



City of Raleigh
Waste Reduction Task Force
Final Report
February 11, 2016

Improving and Expanding
Waste Reduction Efforts



Recommendations to the Raleigh City Council

This page is intentionally left blank to facilitate double-sided printing.

Table of Contents

1	Introduction	1
1.1	WRTF Members.....	2
2	Facilitation Approach.....	2
3	Summary of Meetings	3
3.1	Meeting 1 Summary	4
3.2	Meeting 2 Summary	4
3.3	Meeting 3 Summary	4
3.4	Meeting 4 Summary	5
4	Recommendations from the WRTF	5
4.1	Recommendation for a Vision Statement.....	5
4.2	Recommendations for Guiding Principles	5
4.3	Recommendations for Waste Diversion Goal.....	6
4.4	Recommended Strategies.....	7
4.4.1	Existing Strategies Recommended to Keep	9
4.4.2	Existing Strategies Recommended to Drop	11
4.4.3	New Strategies Considered.....	11
4.4.4	Timing of Recommended Strategies	13

Appendix 1: Meeting 1 Agenda, Meeting Notes

Appendix 2: Meeting 2 Agenda, Meeting Notes

Appendix 3: Meeting 3 Agenda, Meeting Notes

Appendix 4: Meeting 4 Agenda, Meeting Notes

1 Introduction

The City of Raleigh's (City) current Comprehensive Plan (Plan) was adopted in 2009 and most recently updated in 2013. The current Plan includes discussion of opportunities for waste reduction, but does not set specific waste reduction goals or guiding principles for implementation. The Raleigh City Council discussed waste reduction and recycling initiatives at their meeting on November 5, 2013. Council members expressed interest in receiving more information on efforts to increase the amount of materials recycled and reduce the tonnage being sent to the South Wake Landfill. The issue was referred to the Council's Budget and Economic Development (BED) Committee.

On May 13, 2014, Solid Waste Services (SWS) Director, Fred Battle, presented to the BED Committee. At the meeting, he offered a cost-benefit analysis for various waste reduction strategies, including pay as you throw (PAYT), curbside collection of food waste and increased education/marketing. BED Committee members expressed concern about the costs of some of the potential strategies and questioned how they could be implemented for multifamily and commercial properties, not just single-family residences. Solid Waste Services staff were tasked to explore the financial impact of implementing PAYT and to research how other cities had addressed equity concerns for low-income and elderly residents.

On October 28, 2014, SWS Director Battle returned to the BED Committee and expressed a need to broaden the discussion beyond PAYT, taking a comprehensive look at the City Council's goals for waste reduction. As SWS staff did not want to rely strictly on their own research, but instead wanted City Council guidance on an overall direction, as well as public input on specific strategies, Director Battle recommended the formation of a task force to provide diverse perspectives and public input. BED Committee members unanimously agreed to take Director Battle's recommendation to the full Council.

On November 5, 2014, the Raleigh City Council voted unanimously to create a Waste Reduction Task Force (WRTF). The WRTF would have the following two main objectives: identify waste reduction goals and further evaluate the strategies outlined in the Comprehensive Plan Material Resource Management Plan through a set of guiding principles which would be developed considering social equity, fiscal impact to the City and its citizens, as well as environmental impacts. In response to these requests, the SWS issued a request for proposals (RFP) for facilitation services to select a qualified consultant to assist in planning and convening meetings of a WRTF. Through the RFP process, HDR was selected to assist SWS with planning, convening, and facilitating WRTF meetings.

WRTF members were recruited by SWS staff in spring 2015, following the City Council recommendations to include commercial interests as well as a geographically diverse representation of Raleigh's neighborhoods. WRTF members were charged with three specific tasks:

- 1) Decide on a waste reduction goal for the City.
- 2) Recommend specific strategies for achieving that goal, utilizing a set of guiding principles.
- 3) Recommend changes to solid waste related action items in the 2030 Comprehensive Plan.

The WRTF consisted of eighteen members to bring together divergent viewpoints and perspectives on solid waste management and waste reduction strategies for the City. The consensus recommendations presented in this report follow highly participatory debate and discussion on the impacts and effectiveness of existing strategies included in the current Plan, potential new strategies, and goals.

Waste Reduction Task Force Final Report

1.1 WRTF Members

The WRTF members included representatives of various neighborhoods, the City of Raleigh Environmental Advisory Board, Downtown Raleigh Alliance, Raleigh Appearance Commission, Hillsborough Street Community Service Corporation, Greater Raleigh Merchants Association / Shop Local Raleigh, the NC Restaurant and Lodging Association, the Greater Raleigh Chamber of Commerce, and the Sierra Club.

Members of the WRTF and their affiliation are provided in Table 1:

Table 1. WRTF Members

Name	Affiliations
Donny Anderson	Resident of northwest Raleigh
Adam Bronski	Resident of northeast Raleigh
David Dean	Hillsborough Street Community Service Corporation
David Diaz	Downtown Raleigh Alliance
Erin Doss	Resident of northwest Raleigh
Asa Fleming	Raleigh Appearance Commission
Weston Hill	North Carolina Restaurant and Lodging Association
Malay Jindal	Greater Raleigh Chamber of Commerce
Elizabeth Kurzer	Resident of southwest Raleigh
Eric Leary	Capital Group Sierra Club
Sharice Lloyd	Resident of northeast Raleigh
Jennifer B. Martin	GRMA / Shop Local Raleigh
Jason Pfister	Resident of northwest Raleigh
Dean Rains	Raleigh Appearance Commission
Charles Rodman	Resident of southeast Raleigh
Dave Toms	City of Raleigh Environmental Advisory Board (EAB)
Jimmy Turner	Resident of southeast Raleigh
Barbara Zimmerman	Resident of southwest Raleigh

2 Facilitation Approach

Throughout the entire effort, the HDR Team coordinated and work closely with SWS staff. Our backbone to facilitating the WRTF Meetings was the International Association of Public Participation's (IAP2) Participation Spectrum, which allowed us to balance time spent informing (presenting information) and time spent in group discussions.



This approach to facilitation included the following main elements.

- **Research and Planning:** HDR developed a draft schedule and facilitation plan for each of the WRTF Meetings. HDR also developed “save the date” and invitation emails to be sent to the WRTF for each meeting. SWS staff initially contacted potential WRTF members to determine willingness

Waste Reduction Task Force Final Report

to participate in the meetings, and finalized the list of WRTF members. For each of the WRTF Meetings, HDR provided draft materials for review prior to the meeting, conducted a conference call with City staff to discuss agenda, materials, and facilitation format, and finalized WRTF meeting materials. Appendices 1 through 4 contain meeting materials for each meeting, including the agenda, sign-in sheet, presentation materials, and meeting notes.

- **Meeting Facilitation:** For each meeting, the facilitation plans included a balance between informing the WRTF and leading group discussions. The topics that were covered required providing background information and presenting case studies in order to ensure the WRTF members had the same level of understanding. Group discussion and interactive voting were key elements of each meeting. WRTF members were reminded at the beginning of each meeting that everyone had the power of “ELMO” (“enough, lets move on”) to allow the group to move past topics where consensus was not going to be efficiently achieved. ELMO’d topics were revisited and resolved. Section 3 below describes each meeting in more detail.

3 Summary of Meetings

A total of four (4) WRTF meetings were held, and covered a wide range of waste reduction topics. The following provides a summary of each meeting. Appendices 1 through 4 contain meeting agendas and meeting notes, for each respective meeting. Section 4 details the specific recommendations developed throughout the WRTF facilitation process.

What should the Raleigh Solid Waste Program look like? [RSVP Today](#) [View in Browser](#)

  [Save the Date](#)

You have volunteered to participate on the City of Raleigh Waste Reduction Task Force

Please join us for the Visioning Workshop to assist in defining "What Should the Future Raleigh Solid Waste Program Look Like?" Thank you for your participation. Your input is important!

Light refreshments will be provided. We look forward to seeing you!

[RSVP Today >](#)

 **WHEN**
May 26, 2015
4:00-7:00 p.m.
[Add to calendar](#)

 **WHERE**
Raleigh Solid Waste Services Department
630 Beacon Lake Drive
Raleigh, NC 27610
[Map it](#)

HDR | 1733 National Dr., Suite 207
Raleigh, NC 27612-4945
(919) 752-1114 | [www.hdr.com](#)
© 2015 HDR, Inc. All Rights Reserved. Terms/Privacy

Waste Reduction Task Force Final Report

3.1 Meeting 1 Summary

Meeting 1 was held on May 26th, 2015, in the late afternoon. The first meeting included group exercises in order to set the Vision Statement and Guiding Principles to be used throughout the process, and ultimately recommended for inclusion in the Plan update. The HDR facilitators used a “sticky wall” to record the feedback provided by the WRTF, which was used to develop three potential Vision Statements and twelve Guiding Principles statements. The strategies (action items) included in the current Plan were reviewed with the WRTF. The meeting also included an overview of the City’s current solid waste management system, and a general discussion on system costs, disposal capacity, and similar topics, in order to provide background and a common understanding in the group of the current system. Appendix 1 contains the agenda and meeting notes from Meeting 1.



3.2 Meeting 2 Summary

Meeting 2 was held July 14, 2015, in the late afternoon and early evening. The meeting began with a vote on a Vision Statement, where three options were presented based on feedback from Meeting 1; the Vision Statement was narrowed down to two possibilities. It was agreed that HDR could try to combine the two Vision Statements to reflect the discussion, and would discuss with the WRTF at Meeting 3.



Dot voting was used to “short-list” Guiding Principles, which narrowed the list from twelve to seven final Guiding Principles. The meeting also provided a review of existing strategies in the current Plan, as well as additional potential strategies to consider. For the existing and potential new strategies, case studies and other relevant information were provided for the WRTF’s consideration. The meeting ended with a review of all of the existing and potential new strategies, where the WRTF was asked to identify which strategies should be kept, which strategies should be dropped, and which strategies they would like to receive more information on prior to making any recommendations. Appendix 2 contains the agenda and meeting notes from Meeting 2.

3.3 Meeting 3 Summary

Meeting 3 was held September 29, 2015 in the late afternoon and early evening. The meeting began with the presentation of a potential final Vision Statement for discussion with the WRTF and a vote. The final Guiding Principles, decided by dot voting in Meeting 2, were reviewed. A majority of the meeting was spent discussing strategies and additional information regarding each, with an effort to determine which strategies from the current Plan should remain, which should be modified, and which potential new strategies should

Waste Reduction Task Force Final Report

be added, in the opinion of the WRTF. Two topics were ELMO'd during Meeting 3. Time ran out prior to discussing two remaining strategies and goals. It was determined a fourth meeting would be held in order to finalize recommendations. Appendix 3 contains the agenda and meeting notes from Meeting 3.

3.4 Meeting 4 Summary

Meeting 4 was held October 27, 2015 in the late afternoon and early evening. The meeting focused on wrapping up the final list of strategies to recommend for inclusion in the update to the Plan, and determining a recommendation for a waste reduction goal (or goals) for the City. The meeting began with a review of strategies the WRTF voted to keep, voted to drop, voted to add or voted to not add. The two ELMO'd topics were then reviewed and resolved with the WRTF. The two remaining strategies that were not reviewed in Meeting 3 due to time constraints were covered and resolved. The WRTF wrapped up the fourth and final meeting with a discussion about a recommended waste reduction goal for the City. Appendix 4 contains the agenda and meeting notes from Meeting 4.

4 Recommendations from the WRTF

4.1 Recommendation for a Vision Statement

The Vision Statement is meant to provide a theme for the solid waste system. The WRTF was asked "What should the future of the City of Raleigh's solid waste system look like?" Using feedback from the group, three potential Vision Statements were developed and voted on by the WRTF. Consensus was reached on a recommended Vision Statement.

The WRTF recommends the following Vision Statement to serve as a theme for the City's solid waste system:

"Develop a forward-thinking and inclusive solid waste management system that fosters the reduction of waste in a practical and fiscally responsible manner, embracing proven and innovative approaches that incorporate convenience, flexibility, transparency, and mutually beneficial partnerships."

4.2 Recommendations for Guiding Principles

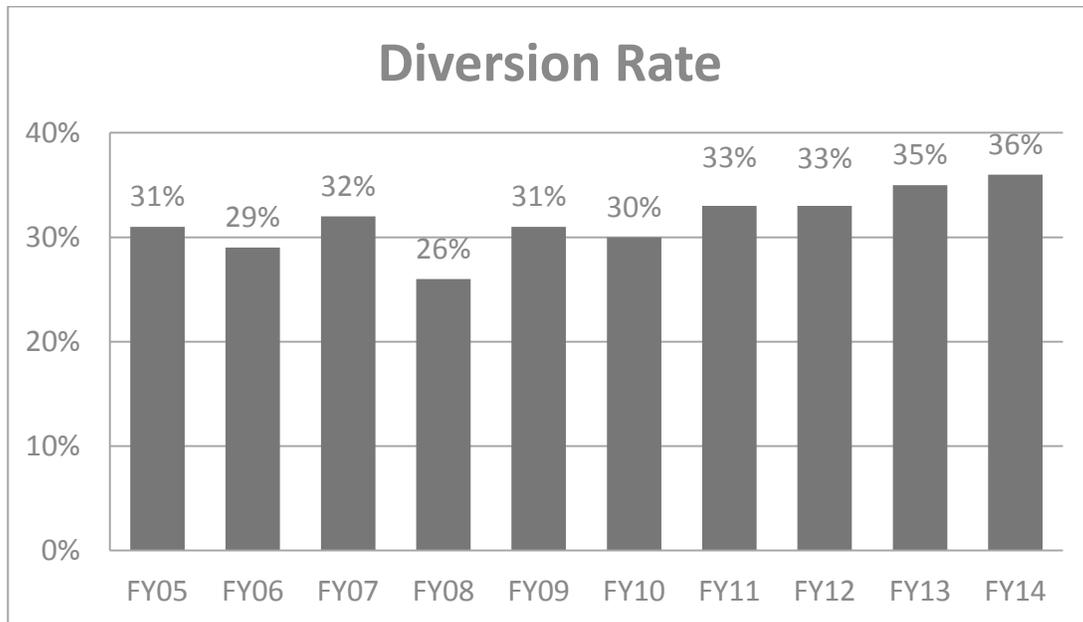
The Guiding Principles are meant to provide insight into shaping the strategies and goals for the solid waste system. The WRTF was asked "How should we shape the strategies and goals of the City's solid waste system?" Using feedback from the group, twelve potential Guiding Principles were developed, and voted on by the WRTF. Consensus was reached on seven recommended Guiding Principles.

The WRTF recommends the following Guiding Principles be followed when considering strategies and goals for the City's solid waste system.

1. *Implement fiscally sustainable and transparent practices.*
2. *Improve education for all waste generators, emphasizing the importance of waste reduction.*
3. *Assess opportunities for creating partnerships with other local governments and the private sector.*
4. *Support practical solutions that divert non-traditional recyclable materials (e.g. C&D) in addition to traditional recyclables.*
5. *Encourage behavior changing market solutions to reduce waste.*
6. *Consider impacts on the community and aesthetics.*
7. *Anticipate and prepare for scalable programs for future.*

4.3 Recommendations for Waste Diversion Goal

The WRTF understands that SWS directly controls the single family residential waste stream, but not the multifamily, commercial, and construction and demolition debris material streams. The current and historical diversion rate for the City is measured using the total tons collected by SWS, and the total tons of recyclables and yard waste diverted from landfill. As shown in the following figure, the City's diversion rate has slowly increased over the years. For Fiscal Year 2014, the City's diversion rate was 36%.

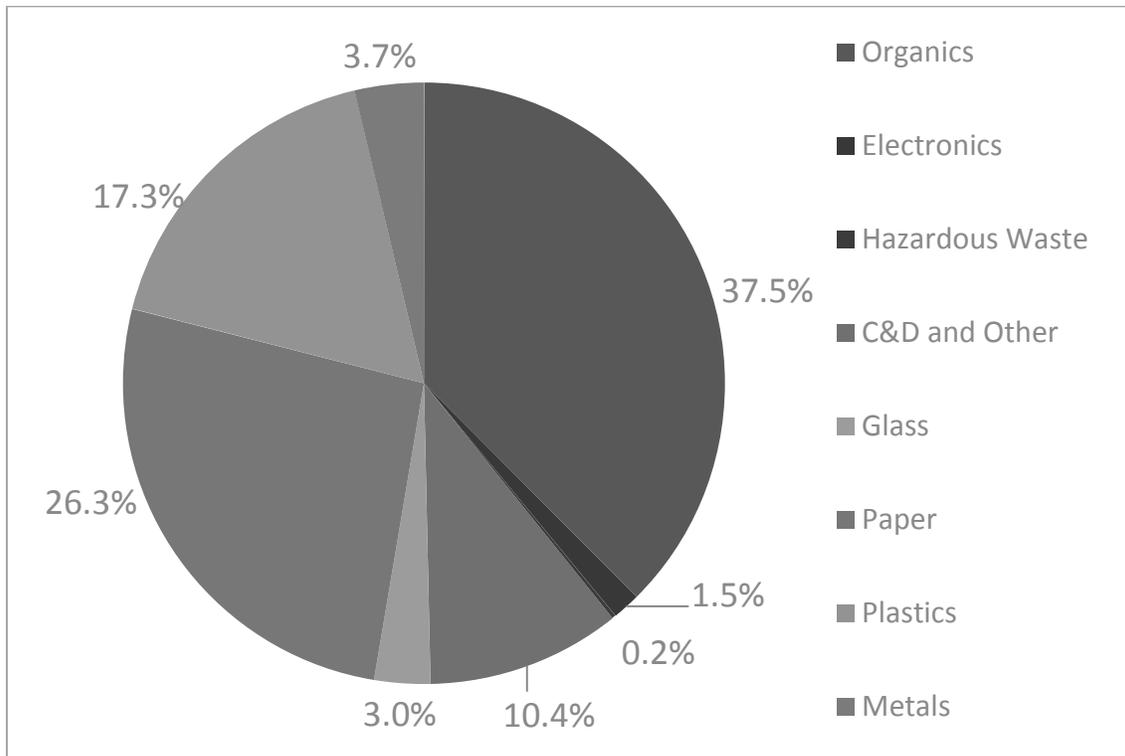


It is also understood that some of the recommended strategies (e.g. mandatory recycling for commercial, construction and demolition debris recycling) would not be directly controlled by SWS. As such, consensus was reached on the need for the establishment of a citywide baseline, in order to measure waste diversion efforts beyond the direct control of SWS.

The WRTF recommends that the City collect data to **develop a baseline of waste disposal and diversion across all generation sectors in the City**, including single family, multifamily, commercial, and construction and demolition debris. From the baseline, the City should then track and report on the effectiveness of the waste reduction strategies and other programs implemented.

Based on a composition study conducted by SCS Engineers, in May 2011, for Wake County at the South Wake Landfill (SWLF), which is currently used by the City for disposal, it is evident that there are items being landfilled that could be recycled. The following figure demonstrates the overall Wake County composition of waste being landfilled at the SWLF, according to the May 2011 report.

Waste Reduction Task Force
Final Report



It was further described in the SCS composition study report that the single family waste being landfilled at SWLF is comprised of 38.9% potential recyclables and 24.6% compostable items (the remaining 36.4% is trash). The multifamily waste being landfilled at SWLF is comprised of 43.6% potential recyclables and 24.0% compostable items (the remaining 32.4% is trash). The commercial waste being landfilled at SWLF is comprised of 37.6% potential recyclables and 32.8% compostable item (the remaining 29.6% is trash).

Considering the opportunities for diversion based on composition of waste being landfilled, combined with the waste reduction strategies recommended for inclusion in the updated Plan, the WRTF recommends a **residential and citywide diversion goal of 50% by 2020**, which will allow the City to craft a consistent message across all waste generator sectors within the City.

4.4 Recommended Strategies

Strategies included in the current Plan (referred to as “Action Items” in the Plan) served as a jumping off point for recommendations for the update to the Plan. There were six strategies identified in the current Plan that relate to solid waste and/or waste diversion, which have not yet been completed. The strategies are included in either “Element C, Environmental Protection”, or “Element H, Community Facilities and Services” in the current Plan. Additional topics and potential strategies were presented to the WRTF, including construction and demolition debris (C&D) recycling, organics diversion, swap shops for difficult to recycle materials, and extended producer responsibility. The following table summarizes each of the strategies contemplated during the workshops, and resulting recommendations to modify, add, or drop the respective strategy. For the existing strategies in the current plan, the following table shows the Action Item number, the Action Item, the respective Section of the current Plan, a Description, and the Time Frame included in the current Plan. Subsections 4.4.1 through 4.4.3 provide more details regarding each strategy, including priority level. Subsection 4.4.4 summarizes the recommended time frame for recommended strategies.

Waste Reduction Task Force Final Report

Action Item No.	Action Item	Section	Description	Current Plan Time Frame	Recommendation	Recommended Time Frame
Action EP 7.1	Pay-As-You-Throw	C.7 Material Resource Management	Create a Pay-As-You-Throw Program that utilizes a volume-based disposal fee system to encourage residents and contractors to reduce waste. Such action will require increased vigilance against illegal dumping.	Mid-term (3-5 years)	Keep, but modify	Short term (1 to 2 years)
Action EP 7.3	Waste-to-Energy Demonstration	C.7 Material Resource Management	Partner with the North Carolina Cooperative Extension and related institutions, agencies, and organizations to explore and develop a demonstration waste-to-energy project.	Mid-term (3-5 years)	Drop	NA
Action EP 7.4	Environmentally-Friendly Product Use	C.7 Material Resource Management	Work with regional agencies to explore options for assuring the use of compostable plastic, recyclable paper, and/or reusable checkout bags by stores throughout the region, as well as a reduction in the use of polystyrene foam (Styrofoam) food service containers, including those in the City of Raleigh (similar ordinances in other cities apply to grocery stores with gross annual sales exceeding two million dollars, and pharmacies with five or more City locations; penalties apply for organizations in violation).	Short-term (1-2 years)	Keep, but modify	Short term (1 to 2 years)
Action CS 2.3	Mandatory Recycling	H.2 Solid Waste	Explore implementing a mandatory recycling program by 2012, consistent with the 10-year Solid Waste Plan.	Mid-term (3-5 years)	Keep, but modify	Implement by end of 2017
Action CS 2.5	Alternative Waste Disposal Techniques	H.2 Solid Waste	Study economically viable opportunities for incineration, as well as other disposal alternatives, that arise in the future, including opportunities involving regional cooperation.	Mid-term (3-5 years)	Keep, but modify	Continual (on-going)
Action CS 2.8	Retrofits to Facilitate Recycling	H.2 Solid Waste	Explore design changes on how to retrofit existing residential and non-residential developments that facilitate participation in the recycling program.	Mid-term (3-5 years)	Drop	NA
New	NA	NA	Construction and Demolition Debris: Implement an ordinance requiring a diversion program for construction and demolition debris materials.	New	Add	Short term (1 to 2 years)
New	NA	NA	Organics: Have the Raleigh Environmental Advisory Board assess the development of an organics/food waste diversion strategy or strategies.	New	Add	Short term (1 to 2 years)
New	NA	NA	Extended Producer Responsibility	NA	Do not add	NA
New	NA	NA	Swap Shop for difficult to recycle items (paint, pesticides)	NA	Do not add	NA

Waste Reduction Task Force
Final Report

4.4.1 Existing Strategies Recommended to Keep

Each of the existing strategies was discussed in the WRTF meetings. For each strategy, background information and case studies from other communities that have already implemented similar strategies was presented, as available. The WRTF discussed the merits of each strategy, the applicability of the Guiding Principles, the appropriateness for the City of Raleigh, and timing for recommended strategies. The following subsections describe the strategies recommended for inclusion in the updated Plan, as well as strategies that were considered but ultimately not recommended.

The following summarizes the four existing strategies in the current Plan recommended to remain in the updated Plan, in alphabetical order. In some cases, modifications to the strategies are recommended as described below.

Alternative Waste Disposal Techniques: The WRTF were presented with details on the Wake County Solid Waste Master Plan, the South Wake Landfill facility life and site constraints, and statistics on the County's per capita disposal rate and trends. Wake County representatives also described their ongoing assessment with NC State to research of disposal alternatives following closure of the landfill. Assessment will consider costs, energy and environmental emissions. SWS staff commented that they track the development of alternative disposal techniques and are reporting status to the Planning Department as part of this existing strategy. The WRTF also learned that incineration has rarely been used in North Carolina because of costs of the technology. A majority of the task force members were in favor of keeping this strategy in, with the modification to language to remove "incineration". Consensus was reached that this strategy was a low priority for the City because South Wake Landfill has an estimated 30 years of capacity remaining and Wake County is already researching future alternatives. It was discussed that most of the Guiding Principles did not apply to this particular strategy.

Original Description (Section H.2 Solid Waste, Action CS 2.5)	Recommended Modified Description	Priority Level
Study economically viable opportunities for incineration, as well as other disposal alternatives, that arise in the future, including opportunities involving regional cooperation.	Study economically viable opportunities for disposal alternatives that arise in the future, including opportunities involving regional cooperation.	Low

Waste Reduction Task Force
Final Report

Environmentally-Friendly Product Use: Looking for options to implement policies promoting environmentally-friendly product use was determined as a strategy to recommend keeping in the Plan update; however, consensus was not reached on the priority level (1 vote for low, 1 vote for high, 4 votes for medium). Information was presented to the WRTF that some product bans have recently been struck down, which led to a recommendation that City staff work with the NC League of Municipalities to develop ordinances that can be feasibly enacted in order to work with the private sector to evaluate the potential impact on businesses. The WRTF expressed a belief that an ordinance would be more effective if adopted by nearby cities or at a state level, and not just in the City of Raleigh. Working with local agencies, in addition to regional agencies, was added to the strategy in order to promote working with the private sector in determining product use efforts that make sense for Raleigh. It was determined by the WRTF that this strategy does not violate any of the Guiding Principles.

Original Description (Section C.7 Material Resource Management, Action EP 7.4)	Recommended Modified Description	Priority Level
Work with regional agencies to explore options for assuring the use of compostable plastic, recyclable paper, and/or re-usable checkout bags by stores throughout the region, as well as a reduction in the use of polystyrene foam (Styrofoam) food service containers, including those in the City of Raleigh (similar ordinances in other cities apply to grocery stores with gross annual sales exceeding two million dollars, and pharmacies with five or more City locations; penalties apply for organizations in violation).	Work with <u>local and</u> regional agencies to explore options for assuring the use of compostable plastic, recyclable paper, and/or re-usable checkout bags by stores throughout the region, as well as a reduction in the use of polystyrene foam (Styrofoam) food service containers, including those in the City of Raleigh (similar ordinances in other cities apply to grocery stores with gross annual sales exceeding two million dollars, and pharmacies with five or more City locations; penalties apply for organizations in violation).	Consensus not reached (1 vote for low, 1 vote for high, 4 votes for medium)

Mandatory Recycling: Implementing a mandatory recycling ordinance was ultimately decided as a high priority strategy because it could be equitable if designed to cover all waste generator sectors (single family, multifamily, and commercial). The WRTF felt it was time to go beyond exploring, and design a phased approach to mandatory recycling, based on experience of other municipalities. The phased approach could begin with technical assistance and education for the first few years, and provide for enforcement in later years after implementing the ordinance. This strategy was determined to support Guiding Principles #1, #2, #5, #6, and #7; Guiding Principles #3, #4 did not apply.

Original Description (Section H.2 Solid Waste, Action CS 2.3)	Recommended Modified Description	Priority Level
Explore implementing a mandatory recycling program by 2012, consistent with the 10-year Solid Waste Plan.	Implement a universal recycling ordinance by 2017 that may include a phased approach for different waste sectors and providing technical assistance (specific waste sectors could be named).	High

Waste Reduction Task Force
Final Report

Pay-as-you-Throw: Implementing PAYT was ultimately decided as the highest priority strategy because the WRTF recognized that variable-rate pricing creates a direct economic incentive to recycle more and generate less waste. Case study information from other communities with PAYT systems was presented to the WRTF. The current collection system for the City was also presented, demonstrating the operating cost savings recognized by changing the style of collection for curbside service from manual to automated collection. The WRTF recognized the cost savings realized by changing to automated collection, and recommends preserving the automated cart collection benefits; however, the WRTF was divided on the best way to implement this strategy (e.g. PAYT bags in carts versus variable rate carts without PAYT bags). The WRTF recommends modifying current language to incorporate a life-cycle-cost analysis to determine the best approach for implementation, as shown in the following table. No specific discussion was noted in relation to the Guiding Principles for this strategy.

Original Description (Section C.7 Material Resource Management, Action EP 7.1)	Recommended Modified Description	Priority Level
Create a Pay-As-You-Throw Program that utilizes a volume-based disposal fee system to encourage residents and contractors to reduce waste. Such action will require increased vigilance against illegal dumping.	Create a Pay-As-You-Throw Program (a.k.a. volume-based pay, or variable rate pay) that utilizes a volume-based disposal fee system to encourage residents and contractors to reduce waste. Maintain the current automated collection method. Conduct a life-cycle-cost analysis to determine the best approach (e.g. variable size cart approach or PAYT bags placed in existing carts). Life-cycle-cost analysis should include considerations for enforcement as well as low income families. Such action will require increased vigilance against illegal dumping, as well as increased education efforts.	High

4.4.2 Existing Strategies Recommended to Drop

The following summarizes the two existing strategies in the current Plan recommended to be dropped, and an explanation as to why the WRTF recommends the strategies be dropped in the updated Plan.

Retrofits to Facilitate Recycling: Most of the WRTF voted to drop this strategy, as it could be included in the phased approach of the Mandatory Recycling strategy. Those who dissented recommended modifying the language to read: “Explore design changes on how to retrofit, or other alternatives to design changes, to assist existing residential and non-residential developments in facilitating participation in the recycling program.”

Waste-to-Energy Demonstration: It was discussed that this strategy was specific to waste to energy, and there is another strategy related to alternative waste disposal strategies that could include waste to energy. WRTF voted to recommend removing the strategy from the Plan.

4.4.3 New Strategies Considered

Additional topics and potential strategies were presented to the WRTF, including construction and demolition debris (C&D) recycling, organics diversion, swap shops for difficult to recycle materials, and extended producer responsibility. Ultimately, C&D recycling and organics diversion strategies are recommended for inclusion in the updated Plan, but swap shops and extended producer responsibility strategies were not recommended for inclusion in the updated Plan.

Waste Reduction Task Force
Final Report

Construction and demolition debris recycling: Targeting this type of waste is a recognized best practice and examples from other cities with mandatory C&D recycling ordinances showed moderately high diversion rates. Examples of C&D recycling ordinances and the resulting diversion effects from Orange County, NC and Lee County, FL were presented to the WRTF. It was discussed that the specifics of the program would be best decided by City solid waste, planning and code enforcement staff with consultation with the building and debris management trades serving the City. Consensus was reached with the WRTF that an ordinance requiring diversion of construction and demolition debris materials should be developed and that it was right for the City of Raleigh. WRTF members believe the market could support additional diversion efforts and the private sector would ramp up efforts in response to ordinance requirements. It was determined by the WRTF that this new strategy conforms to all of the Guiding Principles.

Recommended Language for Updated Plan	Priority Level
Implement an ordinance requiring a diversion program for construction and demolition debris materials.	Consensus not reached; 3 votes for high, 3 votes for low

Organics (food scraps) Recycling: Information on the existing community garden program was shared with the WRTF, including some of the obstacle the program was facing in expanding, and how changes in the Unified Development Ordinance assisted with allowing these community gardens to be permitted as either limited or special use in most zoning districts. Information was also provided on the existing private contractors currently offering food waste collection to businesses, restaurants, and residences in Raleigh. There is currently no composting facility within Wake County permitted to accept food wastes but there are some privately operated facilities outside Wake County permitted to accept and process food wastes. An update on the Wake County organics diversion program and pilot studies at two of the solid waste convenience centers were also discussed. Consensus was reached with the WRTF that that an organics strategy should be added; however the WRTF felt that specifics of the strategy should not be determined by the WRTF, as specifics would be better determined by the Raleigh Environmental Advisory Board. It was determined by the WRTF that this new strategy conforms to all of the Guiding Principles.

Recommended Language for Updated Plan	Priority Level
Have the Raleigh Environmental Advisory Board assess the development of an organics/food waste diversion strategy or strategies.	Consensus not reached; 1 vote for high, 1 vote for medium, 3 votes for low, 1 abstained

The following summarizes the two potential strategies that were considered by the WRTF, but ultimately determined to not be recommended for inclusion in the updated plan.

Extended Producer Responsibility (EPR): The WRTF was presented with the question whether the environmentally friendly product use strategy covered EPR or if a separate strategy should be included. It was discussed that such a strategy on EPR should be a separate strategy but no consensus was reached as to what the strategy should address. There was some discussion that a strategy could include simply having the City promote and provide information on existing take back programs; and that this communication could be more formal, perhaps with the water bill, and not just reliant on individuals using the City web site. Ultimately, the WRTF voted not to recommend incorporation of a new strategy related to EPR.

Waste Reduction Task Force
Final Report

Swap Shop for difficult to recycle items (paint, pesticides): The WRTF was presented with information on the City Swap Shop operated at the yard waste facility, and that it is operated at minimal cost because it is not staffed. Additional information was presented on a swap shop in Charlotte County, FL. Some WRTF members indicated that the City should just promote existing swap shop program, alternative options for donation, and take back programs. Ultimately, the WRTF voted not to recommend a new strategy regarding a swap shop program.

4.4.4 Timing of Recommended Strategies

For each of the strategies recommended to be included in the updated Plan, the WRTF members were asked to indicate an appropriate timeframe for implementation. Consensus was reached on the timeframe for each strategy. The following table shows the WRTF recommendations for timing of each strategy.

Strategy/ Action Item	Time Frame
Alternative Waste Disposal Techniques	Continual (on-going)
Construction and demolition debris recycling	Short term (1 to 2 years)
Environmentally-Friendly Product Use	Short term (1 to 2 years)
Mandatory Recycling	Implement by end of 2017
Organics (food scraps) recycling	Short term (1 to 2 years)
Pay-As-You-Throw	Short term (1 to 2 years)