

# Casey Trees

issues the first annual

### Tree Report Card

the only independent evaluation of the

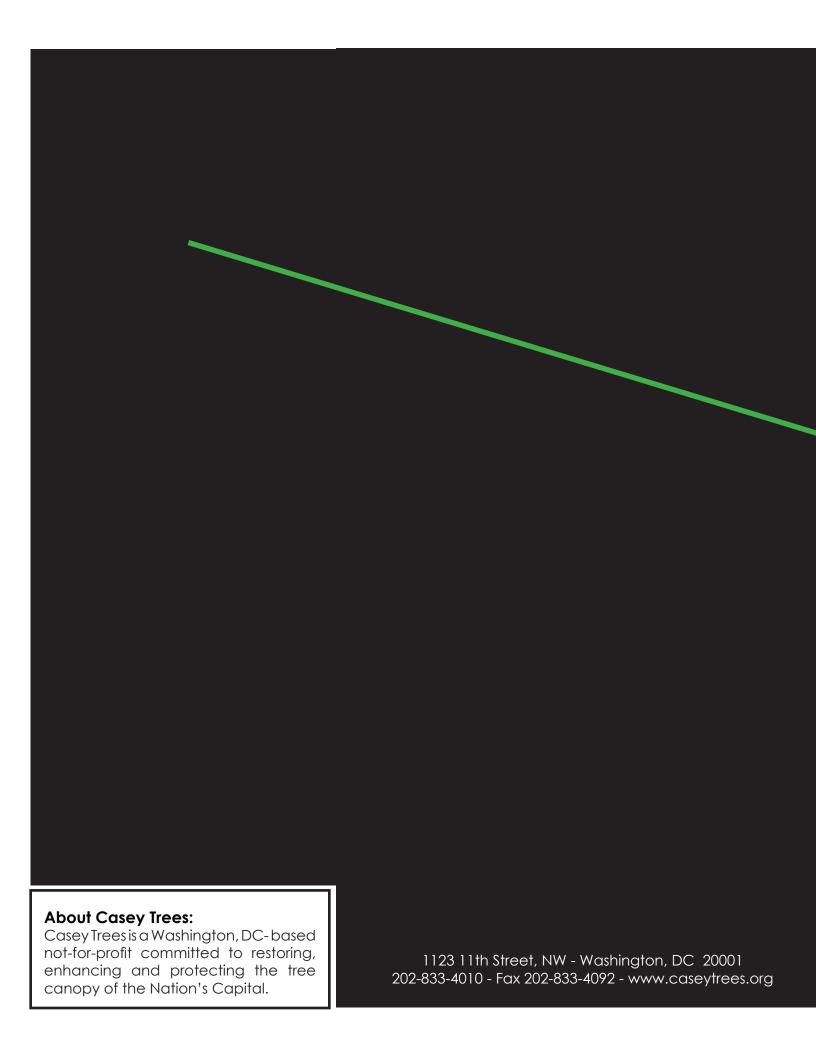
District's trees

Learn why DC received a

## B Grade

and how you can help restore the tree canopy of DC at



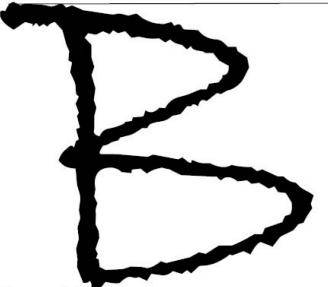


# Tree Report Card Context 4 Tree Metrics Coverage 5 Health 6 Planting 7 Protection 8 Awareness 10

# TREE REPORT CARD

City: District of Columbia

Evaluator: Casey Trees
Date: April 25, 2009



Tree Metrics

Coverage B
Health A
Planting B
Protection C
Awareness B

Learn more about the

#### DC Tree Report Card

and how to help restore, enhance and protect the tree canopy of the Nation's Capital at

caseytrees.org

**The Tree Report Card** is the only independent evaluation of the District's tree canopy and the first such assessment in the Nation.

It grades DC's trees and tree canopy on five metrics:

#### **Tree Coverage**

how much tree cover is there?

#### Tree Health

what condition are the trees in?

#### **Tree Planting**

how many trees are planted each year?

#### **Tree Protection**

what regulatory and voluntary measures are taken to protect trees?

#### **Tree Awareness**

what is the general level of awareness of tree-related issues in DC?

The **Tree Report Card** is not intended to be a report on any individual, organization, or agency, but to be a measure of the quantity and quality of trees and tree canopy, using the five areas noted above.

In endeavoring to create the **Tree Report Card**, we used the best data available. However, this exercise revealed that the optimal national and local data for this effort were not readily available. Our hope is that the launch of the **Tree Report Card** will encourage our partners to share information we do not possess to help us construct a more complete picture of DC's trees.

We also hope that the **Tree Report Card** will spur further interest and engagement in efforts to restore, protect, and enhance the tree canopy of the Nation's Capital.

We invite you to get involved with Casey Trees by becoming a Citizen Forester, enrolling in a Continuing Education Class, joining our monthly Tree Walk series, volunteering at a tree planting, planting a tree on your private property using our Tree Rebate Program, or suggesting new programmatic content.

You may email Casey Trees at TreeDC@caseytrees.org.





#### TREE COVERAGE

Tree Coverage is a measure of how much tree canopy cover there is within a geographic boundary, in this case within the boundaries of the District of Columbia.

#### How did we come up with the grade?

The District tree canopy extent layer was created by the US Forest Northern Research Station and the University of Vermont Spatial Analysis Lab by interpreting high-resolution satellite data for tree canopy, grass, and built surfaces. The resulting Geographic Information System (GIS) layers were then used in combination with property boundary, building, and other GIS layers supplied by DC OCTO to perform the analysis.

The results were then compared to Urban Tree Canopy (UTC) cover in states east of the Mississippi and on the west coast (These are states where high tree cover is natural; we purposely did not compare DC with states in the Great Plains or the desert southwest as those areas do not naturally have high tree cover). These data were developed by the US Forest Service Northern Research Station.

#### **UTC in URBAN AREAS ACROSS USA**



The average UTC in these states is 34%. DC's compares favorably at 35%; it is above the median but below the third quartile (75th percentile).



#### TREE HEALTH

**Tree Health** is a measure of the overall health of DC's tree canopy.

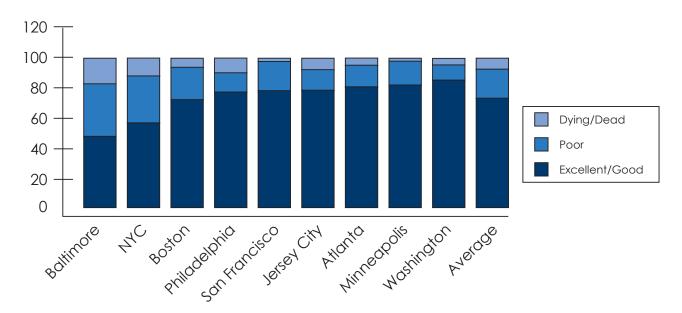
#### How did we come up with the grade?

The Urban Forest Effects Model (UFORE) is an analysis tool developed by the US Forest Service Northern Research Station. UFORE analyses have been done in many cities in North America, including the District (2004). UFORE uses a ground-based statistical sample to say things about trees throughout a geographic area.

The DC UFORE Study was conducted by Casey Trees Staff and Citizen Foresters and the National Park Service.

We compared the results of the DC UFORE study with the results of UFORE studies in cities east of the Mississippi and on the west coast (these are places where high tree cover is natural; we purposely did not compare DC with cities in the Great Plains or the desert southwest as those areas do not naturally have high tree cover). These data were developed by the US Forest Service Northern Research Station.

#### TREE CONDITION in SELECT UFORE CITIES



The condition of DC's trees is better than the average of the noted cities and is also as good or better than the individual cities.



#### TREE PLANTING

**Tree Planting** is a measure of how many trees are planted each year.

#### How did we come up with the grade?

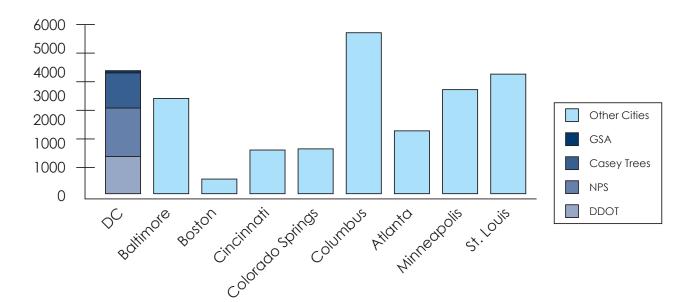
We used information from Casey Trees tree planting programs as well as data obtained from the National Park Service, the U.S. General Services Administration, and the District government related to tree planting activity in 2008.

We compared those numbers with the results of a survey of cities across the U.S. We only used data for cities east of the Mississippi and on the west coast (these are places where high tree cover is natural; we purposely did not compare DC with cities in the Great Plains or the desert southwest as those areas do not naturally have high tree cover). The survey was published by the Trust for Public Land.

It should be noted that the survey included street and park trees but did not explicitly include trees planted by NGOs such as Casey Trees.



#### TREE PLANTING IN SELECTED CITIES





#### TREE PROTECTION

**Tree Protection** is a measure of efforts to preserve existing trees.

#### How did we come up with the grade?

We broke the grade down into two areas: Voluntary and Regulatory Efforts.

#### **Voluntary Efforts:**

For Voluntary Efforts, we looked at the known installations of innovative tree space design practices (structural soils, silva cells, root paths, etc.). A partial map of locations can be found at www.caseytrees.org. These installations are considerable in number but have no on-site interpretive signage.

We graded these efforts a B.

#### **Regulatory Efforts:**

For Regulatory Efforts, we analyzed data provided by the Urban Forestry Administration regarding the Urban Forest Preservation Act. The data provided related to activity under the law during the years 2005-2008.

The law provides that any tree with a circumference of 55" or more be designated as a Special Tree, and that a Special Tree may only be removed if:

- It is removed by a public utility (no permits are required in this instance)
- It is an undesirable species as specified in regulation
- It is, in the opinion of an ISA Certified Arborist, a Hazardous Tree
- The applicant agrees to plant a number of replacement trees whose aggregated circumference equals or exceeds the circumference of the Special Tree being removed, or agrees to pay into the Tree Fund at a rate of \$35 per inch circumference of the tree bring removed

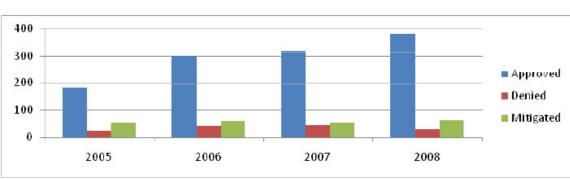
The data provided to us shows that 1361 applications were made in the period. The vast majority were approved (88%), but of those only 20% required that mitigation be made (replacement trees planted or payments into the Tree Fund). The period shows the number of applications denied and the number of removals being mitigated staying the same but the number of removals increasing significantly each year.

This indicates that the law is not protecting our tree canopy as more and more large trees are being removed but the number of replacements is remaining constant.



#### TREE PROTECTION

#### APPLICATIONS FOR THE REMOVAL OF SPECIAL TREES - DC





In addition, the following items required by the Act have not occured:

- The preparation and annual updating of a 5-year urban forest report and master plan;
- The adoption of regulations that provide for income-contingent subsidies from the Tree Fund for the removal of Hazardous Trees
- Issuance of an annual statement along with all receipts and disbursements for the Tree Fund.

We graded these efforts a D.



#### TREE AWARENESS

**Tree Awareness** refers to the general level of awareness of tree-related is ues in the District.

#### How did we come up with the grade?

We used the U.S. Forest Service's criteria for assessing performance of state urban forestry programs, looking at areas that indicate general public, agency, and institutional support for trees and tree programs. We then assigned a grade to each of these areas as noted and derived the Overall Grade of B from the average of the pieces.

The five metrics used to determine the Tree Awareness Grade are as follows:

#### **Volunteer Activity**

Grade B

In 2008, Casey Trees alone recruited 2,757 adult participants, consisting of Volunteers, Casey Trees-trained Citizen Foresters, and Business Improvement District (BID) staff.

#### General Volunteers - 1,725

226 performing tree stewardship activities and 1,499 planting trees

#### Citizen Foresters - 934

532 adult education attendees; 58 performing tree stewardship activities, and 344 planting trees

#### BID Staff - 98

All learning tree planting and stewardship

#### **Management Plans**

Grade C

The District has a Comprehensive Plan that includes many provisions for trees. However, the Urban Forest Master Plan required by the Urban Forest Preservation Act has not developed.

#### Professional Staff Grade A

The Urban Forestry Administration has highly qualified, highly skilled staff with many certified arborists. Quantity and quality of staff are notable.



#### TREE AWARENESS

#### Ordinances/Policies

Grade C

There are many positive elements in local ordinances and policies.

Recommendations for improvement include:

- Modification of the Urban Forest Preservation Act to provide better protection to our tree canopy
- Inclusion of the current one tree per five parking spaces provision in the parking lot section of the zoning code update
- More directed leadership on the provision in the State Implementation Plan for ozone non-attainment related to urban tree canopy.

#### **Advocacy Organizations**

Grade B

DC has a wonderful array of advocacy organizations, from city wide groups like Casey Trees, DC Environmental Network, DC Greenworks, Friends of the Earth, to community groups like Trees for Georgetown, Trees for Capitol Hill, Restore Mass Ave., etc.

