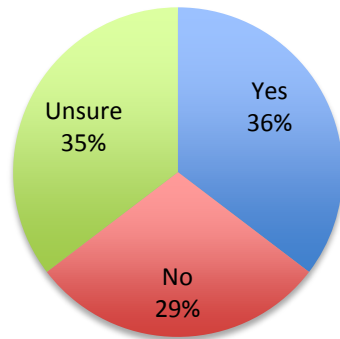
Would you utilize employee training for recycling and/or composting if training services were provided?



Contractor Composting Services

Composting is less common among downtown businesses, and is not a main focus for waste management among those surveyed businesses. Approximately one third of businesses would definitely compost through a contract, while the other two third are unsure or would not be interested. Recycling appears to be the priority alternative waste service of the two services for a new waste management program.

Would you be interested in composting through a contractor service?



Recommendations

Pilot Project

Given the available inventory information in the main downtown area, the ICDD and the City of Iowa City should begin a pilot program in the seven main alleyways where most waste management services in the area are concentrated. The City should also consider collaborating with businesses in the private alley, listed as Alley 9 (Appendix A map). The majority of survey respondents use the seven public and the single private alleyway. The private alley is heavily used and contains a large amount of open space favorable to a Green Alleys design, including outdoor patio seating and plantings, for example. Joe's Place already uses this space for an outdoor patio behind its building. However, much of the private alley interior space is currently used for parking. The program could begin with one pilot alley, or target several in the first year, depending on available funding.

Bid Process

The ICDD should facilitate individual and group meetings with pilot project alleyway businesses to develop shared needs and goals for collective waste management. Each group of alleyway businesses in the project can contribute to a new comprehensive bid for those needs and allow all local waste contractors to apply for the bid based on requested services.

Centralized Waste Bin Location

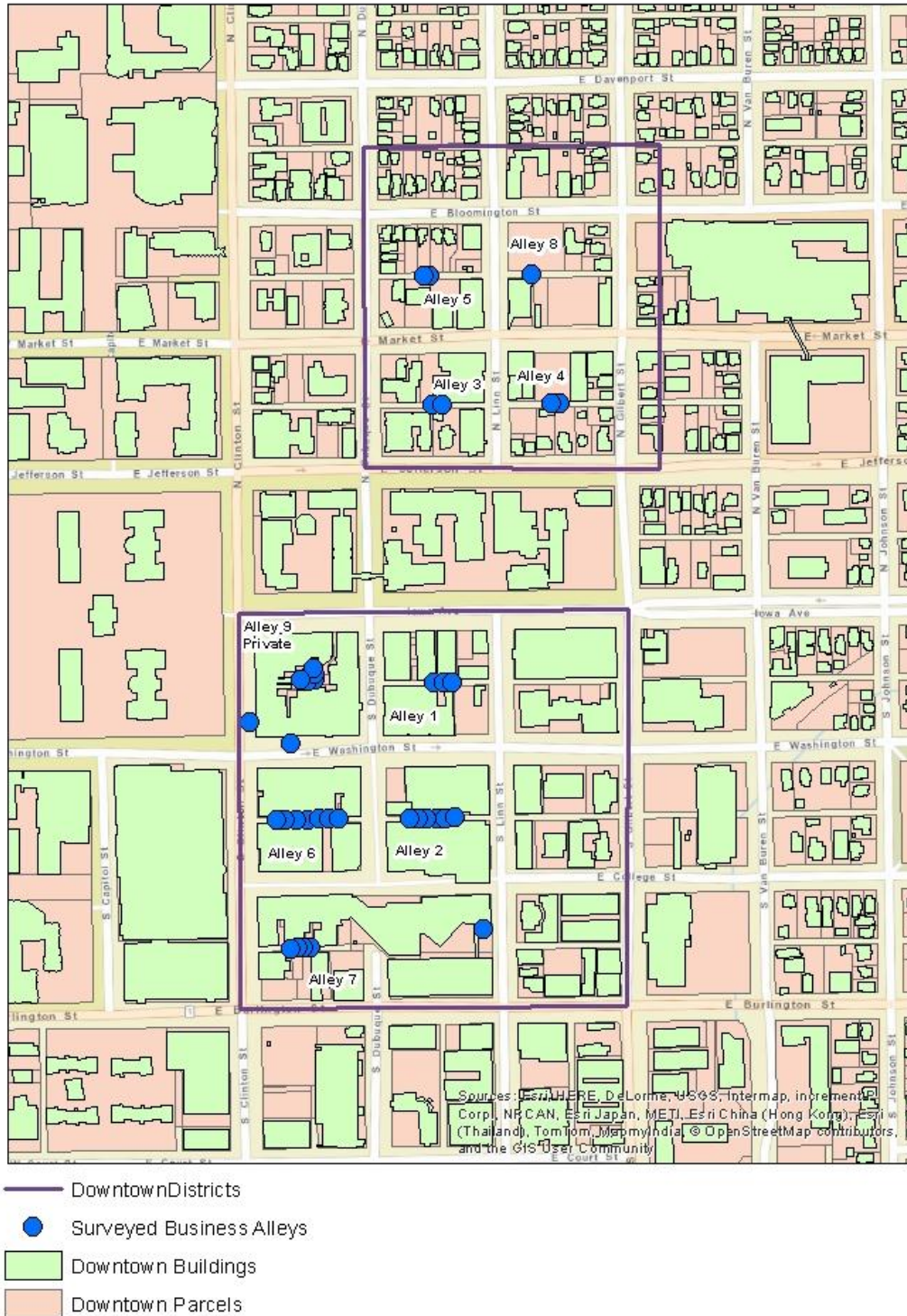
Throughout or after the new bid process, the ICDD should assess each individual alley for the most suitable centralized location to place collective waste receptacles. Available public spaces or right of ways should be the first priority, with private spaces considered as a second option through a lease. Lease costs can be coordinated with planned alleyway improvements, using the Fort Collins example to waive a lease payment in exchange for provided improvements in that space.

Alleyway "Greening" and Enhancements

A separate study will be conducted following this report to explore best practices for Green Alleyway design. Components such as stormwater management, business improvements, public art, landscaping, and accessibility should be addressed.

APPENDIX A: SURVEY

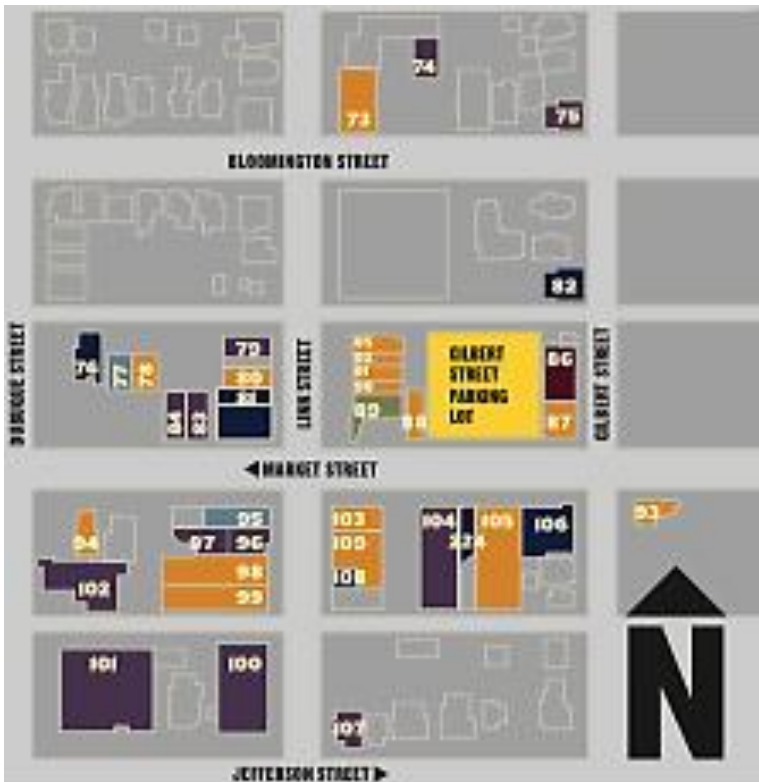
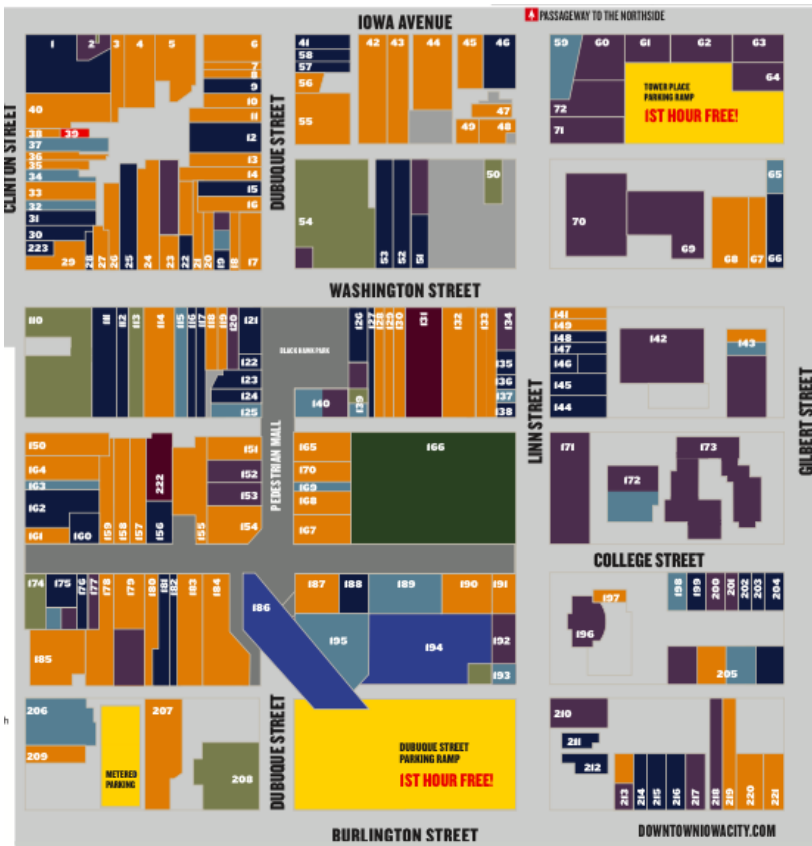
Downtown Business Survey Respondents by Alley Used for Waste



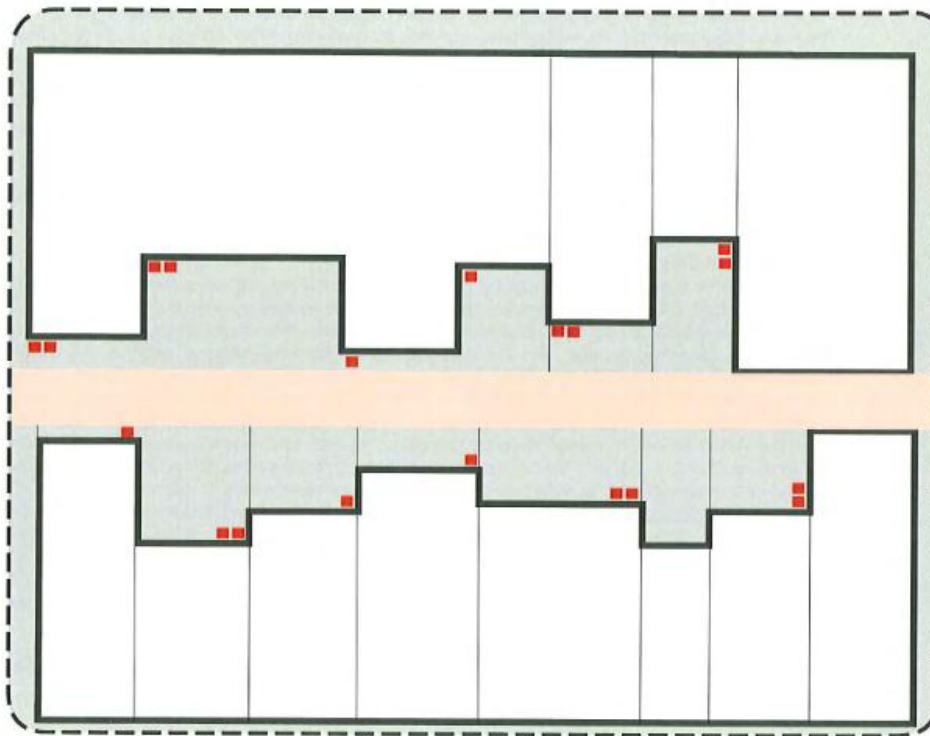
Id	Business	Business Address	Alley Used
1	M.C. Ginsberg	110 E. Washington St.	0
2	Tailgate	30 S. Clinton St.	0
3	Moen Group	Moen Group	0
4	Daydreams Comics	21 S. Dubuque St.	1
5	Iowa City Yacht Club	13 S. Linn St.	1
6	Moen Group	n/a	1
7	The Englert	221 E. Washington St.	2
8	Chait Galleries Downtown	218 E. Washington St	2
9	Quinton's	215 E. Washington St.	2
10	Iowa Artisan's Gallery	207 E. Washington St.	2
11	Moen Group	Park @ 201	2
12	Moen Group	Fieldhouse/Blackstone building	2
13	Devotay	117 N. Linn St.	3
14	Moen Group	Linn Street Cafe	3
15	Motley Cow Cafe	160 N. Linn St.	4
16	R.S.V.P	140 N. Linn Street	4
17	Brix Cheese Shop & Wine Bar	209 N. Linn St.	5
18	Oasis Falafel	206 N. Linn St.	5
19	Textiles Inc.	109 S. Dubuque St.	6
20	Herteen and Stocker Jewlers	101 S. Dubuque St.	6
21	Pints	118 S. Clinton St.	6
22	Discerning Eye	119 E. Washington St.	6
23	Active Endeavors	138 S. Clinton St.	6
24	The Den	123 E. Washington St.	6
25	Moen Group	n/a	6
26	The Mill	120 E. Burlington St.	7
27	Revival & Revival 119	117 E. College St. & 119 E. College St.	7
28	Nori	105 E. College St.	7
29	Moen Group	n/a	7
30	The Hamburg Inn	214 N. Linn St.	8
31	Hayek, Brown, Moreland, & Smith, LLP	120 E. Washington St.	9*
32	Pullman's Diner	17 S. Dubuque St.	9*
33	Bo James	118 E. Washington St.	9*
34	Atlas	127 Iowa Ave.	9*
35	Basta	121 Iowa Ave.	9*
36	Clinton Street Social Club	18.5 S. Clinton St.	9*

Survey Respondents per Alley										
No Alley	Alley 1	Alley 2	Alley 3	Alley 4	Alley 5	Alley 6	Alley 7	Alley 8	Alley 9 (private)*	Total
3	3	6	2	2	2	7	4	1	6	36
8%	8%	17%	6%	6%	6%	19%	11%	3%	17%	100%

APPENDIX B: IOWA CITY DOWNTOWN DISTRICT MAPS

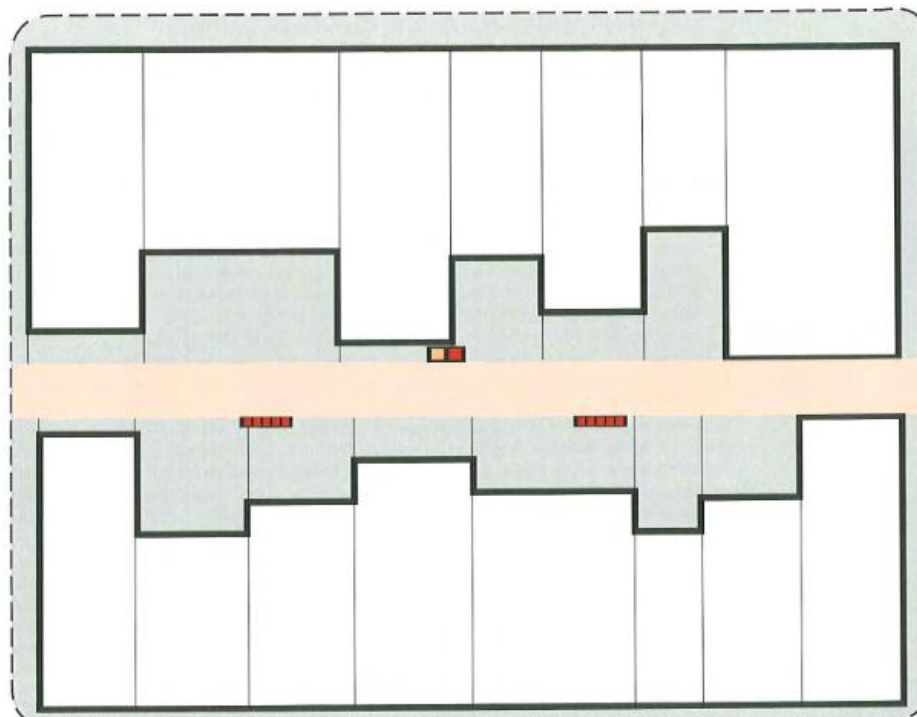


APPENDIX C: FORT COLLINS, CO (BEFORE AND AFTER WASTE SITES)



TYPICAL ALLEY DIAGRAM
Existing conditions= (19) 3 cubic yard receptacles

N.T.S



TYPICAL ALLEY DIAGRAM
Existing conditions = (19) 3 cubic yard receptacles
Proposed = (1) 3 cubic yard recycling compactor
(1) 3 cubic yard receptacle
Approx. (10) 90 Gal. Receptacles

N.T.S