Community Gardens Count
Measuring Chicago’s Harvest
**Principal Investigators**
Howard Rosing, DePaul University
Ben Helphand, Neighborspace

**Research Team**
Domenic Vitiello, Angela Odoms-Young, Martha Boyd, Patricia Bon, Jenny Chen, Adrienne Detanico, Caitlin Donato, Guadalupe Garcia, Mae Kelly, Sally Hamann, Sarah Hernandez, Nicole Llorens Monteserín, Rosamond Meerdink, Ken Wagner, Christopher Weber, Britt Willey, Michelle Jones; Amy DeLorenzo
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
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**
Income Level and the Location of Chicago Community Gardens

Legend
- 0 - $32,500
- $32,501 - $49,705
- $49,706 - $69,792
- $69,793 - $95,000
- $95,001 - $155,500
- Highway

Note:
Nearly half (46%) of community gardens are located in census tracts where the median household income is $32,500 or less.

Only 4 gardens are located in census tracts that have household income levels of $95,000 or greater.

Community Area Index
1 Rogers Park
2 West Ridge
3 Uptown
4 Lincoln Square
5 North Center
6 Lake View
7 Lincoln Park
8 Near North Side
9 Edgewater
10 Norwood Park
11 Jefferson Park
12 Forest Glen
13 North Park
14 Albany Park
15 Portage Park
16 Irving Park
17 Cumber
18 Montclare
19 Belmont-Cragin
20 Hermosa
21 Avondale
22 Logan Square
23 Humboldt Park
24 West Town
25 Austin
26 West Garfield Park
27 East Garfield Park
28 Near West Side
29 North Lawndale
30 South Lawndale
31 Lower West Side
32 Loop
33 Near South Side
34 Armour Square
35 Douglas
36 Oakwood
37 Fuller Park
38 Grand Boulevard
39 Kenwood
40 Washington Park

Data:
- 2011-2015 5-Year Estimates ACS IPUMS
- Community Gardens, Neighborhood (2015)
- Community Area Boundaries, City of Chicago
- Highways, IL Department of Transportation Atlas

Author:
David A. Kubat, University of Illinois at Chicago

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Race and Income in Relation to Chicago's Community Gardens

Community Area Index:

1. Rogers Park  40. Washington Park
2. West Ridge  41. Hyde Park
3. Uptown  42. Woodlawn
4. Lincoln Square  43. South Shore
5. North Center  44. Chatham
6. Lake View  45. Avalon Park
7. Lincoln Park  46. South Chicago
8. Near North Side  47. Berwyn
10. Norwood Park  49. Morgan Park
11. Jefferson Park  50. Fullerton
12. Forest Glen  51. South Shore
13. North Park  52. East Side
15. Portage Park  54. Riverdale
16. Irving Park  55. Hegewisch
17. Dunning  56. Garfield Ridge
18. Madison  57. Archer Heights
20. Hermosa  59. Morgan Park
21. Avondale  60. Bridgeport
22. Logan Square  61. New City
23. Humboldt Park  62. West Elgin
24. West Town  63. Garfield Park
25. Austin  64. Clearing
26. West Garfield Park  65. West Lawn
27. East Garfield Park  66. Chicago Lawn
28. Near West Side  67. West Englewood
29. North Lawndale  68. Englewood
30. South Lawndale  69. Greater Grand Crossing
31. Lawndale-West Side  70. Archer
32. Loop  71. Auburn Gresham
33. Near South Side  72. Beverly
34. Armour Square  73. Washington Heights
35. Douglas  74. Mount Greenwood
36. Oaklawn  75. Morgan Park
37. Fuller Park  76. Gage Park
38. Grand Boulevard  77. Eggleston
39. Ravenswood
Chicago Community Gardens in Relation to Areas with Low Food Accessibility

- Between 1 and 2 miles from a grocery store
- 2 miles or greater from a grocery store
- Highway

* Distances are averaged by census tract.

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 Lakeview 46 South Chicago
7 Lincoln Park 47 Burnside
8 Near North Side 48 Calumet Heights
9 Edison Park 49 Rockland
10 Norwood Park 50 Pullman
11 Jefferson Park 51 South Deering
12 Forest View 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
18 Montclare 58 Brighton Park
19 Belmont Cragin 59 McKinley Park
20 Hermosa 60 Bridgeport
21 Austin 61 New City
22 Logan Square 62 West Elston
23 Humboldt Park 63 Cabbage Park
24 West Town 64 Clearing
25 Austin 65 West Lawn
26 West Garfield Park 66 Chicago Lawn
27 East Garfield Park 67 West Englewood
28 Near West Side 68 Englewood
29 North Lawndale 69 Greater Grand Crossing
30 South Lawndale 70 Ashburn
31 Lower West Side 71 Ashburn-Gresham
32 Loop 72 Beverly
33 Near South Side 73 Washington Heights
34 Armour Square 74 Mount Greenwood
35 Douglass 75 Morgan Park
36 Oakwood 76 Oakwood
37 Fuller Park 77 Edgewater
38 Grand Boulevard
39 Kenwood
40 Washington Park

Source: Food Access Index. Metropolitan Planning Council, 2013
Community Area Boundary, City of Chicago, 2015
U.S. Census Bureau GIS

Author: Sarah A. Thaler
How are Chicago's Community Gardens Laid Out: as Allotments or Collectives?
<table>
<thead>
<tr>
<th>Rank</th>
<th>Crop</th>
<th>Yields (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tomato</td>
<td>101,639</td>
</tr>
<tr>
<td>2.</td>
<td>Squash</td>
<td>56,460</td>
</tr>
<tr>
<td>3.</td>
<td>Beans</td>
<td>50,579</td>
</tr>
<tr>
<td>4.</td>
<td>Swiss Chard</td>
<td>32,844</td>
</tr>
<tr>
<td>5.</td>
<td>Collards</td>
<td>23,507</td>
</tr>
<tr>
<td>6.</td>
<td>Peas</td>
<td>21,130</td>
</tr>
<tr>
<td>7.</td>
<td>Peppers</td>
<td>17,295</td>
</tr>
<tr>
<td>8.</td>
<td>Corn</td>
<td>16,481</td>
</tr>
<tr>
<td>9.</td>
<td>Lettuce</td>
<td>14,863</td>
</tr>
<tr>
<td>10.</td>
<td>Onions</td>
<td>14,436</td>
</tr>
</tbody>
</table>
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
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

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

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

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grapes</td>
<td>39</td>
<td>.19</td>
<td>2472.23</td>
<td>183.2</td>
</tr>
<tr>
<td>Strawberries</td>
<td>119</td>
<td>1.19</td>
<td>24300.44</td>
<td>409.0</td>
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<tr>
<td>Rhubarb</td>
<td>60</td>
<td>.00</td>
<td>68820.40</td>
<td>1714.4</td>
</tr>
<tr>
<td>Melon</td>
<td>97</td>
<td>.51</td>
<td>6572.65</td>
<td>223.2</td>
</tr>
</tbody>
</table>

Daily Requirement: 3-4 servings per/day

Data Analysis by Angela Odoms-Young, UIC
# Nutritional Yield

## Mean Grams of Fiber for Selected Vegetables

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfafa</td>
<td>5</td>
<td>26.12</td>
<td>1206.29</td>
<td>572.8</td>
</tr>
<tr>
<td>Beets</td>
<td>5</td>
<td>0.00</td>
<td>27.88</td>
<td>10.79</td>
</tr>
<tr>
<td>Artichoke</td>
<td>9</td>
<td>12.23</td>
<td>2927.75</td>
<td>481.4</td>
</tr>
<tr>
<td>Beans</td>
<td>166</td>
<td>8.82</td>
<td>883664.68</td>
<td>14341.5</td>
</tr>
<tr>
<td>Broccoli</td>
<td>111</td>
<td>2.99</td>
<td>43967.93</td>
<td>1094.0</td>
</tr>
<tr>
<td>Bokchoy</td>
<td>5</td>
<td>0.00</td>
<td>7.10</td>
<td>2.11</td>
</tr>
<tr>
<td>Brussel</td>
<td>37</td>
<td>4.25</td>
<td>20149.07</td>
<td>1072.2</td>
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<tr>
<td>Cabbage</td>
<td>107</td>
<td>4.59</td>
<td>53890.36</td>
<td>1285.0</td>
</tr>
<tr>
<td>Carrots</td>
<td>127</td>
<td>12.76</td>
<td>119026.91</td>
<td>2279.1</td>
</tr>
<tr>
<td>Celeriac</td>
<td>8</td>
<td>4.07</td>
<td>879.27</td>
<td>169.7</td>
</tr>
<tr>
<td>Celery</td>
<td>54</td>
<td>4.04</td>
<td>33125.35</td>
<td>1089.3</td>
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<tr>
<td>Collards</td>
<td>152</td>
<td>8.82</td>
<td>905410.02</td>
<td>10536.1</td>
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<tr>
<td>Corn</td>
<td>101</td>
<td>6.13</td>
<td>296986.88</td>
<td>7870.6</td>
</tr>
</tbody>
</table>

Data Analysis by Angela Odoms-Young, UIC
Policy/Funding Issues

Compost

Water

Season Extension
How are Chicago Community Gardens Supplying Their Water?

Type of Water Supply
- City Hydrant Only
- Rain Barrels Only
- Private Hose Only
- On-Site Hose Only
- Multiple Sources
- No Reliable Water Source

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
9. Edison Park 49. Roseland
10. Norwood Park 50. Pullman
11. Jefferson Park 51. South Chicago
12. Edgewater 52. East Side
13. North Park 53. West Pullman
15. Portage Park 55. Hegewisch
16. Irving Park 56. Garfield Ridge
17. Douglas 57. Archer Heights
18. Morgan Park 58. Brightwood
20. Hermosa 60. Bridgeport
21. Audubon 61. New City
22. Logan Square 62. West Design
23. Humboldt Park 63. Lake Park
24. West Town 64. Clevegarg
25. Austin 65. West Lawn
26. West Garfield Park 66. Chicago Lawn
27. East Garfield Park 67. Englewood
28. Near West Side 68. Englewood
29. North Lawndale 69. Greater Grand Crossing
30. South Lawndale 70. Ainsworth
31. Lower West Side 71. Ashwood
32. Loop 72. Beverly
33. Near South Side 73. Washington Heights
34. Armour Square 74. K hypert Greenwood
35. Douglas 75. Morgan Park
36. Chatham 76. Charn
37. Fuller Park 77. Edgewater
38. Grand Boulevard 78. New City
39. Kenwood
40. Washington Park

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

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
8 Near North Side 48 Calumet Heights
9 Edison Park 49 Roseland
10 Norwood Park 50 Pullman
11 Jefferson Park 51 South Deering
12 Comer 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
18 Montclare 58 Brighton Park
19 Belmont Cragin 59 McKinley Park
20 Hermosa 60 Bridgeport
21 Avondale 61 New City
22 Logan Square 62 West Elston
23 Humboldt Park 63 Gage Park
24 West Town 64 Cicero
25 Austin 65 East Lawn
26 West Garfield Park 66 Chicago Lawn
27 East Garfield Park 67 West Englewood
28 Near West Side 68 Englewood
29 North Lawndale 69 Greater Grand Crossing
30 South Lawndale 70 Ashburn
31 Lower West Side 71 Auraum-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 Oakdale
37 Fuller Park 77 Edgewater
38 Grand Boulevard 78 Chatham
39 Kenwood 79 Chatham
40 Washington Park 80 Chatham

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

Howard Rosing (hrosing@depaul.edu)