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Addressing Childhood Obesity in Early Head Start Population in Philadelphia through Early Intervention and Food Buying Clubs

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Introduction

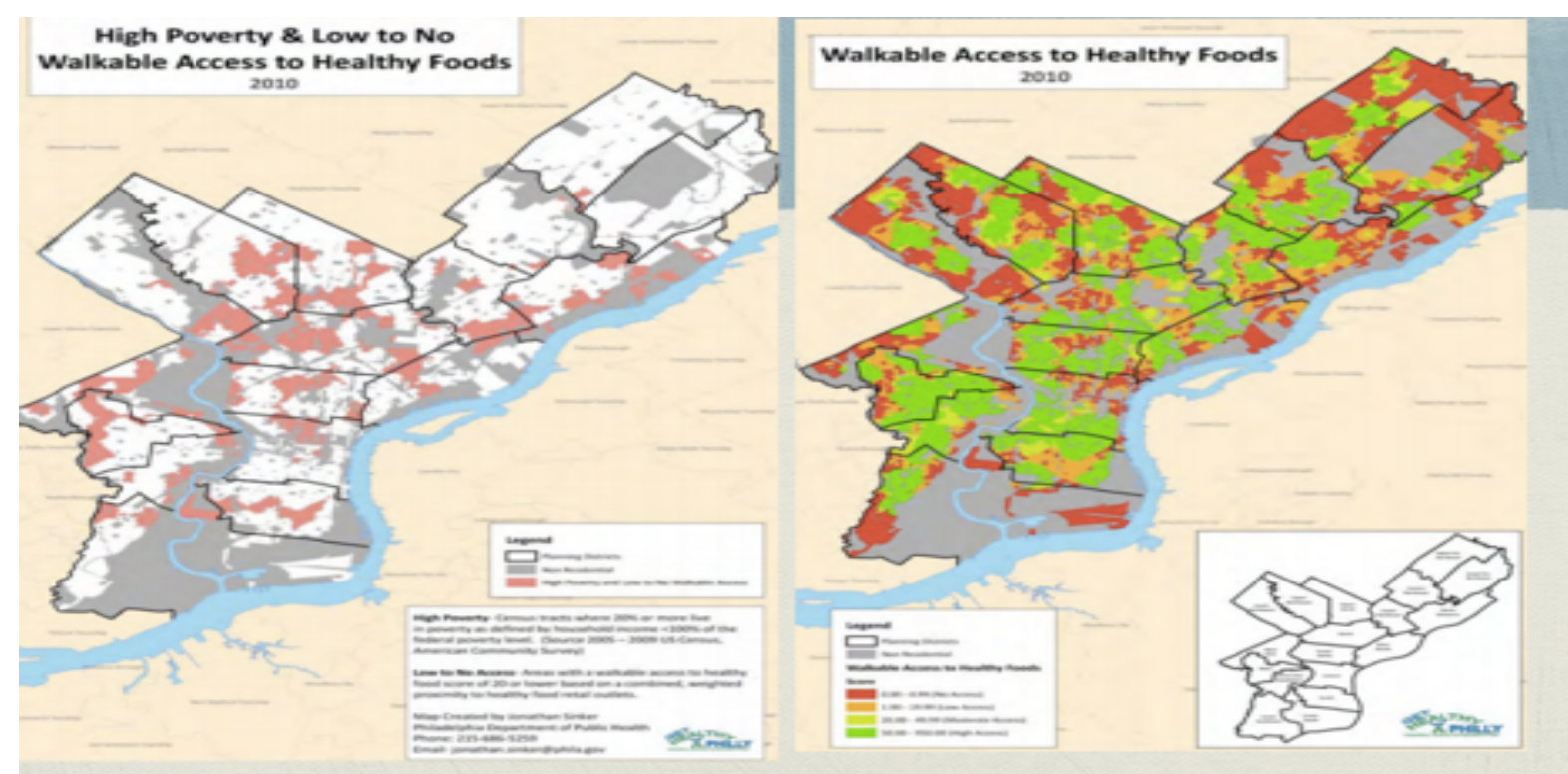
- Obesity is the second leading cause of preventable death
- Obesity costs \$147 billion in health care towards treatment.
- Philadelphia ranked first in incidence of overweight and obese children.
- Children who are at an unhealthy weight [above 85th percentile in weight adjusted for height] at the age of five years old are four times more likely to remain overweight or obese as adults.
- Maternal eating habits and diet in first 1,000 days of life can predispose a child to obesity
- Food desert areas lack access to affordable, fresh, healthy foods.

Aims

- To implement a food buying club model to increase access to fresh and healthy foods for families whose children (ages 2-5) participate in Early Head Start and the Maternity Care Coalition
- Compare four potential food distributors: Philadelphia SHARE, Asociacion Puertorriquenos in Marcha (APM), The Common Market, and JETRO to find the organization that can best implement a feasible food buying club run through Early Head Start to fit the families needs.

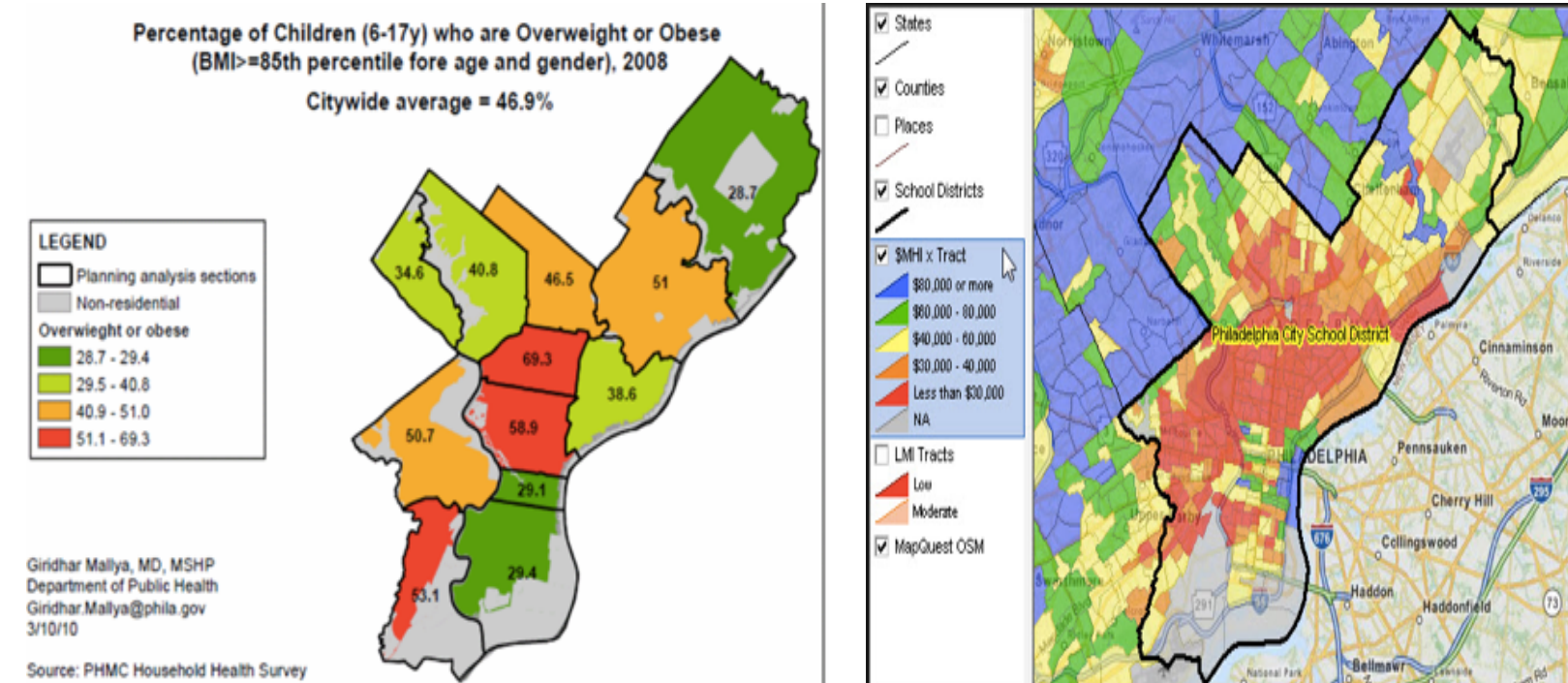
Food Deserts

- Areas of relative exclusion where individuals face physical, geographical, and economic barriers in access to healthy foods
- 46 locations Pathmark and Superfresh grocery stores that supplied Philadelphia closed in 2014-15.
- Corner stores replaced larger supermarkets as primary food source
- In Philadelphia, map of high poverty (left) and walkable access to healthy foods (right) has overlap



Risk Factors

- Childhood overweight and obesity incidence is not uniform throughout Philadelphia. Overweight and obesity rate (left graph) has overlap with household income (right map).



Comparison of Food Suppliers

Food Buying Club and Model Comparison Table

	share	common market	APM FOOD BUYING CLUB	JETRO CASH & CARRY
Input	<ul style="list-style-type: none"> • 2 hours volunteering/ service per month • Logistics/manpower of host site • Host site training 	<ul style="list-style-type: none"> • Logistics for payment and man power • Help with distribution model • \$200 minimum order for free delivery 	<ul style="list-style-type: none"> • Manpower • Driver needed • Distribution help • 2 predetermined distribution sites 	<ul style="list-style-type: none"> • Delivery/man power • Storage logistics • Distribution logistics • Order form • Payment organization
Output	<ul style="list-style-type: none"> • 40-50% discount • Prepackaged boxes • Some local and some in season 	<ul style="list-style-type: none"> • Local/sustainable farms • Seasonal foods • Access program 25% discount 	<ul style="list-style-type: none"> • Wholesale Produce only • 50-70% discount 	<ul style="list-style-type: none"> • Wholesale • Discounted Bulk • Food sold by crate
Products	<ul style="list-style-type: none"> • Value, senior, fruit, and produce packages available 	<ul style="list-style-type: none"> • Wholesale produce, dairy/eggs, some meat/poultry 	<ul style="list-style-type: none"> • Seasonal Produce 	<ul style="list-style-type: none"> • Wholesale Restaurant quality foods
Frequency	<ul style="list-style-type: none"> • 1x/month 	<ul style="list-style-type: none"> • Up to 3x/week 	<ul style="list-style-type: none"> • Up to 1x/week 	<ul style="list-style-type: none"> • Business Hours
Benefit	<ul style="list-style-type: none"> • Family/individual orders • Provides educational component • Built in nutritional guidelines • Offer delivery/shipping • Continually advertises in season foods • Takes SNAP/EBT • No penalty for skipping an order 	<ul style="list-style-type: none"> • Locally grown foods to support local farms • Delivered to site • Partnership with Philadelphia Wholesale Market • Updates on what foods are in season • No penalty for skipping an order 	<ul style="list-style-type: none"> • Seasonal produce • Open to all people • Delivery is facilitated via Job Corps • Prefers to operate as multiple small groups • No penalty for skipping an order 	<ul style="list-style-type: none"> • Flexible purchasing schedule • Many different products available

Discussion

- Initial meeting with the Maternity Care Coalition and Early Head Start suggested Philadelphia Share to be the organization to partner with for the food buying club.
 - Prepackaged boxes suited for families' needs
 - Individual orders
 - Low delivery cost (\$1 per package ordered)
 - Accepts SNAP/EBT for payment

Limitations

- Food buying club increases fresh food options but does not fully substitute options available at a large grocery store
- Requires high level of grocery and food needs pre-planning from the family
- Requires storage due to Philadelphia Share's single delivery per month
- Improving diet is only one arm of obesity intervention. Health education and physical activity also needed to effectively target childhood obesity.

Future Steps

- Formalize agreement between Philadelphia SHARE and Early Head Start
- Arrange information and education sessions for families to learn about food buying clubs and Philadelphia SHARE.
- Bring in representatives from Philadelphia SHARE to show examples of packages, pricing, and foods.
- Arrange system for families to purchase food boxes and packages.
- Begin cooking lessons, recipe exchanges, and "taste test" sessions for families to see cooking possibilities with Philadelphia SHARE food options

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