CITY FOREST CREDITS

CASE STUDY

CITY OF HIGHLAND PARK ILLINIOIS

URBAN FOREST REJUVENATION

EXECUTIVE SUMMARY

The City of Highland Park leads effort to utilize verified carbon credits for urban trees in the Chicago Region to plant more trees.

Background

The City of Highland Park is located 25 miles north of downtown Chicago with a population of about 30,000 people. Highland Park's Forestry Section has a long and successful history of stewarding their city trees, as well as leading at the local level. Highland Park is thinking strategically to increase tree canopy cover and diversify tree species to create a more resilient urban forest, considering a changing climate and future threats from pests and diseases.

About the Highland Park Planting Project

The City of Highland Park was an early adopter to participate in the Chicago Region Carbon Program. They enrolled 809 newly planted trees into their carbon project. Trees were planted between 2019 and 2022, mostly along City owned right-of-way. The goal of the project was to diversify tree species planted to create a more resilient urban forest. The carbon revenue generated through this project will be invested in planting additional trees throughout Highland Park to maintain or increase the tree canopy.

Carbon Credit Opportunity

New revenue for additional tree plantings
The City of Highland Park is proud to champion sustainable initiatives throughout the community. Carbon Credits are one opportunity the City is leveraging to enhance existing programs and pursue additional opportunities to achieve its sustainability goals.

AT A GLANCE

Year Registered: 2022
Trees Planted: 809
Location: Highland Park, Illinois

Project Credits: 1,604 tons CO2
Credits Issued at Initial Verification (2023):
160 tons CO2
Remaining Credits Issued over 26-year Project Duration:
1,444 tons CO2

Staff Time Estimate: 30 hours
Credits Sold to Date: *credits to be sold in National Sale*

"The City of Highland Park is proud to be a leader in carefully managing and growing our award-winning urban tree canopy in support of our carbon-limiting sustainability initiatives. Our partnership with City Forest Credits has provided an effective strategy in support of these goals."

- Joe O'Neill, Deputy Director, Public Works, City of Highland Park

INTRODUCTION

Urban regions are seeing the greatest tree canopy loss of any area in the contiguous United States, with 36 million trees lost annually in urban and community areas. Trees and forests in cities have acquired greater significance as “green infrastructure,” providing services such as stormwater reduction, carbon storage, energy savings, public health benefits, and air quality improvements.

City Forest Credits (CFC) is a national nonprofit carbon registry that serves one sector of carbon – the carbon stored in forests and trees in metropolitan areas in the United States. Through third-party-verified carbon crediting, CFC is providing a new way for private-sector dollars to finance reforestation projects that contribute to the health and well-being of people and the environment. CFC’s 26-year Tree Planting Protocol is for newly planted trees and is adapted to the unique circumstances of urban forestry.

The Chicago Region Carbon Program (CRCP), in partnership with the Chicago Region Trees Initiative (CRTI) and local project implementors, provides opportunities to invest in tree planting and an efficient enrollment of planting projects into a region-wide carbon crediting program. The goal of the CRCP is to improve the health and canopy of the urban forest in the Chicago region through increased tree planting while also generating revenue.

Municipalities and nonprofits can leverage urban forest carbon credits as a finance tool to plant and maintain trees. The City of Highland Park employed carbon crediting to increase the number of trees planted, thus diversifying the existing canopy and creating a more resilient urban forest for the future.

BACKGROUND

The City of Highland Park was an early adopter to participate in the Chicago Region Carbon Program. They enrolled 809 newly planted trees into their carbon project. Trees were planted between 2019 and 2022, mostly along City owned right-of-way.

A changing climate and environmental stressors are making it more challenging to grow an urban forest. Pests and diseases are also a threat. The goal of the project was to diversify tree species planted to create a more resilient urban forest. The carbon revenue generated through this project will be invested in planting additional trees throughout Highland Park to maintain or increase the tree canopy.

OPPORTUNITY

The City of Highland Park has been pushing the envelope for sustainable practices. Since 2010, the Highland Park Community Sustainability Strategic Plan has integrated urban forestry into many green practices throughout the city. The City Council supports enhancing and expanding the tree canopy cover.

With a strong urban forestry program over many decades, Highland Park had the capacity and interest to explore this new opportunity. The 26-year commitment seemed to compliment the work they already have in place and the other requirements for a carbon program are in line with the work they are already doing.

TIPS FROM CITY STAFF

- Gather all tree planting numbers and statistics before starting your project. Ensure that you have a tree inventory or you're tracking the trees being planted at the time.
- Plan ahead to maximize your benefit. If you know about the opportunity, consider planting more trees to enroll in a carbon project to gain additional revenue.

BENEFITS

Provide long-term revenue toward tree plantings

The economy goes up and down and budgets can change from year to year. The revenue from carbon credits can be used to supplement tree planting efforts in the future. This can increase the number of trees planted, ultimately improving the tree canopy and resilience of the urban forest.

Shifting funding

Maintenance and stewardship are generally harder to fund. Highland Park committed to putting revenue from carbon credit sales towards tree planting efforts. By shifting funds allocated for tree plantings towards stewardship and maintenance, they can ensure trees are taken care of long-term.

PROJECT SNAPSHOT

Trees Planted
From 2019 to 2022, the City of Highland Park planted 809 trees. The goal was to replace vacancies and increase tree diversity.

Urban Location
All trees were planted within the city limits of Highland Park.

Ownership
Trees were planted on public rights-of-way on 200+ city streets and properties.

Additionality
Trees were not legally required to be planted. Trees were not planted on sites that were previously forested and then cleared of trees. The 26-year Project Duration is additional to and longer than any commitment made to non-credited trees. Trees are additional based on the Performance Standard Baseline (CFC Standard, Section 4.9) developed in adherence with the World Resources Institute Greenhouse Gas Protocol for Project Accounting.

Effort and Due Diligence
About 30 hours of staff time were spent completing the initial crediting documentation for this project. Future staff time will be needed for annual monitoring reports, as well as sampling, measurements, and reporting for future credit issuances. This work is estimated at 130 hours over the next 26 years.

Timeline

March 2022	Chicago Region Carbon Program Launch
June 2022	Application submitted to CFC
October 2022	Crediting documents submitted to CFC Validation and third-party verification completed
November 2022	Initial Credits issued
March 2023	Initial Credits sold
June 2025	Year 4 Credits Issuance sampling and documentation
June 2027	Year 6 Credits Issuance sampling and documentation
June 2035	Year 14 Credits Issuance sampling and documentation
June 2047	Year 26 Credits Issuance sampling and documentation

Monitoring and Reporting

The City of Highland Park maintains a digital parkway tree inventory and newly planted trees are inspected at least once a year. In addition, Forestry staff will collect data on a randomized sample of project trees. All trees are inspected and pruned on a 7-year rotation.

Credit Issuance

Under the CFC Planting Protocol, forward (or ex-ante) credits are issued based on estimated carbon storage after 25 years. As a safeguard to ensure performance of the forward credits, CFC issues credits throughout the project duration: after initial project verification, at Years 4, 6, 14, and 26. At each credit issuance, the City of Highland Park will sample the trees to ensure tree growth and survival are in line with the estimated forecasts. Should a loss of trees occur due to neglect or willful harm, the City of Highland Park will be responsible for compensating or returning the reversed credits.

Credit Issuance (tons CO2)

Credits Attributed to the Project	2,110
20% Mortality Deduction	1,688
5% Registry Reversal Pool	84
Total Credits to be Issued to Project	1,604
Credits Issued after Initial Verification (10%)	160
Credits Issued at Year 4 (30%)	481
Credits Issued at Year 6 (30%)	481
Credits Issued at Year 14 (10%)	160
Credits Issued at Year 26 (remaining credits)	322

Co-Benefits

Well-designed and managed urban forests make significant contributions to the environmental sustainability, economic viability and livability of cities. Carbon projects like the City of Highland Park provide social, human health, and equity impacts that contribute towards the achievement of global targets such as the UN Sustainable Development Goals.

2022 Project Quantified Co-Benefits & Sustainable Development Goals

Rain interception	3,932 m3/yr	$28,147/yr
Air Quality Improvements	0.1250 t/yr	$578/yr
Energy Savings	124,342 kWh/yr 1,809,644 kBtu/yr	$9,438/yr $17,616/yr

Annual co-benefits once trees reach year 25

Expand recreation opportunities

Sustainable cities and communities

Deliver local climate action