



Chicago's
Harvest Study

Community Gardens Count

Measuring Chicago's Harvest

Principal Investigators

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Research Team

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Questions

How much food can and do Chicago's community gardens (CG) produce?

What is the economic value of CG food?

Where does CG food go?

What is the nutritional value of CG food?



Purpose

Impact of community gardens on food access in cities lacks grounding in empirical research.

To develop a fuller understanding of how the food system can influence the dietary intake and health of low-income urban children



Broad Site Survey (3 season)

measured food production in 260 gardens based on land yield estimates.

All Harvest Study

7 sites chosen as cross-section of Chicago's gardens: crop plans, nutrient density, produce yields.

Interviews

interviews with 53 gardeners at 32 gardens to understand food distributed

Methods



Findings

20% of all Chicagoans (547,360) live within 2 blocks (1/4 mile) of a community garden.

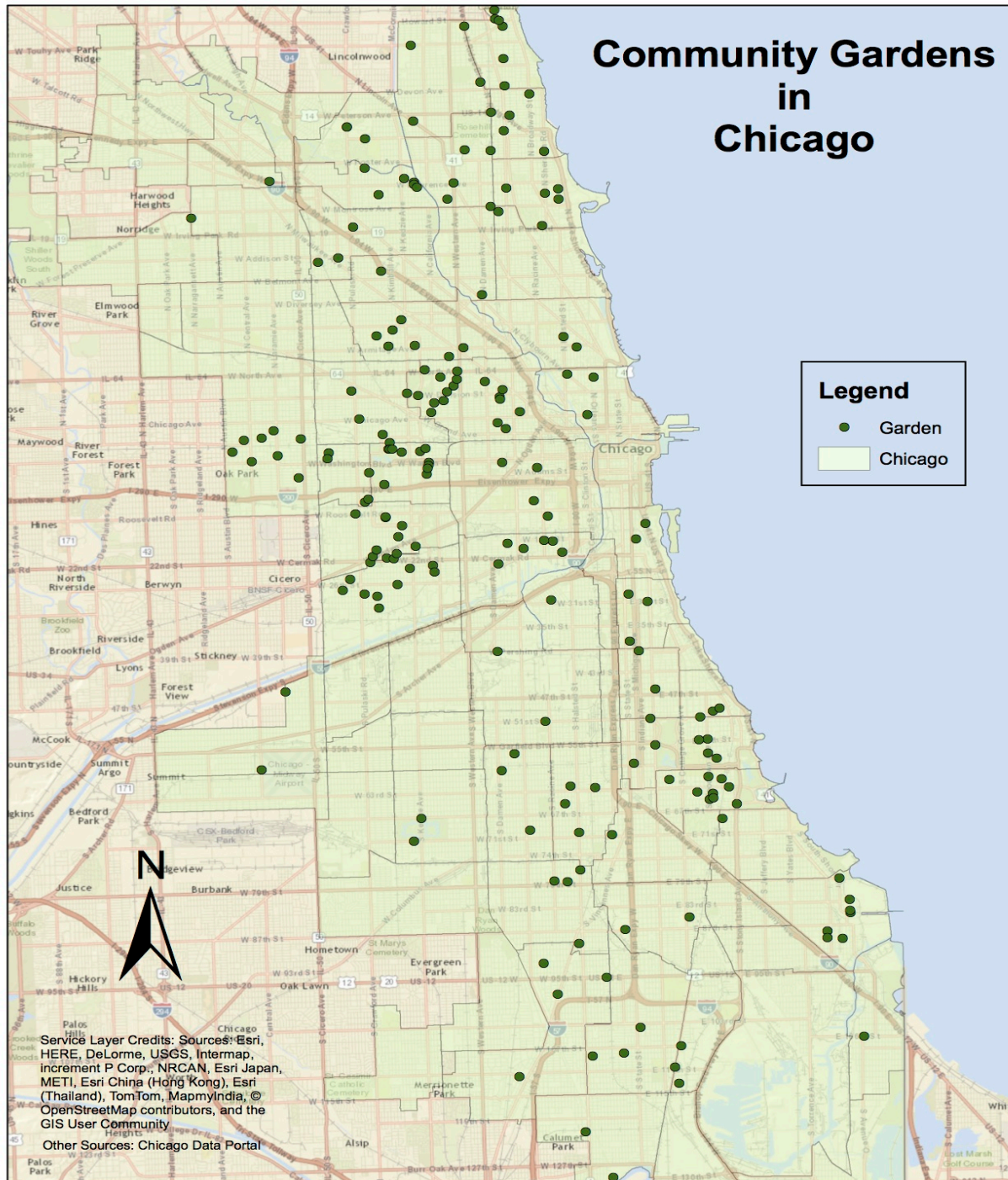
Total pounds of crops **517,157 Lbs.** (259 Tons)

Total value of crops: **\$1,665,698**

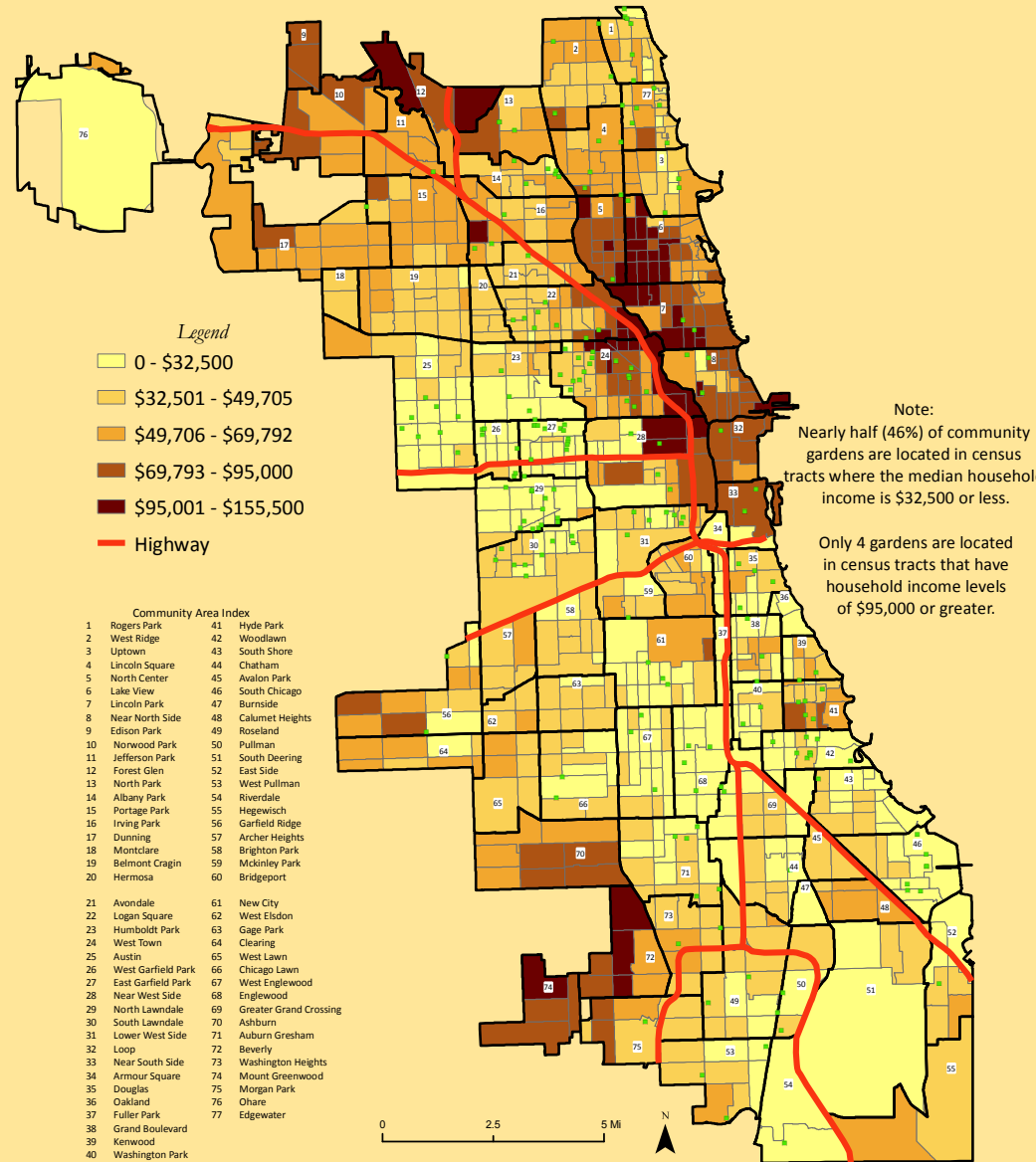
Total Acres: **42.56 ACRES**



Community Gardens in Chicago



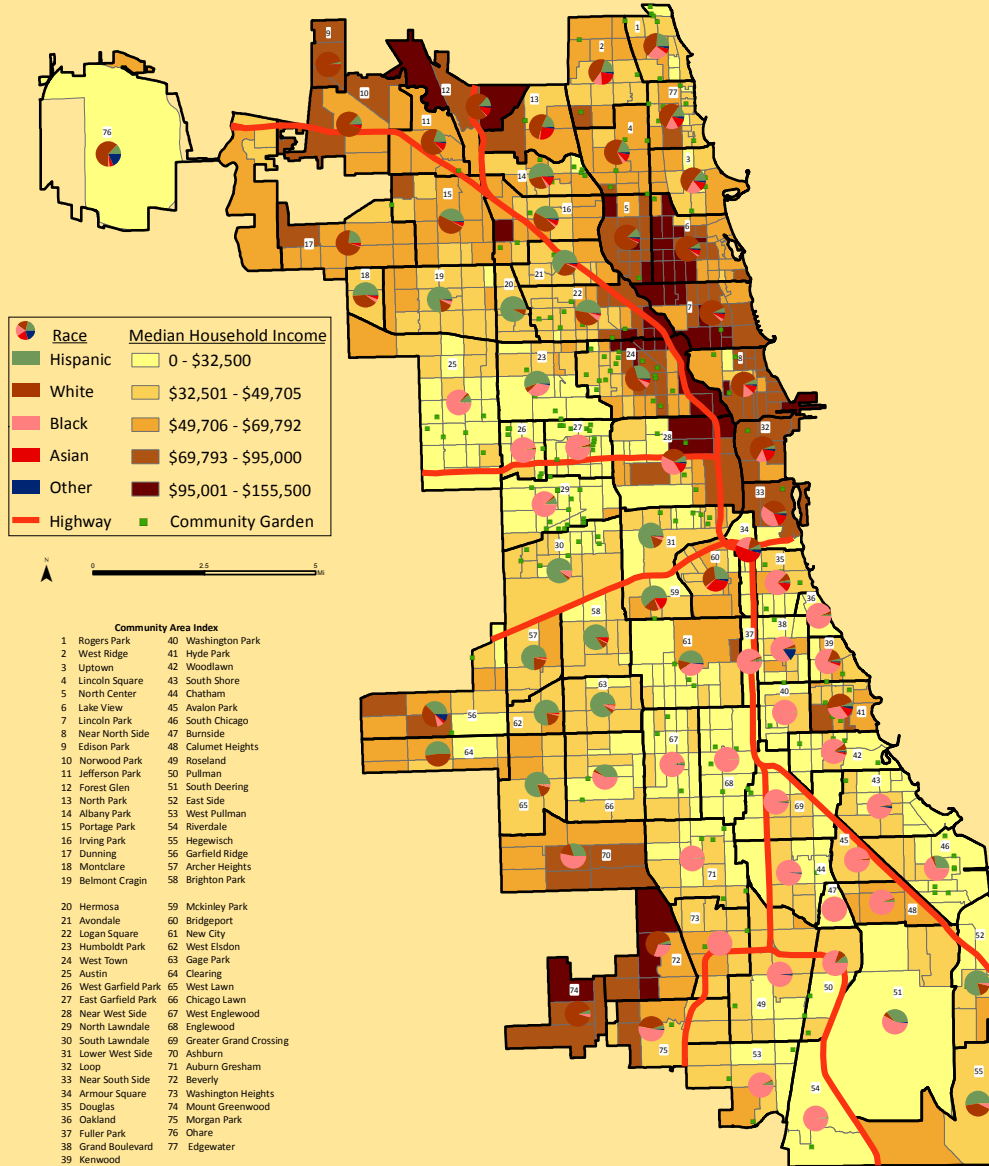
Income Level and the Location of Chicago Community Gardens



Sources
 Tract-Level Median Household Income, ACS 5-Year Estimates 2008-2012
 Community Gardens, Neighborspace (2013)
 Community Area Boundary, City of Chicago
 Highways, U.S. National Transportation Atlas

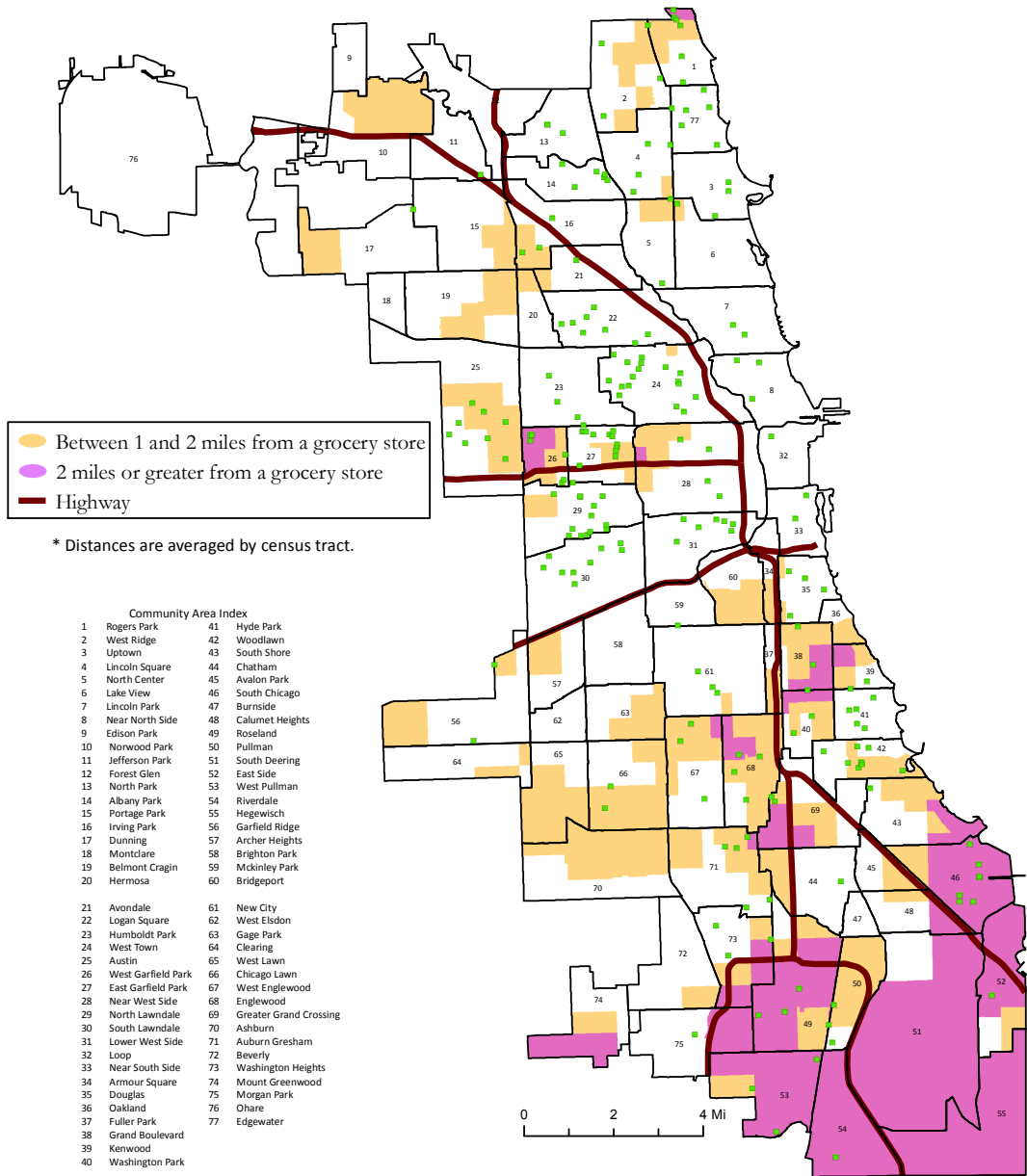
Author
 Derek B. Kaden
 DePaul University's Dept. of Geography
 Feb. 2015

Race and Income in Relation to Chicago's Community Gardens

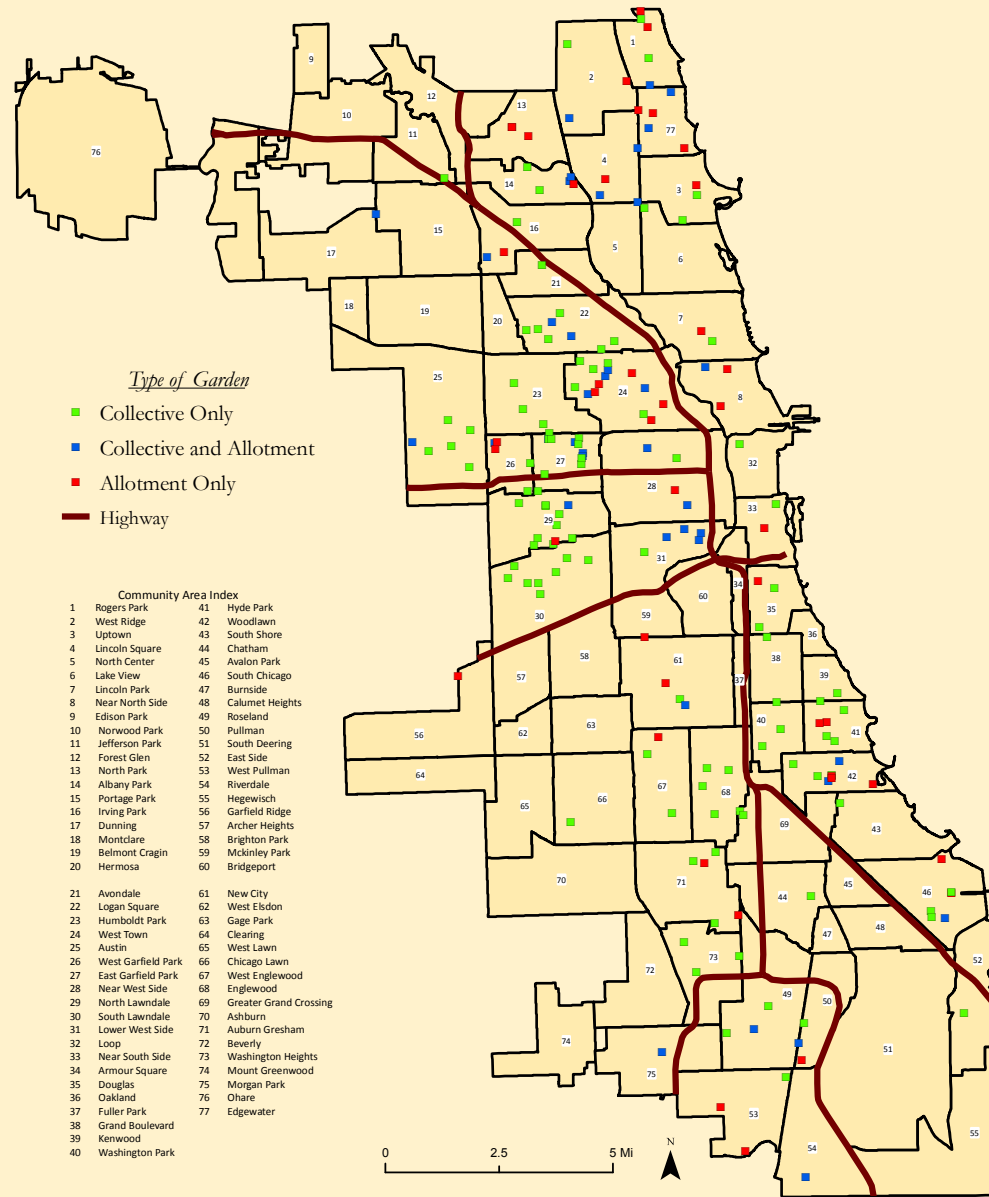


Sources
 Race and Income, ACS 5-Year Estimates 2008-2012
 Community Gardens, Neighborhoods
 Community Area Boundary, City of Chicago
 Highways, U.S. National Transportation Atlas

Chicago Community Gardens in Relation to Areas with Low Food Accessibility



How are Chicago's Community Gardens Laid Out: as Allotments or Collectives?



Type of Garden

- Collective Only
- Collective and Allotment
- Allotment Only
- Highway

Community Area Index

1 Rogers Park	41 Hyde Park
2 West Ridge	42 Woodlawn
3 Uptown	43 South Shore
4 Lincoln Square	44 Chatham
5 North Center	45 Avalon Park
6 Lake View	46 South Chicago
7 Lincoln Park	47 Burnside
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22 Logan Square	62 West Elsdon
23 Humboldt Park	63 Gage Park
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25 Austin	65 West Lawn
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28 Near West Side	68 Englewood
29 North Lawndale	69 Greater Grand Crossing
30 South Lawndale	70 Ashburn
31 Lower West Side	71 Auburn Gresham
32 Loop	72 Beverly
33 Near South Side	73 Washington Heights
34 Armour Square	74 Mount Greenwood
35 Douglas	75 Morgan Park
36 Oakland	76 Ohare
37 Fuller Park	77 Edgewater
38 Grand Boulevard	
39 Kenwood	
40 Washington Park	

Yields (Lbs.)

1.	Tomato	101,639
2.	Squash	56,460
3.	Beans	50,579
4.	Swiss Chard	32,844
5.	Collards	23,507
6.	Peas	21,130
7.	Peppers	17,295
8.	Corn	16,481
9.	Lettuce	14,863
10.	Onions	14,436

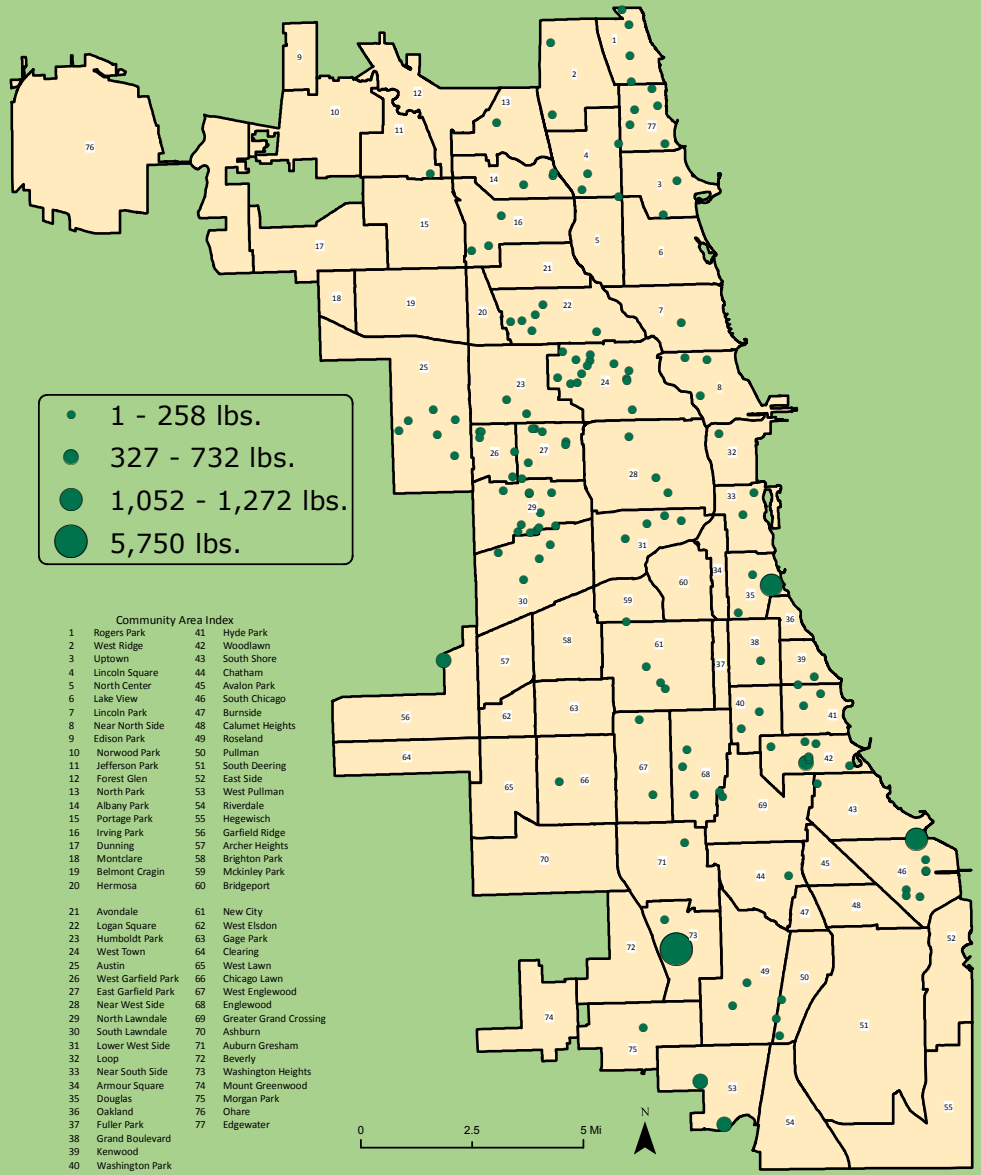


Value (\$)

1.	Tomatoes	\$204,294
2.	Beans	\$112,791
3.	Peas	\$112,415
4.	Collards	\$97,792
5.	Chives	\$91,092
6.	Chard	\$90,979
7.	Mint	\$84,279
8.	Squash	\$79,608
9.	Berries	\$66,113
10.	Basil	\$53,613



Collard Green Poundage in Chicago's Community Gardens



- 1 - 258 lbs.
- 327 - 732 lbs.
- 1,052 - 1,272 lbs.
- 5,750 lbs.

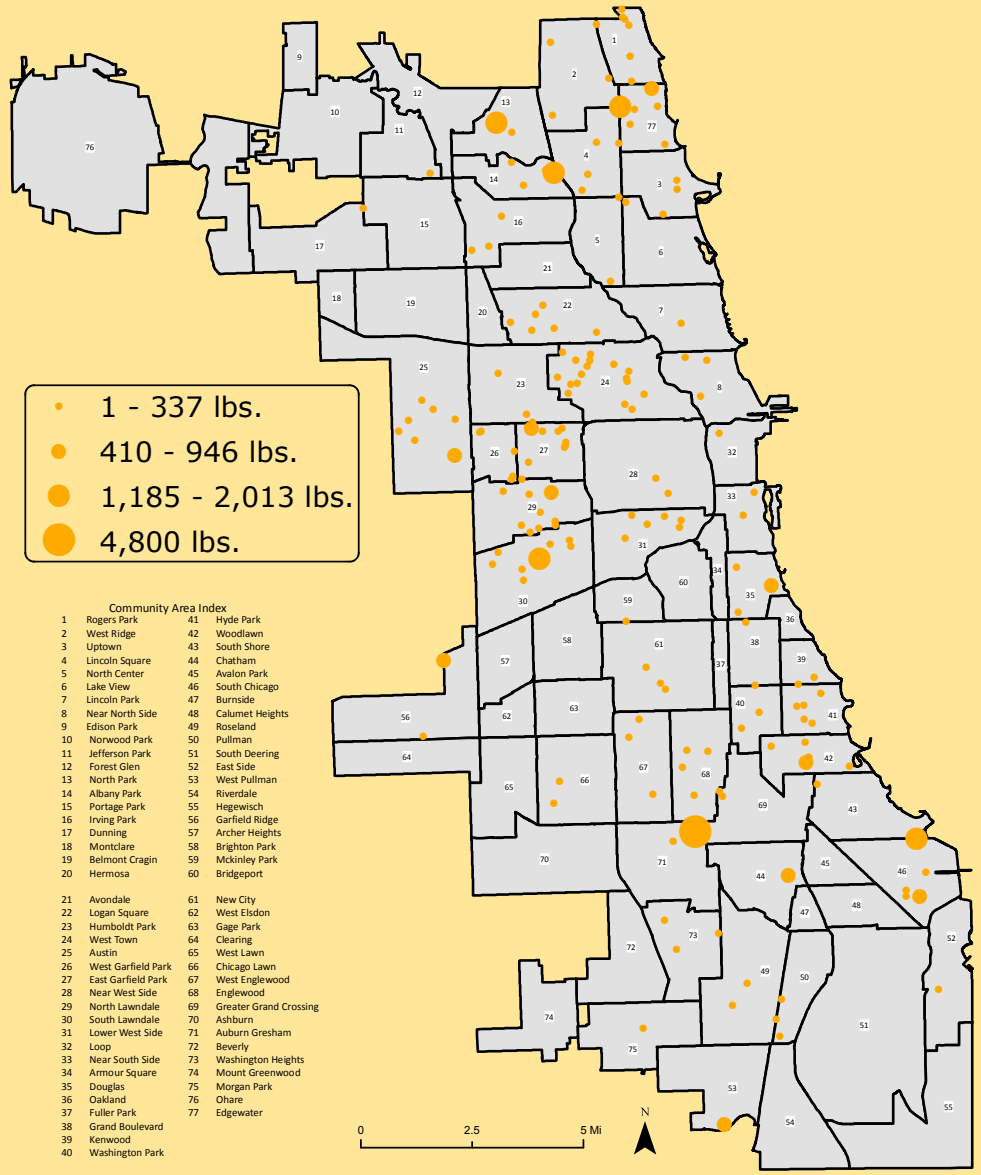
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11	Jefferson Park	51	South Deering
12	Forest Glen	52	East Side
13	North Park	53	West Pullman
14	Albany Park	54	Riverdale
15	Portage Park	55	Hegewisch
16	Irving Park	56	Garfield Ridge
17	Dunning	57	Archer Heights
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30	South Lawndale	70	Ashburn
31	Lower West Side	71	Auburn Gresham
32	Loop	72	Beverly
33	Near South Side	73	Washington Heights
34	Armour Square	74	Mount Greenwood
35	Douglas	75	Morgan Park
36	Oakland	76	Ohare
37	Fuller Park	77	Edgewater
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39	Kenwood		
40	Washington Park		

Sources
 Collard Green Poundage, Neighborspace (2013)
 Community Area Boundary, City of Chicago

Author
 Derek Kaden, Mar. 2015

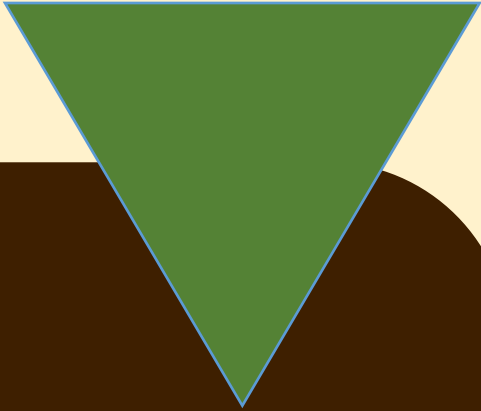
Squash Poundage in Chicago's Community Gardens



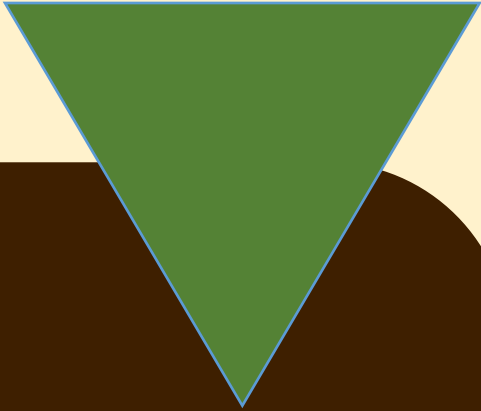
Distribution

Households, **Neighbors, Friends, Youth**



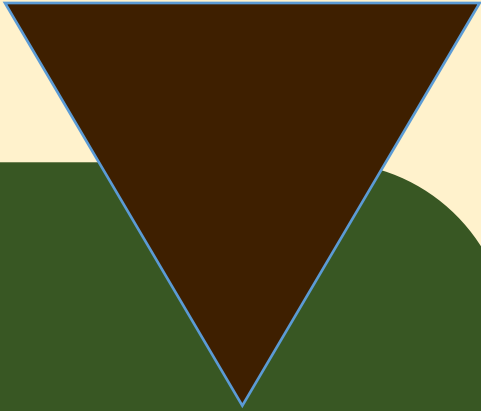


The neighbors take some, ain't nobody sellin' it, somebody might come by and take some, but most people come by and do it like they would from the store- put it in a box

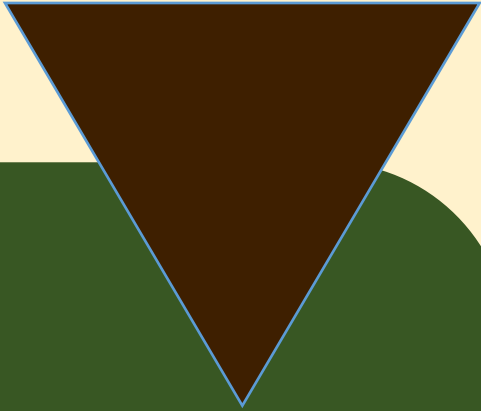


So, for the most part, we're eating what we grow. And if we're not eating what we grow, people who walk by and pick it are eating what we grow

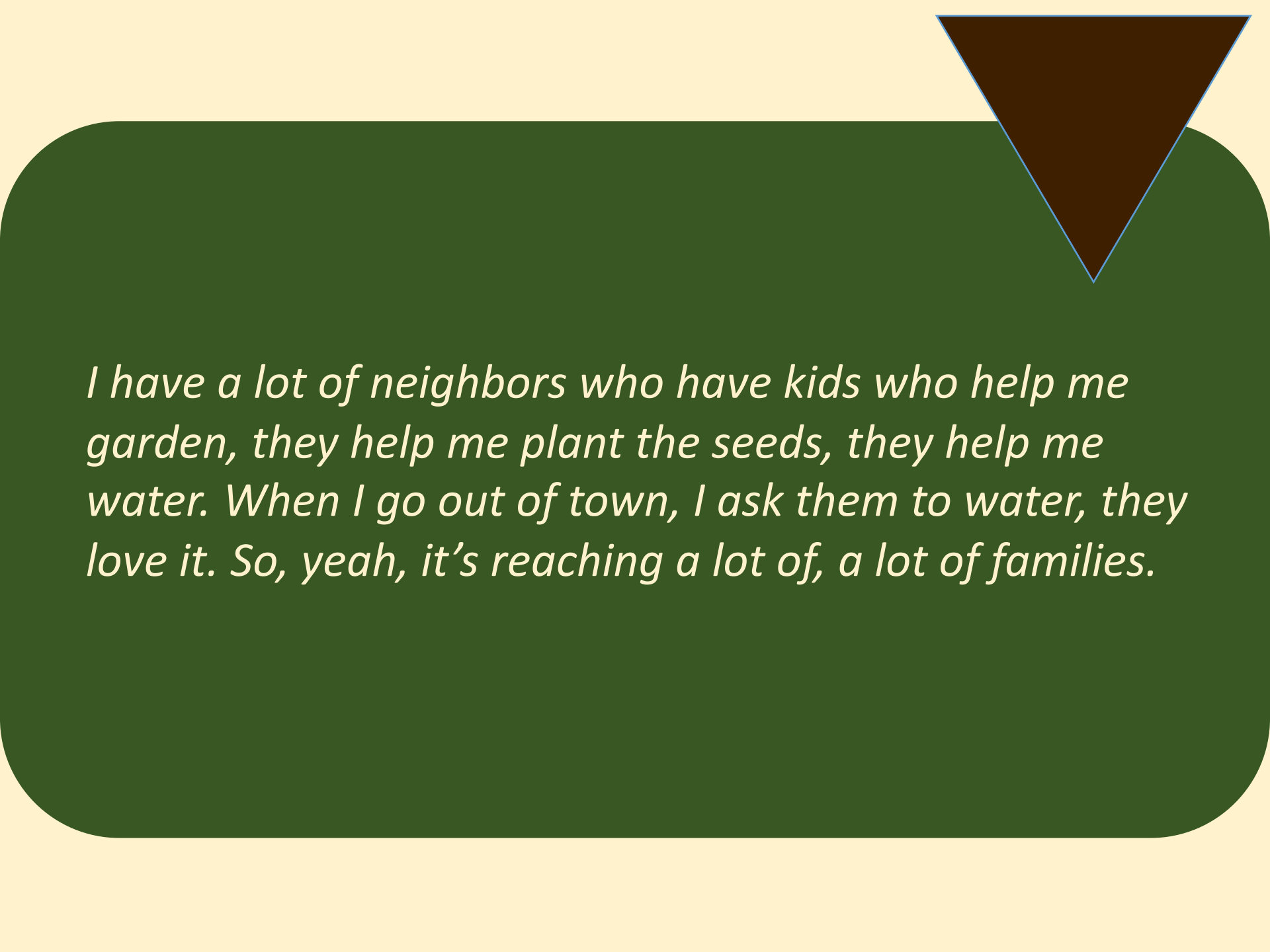




I think we really want kids to eat healthy. I mean we want families to eat healthy, but obviously starting with children. You know, teaching them why you're supposed to eat fruits and vegetables. I think we technically live in a food desert where there is not a lot of access to fresh produce, so wanting kids to have that access, but also just wanting kids to know like, "this is how broccoli grows, break it off and eat it."



And we also have kids who just – they'll take a pot of greens and take it home with them. And kids really, really love it cause I have this one kid who, two months ago, he was like, "Hey, are we gonna grow those things that are orange and long?" I was like, "A carrot." He was like, "Yeah, a carrot. Are we gonna grow those?"



I have a lot of neighbors who have kids who help me garden, they help me plant the seeds, they help me water. When I go out of town, I ask them to water, they love it. So, yeah, it's reaching a lot of, a lot of families.



Nutritional Yield

Mean Number of Servings of Select Vegetables Per Garden

Item	N	Minimum	Maximum	Mean
Beans	166	.24	23564.39	382.4
Beets	5	.00	16.14	6.25
Asparagus	5	.00	2.08	.44
Broccoli	111	.87	12823.98	319.1
Bokchoy	5	.00	38.53	11.4
Brussel	37	1.37	6472.12	344.4
Cabbage	107	4.87	57183.66	1363.5
Carrot	127	5.32	49594.54	949.6
Celery	54	10.78	88334.27	2904.8
Collard	152	5.73	588516.51	6848.4
Cowpeas	6	1.62	32.95	14.8

Daily Requirement: 3-4 servings per/day

Data Analysis by Angela Odoms-Young, UIC



Nutritional Yield

Mean Number of Servings of Select Fruits Per Garden

Item	N	Minimum	Maximum	Mean
Grapes	39	.19	2472.23	183.2
Strawberries	119	1.19	24300.44	409.0
Rhubarb	60	.00	68820.40	1714.4
Melon	97	.51	6572.65	223.2

Daily Requirement: 3-4 servings per/day

Data Analysis by Angela Odoms-Young, UIC



Nutritional Yield

Mean Grams of Fiber for Selected Vegetables

Item	N	Minimum	Maximum	Mean
Alfafa	5	26.12	1206.29	572.8
Beets	5	.00	27.88	10.79
Artichoke	9	12.23	2927.75	481.4
Beans	166	8.82	883664.68	14341.5
Broccoli	111	2.99	43967.93	1094.0
Bokchoy	5	.00	7.10	2.11
Brussel	37	4.25	20149.07	1072.2
Cabbage	107	4.59	53890.36	1285.0
Carrots	127	12.76	119026.91	2279.1
Celeriac	8	4.07	879.27	169.7
Celery	54	4.04	33125.35	1089.3
Collards	152	8.82	905410.02	10536.1
Corn	101	6.13	296986.88	7870.6



Policy/Funding Issues

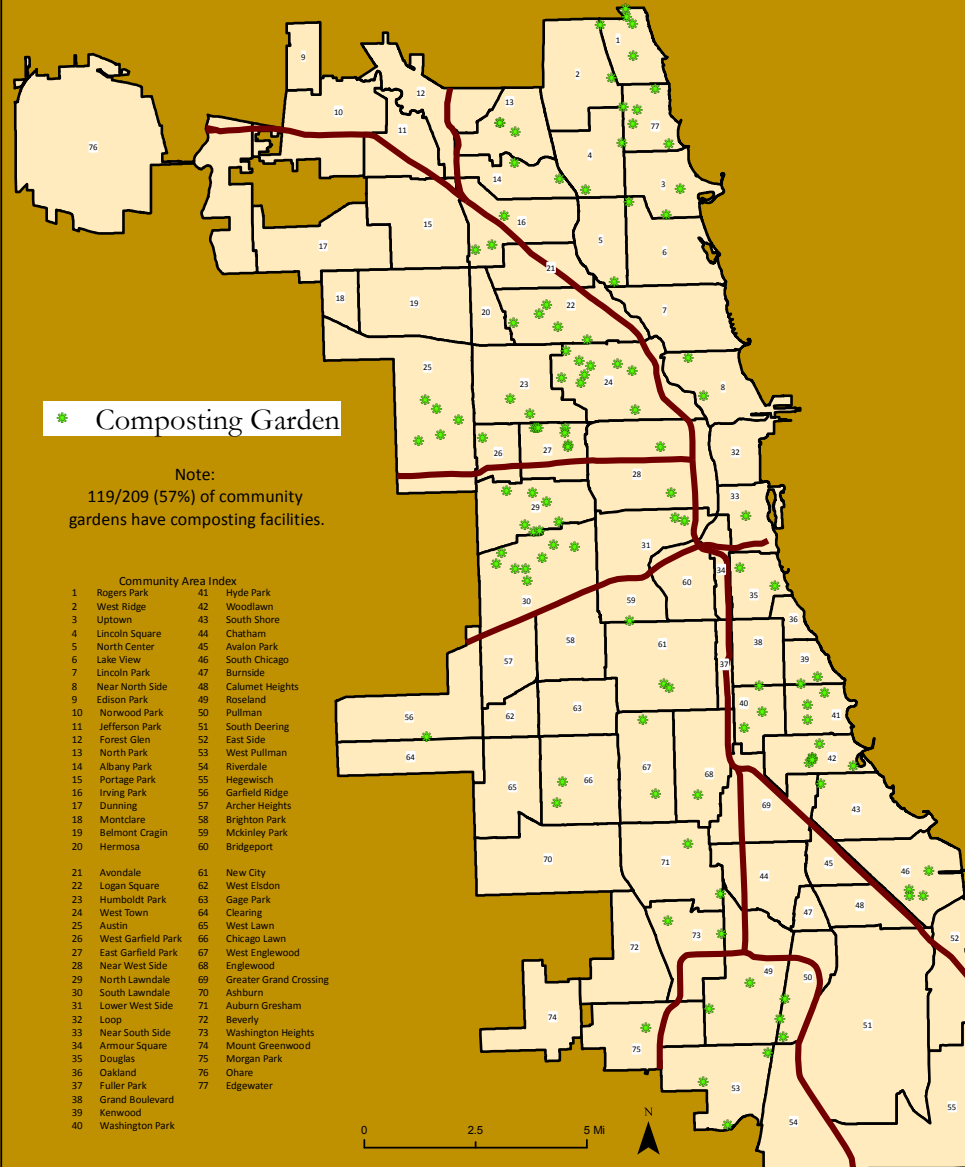
Compost

Water

Season Extension



Chicago Community Gardens with Composting Facilities



 Composting Garden

Note:
119/209 (57%) of community
gardens have composting facilities.

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How are Chicago Community Gardens Supplying Their Water?



Note:
Nearly 1/4 of all gardens rely on connection to a private hose for their water supply.

Chicago Community Gardens with Season-Extending Facilities



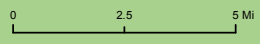
Legend

- Cloche (3)
- Hoop House (6)
- Green House (4)
- Cold Tunnel (7)
- Cold Frame (10)
- ▲ Cold Tunnel and Hoop House (1)
- ▲ Cold Frame and Cold Tunnel (2)
- ▲ Cold Frame and Cloche (1)
- ▲ Cold Tunnel and Cloche (1)
- Highway

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Note:
35/209 (17%) of
gardens have facilities that
allow them to produce past
the regular growing season.



Chicago's
Harvest Study

Thank you

Howard Rosing (hrosing@depaul.edu)



NeighborSpace
Community Managed Open Space

 DEPAUL UNIVERSITY

IRWIN W. STEANS CENTER

FOR COMMUNITY-BASED SERVICE LEARNING & COMMUNITY SERVICE STUDIES