



## Executive Summary

The Capital Programs Division (CPD) is a branch within the City of Seattle Fleets and Facilities Department. CPD manages the Fleets and Facilities Capital Improvement Program which consists of constructing or improving City real estate and facilities, such as fire stations, maintenance shops, public safety buildings, the city of Seattle's office buildings, the Justice Center and City Hall. The specific services provided by CPD may include new construction, major renovations, tenant improvement, infrastructure replacement, and hazardous material abatement.

Through these efforts, CPD strives to support the Mayor's environmental priorities. Currently, CPD follows the City's sustainable building policy and incorporates a sustainable approach to tenant improvements and mechanical upgrades. LEED™ (Leadership in Energy and Environmental Design) Silver certification is the standard for major new construction/major new remodel projects handled by CPD. The division has successfully certified 2 LEED Silver, 2 LEED Gold and currently, 2 other LEED Silver projects are pending certification. However, LEED certification is only applicable to projects 5,000 square feet or greater in scale. Since CPD project responsibilities also involve smaller scale projects, project managers within CPD require another tool for developing sustainable projects of all types. In order to develop a tool that responds to CPD's total business needs, CPD hired PRR and ArchEcology in December 2007 to develop a sustainability master plan, called Capital GREEN.

*The goal of creating a master plan document was to create an adoptable plan customized to the Capital Program Division's needs.*

### Objectives

- Identify department gaps, objectives and opportunities
- Evaluate current practices
- Identify appropriate best practices for the range of CPD project types
- Develop an implementation plan for the resulting master plan
- Develop a performance feedback tool to continue to update best practices
- Develop an employee training tool that enables the City to provide internal education

## DEVELOPING CAPITAL GREEN

Through a six-step process, the consultant team began identifying specific needs and current best practices. Beginning at the director level, a first step was to confirm the vision and common goals for the plan and current project work. These overarching themes helped guide the work of the consultant team in surveying CPD staff to learn about existing tools, challenges and recommendations. By understanding staff interests, a work session was designed to educate project managers about sustainability tools and strategies by drawing on both public and private project examples as well as other green building rating programs.

Work Session I was hosted on March 27, 2008 and included 21 CPD staff members as well as green building staff from the Department of Planning and Development. Staff participating in the work session reviewed and analyzed comparable plans and tools to identify an appropriate master plan format and focus.

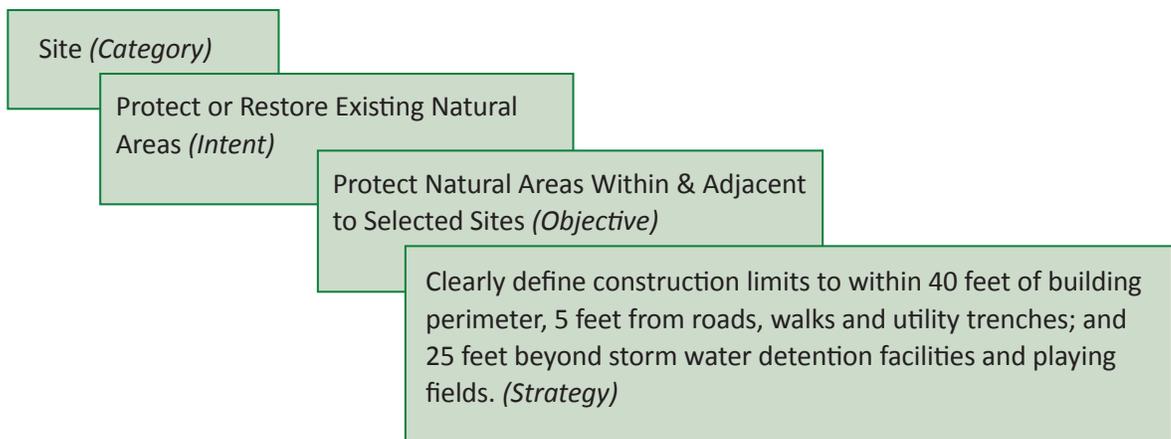
The draft master plan structure was tested, adapted and refined to suit three project types during the second work session held on May 19, 2008. During the session, CPD staff members were introduced to the format, beginning with the plan's six focus areas, or categories, that correspond to the Mayor's environmental priorities.

### Capital GREEN Categories

Category	Mayor's Environmental Priority
Site	Livable Communities
Water	Restore Our Waters
Energy	2030 Challenge
Materials/Waste	Clean & Green Seattle
Indoor Environment	LEED Requirements

As a full group, staff then worked through the four different layers that made up the draft "Master Plan Roadmap." Using a four-step exercise with cards representing each layer (Category, Intent, Objectives, Strategies), participants were asked questions to build and confirm the plans' organization.

Through each step, they matched and connected applicable layers to the previous one, with each layer adding more definition and specificity toward implementing the overall "big picture" category and intent. For instance, under the "Site" category, participants linked the following layers together to make up a specific sustainable approach within the plan.



### Work Session I Key Themes

- Accessible and usable format
- Achievable yet strives for next level of excellence
- Adaptable, built in method for updating goals
- Costs need to be evaluated in terms of long term operational perspectives
- Desire for a system that is manageable and available in near term
- Ease of use is very important
- Establishes clear goals
- Helps document success & accountability
- Implementation Plan is needed
- Moves beyond LEED
- Reflects Mayor's/City initiatives or goals
- Supports range of project types, specifically smaller scale projects
- Tool for project manager & consultants
- Tool to assist programming and budgeting process
- Varies according to type of project



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Finally, participants divided into groups by project type and developed performance standards for strategies that applied to their specific project type.

## Capital GREEN Roadmap

### INTENT

#### 1. Where are we going?

*We intend to go to Chicago.*

*That is our destination.*

### OBJECTIVE

#### 2. How will we get there?

*We have many modes of travel to choose from. We balanced cost against time to decide. Our objective is to go by car.*

### STRATEGIES

#### 3. How will we make our trip successful?

*Our rule of thumb strategies are:*

*Take snacks.*

*Stop every 2 hours for a restroom break.*

*Have emergency gear in the car.*

*Stop for the night after 10 hours on the road. Pack layers of clothing.*

### PERFORMANCE

#### STANDARD

#### 4. How will we measure our progress?

*Our baseline = getting there.*

*Our target performance = Miles? Hours? Gas?*



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Workshop III, held on September 17, 2008, was attended by a large group of employees within the Capital Programs Division. The goal of the third workshop was to test the implementation of Capital GREEN. Participants reviewed the document’s format, the categorical structure of sustainable strategies and participated in small break-out groups to test the application of the checklist, individual guidebook pages and the filtering/sorting features of the master plan. Capital GREEN was received positively by CPD staff. Most workshop participants thought the master plan was easy to use.

**Plan Overview**

The Capital GREEN outlines environmentally responsible strategies that apply toward CPD project types that do not fall within the City of Seattle’s current Green Building Policy, which requires projects 5,000 square feet or greater to achieve LEED silver certification. The project types addressed by Capital GREEN include small new construction and remodeling projects, such as expansions and renovation projects, as well as tenant improvement projects and infrastructure replacement projects.

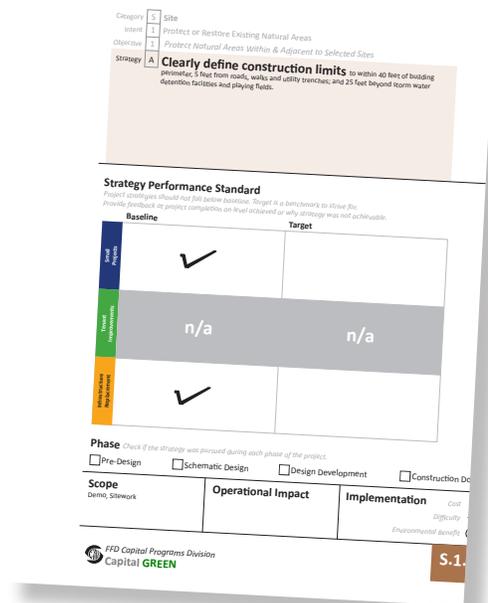
**Using the Plan**

*Selecting Strategies*

Each page of the master plan is focused on one of the 100 sustainable strategies. Each strategy page is traced back through the objective and intent to the category level. A numeric coding is included for each strategy that designates each level.

Sometimes a strategy has a more detailed description to help describe the approach or parameters in which to consider that tactic. Each strategy may relate to three different project types (Small Projects, Tenant Improvements or Infrastructure Replacement) or only one or two. For ease of use, the project type will either appear on the outside edge or not to indicate if it is relevant.

In order to determine which strategies are applicable to the scope of the project, the project manager will use a series of filter questions that will sort and identify a corresponding checklist of strategies. The checklist will then become the contractual requirement for implementing sustainable practices in the project. The checklist is designed in an elegant and simplistic manner to allow a user to sort through possible sustainable strategies by scope of work in order to arrive at the smallest possible strategy subset. The checklist allows managers to quickly and efficiently identify sustainable strategies without individually reviewing all 100 strategies that make up Capital GREEN. To the left is an example of a typical page and descriptions of each field.



### *Baselines and Targets*

Once the applicable strategies are identified, the project manager will see each strategy may have a baseline or level of which to not fall below and a target to strive to achieve. A check mark implies that the strategy should be done either as a baseline or as a target. Other times the baseline and targets may have a numeric goal or a level in which to achieve. A notation of “N/A” means the strategy does not apply to that project type. If the baseline and target are left blank, it may mean that there is no baseline or target and that the strategy is either achieved or not.

### *Filtering Questions aide Implementation*

There are three filtering layers that allow project managers to sort and identify the most appropriate strategies to pursue based on the filtering questions posed. These questions focus on cost, difficulty of implementation and overall environmental benefit. These three factors help project managers to target and customize strategies that meet the projects needs and remain sensitive to the constraints of a project. Low, medium and high designations have been applied with either one, two or three icons to illustrate the intensity of each option.

<b>Implementation</b>	Cost	\$\$\$
	Difficulty	★★★
	Environmental Benefit	🌍🌍🌍

### *Feedback*

Also within each page are feedback areas for the project manager to fill in and document their achievement or describe what challenges may have occurred. Brief comments are encouraged mainly to indicate what was achieved such as a baseline, target or somewhere in-between. If a strategy was not achievable, project managers should provide a simple explanation.

In addition, project managers are asked to track when they pursued a strategy in relation to a specific phase of the project. Often a strategy may be pursued at the start of a project but during the project’s development, the strategy is no longer feasible. By using a checkbox system at the bottom of the page, the project manager can keep track of when the strategy was being pursued and quickly note when it was deemed unfeasible to pursue. The feedback section also includes an area for potential operational impacts of strategies to be noted so that project managers may consult with FFD Operations staff for strategy refinement as the project progresses.

The information collected from project managers will help CPD to continually assess challenging areas as well as baseline and target accomplishments. This feedback will also inform revisions to the master plan as well as any necessary adjustments to baselines and targets.



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