

## **Recommendation - Source Reduction: Expand programs that lead to greater source reduction.**

1. Encourage commercial establishment to charge for one-time-use bags.
2. Encourage newspaper to develop electronic subscriptions that are cheaper, though not necessarily free, for subscribers.
3. Continue to educate people on composting
4. Change “Solid Waste” nomenclature to “Lincoln/Lancaster County Waste Management Plan”;
5. Recognize and promote Waste as a Public Utility (determine who owns the resource, and the principal stakeholders and responsibilities); recognize and promote service, value, and safety as the corner stones of the utility;
6. Create new public policy for a city/county “Commission for Waste Management and Conservation” (CWMC);
  - a. CWMC should be given regulatory, financial, business oversight, and operating responsibility over the following sources, processes, and incomes for waste reductions:
7. Community and County Education programs for Product Stewardship, Waste Reductions, and Conservation;
8. Establish on-going Value Extraction and Safety from the following waste streams:
  - a. Recycling
  - b. Reusing, Repurposing and Reselling
  - c. Construction and demolition waste
  - d. Hazardous waste collection and disposal
  - e. Medical waste
  - f. Electronics and “high-tech” waste collection and disposal
  - g. Biodegradable waste/yard waste (composting)
  - h. Waste conversion to energy
  - i. Emergency disposition of waste from community disasters
9. Initiate and commission the following feasibility studies with target completion dates of January, 2015, or sooner, if possible (target planning date of 2040):
  - a. Governance and Public Policies for Efficient and Effective Community/County Waste Management;

- b. Finance and Budgets to Support a Comprehensive Waste Management Utility; identify financing alternatives for transfer of public expenses from long-term infrastructure investments to the present and future programs for source reductions and value extractions from the future community/county waste streams (i.e., “Conservation Increment Financing” strategies);
- c. Technologies and Processes Required to Operate a Community/County Waste Management System (i.e., movement and processing of waste, extracting valuable materials and by-products from the stream of consumers to disposal, recycling, repurposing, and remanufactured products).

**Recommendation - Toxics Reduction: Expand the toxics reduction program and create a place to provide year round access.**

1. Work with lawn services, the university, and garden shops on developing lawns that require less herbicides, pesticides, water and fertilizer.
2. Reduce the need for lawn chemicals
3. Establishment of a permanent structure funded from the fees assessed to businesses that sell these materials.
4. Year-round access should be provided to both consumers and haulers at sites co-located with any constructed transfer stations (multiple temporary deposit and processing sites in the interim).

**Recommendation - Yard Waste: Maintain the status quo (seasonal ban on grass and leaves); long term consideration may be given to banning grass and leaves year round.**

1. Continue to educate people on composting
2. The seasonal ban on grass, leaves, and landscape materials should only be maintained at the landfill site until such time as a system for conversion of biodegradable materials to energy and/or commercial compost material can be developed from this category of the waste stream.

**Recommendation - Residential Recycling: Residential curbside recycling to be provided to all single family and duplex dwellings City-wide.**

1. Recognize that glass is not a valuable product, but it is recyclable. It is a heavy and takes up a lot of space and will not break down when buried in the land fill. Require that glass be collected in all City recycling programs.

2. Recycling containers should be provided for each participating household. This container must have a lid that will mount securely to the container. It shall consist of at a minimum:

- a. 18 gallon basket with snap on lid
- b. Larger 35, 65, or 95 gallon wheeled container with attached lid.

3. Weekly collection of residential recycling materials

4. Year round access to recycling services should be provided to consumers with financial incentives organized on measured volumes of material collected at residential sites.

5. A system of returning financial value to residences for diversion efforts should be studied and initiated at the earliest possible date.

6. New public policies for implementing bans on deposits for some specific materials from the landfill should be considered, as incentives to greater volumes of recyclable materials collections at residential and commercial sites.

**Recommendation - Commercial Recycling: Commercial recycling to be provided to multi-family dwellings, businesses, industries and institutions.**

1. Recognize that glass is not a valuable product, but it is recyclable. It is a heavy and takes up a lot of space and will not break down when buried in the land fill. Require that glass be collected in all City recycling programs.

2. Recycling containers should be provided for each participating industry. This container must have a lid that will mount securely to the container. It shall consist of at a minimum:

- a. Larger 65 or 95 gallon wheeled container with attached lid; and/or
- b. 1.5 yard or larger dumpster

3. Weekly collection of commercial recycling materials at a minimum.

4. Restaurant, bar & food serving establishments should have a twice a week collection of materials.

5. Codes should be updated so that all new construction and remodel projects are required to provide proper space for recycling & disposal needs. This needs to be mandated by building & safety to make sure areas are built large enough for garbage & recycling containers.

6. Bars, restaurants, and hospitality industry must dispose of bottles and cans and the City should encourage and/or make it easier for them to recycling these materials.

7. Year round access should be provided to commercial consumers with financial incentives organized on measured volumes of material collected at commercial sites.

8. A system of returning financial value to commercial consumers for diversion efforts should be studied and initiated at the earliest possible date.

**Recommendation – Construction and Demolition Materials Recycling: Develop/Support programs to reduce the quantities of construction and demolition waste going to the City’s disposal site(s).**

1. Code and ordinance public policies should be created for all public-funded construction and or demolition projects requiring waste management plans and diversion goals for specific materials and systems.

2. Guidelines and recommendations should be established for privately funded projects.

3. Recycling needs to be mandated at all construction sites. This is for new or remodel projects.

4. Recycling containers should be provided for each project. It shall consist of at a minimum a 6 yard or larger container.

5. Weekly collection of construction and demolition materials at a minimum.

6. Materials to be recycled should include, at a minimum, cardboard, scrap metal, wood, and concrete.

5. Year-round access should be provided to contractors and sub-contractors in the construction and demolition industry to deliver C&D “waste” for sorting of materials with either recycling or repurposing value.

8. National experience in C&D Waste Management programs indicates that 75 -80% of C&D “waste” can be diverted from landfills to become “valuable” material. Sorting and processing of C&D waste should be a major component of transfer station operations.

**Recommendation – Organic Waste Diversion (Composting):  
Develop/Support programs to reduce the quantity of organics,  
especially food waste, going to the City’s MSW disposal site.**

1. Work with the grocery and food industries to find more ways to recycle food that is past the shelf-life date but still good.
  - a. Example 1: Turn Expired food into cheap meals:  
<http://www.npr.org/blogs/thesalt/2013/09/21/222082247/trader-joes-ex-president-to-turn-expired-food-into-cheap-meals>
2. Encourage people to compost their food, participate in a pilot program for composting:
  - a. Food drop-off sites:  
<http://www.npr.org/blogs/thesalt/2013/06/27/196269850/NYC-RECYCLING-REBOOT>
  - b. Residential Compost bins  
<http://www.npr.org/templates/story/story.php?storyId=113969321>
3. The City should work with private industry in an attempt to access grants & funding to set up a facility as well as programs for the processing of organic materials at the existing landfill.
4. Encourage partnerships with private industry for the collection of these materials.
5. After the initial permit funding and facility are set up, this project can fund itself from the fees it charges or additional landfill gate fees. It could then also require all food serving industries, like schools, restaurants, bars, & retirement facilities to recycle their organic materials.
6. Encourage and/or participate in partnerships with private business such as Prairieland Farms and Bosch Companies who want to start a partnership to begin food composting on a larger scale.
7. Year round deposit and sorting access should be provided for all biodegradable materials, including fiber products, food waste, yard and landscape waste, and lumber waste. These wastes and the local volumes should be analyzed for potential contributions to waste-to-energy technologies and commercial opportunities for composted material.

**Recommendation – Waste Conversion Technologies: Pursue the development of Waste Conversion Technology(ies) as a part of a long-term strategy for energy recovery and resource conservation.**

1. Continue to harvest what we have but do not add more organics simply to produce methane
2. Not practical
3. Year-round deposit and sorting access should be provided for waste-to-energy conversions.
4. The appropriate technologies should be co-located with a transfer station.
5. The extracted energy should be appropriated to the operation of the transfer station and other co-located diversion industries.

**Recommendation – Municipal Solid Waste Disposal: Expand on City-owned property to the east of the currently permitted site.**

1. This is the most financial feasible and practical solution
2. The principal objective of the “Lincoln/Lancaster County Waste Management Plan” should be the reduction of pressure to expand the existing local landfill sites for both municipal solid waste and C&D wastes.
3. Successful operation of the above recommendations for diversions and value extractions will diminish the need for expansion of the existing landfill infrastructure.

**Recommendation – Construction and Demolition Waste Disposal:  
Expand on City property.**

1. The principal objective of the “Lincoln/Lancaster County Waste Management Plan” should be the reduction of pressure to expand the existing local landfill sites for both municipal solid waste and C&D wastes.

2. Successful operation of the above recommendations for diversions and value extractions will diminish the need for expansion of the existing landfill infrastructure.

**Recommendation – Transfer Station and Processing Facilities:  
Develop a municipal solid waste Transfer Station if a feasibility  
study shows it can be cost effective.**

1. Encourage private business to fill this need and discourage the City from competing with private enterprise in this area.
2. A transfer station operation is essential to the efficient sorting and extraction of values from the municipal waste stream.
3. The advisory committee’s recommendation for a “transfer station feasibility analysis” should be undertaken at the earliest possible date to identify potential sites, appropriate design guidelines, and estimated costs of development and operations.