



Community Planning and Environmental Services

Natural Resources Department

**March 28, 2006 Council Worksession
Attachment 1: Preliminary Staff Recommendations**

***DRAFT STRATEGIC PLAN
for 50% SOLID WASTE DIVERSION***

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INTRODUCTION

Fort Collins' involvement in recycling and waste reduction traces back to 1977 city master planning policies and the introduction of local curbside recycling in the 1980's. Adoption of a pay-as-you-throw (PAYT) trash ordinance followed in 1995. A 1999 resolution adopted by the City Council for increasing waste diversion levels paved the way for more innovations. When an update was made to the Council in February 2005, measurements showed the community was still only half-way to its goal of 50% diversion by 2010; clearly, new and revitalized efforts were necessary to make significant advances.

During a six-month strategic planning process, dozens of new programs¹ were explored for diverting more of the community's waste stream away from landfill disposal. A highly experienced consulting team led by Skumatz Economic Research Associates was hired for the project, and a group of knowledgeable stakeholders was recruited as a steering committee for the project. Extensive community involvement helped ensure that public input was incorporated into the December, 2005 strategic plan report.

This document introduces staff's preliminary proposal for a package of over 20 new measures that will help Fort Collins divert 50% (or more) of its waste stream. The *Strategic Plan for 50% Solid Waste Diversion* has been designed to provide both an appropriate range of actions and the sequence of changes necessary to reach the community's goal in a timely manner. The new measures were chosen for their feasibility, effectiveness, and pro-activeness. They represent staff's recommended approach, which came out of all the ideas that were explored with help from the public, consultants, and Steering Committee members who participated in the planning process.

If Council agrees to adopt a Strategic Plan, staff recommends prioritizing five programs for early implementation. These include: a one-year education campaign about local recycling and waste reduction opportunities; opportunity for all customers to receive weekly yard waste recycling; a construction and demolition (C&D) deposit that refunds the full deposit for projects that recycle; amend the City's pay-as-you-throw (PAYT) ordinance to include commercial customers so that all receive recycling service; restructure Fort Collins' PAYT ordinance with "rate designs" that further enhance waste reduction efforts.

¹ Table 5-2 (pages 40 – 43) of the draft SERA report (*Fort Collins Solid Waste 5-Year Strategic Plan*), available at www.fcgov.com/recycling/talkingtrash.

Background/Context

A number of cities, including Chicago, San Francisco, Portland (OR), and San Diego have been successful at reaching, and surpassing, 50% waste diversion levels by applying innovative policies and programs². However, relatively few communities in this part of the country have made such a high commitment to waste diversion, especially those that do not manage municipal trash collection, and therefore have limited funding (Fort Collins citizens employ the services of a completely privatized trash collection system).

A number of economic variables are critical to consider in a strategic plan. Fort Collins' geographic location increases shipping costs to recycling markets that are predominantly found in coastal transportation centers. Local recycling opportunities that are not fully developed need to be stimulated. However, Colorado has not adopted the legislative mandates that successfully motivate waste reduction in many other states (quite the opposite happens due to the abundance of landfills that have been built in our state); therefore, local ordinances and requirements play an important role. The regional infrastructure necessary to accomplish higher levels of waste diversion (i.e., processing or remanufacturing plants) requires greater levels of investment, so incentives are important to consider. Because the market for recyclable commodities is so susceptible to global influences such as energy prices and international demand, waste reduction and recycling programs adopted for Fort Collins must be as economically sound and solvent as possible.

Key Objectives

Five main objectives were used to evaluate, model, and select “packages” of programs from among the initial list of new ideas that were submitted by the consultant.

1. Target materials that have the most potential to be diverted and those that represent the largest amount of volume that can be diverted³,
2. Elicit waste reduction contributions from all sectors of the community, including residential, commercial, institutional (*e.g.*, the City), multi-family, and key stakeholder businesses such as trash haulers and recycling companies,
3. Distribute costs so that no single sector is unfairly affected,
4. Optimize positive, intended consequences and interrelationships among potential new programs,
5. Anticipate market forces that will create successful opportunities for our local recycling system, which includes service providers, the business community, recycling professionals, commodity brokers, as well as local citizens and their political representatives, and
6. Address concerns and needs that were expressed by citizens of Fort Collins in a community-wide survey.⁴

² *Waste News* article: Municipal Recycling Survey. February 13, 2006 (www.wastenews.com)

³ Figure 5-1, 5-2 (pages 32, 33) draft SERA report (*Fort Collins Solid Waste 5-Year Strategic Plan*).

⁴ Appendix D, *ibid*

How Recommendations Were Evaluated

The econometric modeling that was used to calculate the costs and effectiveness of new programs for Fort Collins draws from an extensive, proprietary computer program developed by Skumatz Economic Research Associates. (For 25 years, this firm has researched the impacts of solid waste reduction policies and programs in over 1,500 North American communities.) Fort Collins' own measurements of local waste generation and recycling activities provided the baseline data for SERA's Strategic Plan model; the customized tool now belongs to the City for use in future planning.

Public Input

Public involvement was critical to guiding the strategic planning process. Numerous articles and announcements were printed in the media that helped the City obtain comments and ideas. An open house in December 2005 was attended by over 60 citizens and there were a number of "visits" to an interactive website (www.fcgov.talkingtrash).

A group of stakeholders representing a broad cross-section of the community met regularly to assist staff and the consultants with developing and ranking strategies to include in the Plan. The Steering Committee included:

- Trash hauling companies
- Recyclers – public & private
- County landfill staff
- Commercial composter
- Environmental consultant
- Citizen advisory committee members

As part of Fort Collins' strategic planning project, a public opinion survey was conducted by Corona Research, with a margin of error of ~ 4.9 percent and a 95 percent confidence level in the results. (A smaller survey was also administered to poll businesses in Fort Collins about their attitudes and opinions about recycling and waste reduction.) Survey questions were specifically designed to seek information that relates to developing plans for new programs. The responses from the 403 completed telephone interviews indicate an extremely high interest in, and support of, recycling among Fort Collins citizens. In terms of importance, respondents were more likely to state that the ability to recycle conveniently, and the ability to recycle many materials, is more important than having inexpensive trash and recycling services.

There appears to be additional demand for curbside recycling; nearly three-quarters (73 percent) of survey respondents reported that they participate in curbside recycling. While there are many reasons for not recycling, the largest single reason (37 percent of non-recyclers) is that curbside recycling is not available to them; this may be attributed to the fact that curbside recycling is not always provided to residents of multi-family dwellings.

Yard waste appears to be an area of particular potential for recycling. A total of 39 percent of respondents report that they put yard waste out with the trash. About 1/3 of respondents report that they would use a community composting facility even if there was a small fee. Demand is greater for curbside pickup of yard waste; over half would be “very likely” or “somewhat likely” to use the service, even if there was a small fee.

There is a belief that recycling has not yet hit its potential. On average, respondents believe that over 40 percent of their own trash could be recycled. A total of 79 percent believe that it is feasible to divert 50 percent of garbage to recycling. Respondents also expressed price flexibility for increased services. A total of 82 percent of households believe that their current charges for trash and recycling are reasonable, and 78 percent would be willing to pay “a bit more” to achieve the City’s recycling goal. Half of respondents would pay three dollars more per month, while 93 percent would be willing to pay an additional 50 cents per month.

The findings of the public opinion survey confirm that Fort Collinsites are clearly eager to recycle, with 98 percent of respondents expressing the belief that recycling is “good for the city of Fort Collins.” They are supportive of new measures to divert waste (89 percent believe that the City should pursue additional means of recycling and diversion) and willing to pay some part of the costs that may be incurred to develop new programs. These findings, and the public comments that were received, were weighed together with our best estimation about costs and impacts in developing the following preliminary Strategic Plan.

Phase-in Schedule

For the purposes of modeling, it was necessary to enter start-dates for the strategies that were evaluated. Staff applied a phased approach with two basic stages. Many strategies were modeled that could essentially be started right away, while several others would be better to initiate in five or eight years, after the infrastructure has grown or intermediates steps have been taken. It is important to plan for a highly flexible implementation schedule in order to respond to changes over time such as adjusted market conditions or innovations in technology.

In the interests of assisting the City Council to provide immediate direction for the community, staff developed a summary list of five new measures to investigate for Phase I implementation.

- Strategy 1-1. Increase/enhance the City’s education program (in one-year increments) regarding specific measures to be initially implemented.
- Strategy 2-1. Provide customers, upon request to their trash haulers, with optional curbside yard waste collection services on a weekly basis.
- Strategy 3-2. Create a refundable C&D deposit system based on square footage of project (or comparable criterion), with total deposit to be refunded upon certification that appropriate level of recycling was accomplished.
- Strategy 4-9. Amend the City’s PAYT ordinance to include all commercial customers; require recycling fee to be embedded in rates and charge volume-based pricing.
- Strategy 5-1. Amend Fort Collins’ pay-as-you-throw (PAYT) residential trash rates ordinance so that “rate design” further enhances waste reduction efforts.

Next Steps

At the March 28, 2006 work session, the City Council's feedback will be sought for the overall package of new measures, and for the concept of adopting a long-term strategic plan. If the Council concurs about a summary list of new measures to begin implementing immediately, staff will begin preparing a business plan for each one, including more detailed benefit / cost analyses, schedule for implantation, and budget estimates. These project outlines will be submitted as soon as possible for Council's formal endorsement.

STRATEGIC PLAN FOR 50% SOLID WASTE DIVERSION

GOAL: The City will strive to divert 50% of the community's waste stream from landfill disposal by 2010.

Subgoal 1: Provide Fort Collins residents and the business community with information and education about waste diversion.

Strategy 1-1. Increase/enhance the City's education program (in one-year increments) regarding specific measures to be initially implemented⁵.

Modeled costs: \$40 / ton City⁶, \$.50 / ton community⁷

Modeled diversion: 1.3% (5,000 new tons)

Modeled start-date and ramp-up period: 2007, one year

Subgoal 2: Target organics to be separated from the waste stream, for collection and delivery in making secondary products such as compost, mulch, or composition construction material.

Strategy 2-1. Provide customers, upon request to their trash haulers, with optional curbside yard waste collection services on a weekly basis. This measure will require that yard waste does not cost more than equivalent costs for trash, by volume (consistent with pay-as-you-throw rates).

Modeled costs: \$1 / ton City, \$120 / ton community

Modeled diversion: 1.9% (7,500 new tons)

Modeled start-date and ramp-up period: 2007, two years

Strategy 2-2. After sufficient infrastructure has been developed to accept large volumes of organic debris to be composted, add requirement for largest candidate firms (e.g., restaurants and grocery stores) to recycle commercial food waste.

Modeled costs: \$1 / ton City, \$12 / ton community

Modeled diversion: 0.4% (1,700 new tons)

Modeled start-date and ramp-up period: 2011, two years

Strategy 2-3. Prevent yard waste from being discarded in Fort Collins' curbside trash collection system.

⁵ Underlined to indicate strategy was included in staff's recommendation for Phase I implementation.

⁶ City cost per ton is the estimated cost to city government to divert one ton of new material per year following full implementation of a given program.

⁷ User cost per ton is the estimated cost to the community (i.e., residents and businesses) to divert one ton of new material per year following full implementation of a given program.

Modeled costs: \$1 / ton City, \$30 / ton community
Modeled diversion: 9.0% (34,000 new tons)
Modeled start-date and ramp-up period: 2011, two years

Subgoal 3: Target waste material generated by new construction and by demolition activities to be diverted from the waste stream and used in manufacturing secondary products.

Strategy 3-1. Establish contract preferences to encourage recycling and waste reduction for City of Fort Collins construction & demolition (C&D) jobs.

Modeled costs: not modeled
Modeled diversion: not modeled
Modeled start-date and ramp-up period: 2007, one year

Strategy 3-2. Create a refundable C&D deposit system based on square footage of project (or comparable criterion), with total deposit to be refunded upon certification that appropriate level of recycling was accomplished.

Modeled costs: \$1 / ton City, \$30 / ton community
Modeled diversion: 12% (46,000 new tons)
Modeled start-date and ramp-up period: 2007, four years

Strategy 3-3. In the absence of appropriate private-sector facilities necessary for accepting C&D waste, ultimately create a City sponsored drop-off site.

Modeled costs: \$1 / ton City, \$12 / ton community
Modeled diversion: 10.6% (41,000 new tons)
Modeled start-date and ramp-up period: 2011, four years

Subgoal 4: Divert more of the waste generated by the commercial sector.

Strategy 4-1. Offer 3 months recycling free to businesses (City-funded).

Modeled costs: \$20 / ton City, \$20 / ton community
Modeled diversion: very low
Modeled start-date and ramp-up period: 2007, one year

Strategy 4-2. City provides technical assistance / waste audits to businesses.

Modeled costs: \$110 / ton City, \$.50 / ton community
Modeled diversion: 0.9% (3,400 new tons)
Modeled start-date and ramp-up period: 2007, two years

Strategy 4-3. Adopt ordinance making it mandatory for businesses that dispose of more than 10 yd³ of trash weekly to install a recycling bin.

Modeled costs: \$1 / ton City, \$12 / ton community
Modeled diversion: 2.0% (7,500 new tons)
Modeled start-date and ramp-up period: 2007, two years

Strategy 4-4. Actively urge smaller / non-recycling businesses to implement single-stream recycling systems.

Modeled costs: \$.50 / ton City, \$7 / ton community

Modeled diversion: 0.9% (3,300 new tons)

Modeled start-date and ramp-up period: 2007, two years

Strategy 4-5. Assist with formation of recycling cooperatives for small businesses.

Modeled costs: \$110 / ton City, \$.50 ton / community

Modeled diversion: 0.9% (3,300 new tons)

Modeled start-date and ramp-up period: 2007, four years

Strategy 4-6. Awards grants, zero-interest loans, and incentives to businesses for waste prevention efforts.

Modeled costs: \$210 / ton City, \$.50 / ton community

Modeled diversion: 0.7% (2,700 new tons)

Modeled start-date and ramp-up period: 2007, two years

Strategy 4-7. Adopt City procurement guidelines and/or incentives for recycled content.

Modeled costs: not modeled

Modeled diversion: not modeled

Modeled start-date and ramp-up period: 2007, one year

Strategy 4-8. Strengthen the City organization's recycling program; emphasize source reduction.

Modeled costs: not modeled

Modeled diversion: not modeled

Modeled start-date and ramp-up period: 2007, one year

Strategy 4-9. Amend the City's PAYT ordinance to include all commercial customers; require recycling fee to be embedded in rates and charge volume-based pricing.

Modeled costs: \$1 / ton City, \$70 / ton community

Modeled diversion: 16.7% (64,000 new tons)

Modeled start-date and ramp-up period: 2007, four years

Strategy 4-10. Ultimately, make recycling mandatory for all businesses.

Modeled costs: \$1 / ton City, \$70 / ton commercial

Modeled diversion: 1.7% (6,600 new tons)

Modeled start-date and ramp-up period: 2015, one year

Subgoal 5: Divert more of the waste generated by residential sources.

Strategy 5-1. Amend Fort Collins' pay-as-you-throw (PAYT) residential trash rates ordinance so that "rate design" further enhances waste reduction efforts.

Modeled costs: \$1 / ton City, \$30 / ton community

Modeled diversion: 3.3% Modeled start-date and ramp-up period: 2007, one year

Strategy 5-2. Implement ongoing curbside recycling program improvements, including more designated materials and standard options for larger recycling containers, etc.

Modeled costs: not finalized

Modeled diversion: 0.4% (1,700 new tons)

Modeled start-date and ramp-up period: 2007, one year

Strategy 5-3. Encourage multifamily housing managers / residents to adopt single-stream recycling systems.

Modeled costs: not finalized

Modeled diversion: 0.1 (470 new tons)

Modeled start-date and ramp-up period: 2007, two years

Strategy 5-4. Encourage private partnerships for constructing multiple community drop-offs to collect more recyclables (paper, glass, etc.).

Modeled costs: \$1 / ton City, \$.50 ton / community

Modeled diversion: 0.8% (3,000 new tons)

Modeled start-date and ramp-up period: 2007, two years

Strategy 5-5. Prevent discarded computers from being placed in Fort Collins' curbside trash collection system.

Modeled costs: \$14 / ton City, \$120 / ton community

Modeled diversion: 0.4 % (1,700 new tons)

Modeled start-date and ramp-up period: 2007, one year

Strategy 5-6. Adopt the requirement for service providers to collect single stream recycling from residential customers as soon as market trends allow.

Modeled costs: \$1 / ton City, \$.50 / ton community

Modeled diversion: 2.0% (8,000 new tons)

Modeled start-date and ramp-up period: 2007, three years

Subgoal 6. Create a dedicated city "waste diversion fee" that would be used to fund new recycling opportunities, grants and zero-interest loans for waste diversion innovation, as well as other new Strategic Plan activities.