

**Florida Department of Environmental Protection  
FY 2007-08 INNOVATIVE GRANT APPLICATION FORM**

**Project Information (on applicant letterhead)**

- 1) **Applicant Name:** City of Orlando
- 2) **Primary contact person:** Mike Carroll, Manager
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1028 S. Woods Avenue  
Orlando, FL 32805
- 4) **Telephone Number(s) (including SunCom number):** (407) 246-2314
- 5) **E-mail address:** [Mike.carroll@cityoforlando.net](mailto:Mike.carroll@cityoforlando.net)
- 6) **Project Title:** Enabling Downtown Commercial Recycling  
via Single Stream Collection
- 7) **Grant Request Amount:** \$44,000
- 8) **Length of project (months):** 12 months

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Authorizing Signature

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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 Orlando, as with many urban areas in Florida, has over the past several years seen a tremendous urban renewal in its downtown area, in the form of heightened construction not only of downtown multi-family housing (i.e., high-rise condominiums), but also of the commercial businesses that support such residential growth. Consistent with this growth comes increased commercial waste generation. Although the City has had some success with multi-family recycling programs at selected downtown condominium complexes, recycling among the commercial businesses in the high density areas at the heart of the City has been non-existent. Yet, many of these businesses generate a large fraction of recyclable materials—glass and plastic beverage containers, corrugated cardboard, and mixed papers being the primary targets. The City of Orlando maintains the recycling collection infrastructure to collect recyclables from the downtown area, and the recent emergence of single stream recyclables processing offers a market for processing a downtown commercial recycling stream. This operationally-focused project seeks to enable the City to develop the processes, commercial business education materials, physical collection point locations and drop-off strategies, and collection/reporting practices to implement a functional downtown business recycling program. If successful, this program would be expected to be transferable to other downtown urban areas within Florida, many of which are actively engaged in providing the collection services that would be needed to support such a program.

## **PROJECT DESCRIPTION**

(1 page)

Orlando's downtown urban commercial area can be roughly defined as being enclosed within approximately 20 square blocks: for purposes of this project the downtown boundary is enclosed by Anderson Street (south) Rosalind Avenue (east) Washington Street (north) and Garland Avenue (west). This high density commercial census tract is home to several dozen mid- and high-rise office buildings (many with mixed use, street-fronted businesses on the first floor), as well as a range of smaller stand-alone restaurants, shops, and other businesses. One-way streets and alleys offer the only transit through the area, and space is at a premium. This project will attempt to create a sustainable downtown recycling program within the parameters of the City's existing collection system by performing the following tasks:

**Task 1 – Inventory of Businesses:** In this task we will develop an inventory of businesses in the target area by business type, size, and general waste and recycling generation parameters, as well as contact names and phone numbers. The businesses, as well as current refuse collection containers and locations, will be documented and entered in a GIS map. The inventory and map will help to target both program participants as well as possible recycling site hosts.

**Task 2 – Collection Point Site Development:** Because space is at such a premium, it is expected that a range of collection points will need to be identified and developed. Candidate areas for recycling collection points include adjacent to current downtown refuse collection containers, within parking garages, and negotiated access to private property. To the extent site improvements, landscaping, fencing, or other improvements are needed, they will be performed in this task. Finally, this task includes provision of the range of carts and containers that will be used to receive recyclables generated by downtown businesses prior to collection. Ultimately, downtown recycling potential may be capped at the capacity of containers for which sufficient space can be found in the high density downtown area.

**Task 3 – Business Outreach:** In this task, City of Orlando recycling personnel and consulting team members will design and implement a coordinated business recruiting and education campaign to identify commercial business participants in the downtown recycling program. Business outreach will include: development of an informational brochure to introduce the effort and recruit participants; follow-up phone calls to business management; development of signage and educational materials for businesses to post/distribute to employees who may be implementing the recycling program; one-on-one meetings to review program objectives and methods; and formal tours of the completed recycling drop-off sites.

**Task 4 – Routing:** The City of Orlando intends to minimize the ongoing costs of the downtown recycling program by largely integrating collection of downtown recyclables into existing recycling collection routes (for example, an existing downtown multi-family recycling route). However, there are likely greater limits on the times of day in which downtown collection can occur. This task will develop the optimized collection route(s) needed to service the downtown recycling program area.

**Task 5 – Reporting:** The City will, either through its own or with the help of a consultant, document the project methodology, participation rates, recycling diversion rates, obstacles, solutions, and other notable findings in a written report. Further, the City will present the results of the project at a Florida recycling conference to disseminate results.

## **Criteria 1: TECHNOLOGIES or PROCESSES**

(1 page)

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(20 points) The range of scoring is between 0 and 20 points, with up to 10 points for meeting one of the following sub-criteria, up to 15 points for meeting two, and up to 20 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.**

Based on a survey of the most populous cities in Florida, we could find no ongoing business recycling program that is functioning effectively and sustainably in the high density downtown business district. Other cities in Florida “offer” recycling to downtown businesses, but anecdotal evidence suggests that participation rates are low to nil. The City of Tampa is currently evaluating barriers to recycling participation from residential and commercial customer classes in an urban environment (as part of last year’s innovative grants), but this project is ongoing. The City of Orlando intends to demonstrate the level of business recruiting, site planning, and outreach/education needed to actually implement recycling from the highest density downtown business districts.

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

In many regards, the arrival of single stream recyclables processing has opened up new avenues for handling commingled containers and fibers from a variety of sources, not just residential. The City of Orlando benefits from having access to a processor that accepts single stream recyclables. Because of this enabling technology, the City of Orlando believes that opportunities exist to incrementally expand on existing recycling programs using existing collection equipment, routes, City public education officers, etc. This project intends to demonstrate how to increase downtown commercial recycling on the margin without a requirement for excessive capital expenditure, by better utilizing available collection services and processing capacity. By (a) consolidating mixed recyclables into carts, and (b) reducing the need for source separation, single stream collection is believed to be an enabler of better downtown commercial recycling.

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

Downtown commercial recycling faces numerous obstacles—including limited space for material storage (not to mention source separation) within individual businesses, limited space for setting out recyclables for collection in a high density urban area, high potential for material contamination, and being low on the priority list for any business. This project is intended to apply City resources to address and mitigate all of these constraints. The project has a very hands-on, operational focus, and seeks to provide the business outreach, recyclable container set-out locations and/or drop-off facility siting, equipment needs, efficient routing and collections, and coordination with local single stream recyclables processing capacity to assure delivery of material that can be processed without the handling of excessive contamination.

## **Criteria 2: TARGETS**

(1 page)

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(10 Points) Demonstrate innovative processes to collect and recycle or reduce these targeted materials/sectors: Construction and Demolition Materials, Commercial/Institutional Sectors, Hurricane Debris, Pay-As-You-Throw and 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.

This project targets recyclable materials contained in the business waste stream, which is a targeted sector for this year's innovative grants. Specifically, the downtown commercial recycling program will target any material that is currently accepted in the local single stream processing facility, which includes:

- Glass, aluminum, and plastic beverage containers from restaurants and bars;
- Mixed papers (including high grade) from small businesses; and
- Corrugated cardboard from a wide range of businesses.

With virtually no recycling occurring in the high-density downtown area at the current time, successful recycling of any or all of these material streams from even a small subset of businesses would be a significant improvement.

## **Criteria 3: BENEFITS/ COST-EFFECTIVENESS**

(1 page)

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(25 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 (5 points).**

- **Methodology**

This project seeks to cost-effectively recycle commercial materials within the parameters of existing collection and recycling system infrastructure. It does not envision source reduction or reuse.

- **Toxicity**

This project seeks to cost-effectively recycle traditional recyclable plastic/glass/metal containers and mixed fiber. While it will certainly be critical to design a program that minimizes litter, maintains pleasing downtown aesthetics, and prevents contamination of recyclables with any hazardous materials, the project does not directly address any toxicity issues.

### **Sub-criteria 2 – Economic Benefits (5 Points).**

The City of Orlando and Orange County have made great efforts over the past years to position Central Florida as having a top-notch standard of living. In articles and studies on the characteristics that distinguish cities as being especially favored places to live and work, environmental progressiveness is a factor (along with good schools, accessibility to the arts, and an educated work force). The City of San Francisco, for example, touts its closed loop commercial organics recovery program as being among the most progressive in the country. Orlando believes that there is an economic benefit to maximizing commercial recycling programs in support of the environmentally progressive image the City attempts to put forth.

### **Sub-criteria 3 – Cost-Effectiveness (15 Points).**

This project, if successful, will be highly cost effective because it will optimize the use of existing collection and recycling infrastructure by increasing diversion rates for little to no ongoing operating costs. This grant will allow Orlando to perform the program start-up steps—including the recruiting of businesses and development of recycling locations/containers and collection routes—which comprise the vast majority of the costs. Once downtown business recycling is in place, it will result in more economically attractive usage of City recycling assets and personnel, as well as disposal cost savings and increased recycled material revenues.

## **Criteria 4: SUSTAINABILITY:**

(1 page)

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(25 points) Demonstrate the sustainability of the proposed program.

The stated objective of this project is to provide the start-up costs for the commercial business outreach and infrastructure needed to enable downtown commercial recycling to be seamlessly integrated into the City of Orlando's existing recycling, collection, and public education programs. As such, we have every intention of establishing a sustainable program for minimal ongoing cost (and in fact there should be disposal cost decreases and recycled material revenue increases). Orlando operates seven residential recycling routes per day, as well as one multi-family recycling route that services apartments and condominiums on the periphery of the downtown area. Further, the City is in the process of converting to single stream recycling. We believe that intelligent routing of recycling vehicles within the existing routing framework will enable the tuck-in collection of downtown business recyclables with little impact.

At the conclusion of this grant, all ongoing costs will be fully funded by the City in future years, and are expected to be limited to regular public education and outreach to the downtown business community (which is not unlike ongoing public education that is needed for any recycling program to be successful).

## **Criteria 4: TRANSFERABILITY**

(1 page)

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(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 has a strong operational focus, intended to identify the business outreach strategies, recycling set-out and/or drop-off sites in the urban core, and integration of commercial business recycling into existing operations. Thirty percent of Florida's total population resides in its 50 largest cities, most of which have a downtown business district. Further, all Florida cities provide for the collection of refuse and recyclables from residential areas, either with public crews and equipment or else under contract with a private hauler. Establishment of a downtown commercial recycling program in Orlando that leverages the infrastructure of the residential collection program could theoretically be copied by any city in the state, and we believe the lessons learned will be highly transferable in this regard.

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

The results of the project will be summarized in a written report and also presented at one Florida recycling or solid waste conference.

## **Criteria 5: LOCAL SUPPORT**

(1 page)

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(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. (Points will be allocated for only those contributors located within the jurisdiction of the applicant.)

- **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**

As shown in the attached budget, cash and in-kind commitments make up 50.3 percent of the total project budget. Although not shown, the City of Orlando will also fund 100 percent of the ongoing operational costs of the downtown commercial recycling program after conclusion of the program.

## **BUDGET**

(1 page using Budget Table Template)  
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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/InnovativeGrants2007-08.htm](http://www.dep.state.fl.us/waste/categories/recycling/pages/InnovativeGrants2007-08.htm)).