
Feeding America

Healthy Cities Phase II Year Two

Phase III Year One

Evaluation Results

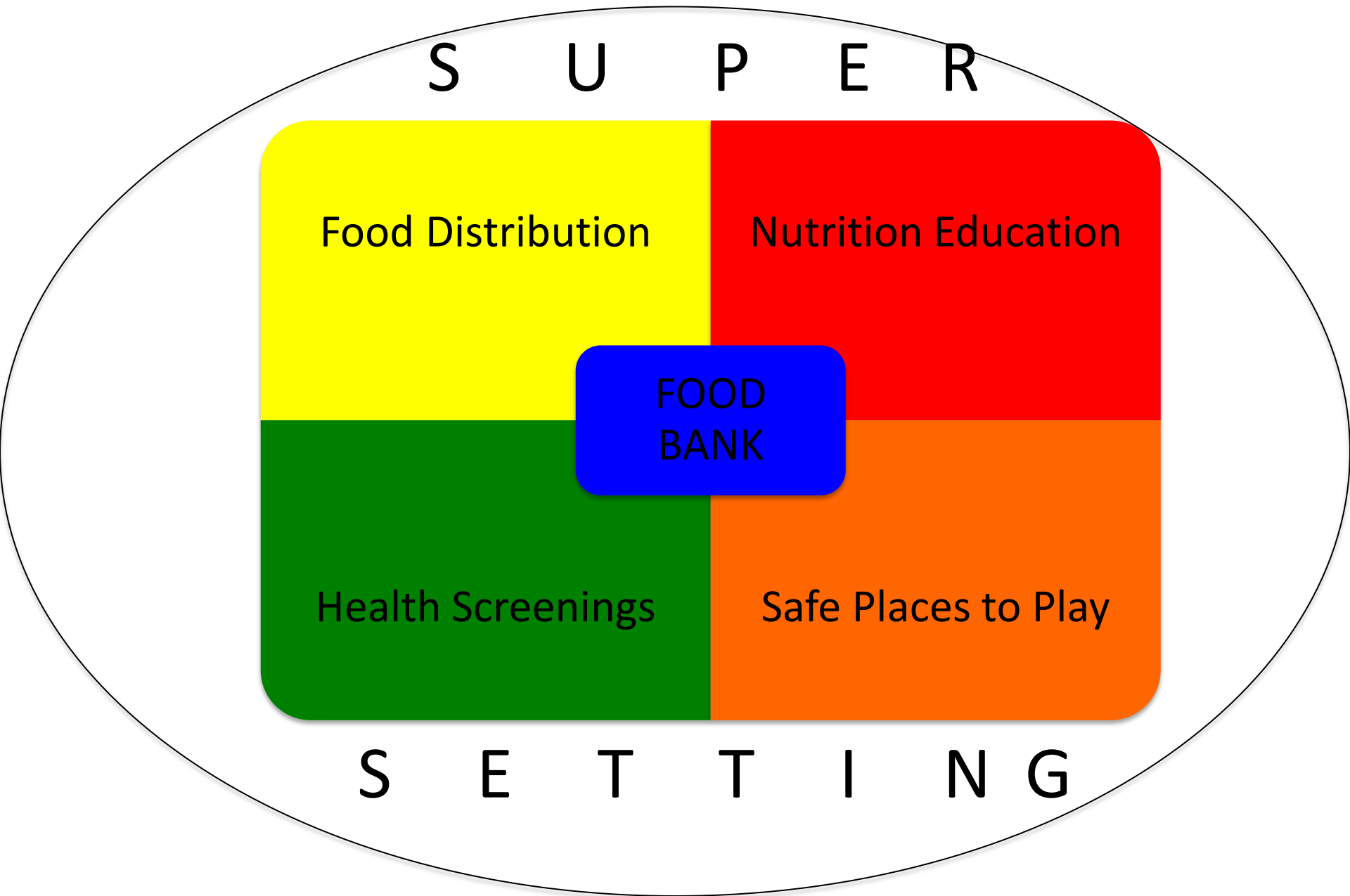
Background

- The Healthy Cities **integrated health and nutrition program** was initially piloted in three cities (Chicago, IL, Newark, NJ, Oakland, CA) from September 2014 – May 2015.

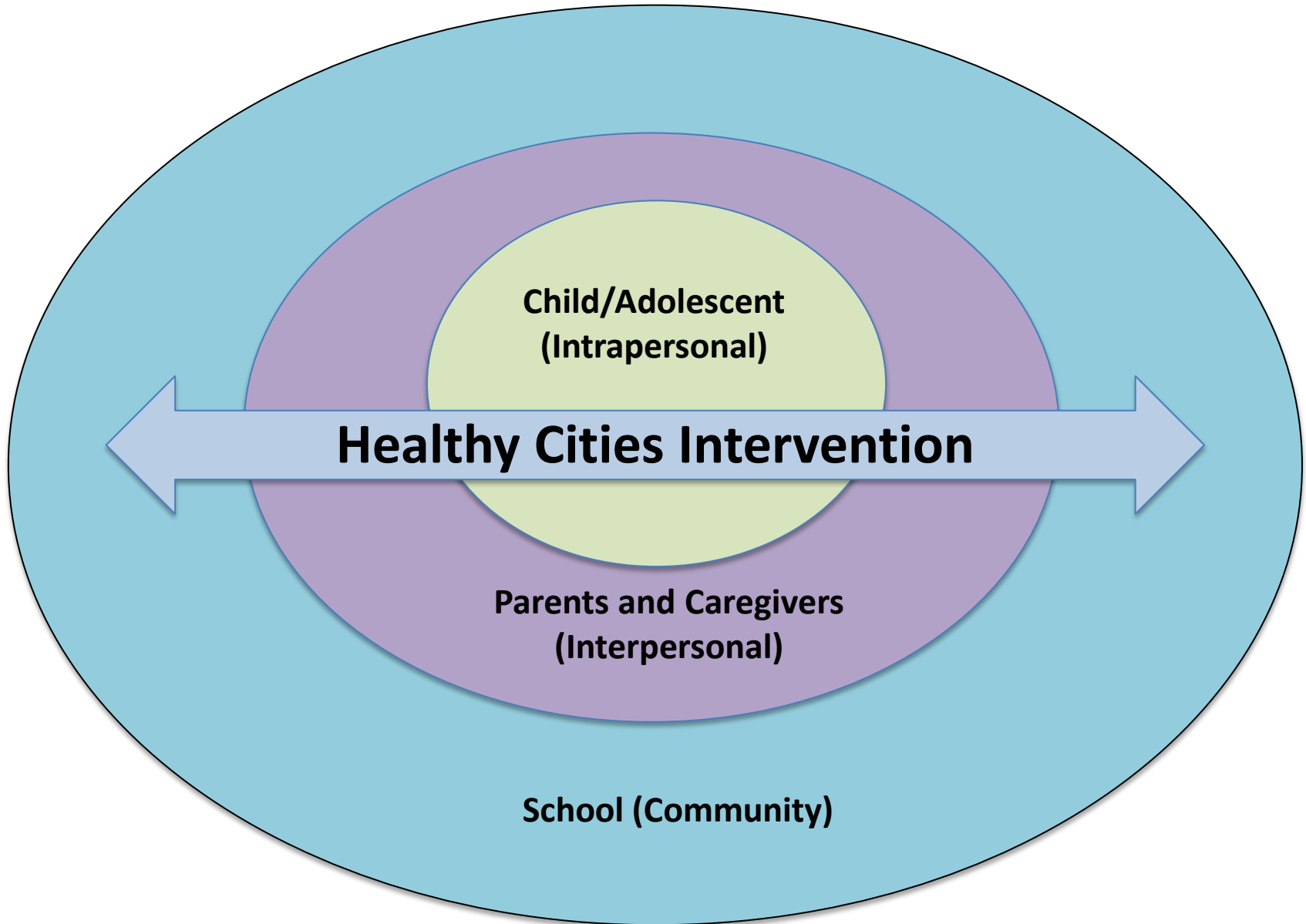
Background

- Pilot demonstrated feasibility of FA food banks serving the role of primary facilitators of partnership development to offer an **integrated health and nutrition program.**
- Set the foundation for replication and implementation in other FA food banks.

Healthy Cities Integrative Nutrition and Health Model



Ecological Approach to Healthy Cities Integrative Nutrition and Health Model



Evaluation Objectives

- Determine HC food bank clients changes in health and nutrition knowledge, attitudes, and behaviors.
- Determine perceived client benefit and impact.
- Determine continued sustainability of HC integrative health and nutrition model.

Food Bank Profiles, Partnerships, and Activities

Greater Cleveland Food Bank: Phase II Year Two



Greater Cleveland Food Bank

Food Distribution	Nutrition Education	Health Screening	Safe Places to Play*
<ul style="list-style-type: none"> • After-school market days • Produce and shelf-stable foods distributed <p>PARTNERS:</p> <ul style="list-style-type: none"> • Cleveland Metropolitan School District • Trinity Cathedral 	<ul style="list-style-type: none"> • Schools • Smoothie curriculum • Tip cards and recipe sheets distributed <p>PARTNER:</p> <ul style="list-style-type: none"> • Cleveland Clinic (Food is Knowledge Curriculum) 	<ul style="list-style-type: none"> • Schools • Asthma • Height/weight (body mass index) • Vision screening <p>PARTNERS:</p> <ul style="list-style-type: none"> • MetroHealth Hospital • University Hospitals Safety Squad • Cleveland Clinic 	<ul style="list-style-type: none"> • Playgrounds at school food distribution sites • Volunteers encouraged and supervised active play • Hula hoops and balls were provided at food distribution sites • Fitness Camps • Yoga • Zumba <p>PARTNER:</p> <ul style="list-style-type: none"> • Cleveland Metropolitan School District • NuLife Fitness • YMCA • Cleveland Clinic • Children's Hunger Alliance

Greater Cleveland Food Bank

Partner	Role in Project
Cleveland Metropolitan School District	Served as a site for food distributions, nutrition education, health screenings, and safe places to play program components.
Trinity Cathedral	Provided food for food market days at one of the school sites.
MetroHealth Hospital Systems	Provided safety information such as seat belt and car safety, healthy and safe Halloween at one school site.
University Hospitals Safety Squad	Provided health screenings (asthma, height/weight (BMI), vision, blood pressure) to one school site.
Cleveland Clinic	Provided health screenings (asthma, height/weight (BMI), vision, blood pressure) to one school site; held fitness challenge at one school site.
NuLife Fitness	Held fitness camps at some school sites.
YMCA	Led fitness activities/classes at some school sites.
Children's Hunger Alliance	Provided support for yoga classes at community center for two school sites.

Houston Food Bank: Phase II Year Two



Houston Food Bank

Food Distribution	Nutrition Education	Health Screening	Safe Places to Play
<ul style="list-style-type: none"> • After-school market (mobile and school-based food pantries) • Produce and shelf-stable foods distributed monthly • Seven elementary schools, one middle/high school, one high school <p>PARTNERS:</p> <ul style="list-style-type: none"> • Houston Independent School District • Pasadena Independent School District • Southwest Charter School 	<ul style="list-style-type: none"> • CATCH curriculum in elementary schools • Food demonstration, recipes and nutrition tips <p>PARTNER:</p> <ul style="list-style-type: none"> • Brighter Bites 	<ul style="list-style-type: none"> • Services: blood pressure, immunizations, physicals, dental, vision, blood sugar, lice <p>PARTNERS:</p> <ul style="list-style-type: none"> • Center for the Blind • Jamboree Dental • University of Houston College of Pharmacy • Memorial Hermann Community Benefits 	<ul style="list-style-type: none"> • CATCH curriculum <p>PARTNER:</p> <ul style="list-style-type: none"> • Brighter Bites

Houston Food Bank

Partner	Role in Project
Houston Independent School District	Served as a site for food distributions, nutrition education, health screenings, and safe places to play program components.
Pasadena Independent School District	Served as a site for food distributions, nutrition education, health screenings, and safe places to play program components.
Southwest Charter School	Served as a site for food distributions, nutrition education, health screenings, and safe places to play program components.
Brighter Bites	Provided nutrition education and opportunities for physical activity through CATCH curriculum in elementary schools.
Center for the Blind	Provided eye exams and vouchers.
Jamboree Dental	Provided vouchers for dental exams.
Memorial Hermann Community Benefits	Provided health screenings at schools.
University of Houston College of Pharmacy	Provided health screenings at schools.

Second Harvest Food Bank (NOLA): Phase III Year One



Second Harvest Food Bank

Food Distribution	Nutrition Education	Health Screening	Safe Places to Play
<ul style="list-style-type: none"> • After-school market • Produce and shelf-stable foods distributed monthly <p>PARTNERS:</p> <ul style="list-style-type: none"> • ReNew Schools (ReNew Accelerated High School and Dolores T. Aaron Elementary School) • Warren Easton Charter Foundation (Warren Easton High School) 	<ul style="list-style-type: none"> • Cooking Matters • Food demonstration • Tip cards and recipes <p>PARTNER:</p> <ul style="list-style-type: none"> • Sankofa • Tulane Dietetic Internship Program 	<ul style="list-style-type: none"> • Mental Health • Blood Glucose • Blood Pressure • Cholesterol • Lead <p>PARTNERS:</p> <ul style="list-style-type: none"> • Daughters of Charity • Louisiana Health Sciences Center • Lead Safe Louisiana • Priority Health Care • Tulane Pediatrics • Xavier National Student Pharmaceutical Program • Amerigroup • Louisiana Healthcare Connections 	<ul style="list-style-type: none"> • Volunteers encouraged and supervised active play (i.e. hopscotch) • Yoga • Hip Hop <p>PARTNER:</p> <ul style="list-style-type: none"> • Project Peaceful Warrior • Youth Run NOLA

Second Harvest Food Bank

Partner	Role in Project
Charter Schools	Served as a site for food distributions, nutrition education, health screenings, and safe places to play program components.
LA Health Sciences Center	Conducted mental health screenings and provided parenting resources to families.
Priority Health Care	Provided health screenings at school sites.
Daughters of Charity	Provided health screenings at school sites.
Healthy Louisiana Plans	Assist clients in understanding health care plans, including Medicaid plans.
Tulane University, Hispanic Consulate, Fernando Sosa	Federally Qualified Health Clinic. Provides health information in Spanish for Spanish speaking clients.
Sankofa	Conducted cooking demonstrations in support of nutrition education.
Cooking Matters	Nutrition education curriculum used by volunteers.
Project Peaceful Warrior	Conducts yoga classes at school sites.
Urban League Workforce Development	Provided economic information resources, including information on job fairs, GED completion, and adult education courses.
Office of Emergency Preparedness, Region 1	Provides education and information on emergency preparedness (i.e. Zika kits, how to prepare for a hurricane).
Journey Allen, Creative Arts Projects	Provides onsite creative art project for families; families can learn how to do at home for leisurely activities.

Evaluation Tools

- Observation and Interviews
 - Initial site visit (NOLA) and interview for process evaluation
- Surveys
 - Partner surveys
 - Program manager surveys (beginning and end)
 - Monthly logs, monthly update forms, and phone calls
 - Beginning, middle, and end point surveys:
 - Parents-guided surveys
 - Teachers-administered online
 - Face to face (final) site visit with program managers and partners
 - Cleveland and Houston

Healthy Cities Research Questions:

- How do health and **nutrition knowledge, attitudes and reported behaviors** change over time among HC program participants?
- What is the **perceived client benefit** of the integrated health services provided by the HC project?
- What are the perceptions of food bank **program managers (grantees) and their partners**?

Results

Phase II Reach: May 2015-May 2017

2,678,708 pounds of food distributed (73% produce)

45,286* households* with 55,117* children

Average 59 pounds food/household

140,862+ nutrition education* materials distributed

7,791 health screenings*

11,000 children reached through safe places to play*

***= duplicated numbers**

Cleveland & Houston Reach

Factor	Combined first 12 months (May '15 - April '16)	Combined last 13 months (May '16 - May '17)	Combined Full Program May '15 - May '17 (25 months)	OH Full Program May '15 - May '17	TX Full Program May '15 - May '17
Food distribution:					
Hours of operation	523.50	696.50	1,220.00	321.50	898.50
Number of sites distributing food*	111	150	261	107	154
Produce (lbs.)	929,540	1,019,801	1,949,341	838,072	1,111,269
Shelf-stable/other food (lbs)	280,442	448,925	729,367	183,305	546,062
Total distributed	1,209,982	1,468,726	2,678,708	1,021,377	1,657,331
Households served:					
# Households*	20,912	24,374	45,286	16,294	28,992
Adults*	29,451	37,272	66,723	29,115	37,608
Children*	25,206	29,911	55,117	25,004	30,113
Total Adults + children*	56,422	67,183	123,605	54,119	69,486
Number of nutr. ed. materials distributed:					
For Parents	37,416	63,074	100,490	4,446	96,044
For Children	18,433	21,939	40,372	4,493	35,879
Total # nutr. ed. materials distributed	55,849	85,013	140,862	8,939	131,923
Number of screenings:					
ht/wt	267	797	1,064	674	390
blood pressure	480	1,176	1,656	781	875
Dental	295	184	479	160	319
Hearing	1,251	719	1,970	8	1,962
Visual	1,487	716	2,203	202	2,001
Immunization	164	78	242	94	148
other (see below)**	16	161	177	7	170
Total number of screenings	3,960	3,831	7,791	1,926	5,865
Number reached with safe places to play activities:					
# children reached*	6,795	4,353	11,148	3,660	7,488
* duplicated numbers					
** Other screenings included screenings for asthma, diabetes, and scoliosis					

Phase III Reach: June 2016-May 2017

202,372 pounds of food distributed (63% produce)

5,282* households* with 8,726* children

Average 38 pounds food/household

4,000+ nutrition education* materials distributed

867 health screenings*

1000 children reached through safe places to play*

***= duplicated numbers**

New Orleans Reach

Factor	June 2016	July 2016	Aug. 2016	Sept. 2016	Oct. 2016	Nov. 2016	Dec. 2016	Jan. 2017	Feb. 2017	Mar. 2017	Apr. 2017	May 2017	Total Year 1 June '16- May '17 (12 mos)
Food distribution:													
Hours of operation	4	4	4	4	8	8	6	8	4	8	6	6	70
Number of sites distributing food	1	2	2	2	4	4	3	4	2	4	3	3	34
Produce (lbs.)	8,910	3,370	4,861	8,290	24,472	11,435	7,983	22,703	8,244	14,398	7,486	4,752	126,904
Shelf-stable/other food (lbs)	1,026	5,646	3,000	3,544	11,383	8,555	5,732	3,986	7,870	5,851	7,329	11,546	75,468
Total distributed	9,936	9,016	7,861	11,834	35,855	19,990	13,715	26,689	16,114	20,249	14,815	16,298	202,372
Households served:													
# Households	208	1,134	(not captured)	362	710	477	470	486	300	349	467	319	5,282
Adults	383	1,235	757	766	1,121	1,109	962	1,077	650	684	772	559	10,075
Children	316	1,192	738	533	683	806	879	1,089	573	674	649	594	8,726
Total Adults + children*	699	2,427	1,495	1,299	1,804	1,915	1,841	2,166	1,223	1,358	1,421	1,153	18,801
Number of nutr. ed. materials distributed:													
For parents	182	301	339	62	390	303	268	219	111	160	180	231	2,746
For children	73	199	9	313	205	207	189	116	71	233	194	78	1,887
Total # nutr. ed. materials distributed	255	500	348	375	595	510	457	335	182	393	374	309	4,633
Number of screenings:													
blood pressure		99	6			36	24	28				74	267
Dental			11										11
Hearing			11										11
Visual			11									15	26
other **							72	64	122	38	205	51	552
Total number of screenings		99	39	0	0	36	96	92	122	38	205	140	867
Number reached with safe places to play activities:													
# children reached*	60	0	22	138	564	21	71	41	20	47	54	0	1,038

* Duplicate numbers

** "Other" screenings included cholesterol (8), lead in-home swabs and soil kits (128), and mental health screenings (416)

Perceived Client Benefits Cleveland and Houston

Qualitative Results from Parent and
Teacher Surveys

HC II: Survey Response

	October 2015	January 2016	May 2016	October 2016	January 2017	May 2017
Parent Survey (English)	21	19	17	23	29	25
Parent Survey (Spanish)	10	13	9	8	1	5
Total Parent Surveys	31	32	26	31	30	30
Teacher Survey (Cleveland)	25	26	36	12	10	29
Teacher Survey (Houston)	24	26	78	54	41	37
Total Teacher Surveys	49	52	121*	67*	51	66

*=includes surveys from teachers not indicating which school they were from

HC III: Survey Response

	October 2016	January 2017	May 2017
Parent Survey	15	15	15
Teacher Survey	9	24	19

Emerging Themes

- Improved food security*
- Access to healthy food*
- Increased awareness of health habits*
- Improved eating behaviors*
- Increased sense of community
- School Performance



*=HC2 and HC3 Themes

Food Security: *It helps because there are times when our family is running low on some food items. (Parent, January 2017)*

Access: *We are able to eat more fresh foods (Parent, January 2017)*

Awareness of Health Habits: *They are more aware of what they take in their bodies as well as trying to be more physically active. (Teacher, May 2017)*

Improved Eating Behaviors: *We eat more vegetables. (Parent, January 2017)*
I have noticed them making better food choices and being excited about what was on the menu for the day. (Teacher, May 2017)

Community: *Having the distribution on campus builds community ties. (Teacher, May 2017)*

School Performance: *Students are more energized and more focused. (Teacher, May 2017)*

Food Security Measures HCII

Survey question: Which of the following statements best describes the food eaten in your household in the last 12 months? (not significant, p=0.3916)	October 2015 (n=31)	January 2016 (n=33)	May 2016 (n=26)	October 2016 (n=30)	Jan 2017 (n=30)	May 2017 (n=30)
There is enough of the kind of food we want to eat.	5 (16%)	9 (28%)	9 (35%)	10 (33.3%)	7 (23.3%)	8 (26.7%)
There is enough food but not always the kinds of food we want.	20 (65%)	17 (53%)	12 (46%)	13 (43.3%)	18 (60.0%)	13 (43.3%)
Sometimes there is not enough to eat.	6 (19%)	10 (30.3%)	4 (15%)	7 (23.3%)	3 (10.0%)	9 (30.0%)
Often there is not enough to eat.	0	0	1 (4%)	0	2 (6.7%)	0 (0%)
Survey question: Have you ever in the past year, gone without food to pay for (mark all that apply):						
In the last 12 months, I have gone without food to pay for medicine. P=0.7197	5 (16%)	2 (6%)	2 (8%)	4 (12.9%)	4 (13.3%)	2 (6.67%)
In the last 12 months, I have gone without food to pay for utilities. P=0.0331	13 (42%)	8 (24%)	4 (15%)	9 (30%)	9 (30%)	2 (6.67%)
In the last 12 months, I have gone without food to pay for transportation. P=0.9464	3 (10%)	5 (15%)	3 (12%)	5 (16.1%)	3 (10.0%)	3 (10.0%)
In the last 12 months, I have gone without food to pay for housing. P=0.8917	6 (19.4%)	7 (22%)	5 (19%)	5 (16.1%)	3 (10.0%)	5 (16.7%)

Food Security Measures HCIII

Survey question: Which of the following statements best describes the food eaten in your household in the last 12 months? ^a	October 2016 (n=15)	January 2017 (n=15)	May 2017 (n=15)
There is enough of the kind of food we want to eat.	5 (33.3%)	4 (26.7%)	4 (30.8%)
There is enough food but not always the kinds of food we want.	4 (26.7%)	5 (33.3%)	6 (40.0%)
Sometimes there is not enough to eat.	3 (20%)	4 (26.7%)	3 (23.1%)
Often there is not enough to eat.	3 (20%)	2 (13.3%)	0
Mean \pm SD missing food groups	2.73 \pm 0.26	2.73 \pm 0.26	3.08 \pm 0.28
Survey question: Have you ever in the past year, gone without food to pay for (mark all that apply):^b			
In the last 12 months, I have gone without food to pay for medicine.	3 (20%)	3 (20%)	3 (20%)
In the last 12 months, I have gone without food to pay for utilities.	4 (26.7%)	5 (33.3%)	6 (40%)
In the last 12 months, I have gone without food to pay for transportation.	2 (13.3%)	1 (20.0%)	2 (40%)
In the last 12 months, I have gone without food to pay for housing.	5 (38.5%)	4 (30.8%)	4 (30.8%)

^a Pearson's chi square p=0.7462. There were no significant differences in the proportion of parents who reported each level of food security status across the time points.

^b There were no trends in the frequency with which each tradeoff was made at each time point.

HC Client Utilization

Cleveland and Houston, Years 1 and 2

Healthy Cities Program Component	Reports having previously participated (January, 2016, n=32)	Reports having previously participated (May, 2016, n=26)	Reports having previously participated (January, 2017, n=30)	Reports having previously participated (May, 2017, n=30)
Food Distribution	28 (88%)	18 (69%)	26 (87%)	29 (97%)
Nutrition Education	8 (25%)	6 (23%)	9 (30%)	8 (28%)
Health Screenings	2 (6%)	9 (35%)	7 (23%)	8 (28%)
Safe Places to Play	1 (3%)	0	1 (3%)	4 (14%)

New Orleans, Year 1

Healthy Cities Program Component	Reports having previously participated (January, 2017, n=15)	Reports having previously participated (May, 2017, n=15)
Food Distribution	12 (80%)	15 (100%)
Nutrition Education	5 (33%)	10 (67%)
Health Screenings	5 (33%)	9 (60%)
Safe Places to Play	0	3 (20%)

Client Changes and Impact

- Range of parents stating they made healthy changes at mid point and end points HC:
 - 70-91% HCII
 - 93% HCIII
- Specific changes made:
 - Eating more fruits and vegetables*
 - Cooking more*
 - Eating less sugary foods**
 - Eating less fast foods**

Client Changes and Impact

- Quantitative data regarding changes in intake of fruits, vegetables, and legumes was also collected.
 - Clients from HCII perceived they were eating more fruit than they were three months ago.
 - Clients from HCIII reported significant increases in actual and perceived intake of vegetables and in actual intake of legumes.
 - Self-reported **daily vegetable intake** went from **0%** at beginning of program to **42%** at end of program.
 - Self-reported intake of **legumes “a few days per week”** went from **13%** at beginning of program to **71%** at end of program.

Program Manager Satisfaction Ratings

Partners & Clients	Sept	Oct	Nov	Dec	Jan 2016	Feb	Mar	Apr	May	Mean	Difference (Sept 2015-May 2016)
Satisfaction with partners	8.5	8.5	8.5	9.0	9.0	9.0	8.5	9.0	9.0	8.8	+0.3
Satisfaction with client feedback	n/a	9.0	9.5	8.5	7.0	6.5	8.0	8.0	7.0	7.9	-1.1
Partners & Clients	Sept	Oct	Nov	Dec	Jan 2017	Feb	Mar	Apr	May	Mean	Difference (Sept 2015-May 2016)
Satisfaction with partners	9.5	9.0	9.5	9.0	9.0	8.5	8.5	8.5	8.5	8.9	-0.6
Satisfaction with client feedback	9.0	9.0	8.0	8.5	8.5	8.5	5.5	n/a	9.5	8.3	-0.7

Program Manager Challenges

- Initial challenges related to logistics, resolved over time.
- Implementation of safe places to play remained most challenging in years one and two.

HCI End of Program Findings: Program Manager Insights

- **Rewards**
 - Growth of program over time; engaged community members
- **Client benefits**
 - Convenience
 - *“One-stop shop”; “Like going to Walmart”*
 - *“Waiting in line is not glamorous...seeing families come back speaks to the need.”*
- **Attitudes**
 - *“We have changed attitudes around what food banks do.”*
 - *“Clients see we give high quality produce, not just left-overs.”*

HCII End of Program Findings: Program Manager Insights

- **Department changes and celebrity status**
 - *“Phone ringing off the hook”*
 - *“Other food banks visiting, want to know how to do this”*
 - Program became a model/template for other food bank interventions
- **Challenges**
 - Safe places to play; return on investment issue

HCI End of Program Findings: Program Partner Insights

- **Community contributions**
 - Improved perceptions of school communities.
 - *“Other organizations view us as a touch point to reach other community members.”*
- **Attitudes**
 - *“I didn’t know food banks did these things; I used to think of shelters when I thought of food banks.”*

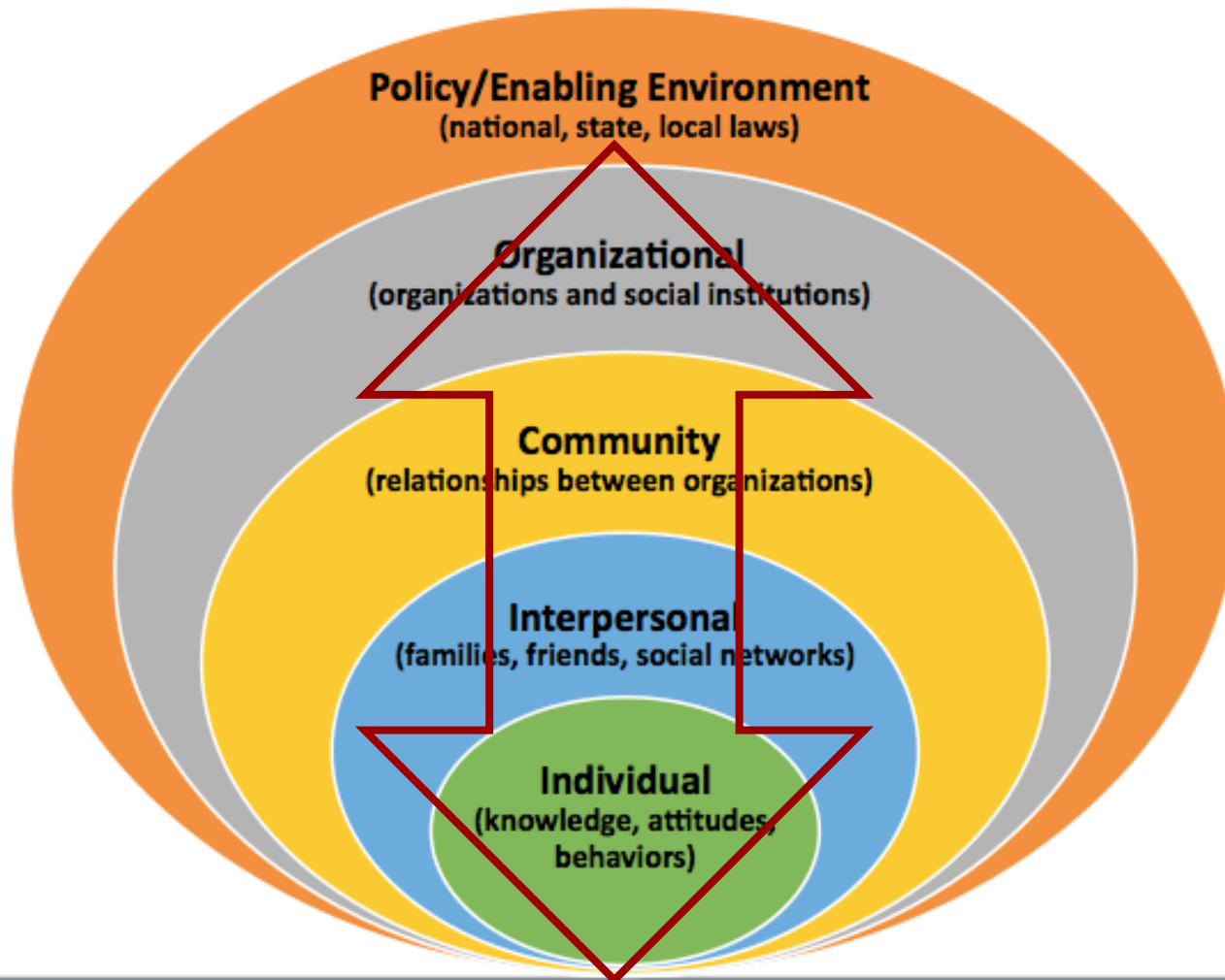
HCII End of Program Findings: Program Partner Insights

- **Client benefits**
 - Convenience of services in one place
 - *“When you tell a parent to see someone at another place, a lot of times, they don’t follow through. But when they can get their blood pressure checked right there...it gives them a friendly face.”*
- **Challenges**
 - Varied by community; including age of children served at school site.
 - Initial red tape, bureaucracy

HCIII Year One Insights

- Unique population needs and circumstances reinforced of the need of community buy-in.
- Addition of partnerships addressing social determinants of health is a new dimension of value to consider for future program funding.

Socio Ecological Model



Summary and Conclusions

- The Healthy Cities program has made a **significant impact on families and communities.**
- An integrative health and nutrition model with **food distribution, nutrition education, and health screening** is a model that can be scaled and implemented in communities across the country.

2014-15 Follow-Up Reach

Factor	ChicagoApr. 2016	Oakland Apr. 2016	New Jersey May 2016	Combined 1-month snapshot Total 2016	ChicagoApr. 2017	Oakland Apr. 2017	New Jersey May 2017	Combined 1-month snapshot Total 2017
Food distribution:								
Hours of operation	5	27	3	35	3	19	0	22
Number of sites distributing food*	2	10	5	17	2	12	0	14
Produce (lbs.)	14,277	54,266	2,534	71,077	8,120	40,794	0	48,914
Shelf-stable/other food (lbs)	6,347	33,064		39,411	5,000	31,242	0	36,242
Total distributed	20,624	87,330	2,534	110,488	13,120	72,036	0	85,156
Households served:								
# Households*	987	2,496	382	3,865	538	2,053	0	2,591
Adults*	2,178	5,175		7,353	1,194	4,561	0	5,755
Children*	2,168	5,770	1,361	9,299	1,218	3,980	0	5,198
Total Adults + children*	4,346	10,945	1,361	16,652	2,412	8,541	0	10,953
Number of nutr. ed. materials distributed:								
For parents		371		371	0	0	0	0
For children		0		0	0	0	0	0
Total # nutr. ed. materials distributed	0	371	0	371	0	0	0	0
Number of screenings:								
ht/wt		0		0	0	0	0	0
blood pressure		0		0	0	0	0	0
dental		0		0	0	0	0	0
hearing		0		0	0	0	0	0
visual		0		0	0	0	0	0
immunization		0		0	0	0	0	0
other		0		0	0	0	0	0
Total number of screenings	0	0	0	0	0	0	0	0
Number reached with safe places to play activities:								
# children reached*	461	0		461	0	0	0	0

* Duplicated numbers.

Summary and Conclusions

- Although **safe places to play** is more challenging to implement and sustain, the needs of the community should guide such interventions.
- Partnerships with organizations addressing **social determinants of health** as well as creative arts or other non-medical programs may offer additional opportunities for community engagement and well-being.

Looking Ahead

- NOLA to enter year two of Phase III
- Cleveland will maintain the HC school market model and has adopted the model for other population programming needs.
- Houston is looking at other funding opportunities to maintain the current model; additional discussion with partner organizations about rural communities and migrant farmer communities.

Thank you!

Questions and Discussion