



**CHICAGO
REGION
TREES
INITIATIVE**

Our Trees.
Our Communities.
Our Future.

Chicago Region Carbon Program

Zach Wirtz, CRTI Community Manager, The Morton Arboretum
2023

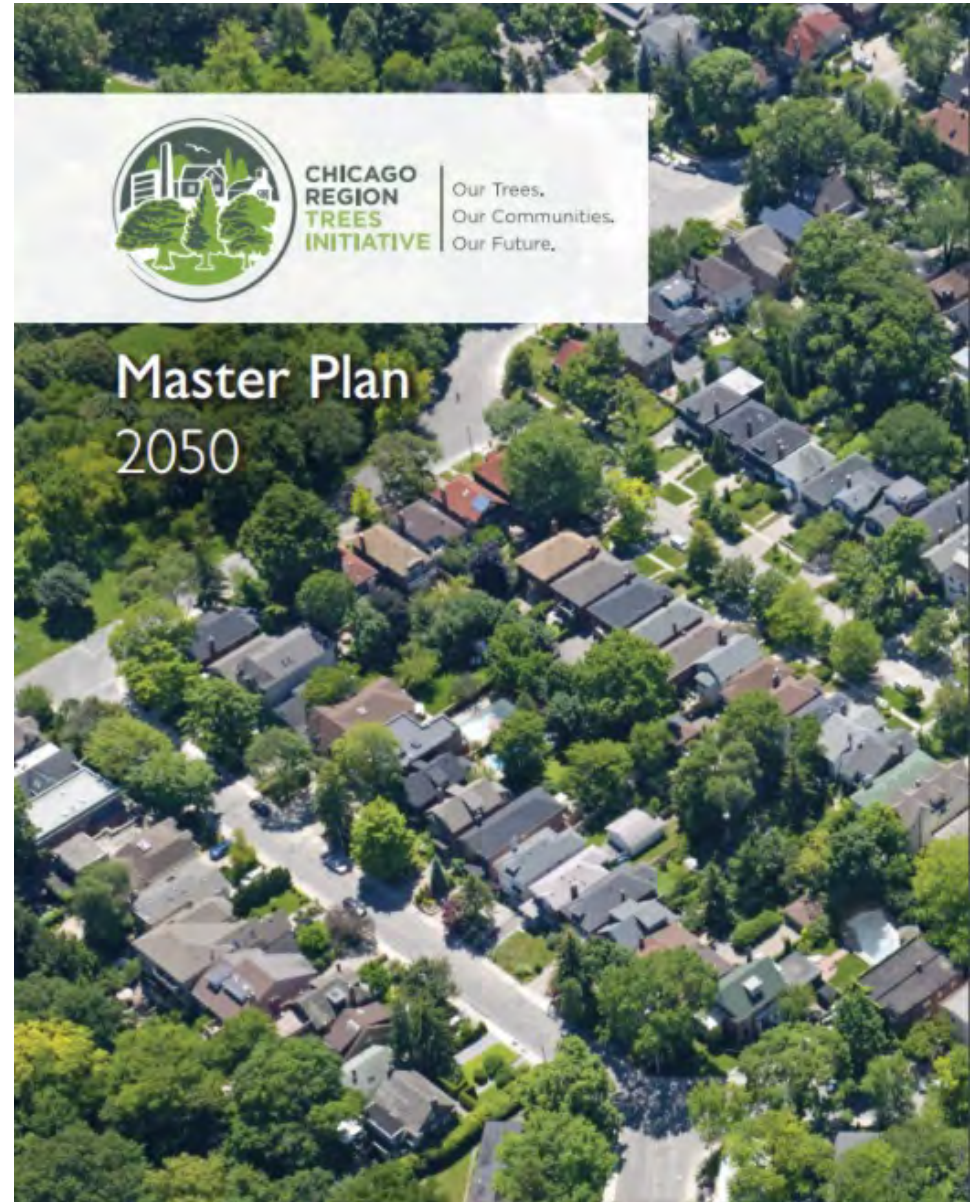
Contents

- CRCP
 - Mission and purpose
- Urban Forest Carbon Credits
 - Value of urban forests
 - Opportunity for carbon credit revenue
 - National carbon standard and protocols
 - Carbon+ Credits and Co-Benefits
 - How it works
 - Project Examples
- Get involved in 2023

CRTI'S MISSION: CREATE A HEALTHIER TREE CANOPY, THAT IS MORE ABUNDANT, MORE DIVERSE,
AND MORE EQUITABLY DISTRIBUTED TO PROVIDE NEEDED BENEFITS TO ALL PEOPLE AND
COMMUNITIES



MASTER PLAN To 2050



Increased funding for urban forestry

Results in:

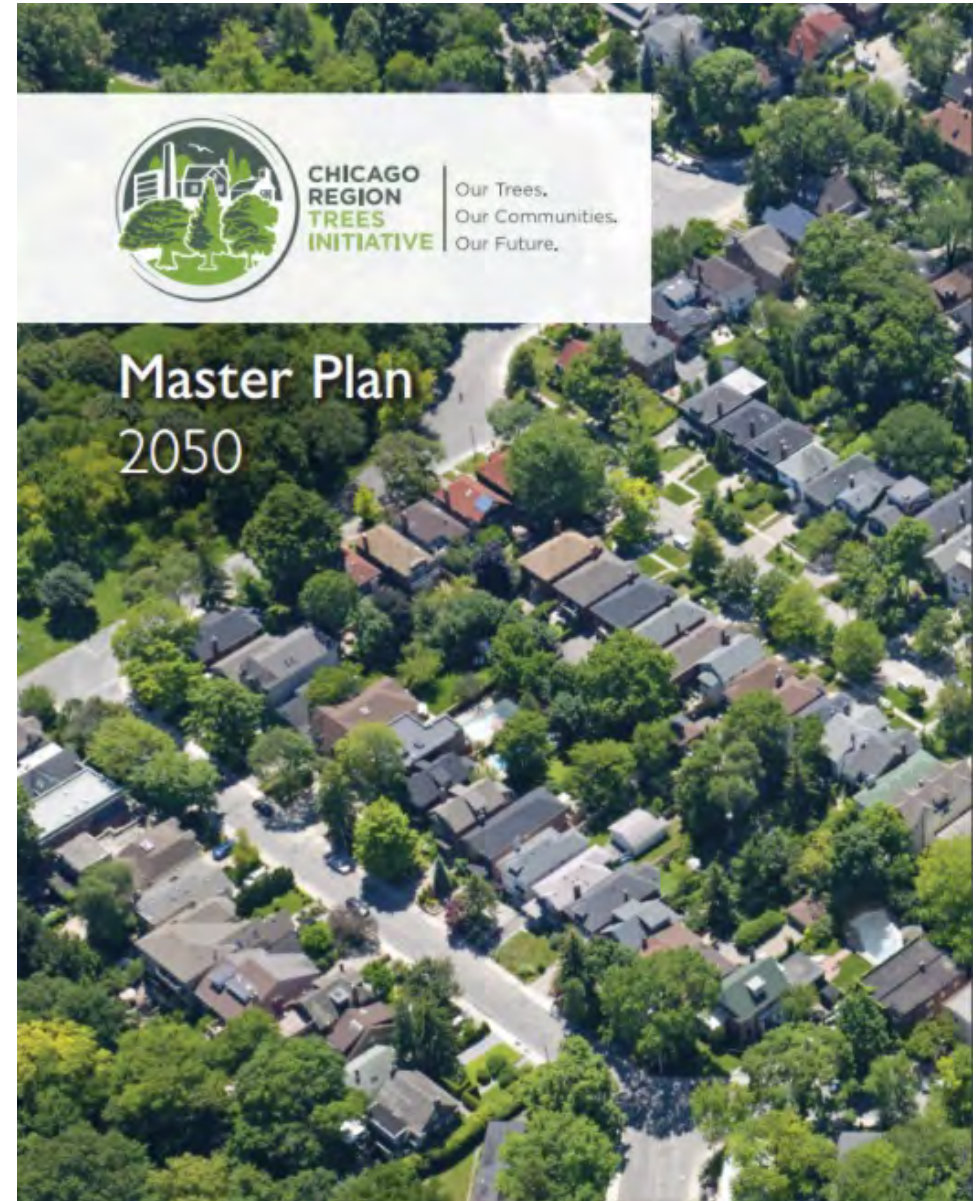
Increased canopy

Improve resilience

Increased protection

Improved care

Increased quality of life



Partnership with City Forest Credits 2019

Made possible through a grant from the
Walder Foundation



**CITY FOREST
CREDITS**



If you plant only one tree, if you buy only one carbon credit,
it should be in a city.

Problem

Losing urban trees

36 million trees lost each year nationwide

Urbanization

Over 80% of the U.S. population lives in cities and towns

Inequitable distribution

Under-resourced neighborhoods have fewer trees

Lack of public funding

Budgets strained, not enough money for tree care

Benefits of Trees in Cities



Environment



Social Equity



**Human
Health**

- Store carbon
- Manage stormwater
- Enhance climate resilience
- Provide jobs
- Address environmental injustices
- Improve access to nature
- Promote physical activity
- Provide shade

Chicago Region Carbon Program

Annual (or Biannual) Call for Projects

Communities, forest preserves, land trusts, park districts, private landowners, etc.
routinely enroll projects



Goals of the Chicago Region Carbon Program

Make carbon crediting of urban forest **planting** projects routine common practice

Make carbon crediting for urban forest **preservation** projects routine common practice

- Increased funding
- Increased protection
- Increased preservation
- Improved forest health
- Improved policies and actions

- Increased understanding of the value of our urban forest
- Connect corporate interests to community needs
- Improved quality of life

Urban Forest Carbon Projects

2021



2022





City Forest Credits

Generating new carbon revenue and high-quality projects for greener, healthier, and more equitable cities

- National 501(c)(3) nonprofit carbon registry
- Connect urban forest leaders to new source of funding
- Empower companies to invest in local climate action

Opportunity



Leverage dollars, amplify impact

Bringing carbon finance to city forests



LOCAL

Spend carbon offset funds where they matter most



CREDIBLE

Trust robust national carbon protocols



MEASURABLE

Report on quantified data with confidence

National Carbon Protocols



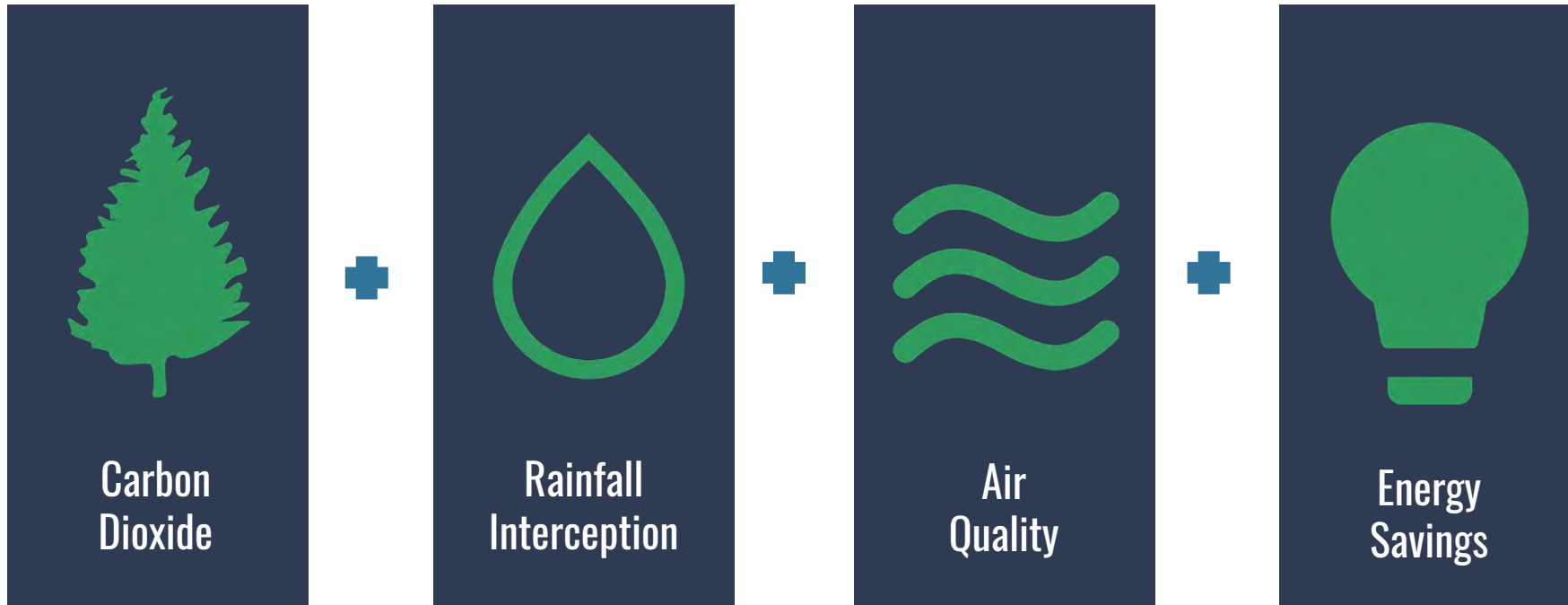
Rulebooks for verified carbon projects

- Leading forest scientists and urban forest professionals on protocol drafting group
- Rules for location, site ownership, quantification, duration, monitoring, third-party verification, and more



Available at: <https://www.cityforestcredits.org/carbon-credits/carbon-protocols/>

Carbon+ Credits



Each carbon credit represents one ton of carbon dioxide plus
quantified ecosystem values

Triple Bottom Line Impact of Urban Forest Carbon+ Credits

Carbon+
Credits

Environmental



Stormwater



Air quality



Cooling



Slope Stability



CO2



Energy Savings



Wildlife

Social



Public Health



Human Health



Environmental Justice



Community Building



Recreation



Crime Reduction

Economic



Green Jobs



Workforce Development



Dollars Delivered Locally



Media for Buyers



Customer Engagement



Employee Engagement

Reportable Social Impacts

Projects contribute to global goals

- Describe project social impacts and contributions towards UN Sustainable Development Goals

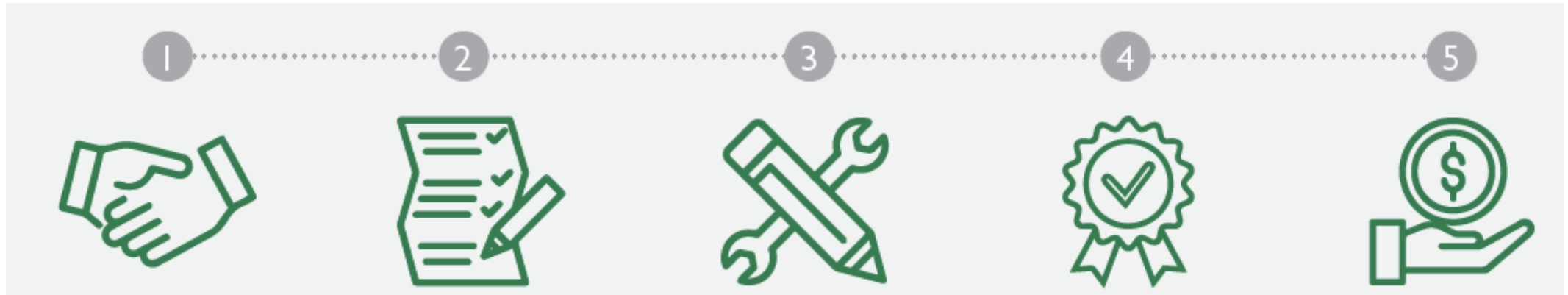




Carbon Projects



Chicago Region Carbon Program (CRCP)



CRTI recruits local projects for CRCP

Local Project Implementers prepare application and project info with help from CRTI

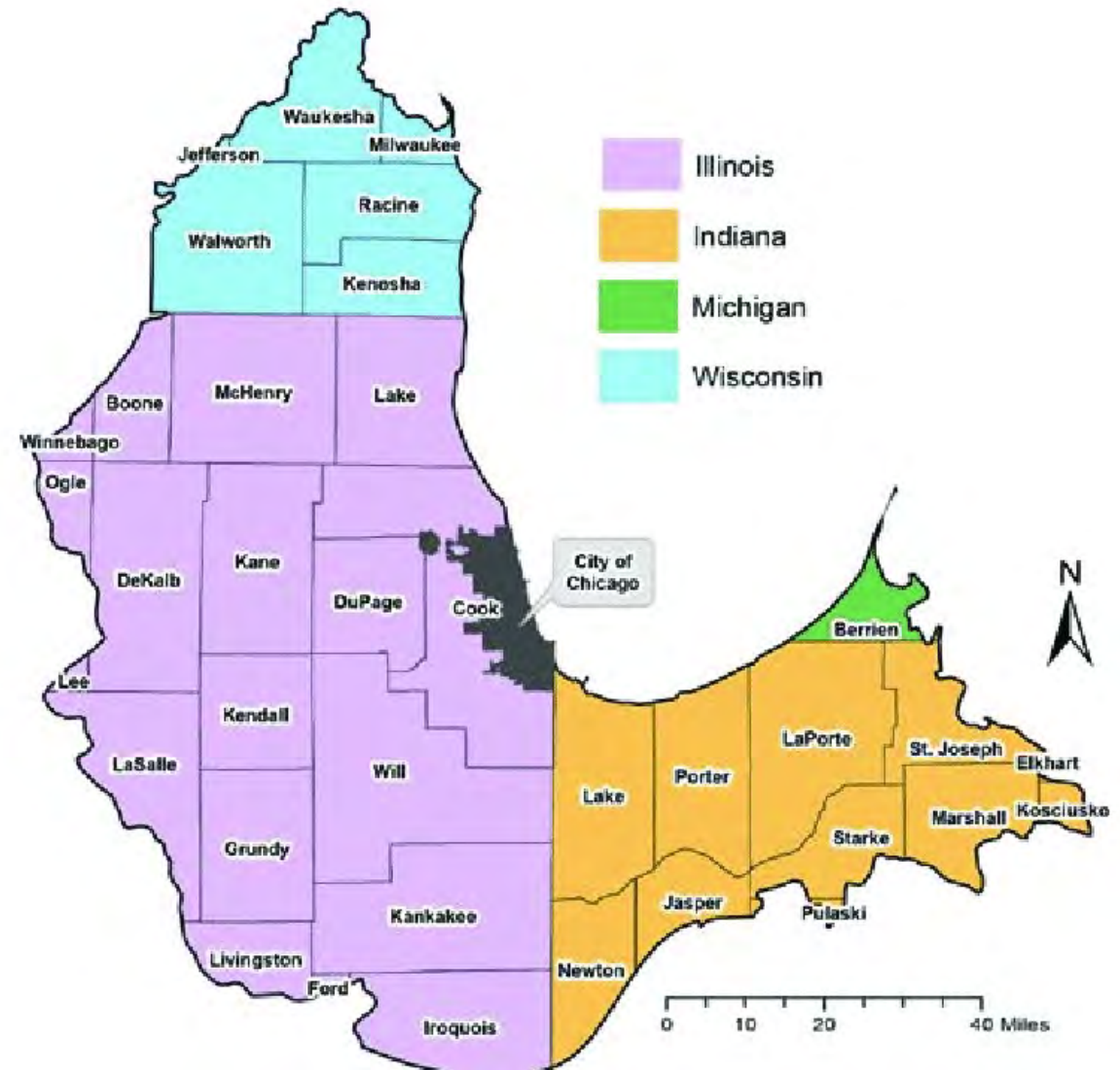
Local Project Implementers submit project docs with help from CRTI

CFC reviews, obtains third-party verification, and issues credits

Local Project Implementers sell credits

CRCP Boundary

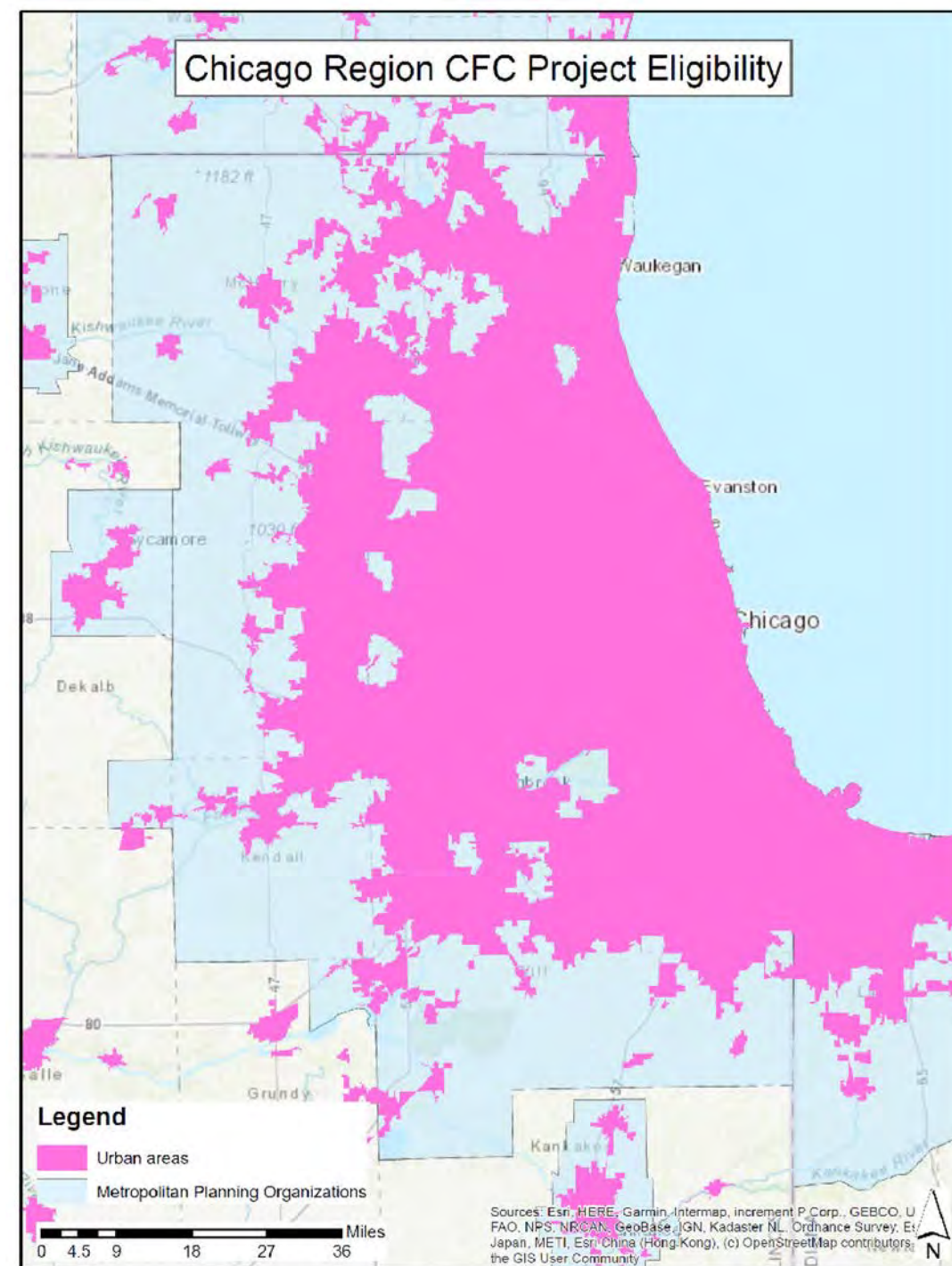
CRCP covers urban areas within the Chicago Wilderness region of southeastern Wisconsin, northeastern Illinois, northwestern Indiana and southwestern Michigan.



Urban Area Definition

Projects must be in or adjacent to one of the following:

- “Urban Area” per Census Bureau maps
- An incorporated or unincorporated city or town
- Planning area for a regional metropolitan planning agency or entity
- Land owned, designated, and used by a municipal entity for sourcewater or watershed protection
- Transportation or utility right of way through one of the above



2022 CRCP Carbon Projects

Organization	Project Type	Project Name	Credit Total	Estimated Revenue @ \$34/credit
Village of Mt. Prospect	Planting	Village of Mount Prospect Planting Project 2022	284 in 2023 2,845 over 26 years	\$9,656 (in 2023) \$96,730 (lifetime)
City of Highland Park	Planting	Urban Forest Rejuvenation	160 in 2023 1,604 over 26 years	\$5,440 (in 2023) \$54,536 (lifetime)
Land Conservancy of McHenry County	Preservation	Thompson Road Oak Woods	6,897	\$234,498
Land Conservancy of McHenry County	Preservation	Crowley Oaks Conservation Area	7,709	\$262,106
Kendall County Forest Preserve District	Preservation	Reservation Woods	2,082	\$70,788
Natural Land Institute	Preservation	Fitzgerald Road	3,230	\$109,820



CRCP 2022 Numbers

- 6 projects – 2 planting and 4 preservation projects
 - 1,915 trees planted
 - 111.3 acres preserved
- 21,041 credits issued in 2023 (4,005 to be issued in future years)
- At an estimated \$34/ton = \$715,394 additional dollars in 2023

Planting - City of Highland Park



Photo Credit: City of Highland Park

Planting Project (2022)

- **Goal:** restoring tree canopy cover and diversifying to reduce impacts from pests and diseases
- **Project Design:** planted 809 trees on public rights-of way across all 8 planting regions of the City on 200+ different City streets/properties.
- **Impacts:**
 - mitigating undesirable impacts of roadways
 - improving storm water runoff and soil infiltration rates
 - mitigating urban heat island effects

Project Details



- **Quantification Method:** Single tree
- **Carbon+ Credits:** 1604 tons CO₂e over the 26-year Project Duration
- **Co-Benefits:** The project will provide \$55,778.97 in ecosystem services every year after the trees reach 25 years old.
- **Commitments:** Monitor and track tree health, submit report every year for 25 years



Photo Credit: City of Highland Park

CRPC: Benefits and Obligations

Why participate?

- Help your community reach sustainability goals
- Be a leader in climate action in your community
- Sell the carbon credits generated from trees for maintenance or to reinvest in community trees
- Receive funding at intervals for a stream of dollars

What do I need to do?

- Plant or preserve trees
- Maintain the project for 26 years (planting) or 40 years (preservation)
- Monitor and report on your project, document survival at key intervals, and sell your carbon credits

Buyers and Funders

Premium credits

- Local operators can sell credits directly to companies, aggregated sales with other local operators, or via for-profit carbon portfolio advisors
- Seller and buyer negotiate price
- Like rare earth minerals – low volume, high cost, extremely valuable
- Allows for local climate action, with prominent, accessible, and direct engagement opportunities



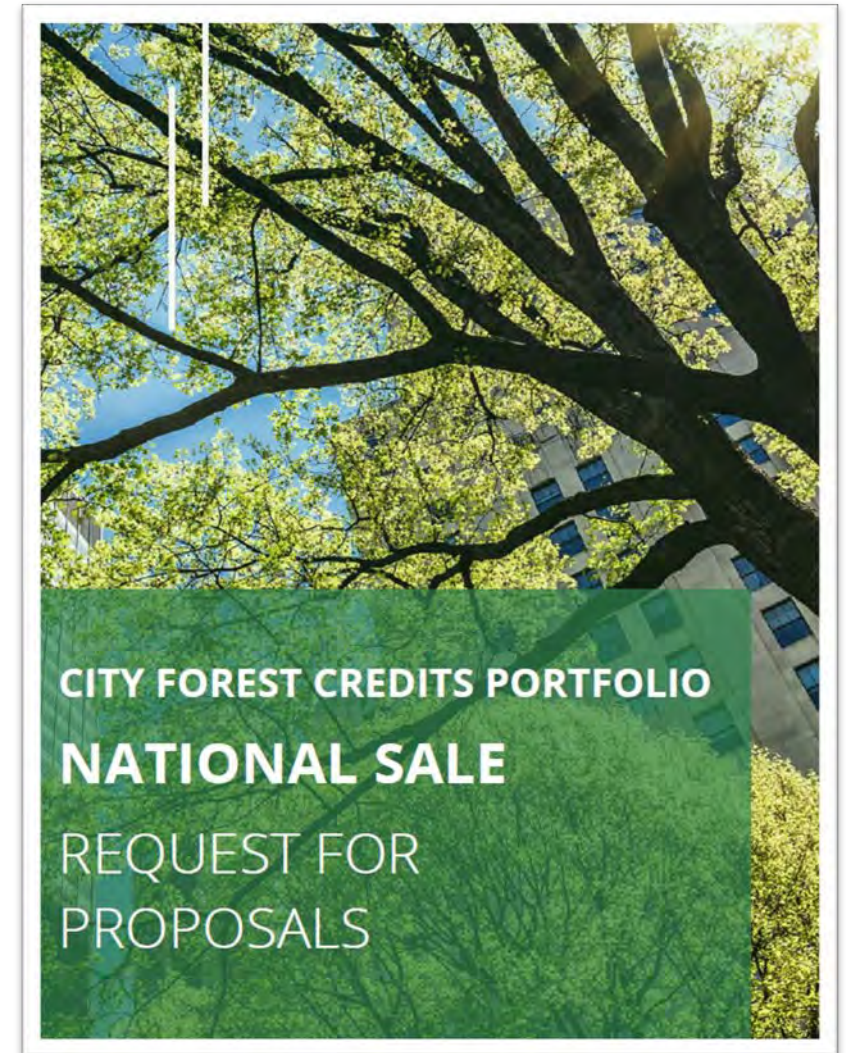
To solve climate change, we will have to learn how to feed the world virtually carbon-free. Our partnership with City Forest Credits and King County moves our company toward that goal, all while beautifying and protecting ecosystems in our community.

- Helena Park, CEO
Fishermen's Finest

National Sale

Aggregated National Sale of all 2021 Credits

- 13 projects across U.S. – 31,000 tons/credits
 - Rich tapestry of environmental, social, and community impacts
 - Sold to one buyer for \$34/ton
 - Each projects gets revenue equal to its credited CO2 storage
 - Carbon market recognizes the value of city trees and credits
-
- **2022/2023 sale underway!**
 - 18 Projects – approx. 67,000 Carbon+ Credits
 - @\$34/tonne → \$2.2 million

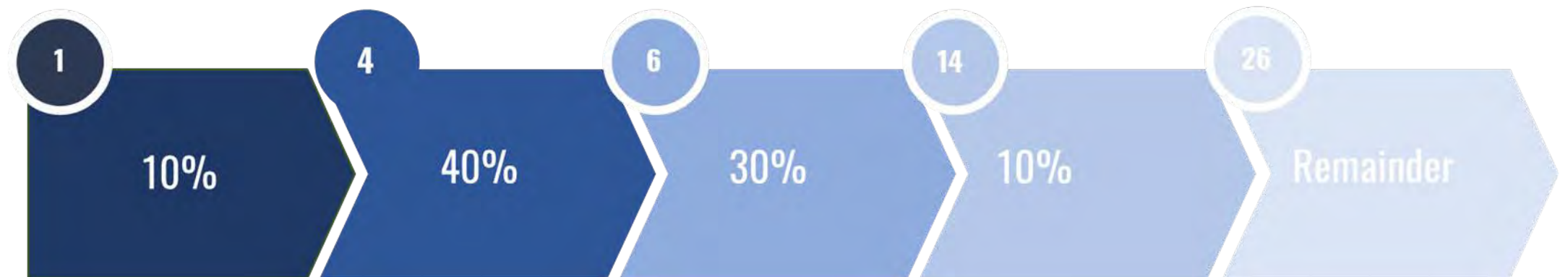


Poll:
How many trees
does your
community plant?



Planting Project Design and Credits

- Ownership: best if publicly-owned property
- Planting design:
 - Single tree - street tree or linear plantings, trees more dispersed
 - Clustered Parks Canopy - clustered, parks, natural areas, 5 acres or more
 - Area reforestation – reforestation of large areas, ag to forest, riparian
- Forecasted CO2 stored when trees are 26 years old



Credit Issuance Schedule

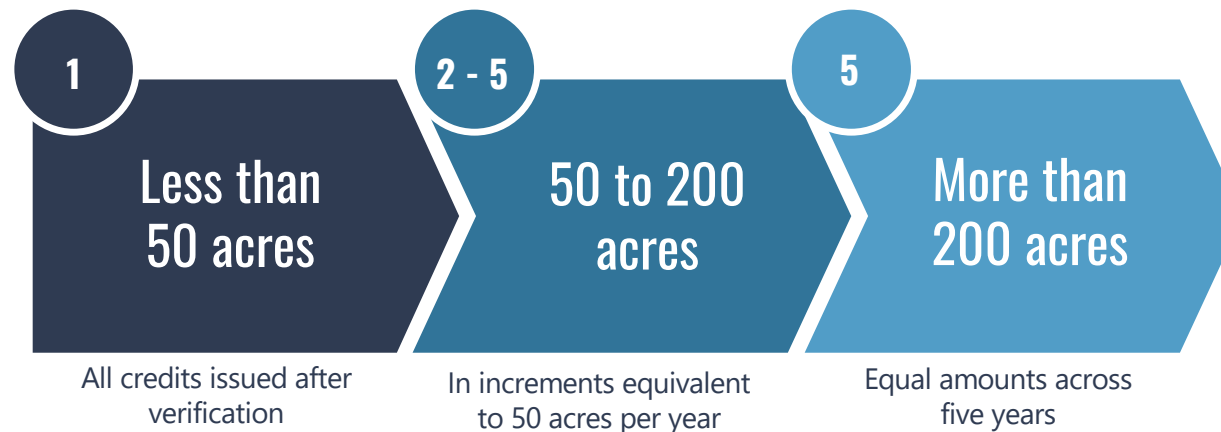


Planting Potential Revenues

Yearly Tree Planting	Carbon Credits Generated (tons)	Year 1 Revenue	Year 4 Revenue	Year 6 Revenue	Year 14 Revenue	Year 26 Revenue	Total Estimated Revenue
250 trees	683	\$ (908)	\$ 6,675	\$ 9,340	\$ 3,612	\$ 13,376	\$ 32,095
500 trees	1,367	\$ 1,182	\$ 13,852	\$ 19,182	\$ 8,226	\$ 28,754	\$ 71,196
2500 trees	6,834	\$ 17,912	\$ 71,259	\$ 97,912	\$ 45,130	\$ 151,769	\$ 383,982
5000 trees	13,669	\$ 38,825	\$ 143,019	\$ 196,326	\$ 91,262	\$ 305,541	\$ 774,973

Preservation Project Design and Credits

- Best for forested areas 10 acres or larger
- Trees not currently protected, and can show there is a threat of conversion
- In a zoning designation that allows at least one non-forest use
- Protect trees with deed restriction



Credit issuance schedule



Preservation Potential Revenues

Forest Preserve Districts, Conservation Districts, and Land Trusts

1 acre of mature oak-hickory forest preserved = approx. 100 to 150 credits

50-acre property = 5,000 to 7,500 credits

At \$34/credit, potential revenue = \$170,000 to \$255,000

For parcels under 50 acres, the credits are issued and can be sold immediately in Year 1 after validation of project compliance by CFC and third-party verification

CFC fees would reduce potential revenue by approximately 11%

Staff time for preservation projects through issuance of credits can range from 50 to 80 hours

Get Involved in the 2023 CRCP

- 2023 Cohort – seeking interested participants!
 - ChicagoRTI.org/CarbonCredits
- Planting - from Fall 2020 to Spring 2023
 - 500+ trees (single and cluster)
 - Reforestation of 3+ acres
 - Must all be planted to receive credits
- Preservation acquisitions - from Fall 2021 - Spring 2023
 - 10+ acres

Timeline

Activity	What Occurs	Due Date
Informational Window	Local Project Operators (LPIs) consult with CRTI and CFC	Webinar Launch: Feb. 7, 2023 In-person workshop: March 23, 2023
Application	LPIs submit 2-page application	June 2, 2023
Project Implementation Agreement with CFC	LPIs get contracts approved and signed	June 30, 2023
Project info and draft documents	LPIs gather their project info, draft project documents	Sept 8, 2023
Final project documents for crediting	LPI submits all final project documents	Nov. 3, 2023
Validation and Third-Party Verification	CFC validates and obtains third-party verification	Feb 28, 2024
Credit Issuance	CFC issues credits after validation and verification	March 15, 2024

Next Steps

ChicagoRTI.org/CarbonCredits

- Interest List / Project Profile - Let's Chat!
- In-person / Hybrid Workshops - March 23 1:00-4:00 p.m.

CRTI: Zach Wirtz- zwirtz@mortonarb.org

CFC: Jen Kullgren- jen@cityforestcredits.org

Future Opportunities with Grant Funding

- IDNR CORE grants – fund planting and inventory
- Inflation Reduction Act funding – huge boost in planting \$\$\$
- Remember that trees must be planted at the time of crediting and require a GPS coordinate
 - Think ahead!

Wrap up

- CRCP
 - Mission and purpose is to help communities
- Urban Forest Carbon Credits
 - Opportunity for carbon credit revenue
 - Viable national carbon standard and protocols for Carbon+ Credits and Co-Benefits
- It is easy to get involved in 2023!
 - Program has nuance – check out upcoming info packets and meetings

[ChicagoRTI.org/
CarbonCredits](https://ChicagoRTI.org/CarbonCredits)

Questions & Answers

Contact: Colette Copic Ccopic@Mortonarb.org

Zach Wirtz - ZWirtz@Mortonarb.org (630) 725-2498

**ChicagoRTI.org/
CarbonCredits**