

**Florida Department of Environmental Protection
FY 2006-07 INNOVATIVE GRANT APPLICATION FORM**

Project Information (on applicant letterhead)

- 1) Applicant Name:**
- 2) Primary contact person:**
- 3) Complete Address:**

- 4) Telephone Number(s) (including SunCom number):**

- 5) E-mail address:**
- 6) Project Title:**
- 7) Grant Request Amount:**
- 8) Length of project (months):**

Authorizing Signature

Title

PROJECT ABSTRACT

(No more than 20 lines. Every word over 20 lines will constitute a one point deduction.)
(do not delete the instructions on this page)

The City of Deerfield Beach maintains a very progressive recycling program including residential, multi-family, drop off center, beach recycling and an extraordinary commercial recycling program. The City is sole self-hauler for both garbage and recycling and has been collecting and processing recyclables since 1995. Until recent years, approximately, seventy five percent (75%) of businesses recycled with the City's recycling services. The paper recycling component constitutes 20% of the total volume of paper collection. Specifically, commercial office paper recycling collection has grown from 30 stops per week to well over 400 stops per week. However, more than 25% of businesses rely upon document destruction. The City must enhance its program to include a shredding service to continue to remain competitive. This venture will continue to reduce City's waste and disposal fees.

A city operated, on-site mobile shredding vehicle will offer local businesses an exceptionally competitive, economical alternative to other shredding companies. As an enterprise fund, the Recycling Division relies upon revenue generated from recyclables collected. A mobile shredding unit will allow the city to regain lost customers, increase recycling tonnage, and regain lost revenue from accounts lost due to law. The City will be able to contract with previously unattainable customers due to shredding laws with the shredding unit, thereby significantly boosting the City's recycling credit.

Collection will be incorporated into the current recycling program and readily received by the MRF.

Grant dollars will cover the cost of the shredding vehicle which is 85.54% of the cost of program. In-kind match by the City (14.46%) will cover the cost of the driver, locked secured containers, staff time for creation of educational materials and advertising, and continuing educational program.

Over the course of the next three years, the shredding vehicle will proffer a much added value to the vision of the program. The gain should reap over \$122,480.00 savings in tipping fees and revenues.

PROJECT DESCRIPTION

(1 page)

There are two major goals of the project. First is to afford local businesses an office paper shredding recycling program serviced by the City providing an exceptionally economical means to legally dispose of confidential / sensitive paper and encourage the proper method of disposal of office paper. Second is to reduce waste, reduce emissions, increase recycling rates & revenue and to educate.

The City collects shredded office paper as part of the recycling program. However, a current law (FACT ACT – 15 U.S. C. 1682w Sec. 628) requires businesses to destroy sensitive documents, therefore, local businesses have been forced to shift from City recycling services and contract with outside contractors for document destruction.

The current law is now threatening the economical survival of our traditional office paper recycling collection. This ACT has reduced the City's office paper recycling collection significantly consequently reducing revenue. A mobile shredding unit must be added to our fleet in order for the City's program to subsist in current recycling markets and remain competitive.

A major goal of the City's Recycling Division is to reduce waste, emissions and increase revenue. With the new shredding program, the City will be able to recapture lost office paper accounts and gain numerous new accounts that were not available because of the inability to shred. There are over 4,500 local businesses in Deerfield Beach generating over 3,180,000 million tons of solid waste annually.

This program will greatly assist in reducing overall waste generated.

The City proposes to manage its own mobile shredding vehicle. This vehicle will pick up materials from Deerfield businesses and shred it on site. The captured office paper will generate revenue and increase tonnage for the city that will help offset the cost of secured containers and staff.

The project will proceed as follows:

- Purchase vehicle - 06/06
- Purchase initial secured roll carts – 10/06
- Attorney creates document destruction document for customers - 07/06
- Create and print brochures & information flyers for personalized education – 08/06
- Chamber of Commerce promotion / Mail out to all businesses / civic organization – 10/06
- News Releases & Advertisement in local papers and industry magazines – 10/06
- Conduct open house for local businesses and stakeholders – 10/06
- Deliver secured carts to businesses - 10/06 and onward

Once customers receive their secured roll carts, the carts will be serviced each week or frequency of trips required by customer. A pre-set route is currently established. The roll carts will be serviced by a side lift on the truck and shredded paper will be deposited into a compartment and compacted. The paper is minced into quarter-sized pieces. Once the vehicle reaches its capacity, it will be delivered directly to the MRF.

The City takes great pride in its award-winning program that includes the most recent Emerald Award from Broward County Environmental Protection Department. The commercial office paper recycling program is a key component. If the program continues status quo, the City will lose one of its most valued original reliable components due to outside competition. The shredding vehicle is essential for continued survival.

Criteria 1: TECHNOLOGIES

(1 page)

(do not delete the instructions on this page)

(35 points) 0-15 points for meeting one of the following sub-criteria, up to 10 more points for meeting two, and up to 10 more points for meeting all three. Note: applicant may adjust space used to address each sub-criteria.

Sub-criteria 1 – Not in common use in Florida

Mobile shredding units are in themselves widely utilized. However, a municipality owning and operating its own on-site recycling shredding unit for collection of the Commercial Sector is a novel application to an existing process.

An email search of recycling coordinators throughout Florida, additional phone survey, and website searches were conducted. Results from research revealed that the only self-hauling governmental program utilizing a mobile shredding unit was Lee County.

Sub-criteria 2 – Novel application of an existing technology or process.

It is rare for a Municipality to have its own on-site mobile shredding unit. Novel application of process centers on the fact that no extreme change to existing recycling collection program is required. Utilizing existing collection route, existing drivers, and existing processor simplifies overall process. Existing container delivery routes will be utilized to deliver secured containers.

Sub-criteria 3 – Overcoming obstacles to recycling/waste reduction in new or innovative ways

Losing recycling business accounts to on-site mobile unit shredding companies is the major obstacle the City of Deerfield Beach Recycling Division must overcome. The volume of office paper collected at Deerfield businesses has decreased over 25% due to contracted on-site shredding.

A barrier exists of assuring that all possible shredded paper is collected.

It has been observed that some sensitive documents are bagged and tossed in the garbage dumpster as opposed to having the materials properly destroyed. This is done because of the high cost involved to shred documents. Those lost materials will be regained to the recycling stream and removed from the waste stream once the City's on-site shredding unit is in operation.

Grant monies toward the purchase of the vehicle will allow the City to offer customers a viable economical option to the high cost of outside contractors and provide them with the secure and reliable service that they are accustomed to from the City. An appreciably reduced rate for on-site shredding that customers will be delighted to accept, concurrently, the City will increase its volume of recyclables and revenue by a projected minimum of twenty-five (25%).

Collection of shredded paper from City would be an outstanding, viable economical option for both the customer and the City.

Criteria 2: TARGETS

(1 page)

(do not delete the instructions on this page)

(10 Points) Demonstrate innovative processes to collect and recycle or reduce these targeted materials/sectors: Construction and Demolition Materials, Commercial/Institutional Sectors, Waste Tires. Note: if the proposed project also includes materials/sectors other than those targeted by this criteria, the project will receive less than the maximum 10 points allocated for the criteria.

The target of this program is the Commercial/Institutional Sector, including more than 4,500 businesses in the City of Deerfield Beach.

Currently, the City's Commercial Recycling Sector generates 1,200 tons of paper annually. However, 5 million tons of garbage is being incinerated annually. Many of those tons are recyclable paper that will be captured once the education process commences. Paper from the Commercial Sector is being lost to the waste stream due to inability of the City to provide on-site shredding services for local businesses. The shredding program will assure reduction of incinerated tonnage of waste while increasing recycling tonnage

Materials Target: Office Paper such as; copy paper, fax paper, shredded paper, envelopes, files, file folders, applications, mail, brochures, computer print out, post-it notes, printed or typed reports, register rolls, shredded paper, and used files.

Criteria 3: BENEFITS

(1 page)

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(35 points) Demonstrate the potential economic, environmental, and cost-effectiveness of the program's approach. Note: applicant may adjust space used to address each sub-criteria.

Sub-criteria 1 - Environmental Benefits (15 points)

Methodology The project will provide an opportunity and encourage both large and small businesses to increase recycling rate and to recycle properly. A project long educational campaign associated with the program will encourage waste reduction, waste prevention and recycling

Toxicity A projected **400** tons of paper to be eliminated from the waste stream, consequently reducing emissions. Lost paper previously tossed into the garbage will be placed back into the life-cycle process to be reprocessed as new products.

Sub-criteria 2 – Economic Benefits (10 Points)

A substantial economic benefit will be gained by local businesses requiring shredding services. Initially, the City program will charge a very competitive minimal flat rate of \$50.00 per month for full services. Low rates can be offered to local customers since grant monies will cover the cost of the vehicle. This will allow many smaller businesses on a tighter budget to recycle their sensitive material properly, and prevent materials from being lost to the waste stream. Research indicated businesses pay an average of \$95 to \$200 per week for mobile shredding through private companies depending on the program option. The City of Deerfield Beach will experience a substantial increase in tonnage credit for the additional shredded materials. Concurrently, a hefty increase in revenues will also be generated from the materials captured. The project hopes to divert at least 25 % additional materials thereby reducing overall cost of disposal. As the program grows, a new driver position will be guaranteed and possibly a dedicated recycling commercial coordinator.

Sub-criteria 3 – Cost Effectiveness (10 Points) Includes, but not limited to cost reduction, payback period, sustainability, and cost-effectiveness.

The cost effectiveness of the proposed program is best measured over the long term. Investing \$234,000.00 will yield over \$122,000.00 over three (3) years. There is minimal overhead to run this program, as the city will use existing fleet service to maintain the new mobile shredding unit and drivers that already work for the City. Sustainability is very high. Once the grant covers the cost of the mobile shredding unit, the program will become a permanent part of the cities extensive recycling program generating long-term revenue income.

The Recycling Division will also make the most of cost-effective use of vendors by requesting container manufacturers and distributors to donate or provide at reduced prices the containers for the initial program. The Division will also enlist donated marketing and graphic assistance from local vendors.

The office paper recycling program is slowly growing with the blitz of several small accounts. As growth of the program continues, a second vehicle will have to be purchased. If the City is able to receive the on-site shredding vehicle, only one vehicle will have to be maintained. Transportation time will be reduced resulting in fewer trips to MRF by utilizing the compacted compartment

Criteria 4: TRANSFERABILITY

(1 page)

(do not delete the instructions on this page)

(10 Points) Demonstrate transferability of technology and processes and specify how the project will promote transferability. Note: applicant may adjust space used to address each sub-criteria.

Sub-criteria 1 – Transferability of technology and processes (5 points)

This project will be of particular interest to all cities and counties that are self-haulers or haul a portion of their loads. However, many cities may find this project as a simple and secure means to gain additional revenue from a high-grade paper while assuring recycling remains a priority. These governmental organizations should find the projected revenues gained and the analysis of cost and benefits that will be created of great value. A full-scale implementation plan will result in a comparison of collection systems: contract-recycling shredding vs. city or county owned recycling shredding services.

Prices for vehicles and secured locked containers will be established. Cities or counties may piggyback on our purchase price for the vehicle or containers.

Sub-criteria 2 – How project will promote transferability (5 points)

This pilot program will open doors for other cities and counties to take steps toward expanding and broadening recycling opportunities. The City of Deerfield Beach will serve as mentors to those interested in replicating the program. Any city or county willing to venture into this project which offers an environmental service that is a revenue-generating program will have a blueprint to follow.

One goal is to videotape steps taken to develop the program, community efforts to educate and actual use and depicting benefits of program. The tape will be used to promote the program and for instructional purposes.

Irrespective of geographical location or demographics, where commercial sectors exist, the potential for shredding office paper resulting in increased recycling and increased revenue is very real.

The City will present the program to Broward County's Technical Advisory Committee and the Resource Recovery Board as well as promote the program on the Internet, in newspapers and trade journals/magazines nationally.

Criteria 5: LOCAL SUPPORT

(1 page)

(do not delete the instructions on this page)

(10 Points) Demonstrate local support for the proposed project in commitment of cash or in-kind matching funds. Please provide the name, address and phone number of ALL contributors.

- **00 points** **0% up to and including 1% of total project cost**
- **01 points** **Greater than 1% up to and including 10% of total project cost**
- **02 points** **Greater than 10% up to and including 20% of total project cost**
- **03 points** **Greater than 20% up to and including 30% of total project cost**
- **04 points** **Greater than 30% up to and including 40% of total project cost**
- **05 points** **Greater than 40% up to and including 50% of total project cost**
- **06 points** **Greater than 50% up to and including 60% of total project cost**
- **07 points** **Greater than 60% up to and including 70% of total project cost**
- **08 points** **Greater than 70% up to and including 80% of total project cost**
- **09 points** **Greater than 80% up to and including 90% of total project cost**
- **10 points** **Greater than 90% up to and including 100% of total project cost**

The city will contribute 14.46% of total project cost. This cost includes the locked containers required for customers, staff time to develop educational literature on the mobile shredding unit.

1) Total grant request + total local match = Total project cost

\$200,000.00 + \$33, 835.00 = \$ 233,835.00

2) Total local match / Total project cost) x 100 = Percentage match

\$33,835.00 / \$233,835.00 x 100 = 14.46%

| Cost of Recycling On-site Mobile Shredding Unit Program | | | | |
|--|--|--------------------|--------------------|--------------------|
| Expenses: | | 1st Year | 2nd Year | 3rd Year |
| *Driver | | \$10,660.00 | \$10,660.00 | \$11,000.00 |
| Staff | | \$9,700.00 | \$9,700.00 | \$9,950.00 |
| Fuel | | \$2,025.00 | \$2,025.00 | \$2,025.00 |
| Secured Containers (75 @ \$85.00 each) | | \$6,375.00 | \$1,500.00 | \$500.00 |
| Total | | \$28,760.00 | \$23,885.00 | \$23,475.00 |
| Income: | | 1st Year | 2nd Year | 3rd Year |
| Number of customers | | 50 | 75 | 90 |
| ***Charge per customer | | \$50 p/month | \$50 per month | \$70 per month |
| Yearly income | | \$30,000.00 | \$45,000.00 | \$75,600.00 |
| Revenue from MRF **200 tons annually @ \$80.00 p/ ton | | \$16,000.00 | \$16,000.00 | \$16,000.00 |
| Total | | \$46,000.00 | \$61,000.00 | \$91,600.00 |
| Income after expenses | | \$17,240.00 | \$37,115.00 | \$68,125.00 |

* 25% of driver time will be dedicated to new program after initial set-up

** Shows current rate paid to City - or as market dictates

***First 8 carts @ \$50.00 per month, an additional \$10.00 for every additional 3 carts

BUDGET

(1 page using Budget Table Template)
(do not delete the instructions on this page)

Describe the project's budget allocated by task and budget categories per the Budget Table Template available from DEP's Innovative Grants web site in Microsoft Excel digital format (www.dep.state.fl.us/waste/categories/recycling/pages/InnovativeGrants2006-07.htm).