



DRAFT 8

RECOMMENDATIONS FOR A DOWNTOWN RECYCLING & REFUSE PROGRAM

Prepared by the Core Committee of
Sustainable Blacksburg's Downtown Recycling Study Group

(Last revised November 18, 2008)

INTRODUCTION

Sustainable Blacksburg's charge, as an organization, is to facilitate effective environmental stewardship in the Blacksburg area and to enhance the region's livability and sustainability by reducing its impact on the local and global environment.

In the spring of 2008, *Sustainable Blacksburg* determined that it would pursue, as a focused project, the possibility of increasing and improving recycling downtown. This issue was selected in response to merchants' and citizens' comments about the pressing need to establish a comprehensive recycling program downtown.

Sustainable Blacksburg asked Bill Claus to chair a study group that would be composed of downtown merchants, interested citizens, local solid waste professionals, and Sustainable Blacksburg members, and to guide this study group toward making recommendations for establishing a uniform downtown recycling program. A complete list of group members is attached (see Appendix A). The Group began meeting in April 2008, and it set the following tasks to help develop recycling recommendations:

- Conduct a verbal, in-person survey with downtown business owners, managers, and employees to determine the current state of refuse and recycling downtown, as well as understand the perceived needs and desires for a future recycling program (see Appendix B).
- Interview solid waste professionals in other, similar communities to establish a benchmark of how downtown trash and recycling are effectively handled elsewhere (see Appendices C, D, E, and F).
- Visually determine the address of each downtown business, and then create a categorized downtown map that shows the location and type of each business. The purpose of

this map would be to help determine the distribution of recycling needs downtown (see Appendix G).

The next step was to analyze the results obtained from these three tasks and then to develop recommendations for establishing a uniform recycling program for downtown Blacksburg.

CORE RECOMMENDATIONS

The core recommendations given below are based upon (i) feedback from downtown Blacksburg businesses and citizen representatives, (ii) the result of a systematic survey of downtown businesses by Sustainable Blacksburg and Virginia Tech student volunteers, (iii) the experiences of four similar, nearby municipalities in Virginia and North Carolina, and, (iv) the strong recommendations expressed by some of the employees in these cities who are directly responsible for the operation of their downtown refuse and recycling programs. One of the fundamental lessons learned from these other cities is that *refuse and recycling programs in downtown districts should be linked together*, because the efficient operation of one supports the other.

1. Recommendation: Establish a single uniform recycling & refuse collection program for downtown Blacksburg businesses.

The implementation of a comprehensive recycling program will help divert a significant amount of usable material from our current waste stream, thus enhancing environmental sustainability. A single uniform program that coordinates recycling and refuse collection would simplify the handling of all waste materials by downtown businesses and would therefore increase the likelihood of participation in recycling. A properly structured, uniform program would help minimize waste management costs for all involved.

2. Recommendation: Require all businesses in the downtown area to participate in the refuse & recycling program.

By requiring all businesses to participate in a single program, we achieve an immediate economy of scale and thereby help to minimize the cost of this basic service to everyone.

Without a critical mass of participants, it would not be cost effective to offer certain services. Such a requirement would also make it feasible to select a single collection contractor. This would, in turn, make it easier to monitor compliance by the contractor and verify that all materials are recycled or disposed of properly. Requiring participation in a single program would also make it easier to ensure compliance by all businesses.

Additionally, collection provided by a single contractor/hauler would reduce the number of vehicles needed to remove recyclables and refuse from the downtown, and thus, reduce the noise, traffic, vehicular fuel consumed, and greenhouse gasses emitted in downtown Blacksburg.

Most importantly, an active recycling program would assure all businesses and citizens that Blacksburg is making the best possible use of its resources and reducing its impact on the environment.

We recommend that the Town of Blacksburg make the necessary changes to the Solid Waste section of the Town Code in order to implement this recycling and refuse requirement

3. Recommendation: *Develop a “Pay As You Throw” system for refuse collection with fees based primarily on the weight or volume of material discarded.*

A “Pay As You Throw” system is the most equitable system for solid waste disposal, as each business is charged for the actual weight or volume of the waste they discard. This system provides the strongest, most direct incentive to recycle and reduce waste. It would encourage recycling while providing a disincentive for the disposal of trash. Trash costs would then be greatly reduced as more material is diverted to recycling.

Participation in both the refuse and recycling programs would be most cost effective for businesses. And, we believe that participation in both programs will enhance our downtown environment by recovering recyclable resources, reducing greenhouse gasses, and preserving landfill space. A Pay As You Throw program would help to create awareness amongst downtown businesses as to just how much waste they produce and how they can better manage it.

4. Recommendation: *Provide education and training, periodically and free of charge, for downtown businesses.*

Uniform education about the program and how to adjust internal business procedures is necessary in order to maintain proper functioning of the program. Education helps to ensure that recycled materials are properly sorted and free of contamination. This is important, as contaminated materials must be disposed of as trash, which would increase Pay As You Throw trash costs. Additionally, regular education is necessary as employee turnover may be high in some downtown businesses due to the ever changing college student population. Education is essential to a well managed recycling program.

5. Recommendation: *Extend the recycling requirement to all businesses in Blacksburg.*

Expansion of this requirement to other businesses in Blacksburg provides a consistent, equitable, community-wide approach to recycling. Recycling is important for the entire community. This downtown program could be a model not only for other business in Blacksburg, but also for other communities. This plan represents the best of all other programs researched. It would help put Blacksburg on the map for environmental sustainability.

The recommendations that follow are more specific. First are recommendations for recycling collection, and second are recommendations for refuse collection. These specific recommendations are based on input from Blacksburg merchants and advice from solid waste management professionals in other cities.

RECYCLING RECOMMENDATIONS

The following recommendations are based on results from the survey of merchants in downtown Blacksburg, direct input from the Downtown Recycling Group, and advice from solid waste management professionals in other cities.

1. We recommend that the Town of Blacksburg establish specific boundaries for a "Downtown Business District" for the purposes of recycling and refuse.
2. We recommend that all businesses in this Downtown Business District be required to recycle both commingled containers and mixed paper, with corrugated cardboard separated out if necessary due to volume constraints.
3. We recommend that the Town of Blacksburg provide this recycling service for a fee, much in the same way that the Town currently provides recycling collection to residents. We note, however, that the exact same residential service will not likely be adequate for downtown businesses due to larger volumes of recyclables and space constraints.

Operational recommendations for recycling collection specifically tailored to the Downtown Business District are as follows:

Containers: We recommend that a variety of different sized containers be issued to merchants based on their needs. In cases where the use of a wheeled cart is not feasible, various sizes of front load or roll-off dumpsters or even recycling bins may be provided. The goal would be to offer service that can accommodate various types and sizes of downtown businesses, rather than adopting a "one-size-fits-all" program. Flexibility in container sizes can still equate to a uniform recycling program. Survey results suggest that most businesses will, however, benefit most from wheeled carts used for curbside, backdoor, or alley pickup. Containers for recyclables should be of a different color and otherwise specially marked to clearly differentiate recyclable materials from refuse.

Cost: We recommend that businesses be charged a monthly fee for recycling based on container size, number of containers used, and frequency of collection. We believe, however, that the lower cost of refuse removal will compensate for the cost of recycling. If refuse removal is Pay As You Throw as recommended, and many materials from the merchants' refuse stream are recycled, then refuse removal costs will decrease.

Collection Location: Based upon the experiences of other communities, we recommend that each business place their recycling containers at a designated location for pickup. Possible locations, where appropriate, include: curbside in front of each business, backdoor or alley locations, or consolidated/communal dumpster sites. Our survey results suggest that most business will benefit from curbside or backdoor/alley collection.

Time of Collection: The time of collection must be standardized based on the needs of downtown businesses and their patrons. Collection times should be set in order to minimize the amount of time that recyclables remain outside at the curb or backdoor/alley area.

Frequency of Collection: Based upon the experiences of other communities, we recommend that recyclables be collected from businesses 4-6 days/week. Most restaurants will require more frequent collection, while smaller offices and retail establishments may only require 1-2 days/wk collection.

Recycling Collection Providers: In order to minimize the number of collection vehicles and downtown truck congestion, we recommend that no more than one contractor be used to collect recyclables in downtown Blacksburg. Ideally, this would be the same contractor that would provide the recommended refuse collection. We believe that finding an appropriate contractor to collect recyclables, and negotiating a contract that covers appropriate times, is an activity that will be best handled by the Town of Blacksburg.

Periodic Review: We recognize that once in place, adjustments to the downtown recycling program may be necessary. Therefore, we recommend that a group, to include merchants, citizens, and local solid waste professionals, be established to periodically review the adequacy and effectiveness of the downtown recycling program.

REFUSE-REMOVAL RECOMMENDATIONS

The following recommendations are based on results from the survey of Blacksburg merchants, direct input from the Downtown Recycling Group, and advice from solid waste management professionals in other cities. We strongly believe (i) that this proposed refuse program compliments our recommended recycling program, and (ii) that this program will promote the greatest environmental benefit and be the most cost effective for businesses. The more we recycle, the less we will need to dispose of as waste.

1. We recommend that the Town of Blacksburg establish specific boundaries for a Downtown Business District for the purpose of recycling and refuse collection.
2. We recommend that there be a single uniform refuse collection system for the Downtown Business District, and that all businesses in this district be required to participate.
3. We recommend that downtown businesses pay only for the actual refuse they discard, rather than a fixed or flat rate for refuse collection. Such a system, as successfully used in other communities, is often referred to as a Pay As You Throw system, because each business would pay only for the weight or volume of refuse discarded. We believe that such a system would not only be the most fair way to handle downtown refuse, but it would also encourage more recycling and greatly reduce the amount of refuse that is discarded.
4. We recommend that the Town of Blacksburg provide this service, much in the same way that the Town provides refuse collection service to its residents. We note, however, that the exact same residential service will not likely be adequate for downtown businesses and will also be charged differently than the flat rate for residents.

Operational recommendations for refuse collection specifically tailored to the Blacksburg Downtown District:

Containers: Based upon the experience of other communities, we recommend that each downtown business be issued one or more wheeled carts or be assigned a consolidated dumpster for refuse based on their specific needs. The size and number of containers issued will be determined by the business type and volume of waste generated. Diverting more material to recycling will reduce the number or size of refuse containers needed. The goal is to offer a service that is flexible enough to accommodate the various types and sizes of businesses downtown, rather than a "one-size-fits-all" program. Survey results suggest that

most businesses will benefit most from wheeled carts with curbside, backdoor, or alley pickup. Refuse containers should be of a different color and otherwise specially marked to clearly differentiate refuse from recycling.

Cost: We recommend that refuse be collected downtown with a Pay As You Throw system. Ideally, this would be a “true” Pay As You Throw system based on weight. Each business would then be regularly billed for the weight of refuse they discard. We feel that these procedures would most fairly allow each business to pay only for what they discard and be suitably rewarded for the recyclable material removed from their waste stream.

Collection Location: Based upon the experiences of other communities, and wherever possible, we recommend that refuse containers be placed at designated locations for each business to include: curbside in front of each business, backdoor or alley locations, or single-business dumpster sites. Survey results suggest that most business will benefit from curbside or backdoor/alley pickup.

Time of Collection: The time of collection must be standardized based on the needs of participants in the refuse and recycling program and patrons of the downtown. Collection times should be determined in order to minimize the amount of time trash is set out at the curb or backdoor/alley area.

Frequency of Collection: Based upon the experiences of other communities, we recommend that refuse be collected up to six times per week. Collection needs will vary by business type.

Refuse Collection Providers: To keep the number of collection vehicles and downtown-truck congestion at a minimum, we recommend that no more than one contractor/hauler be used to collect refuse in downtown Blacksburg. Ideally, this would be the same contractor that would provide the recommended recycling collection. We believe that finding an appropriate contractor to collect recyclables, and negotiating a contract that covers an appropriate length of time, is an activity that will be best handled by the Town of Blacksburg.

Periodic Review: We recognize that once in place, adjustments to this refuse collection program may be necessary. Therefore, we recommend that a group, to include merchants, citizens, and local solid waste professionals, be established to periodically review the adequacy and effectiveness of the downtown-recycling program.

SUPPLEMENTAL RECOMMENDATIONS

The recommendations above provide the basis for a mandatory, uniform recycling and refuse program in downtown Blacksburg. We also make the following recommendations that would enhance recycling downtown and elsewhere in Blacksburg:

1. We recommend that Town-owned (public) recycling receptacles be placed at selected locations in the downtown area for pedestrian use. Some containers would be permanent, while additional containers could be set out during high foot traffic periods. We have learned that a great quantity of recyclable material is discarded as refuse by pedestrians downtown due to a lack of available recycling containers. Public commingled container recycling has proven very successful in the downtown during events such as *Steppin' Out*. Permanent, public recycling containers would divert pedestrian-generated materials from the waste stream on a regular basis.
2. We recommend that the program be expanded to include the collection of cooking oil (grease) for recycling.
3. We recommend that commercial food generators (i) donate unsalable yet still edible food to the local food bank and (ii) divert food waste to a permitted compost facility for recycling.
4. We recommend that the Town of Blacksburg's *Solid Waste Community Programs Coordinator* provide education to assist businesses with this program.
5. We recommend that this plan be periodically reviewed and improved to address the concerns of Blacksburg's merchants and citizens.

CONCLUSIONS

We recommend that this recycling & refuse program be implemented for the entire Blacksburg downtown area. We further recommend that all businesses in the downtown area be required to participate in this program.

We strongly believe that establishing this program will be an important step in revitalizing downtown Blacksburg. We also believe that this recommended program is consistent with (or better than) those programs established in other progressive cities in the region. Recycling in the downtown is important to both our merchants and our citizens. We believe that a vigorous

and effective recycling program is essential to enhancing the environmental sustainability of Blacksburg.

STEPS TOWARD IMPLEMENTATION

1. *Core Committee* presents this plan to the *Sustainable Blacksburg's Downtown Recycling Study Group* for their review, modification, and approval. **Completed 8/20/08.**
2. The *Sustainable Blacksburg Downtown Recycling Study Group* presents the modified plan to *Sustainable Blacksburg* for their review, modification, and approval. **Completed 9/4/08.**
3. *Sustainable Blacksburg* presents the modified plan to the *Downtown Merchants of Blacksburg* for their review and to solicit their overall approval. **Completed 9/24/08.**
4. *Sustainable Blacksburg* presents the modified plan to the Town of Blacksburg with the support of all relevant stakeholders.
5. *Sustainable Blacksburg* works with all relevant stakeholders to develop the operational details of the program.
6. The Town of Blacksburg implements the program.

ATTACHMENTS

- Appendix A: Downtown Recycling Group Invitees (and active participants)
- Appendix B: Downtown Recycling & Refuse Survey – Blacksburg, VA
- Appendix C: Downtown Recycling Benchmark Survey – Charlottesville, VA
- Appendix D: Downtown Recycling Benchmark Survey – Roanoke, VA
- Appendix E: Downtown Recycling Benchmark Survey – Chapel Hill, N.C. and Vicinity
- Appendix F: Downtown Recycling Benchmark Survey – Raleigh, N.C.
- Appendix G: Downtown Blacksburg Business Map for Recycling and Refuse

FOR FURTHER INFORMATION OR CLARIFICATION, CONTACT:

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