

HEALTHY KIDS, HEALTHY COMMUNITIES OF DESOTO, MARSHALL, AND TATE COUNTIES CASE REPORT

DESOTO, MARSHALL, AND TATE COUNTIES, MISSISSIPPI
Evaluation of the Healthy Kids, Healthy Communities National Program
December 2009 to December 2013



ACKNOWLEDGMENTS

Support for this evaluation was provided by a grant from the Robert Wood Johnson Foundation (#67099). Transtria LLC led the evaluation and dissemination activities from April 2009 to March 2014. Representatives from Healthy Kids, Healthy Communities of Desoto, Marshall, and Tate Counties partnership actively participated in the evaluation planning, implementation, and dissemination activities. This case report is a synthesis of information collected through multiple evaluation methods as part of a collaborative, community-based approach to evaluation.

We are grateful for the collaboration with and support from the Robert Wood Johnson Foundation (Laura Leviton, PhD and Tina Kauh, PhD), the Washington University Institute for Public Health (Ross Brownson, PhD), the Healthy Kids, Healthy Communities (HKHC) National Program Office (Casey Allred; Rich Bell, MCP; Phil Bors, MPH; Mark Dessauer, MA; Fay Gibson, MSW; Joanne Lee, LDN, RD, MPH; Mary Beth Powell, MPH; Tim Schwantes, MPH, MSW; Sarah Strunk, MHA; and Risa Wilkerson, MA), the HKHC Evaluation Advisory Group (Geni Eng, DrPH, MPH; Leah Ersoylu, PhD; Laura Kettel Khan, PhD; Vikki Lassiter, MS; Barbara Leonard, MPH; Amelie Ramirez, DrPH, MPH; James Sallis, PhD; and Mary Story, PhD), the Social System Design Lab at Washington University in St. Louis (Peter Hovmand, PhD), the University of Memphis (Daniel Gentry, PhD), and Innovative Graphic Services (Joseph Karolczak).

Special thanks to the many individuals who have contributed to these efforts from Transtria LLC, including Evaluation Officers (Tammy Behlmann, MPH; Kate Donaldson, MPH; Cheryl Carnoske, MPH; Carl Filler, MSW; Peter Holtgrave, MPH, MA; Christy Hoehner, PhD, MPH; Allison Kemner, MPH; Jessica Stachecki, MSW, MBA), Project Assistants (James Bernhardt; Rebecca Bradley; Ashley Crain, MPH; Emily Herrington, MPH; Ashley Farrell, MPH; Amy Krieg; Brandye Mazdra, MPH; Kathy Mora, PhD; Jason Roche, MPH; Carrie Rogers, MPH; Shaina Sowles, MPH; Muniru Sumbeida, MPH, MSW; Caroline Swift, MPH; Gauri Wadhwa, MPH; Jocelyn Wagman, MPH), additional staff (Michele Bildner, MPH, CHES; Daedra Lohr, MS; Melissa Swank, MPH), Interns (Christine Beam, MPH; Skye Buckner-Petty, MPH; Maggie Fairchild, MPH; Mackenzie Ray, MPH; Lauren Spaeth, MS), Transcriptionists (Sheri Joyce; Chad Lyles; Robert Morales; Vanisa Verma, MPH), and Editors (Joanna Bender and Julie Claus, MPH).

This material may be reproduced or copied with permission from Healthy Kids, Healthy Communities of Desoto, Marshall, and Tate Counties, Robert Wood Johnson Foundation, the Healthy Kids, Healthy Communities National Program Office, or Transtria LLC. Citation of the source is appreciated.

Front page photos were provided by the Healthy Kids, Healthy Communities of Desoto, Marshall, and Tate Counties partnership and Transtria LLC.

Suggested citation:

Behlmann T, Brennan LK. *Healthy Kids, Healthy Communities of Desoto, Marshall, and Tate Counties Case Report*. St. Louis, MO: Transtria LLC; 2014. <http://www.transtria.com/hkhc>. Accessed <Month Day, Year>.

For more information about the evaluation aims, methods, analyses, or products, please contact Laura Brennan (laura@transtria.com) or Allison Kemner (akemner@transtria.com).

TABLE OF CONTENTS

| | |
|---|--------------|
| Background | 4-6 |
| Community Demographics | 7 |
| Influence of Social Determinants | 8 |
| Healthy Kids, Healthy Communities of Desoto, Marshall, and Tate Counties Partnership | 9 |
| Partnership Funding | 10 |
| Community Assessment | 11 |
| Planning and Advocacy Efforts | 12-13 |
| Healthy Eating and Active Living Strategies | |
| Comprehensive Plan | 14 |
| Active Transportation | 15-18 |
| Greenways/Blueways | 19-20 |
| Parks and Play Spaces | 21-22 |
| Farmers’ Markets | 23-24 |
| Other Healthy Eating Strategies | 25-26 |
| Sustainability of the Partnership and Initiative | 27 |
| | |
| Tables | |
| Table 1: Desoto, Marshall, and Tate County Demographics, 2010 | 7 |
| | |
| Figures | |
| Figure 1: Map of Healthy Kids, Healthy Communities Partnerships | 4 |
| Figure 2: Map of Desoto, Marshall, and Tate Counties, Mississippi | 7 |
| Figure 3: Active Transportation Infographic | 17 |
| Figure 4: DeSoto County Greenways Map | 19 |
| | |
| Appendices | |
| Appendix A: Evaluation Logic Model | 29 |
| Appendix B: Partnership and Community Capacity Survey Results | 31 |
| Appendix C: Partner List | 36 |
| Appendix D: Sources and Amounts of Funding Leveraged | 37 |
| | |
| Enhanced Evaluation Reports | 41 |
| Appendix E: Farmers Market Environmental Audit Report | |
| Appendix F: Parks and Play Spaces Environmental Audit Report | |

BACKGROUND

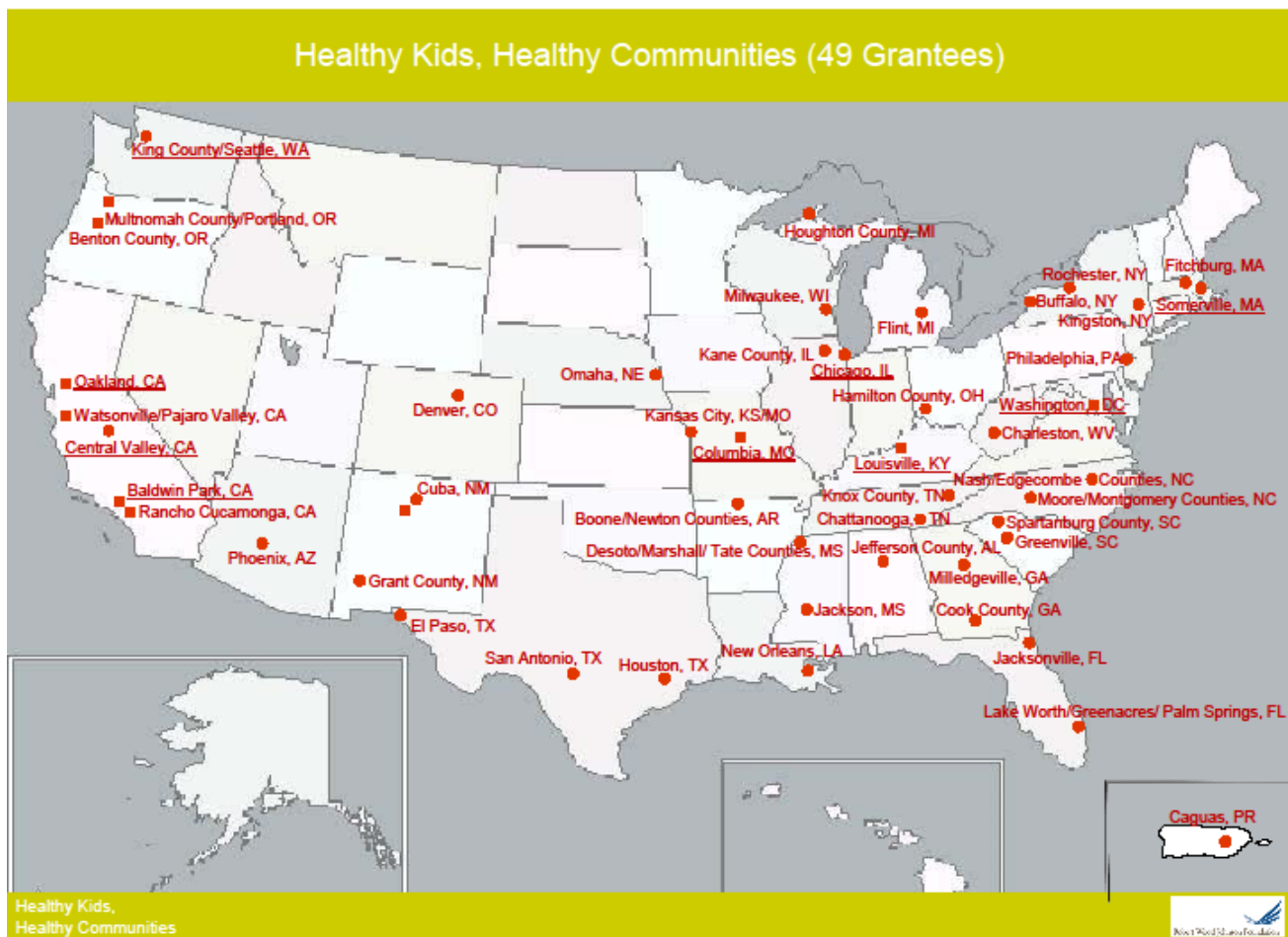
Healthy Kids, Healthy Communities National Program

With the goal of preventing childhood obesity, the Healthy Kids, Healthy Communities (HKHC) national program, funded by the Robert Wood Johnson Foundation (RWJF), provided grants to 49 community partnerships across the United States (Figure 1). Healthy eating and active living policy, system, and environmental changes were implemented to support healthier communities for children and families. The program placed special emphasis on reaching children at highest risk for obesity on the basis of race, ethnicity, income, or geographic location.¹

Project Officers from the HKHC National Program Office assisted community partnerships in creating and implementing annual workplans organized by goals, tactics, activities, and benchmarks. Through site visits and monthly conference calls, community partnerships also received guidance on developing and maintaining local partnerships, conducting assessments, implementing strategies, and disseminating and sustaining their local initiatives. Additional opportunities supplemented the one-on-one guidance from Project Officers, including peer engagement through annual conferences and a program website, communications training and support, and specialized technical assistance (e.g., health law and policy).

For more about the national program and grantees, visit www.healthykidshealthycommunities.org.

Figure 1: Map of Healthy Kids, Healthy Communities Partnerships



Evaluation of Healthy Kids, Healthy Communities

Transtria LLC and Washington University Institute for Public Health received funding from the Robert Wood Johnson Foundation to evaluate the HKHC national program. They tracked plans, processes, strategies, and results related to active living and healthy eating policy, system, and environmental changes as well as influences associated with partnership and community capacity and broader social determinants of health. Reported "actions," or steps taken by community partnerships to advance their goals, tactics, activities, or

benchmarks from their workplans, formed community progress reports tracked through the HKHC Community Dashboard program website. This website included various functions, such as social networking, progress reporting, and tools and resources to maintain a steady flow of users over time and increase peer engagement across communities.

In addition to action reporting, evaluators collaborated with community partners to conduct individual and group interviews with partners and community representatives, environmental audits and direct observations in specific project areas (where applicable), and group model building sessions. Data from an online survey, photos, community annual reports, and existing surveillance systems (e.g., U.S. census) supplemented information collected alongside the community partnerships.

For more about the evaluation, visit www.transtria.com/hkhc.

Healthy Kids, Healthy Communities of DeSoto, Marshall, and Tate Counties

In December 2009, the Healthy Kids, Healthy Communities of DeSoto, Marshall, and Tate Counties partnership received a four-year, \$360,000 grant as part of the HKHC national program. The partnership focused on increasing access to healthy foods and physical activity opportunities within the three counties located in the Delta region of Northwestern Mississippi.

The Community Foundation of Northwest Mississippi was the lead agency for the partnership. The partnership and capacity building strategies of the Healthy Kids, Healthy Communities of DeSoto, Marshall, and Tate Counties partnership included:

- **Training and Technical Assistance:** The Community Foundation of Northwest Mississippi provided training opportunities and technical assistance on active living and healthy eating policy and environmental changes. The opportunities included annual summits or conferences and several presentations.
- **DeSoto County Community Health Council's Youth Health Ambassadors:** The HKHC partnership collaborated with the DeSoto County Health Council to develop the MoveDeSoto...Change4Life! program that was designed to provide support and training to youth and school staff to implement health councils.

See Appendix A: Desoto, Marshall, and Tate Counties Evaluation Logic Model and Appendix B: Partnership and Community Capacity Survey Results for additional information.

Along with partnership and capacity building strategies, the Healthy Kids, Health Communities of Desoto, Marshall, and Tate Counties partnership incorporated assessment and community engagement activities to support the partnership and the healthy eating and active living strategies.

The healthy eating and active living strategies of the Healthy Kids, Healthy Communities of DeSoto, Marshall, and Tate included:

- **Comprehensive Plans:** The Cities of Olive Branch and Holly Springs revised and expanded their Comprehensive Plans to include recommendations for active living.
- **Active Transportation:** The cities of Holly Springs, Byhalia, Senatobia, and Hernando adopted a Complete Streets Policy. Design standards were created for sidewalks in Byhalia and Holly Springs, and a grant was received from the Mississippi Department of Transportation to upgrade sidewalks in Senatobia. Since 2010, Hernando added bike lanes and a new stretch of sidewalk that connected the east and west sides of the city. In addition, an agreement with the Mississippi Department of Transportation and Hernando was signed for the use of an underpass to connect the city, and a new walking track was installed at Senatobia Middle School.
- **Greenways/Blueways:** In 2011, DeSoto County and local municipal officials received \$2.26 million from the Mississippi Department of Transportation for greenway projects. The projects included beginning development of the Johnson Creek trail; an extension of the Bass Landing Park trail; design and construction of a new trailhead and trails at the Crockrum Civic Center; construction of an asphalt bicycle path/walking trail from the Central Park. In 2012, a set of rules and regulations was created for the DeSoto County Greenways. A comprehensive update of the Greenways Plan is currently underway and will be completed after December 14, 2013.

- *Parks and Play Spaces:* To increase active living in the tri-county area, several environmental changes were made. New play equipment was installed at parks in DeSoto, Marshall, and Tate Counties. New signs identifying the park name were placed in ten DeSoto County parks, and improvements were made to the walking trail in Byhalia. Land donations were received to develop a new park in Senatobia, expand a park in DeSoto County, and to build a skate park in the City of Hernando. In addition, a DeSoto County Parks and Recreation District was established.
- *Farmers' Markets:* The City of Holly Springs and City of Olive Branch established farmers' markets. Two existing markets, Tate County Farmers' Market and Hernando Farmers' market received certification from the Mississippi Farmers' Market Certification Program. In 2013, the markets were able to start accepting Supplemental Nutrition Assistance Program (SNAP) and Senior Vouchers.
- *Other Healthy Eating Strategies:* To increase access to healthy foods in the tri-county area, the partnership supported several community initiatives including the creation of a regional food hub, development of learning gardens, establishment of a mobile food pantry, and providing community health partner awards for healthy restaurants.

COMMUNITY DEMOGRAPHICS

DeSoto, Marshall, and Tate Counties are located in the Delta region of Northwestern Mississippi (see Figure 2). With a total population of 227,282, the counties are a part of the Memphis, Tennessee metropolitan area. DeSoto County, which includes the cities of Hernando, Horn Lake, Olive Branch and Southaven, is a suburban area with a population of 161,252. Marshall County, which includes Holly Springs and Byhalia, is a rural area with a population of 37,144. Tate County, which includes the cities of Senatobia and Coldwater, is also a rural area with a population of 28,886.² The tri-county area is bound together by the upper Coldwater River Watershed, a tributary of the Mississippi River. See Table 1 for demographic information.

Figure 2: Map of DeSoto, Marshall, and Tate Counties, Mississippi³

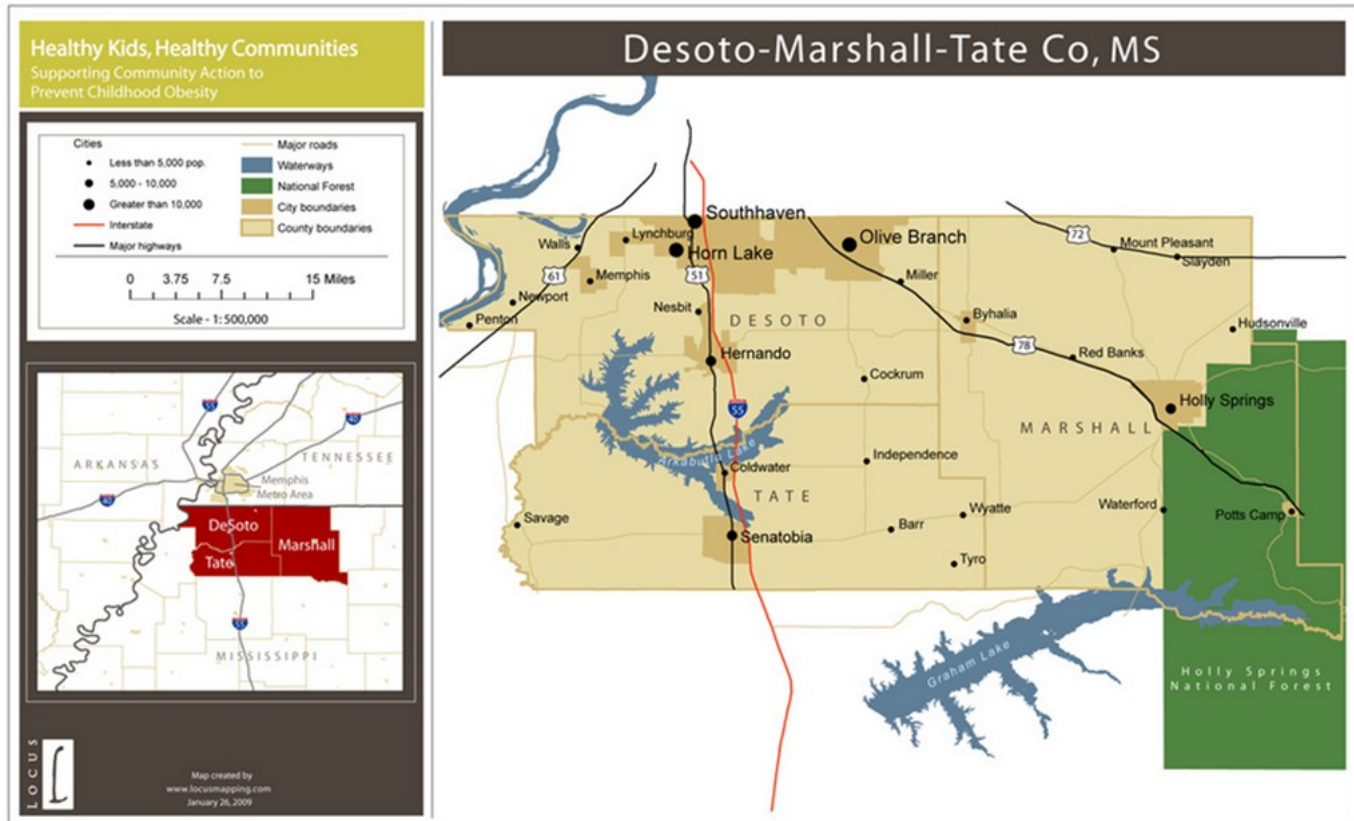


Table 1: DeSoto, Marshall, and Tate County Demographics, 2010²

| Community | Population | % Below Poverty | Race/Ethnicity | | % Language Other than English |
|-----------------|------------|-----------------|----------------|----------|-------------------------------|
| | | | Black | Hispanic | |
| DeSoto County | 161,252 | 9.5% | 21.9% | 5.0% | 5.9% |
| Hernando | 14,090 | 11.0% | 13.1% | 5.5% | 5.4% |
| Horn Lake | 26,066 | 16.0% | 32.9% | 8.0% | 8.0% |
| Olive Branch | 33,484 | 5.0% | 23.1% | 4.2% | 7.3% |
| Southaven | 48,982 | 10.5% | 22.2% | 5.0% | 5.5% |
| Marshall County | 37,144 | 24.2% | 46.9% | 3.2% | 3.4% |
| Byhalia | 1,302 | 43.7% | 44.9% | 4.0% | 0.9% |
| Holly Springs | 7,699 | 41.4% | 79.2% | 2.2% | 2.2% |
| Tate County | 28,886 | 18.1% | 30.3% | 2.2% | 2.3% |
| Coldwater | 1,677 | 35.2% | 75.7% | 1.4% | 0.0% |
| Senatobia | 8,165 | 22.0% | 35.0% | 2.4% | 2.9% |

INFLUENCE OF SOCIAL DETERMINANTS

Poverty and Unemployment

Approximately 9.5% to 24.2% of residents are living below the poverty level in DeSoto, Marshall, and Tate Counties.⁴ Byhalia (43.7%), Holly Springs (41.4%), and Coldwater (35.2%) have much higher rates. Unemployment rates range from 8.0% to 13.0%, with Marshall County having the highest rate.⁴ Residents oftentimes travel to Memphis to work. For example, 65% of DeSoto County residents work in Memphis. Jobs in the three counties are typically in manufacturing and government.

Economic Development/City Funding

Elected officials in Marshall and Tate Counties are eager to boost economic development, because the counties are very low-income. Hernando is working to attract more businesses and shops, which will generate more tax funds.

Approximately 60-65% of general fund budgets in most cities come from sales tax revenue; therefore, cities encourage any kind of business development, even fast food restaurants. The city of Hernando has the lowest tax rate of the four major cities in DeSoto County.

Schools

DeSoto County, which has one consolidated school system, is the largest in the state. Tate and Marshall Counties each have two school districts. The state legislature is trying to consolidate many of the schools in Mississippi because there are many at-risk, failing schools that do not have funding.

Smoking Ordinances

Adult smoking rates in Marshall (29%), Tate (28%), and DeSoto (24%) Counties are higher than the national (13%) and state of Mississippi (24%) rates.⁴ A few of the communities have smoking ordinances, including Senatobia and Hernando, which are a smoke-free community. Although smoking ordinances exist, some are very restricted, such as the Olive Branch Ordinance which bans smoking in restaurants until 9 PM.

Transportation

There is no public transportation system in DeSoto, Marshall, or Tate Counties. Although, federally funded busses are provided to take residents to medical appointments. A large portion of DeSoto County residents work in Memphis and would benefit from a public bus route.

HEALTHY KIDS, HEALTHY COMMUNITIES OF DESOTO, MARSHALL, AND TATE COUNTIES PARTNERSHIP

Lead Agency and Leadership Teams

The lead agency was the Community Foundation of Northwest Mississippi. The foundation was started in 2002 and currently serves ten counties in Northwest Mississippi. Governed by a board of 20 volunteer civic leaders, the agency prioritized youth, education, and health. The foundation managed 133 donor-established funds and distributed \$11.2 million to support organizations.⁵

A multidisciplinary partnership, focusing on childhood obesity, was created in 2005 by a local county attorney and physician in DeSoto County. Since receiving HKHC funds, the efforts had been expanded to include Marshall and Tate Counties. Project Director Peggy Linton and Project Coordinator Shelly Johnstone had led the partnership since the beginning of HKHC. Peggy is employed by the Foundation, while Shelly Johnson is a contractor through Johnstone & Associates. Other staff from the Community Foundation of Northwest Mississippi helped with HKHC activities, but were not funded through the grant.

A Partners Group was established in each of the counties. The groups consisted of residents, mayors, health officials, educators, churches, businesses, and non-profits. See Appendix C for a list of partners. The Partners met each year to review and update plans for healthy eating and active living. Desoto County's Partner Group was renamed the Community Health Council. The remaining Partner Groups were merged into the Mayor's Health Council.

PARTNERSHIP FUNDING

Several funding sources were obtained to support the HKHC initiatives. Grants or funds were received from private and public foundations or organizations. As part of HKHC, grantees were expected to secure a cash and/or in-kind match equal to at least 50% of the funds received from Robert Wood Johnson Foundation (RWJF) over the entire grant period. For additional funding information, see Appendix D: Sources and Amounts of Funding Leveraged. Partner organizations provided in-kind support for staff time and meeting space as part of the matching funds.

A few examples of funds received to support the HKHC initiatives included:

- The lead agency received a \$50,000 grant from General Mills called Champions for Healthy Kids to work with preschools in DeSoto and Tate Counties through the First Regional Library Child Resource and Referral Center.
- A three-year grant for \$350,000 was received from W.K. Kellogg Foundation to sustain the work of the Regional Health Council.
- The Mississippi Department of Transportation funded the City of Senatobia \$238,000 for Safe Routes to School.
- The City of Senatobia received a \$10,000 Delta Health Collaborative grant to establish a Mayor's Health Council.
- Youth Service America awarded the Community Foundation of Northwest Mississippi and the after-school garden program a \$2,000 grant to assist in developing new gardens and expanding existing gardens.
- A grant for \$1,000 from Entergy (the local utility provider) assisted with the creation of raised vegetable and herb gardens in elementary schools in DeSoto County serving approximately 15,000 children.
- A two-year Robert Wood Johnson Foundation grant of \$150,000 will provide continuation and coordination of the Regional Health Council.

COMMUNITY ASSESSMENT

The partnership conducted several general assessments to guide the HKHC initiative.

- **Policy Checklist/Document Review:** Project Coordinator and Evaluator Shelly Johnstone completed assessments in each city and town in the tri-county area. In June 2010, she tailored a policy checklist after receiving training through the Centers for Disease Control and Prevention (CDC). She also reviewed each county's Comprehensive Plan and interviewed the mayors. Assessment results were compiled and shared with local mayors in September 2010.
- **Focus Groups:** In May 2010, key leaders, parents, and church representatives from Marshall and Tate Counties participated in focus groups to discuss barriers, challenges, and opportunities to becoming a healthier community.
- **Charrettes:** The Bouchillon Institute for Community Planning conducted a seminar in December 2010. The seminar was followed up with Charrettes in Tate and Marshall Counties to facilitate healthy community planning. A Community Strategic Plan was developed for each county that included a vision statement, existing/potential resources, goals, objectives, and strategies related to healthy eating and active living. Results were presented to the Partner Groups of each county.
- **Healthy Congregations Survey:** Surveys were completed by participants of the Healthy Congregations Conference 2010 and 2011, which indicated the congregations that were involved in health ministries.

In addition, the partnership, in collaboration with partners, conducted several strategy-specific assessments to help guide the planning and implementation of HKHC activities.

- **Corner Store Survey:** In 2011, a survey tool was developed by Dr. Heather Chambliss from the University of Memphis entitled "Living for Healthier Mississippi Today." An intern from the university used the tool to survey stores in Marshall and Tate Counties. Survey results, observations, and recommendations were compiled into a report.
- **Farmers' Market Survey:** The farmers' markets in the tri-county area were surveyed to better understand what they needed in order to be sustainable.
- **Farmers' Market Environmental Audit:** The partnership used the Farmers' Market Environmental Audit to assess the Tate County Farmers' Market, Hernando Farmers' Market, and Olive Branch Farmers' Market. The tool was modified from existing audit tools including the Farmers' Market Vendor Evaluation, Farmers' Market Evaluation, Mystery Shopping Farmers' Market, and the Nutrition Environment Measurement Survey (NEMS). The tool assessed the presence or absence of different features as well as the quality or condition of the physical environment. Data was collected in 2012 and 2013. Findings indicated that at least 50% of the market vendors at each market sold fresh produce. For further information, see the summary report in Appendix E.
- **Parks and Recreation Survey:** Hernando residents completed a parks and recreation survey to help plan future park projects. The results of the survey were discussed at the Board of Aldermen meeting on October 18, 2011.
- **Parks and Play Spaces Environmental Audit:** Representatives from the partnership used audits to assess the presence or absence of different features as well as the quality or condition of parks and play spaces in DeSoto County. Ten parks and play spaces were included in the assessment. Results indicated that all ten spaces were located outdoors and had clear signage displaying the park name. The parks were all accessible, none required entrance fees, and there were no vending machines on-site. For further information, see the summary report in Appendix F.

PLANNING AND ADVOCACY EFFORTS

Community Outreach, Engagement, and Advocacy

Residents of DeSoto, Marshall, and Tate were involved in the multi-disciplinary partnership. As mentioned previously, each county had its own Partner Group. Members of the partnership have made individual contacts and used email for project updates.

Partnership sessions were held for youth, but because of competing school activities and lack of transportation, participation was low. Youth engagement was especially challenging in Marshall County. The partnership piloted the Alliance for a Healthier Generation's EmpowerME4Life at a summer camp that was held in Holly Springs, MS. At the summer camp, youth were taught about healthy eating and active living. Outside of the summer camp, EmpowerME4Life youth sessions were held twice a week for four weeks in 2010 to empower youth to advocate for change within their communities. In addition, information was provided to several youth groups in the tri-county area, including the Superintendent's Youth Leadership Council in DeSoto County, Teens for Tate, and DeSoto/Tate County Tobacco-Free Students Working Against Tobacco.

Residents, community leaders, and elected officials were actively engaged through seminars, trainings, and technical assistance.

- The Bouchillon Institute for Community Planning conducted a free Your Town-Your Health Seminar in December 2010 to facilitate healthy community planning. About 50 individuals, including planners, community leaders, and elected officials from the tri-county area participated. Charrettes were conducted after the seminar in Tate and Marshall Counties, and Geographic Information Systems (GIS) maps were created for the communities.
- A Healthy Ministry Advocate Training was held in September of 2010 for nurses or lay persons who wanted to start health ministries in their churches. The five course graduates were trained to be advocates for healthy communities.
- An annual Healthy Congregations Conference, sponsored by the Community Foundation of Northwest Mississippi and the Mississippi Faith-Based Healthy and Wellness Network, was held for community residents.
- In 2011, The Bouchillon Institute held a training seminar for community officials focused on active living.
- Physical activity and healthy eating training workshops were held for preschool and daycare staff in 2012. The workshops were called "I'm Moving I'm Learning," and participants received a Choosey Kids Toolkit. The workshops were funded through General Mills, and the grant also supported parent and child "Start Healthy Stay Healthy" sessions at local libraries.
- In 2013, The Community Foundation of Northwest Mississippi held regional health summits to work on creating a strategic plan.
- Over the four years, the partnership provided on-site assistance and resources to each of the tri-counties, including the Healthier Community Toolkit, National Policy and Legal Analysis Network (NPLAN) templates, HKHC Dashboard resources, and guides to start a community garden and health ministry.

In addition, the partnership supported and engaged community members through their participation in local and regional councils.

Mayor's Health Council

The partnership, in collaboration with the City of Senatobia, created the Mayor's Health Council. The city applied for and received a \$10,000 Delta Health Collaborative grant to establish the council. The group met once a month to work on health issues including childhood obesity. A representative from the Mayor's Health Council served on the Regional Health Council.

Regional Health Council

Representatives from the partnership were engaged in the Regional Health Council, which was comprised of

non-profit organizations from across eight counties in the northwest Mississippi region. In May 2011, the council received a grant from the Kellogg Foundation for \$375,000 for development and sustainability efforts that focused on physical activity, access to healthy foods, and nutritional education.

Food Policy Council

Representatives of the partnership were engaged in the Mississippi Food Policy Council. The Project Director served on the Farm to School Subcommittee.

Programs/Promotions

Several programs were held from 2009 to 2013 related to the HKHC initiative, including the Byhalia Health Fest, Walk with the Mayor, Biggest Loser Contest at Town Hall, Project Fit America, DeSoto County Health and Fitness Day, and a 5K Walk/Run for American Cancer Society and Sounds of Summer.

In 2012, a local HKHC partner, the YMCA in DeSoto County, added Coordinated Approach To Child Health (CATCH) to its summer and after-school programs. CATCH was a curriculum designed to incorporate physical activity into learning games and exercises. Some local daycare programs also used Sports, Play, and Active Recreation for Kids (SPARK) equipment.

The HKHC initiative and other health-related initiatives in the tri-county area were promoted through local news (e.g., Channel 5 NBC, ABC Good Morning America), German TV, local and state newspapers (e.g., DeSoto County Times/Tribune, Clarion Ledger), and social media (e.g., Facebook).

COMPREHENSIVE PLAN

The partnership supported the City of Holly Springs and the City of Olive Branch as they revised their Comprehensive Plans.

Policy, Practice, and Environmental Changes

- The City of Olive Branch in DeSoto County expanded its Comprehensive Plan in May 2012 to include recommendations for parks, recreation, and open spaces.
- In the spring of 2013, the City of Holly Springs in Marshall County revised and passed a new Comprehensive Plan.

Implementation

City of Holly Springs Comprehensive Plan

The City of Holly Springs revised its Comprehensive Plan in March 2013 to include the following components under the transportation section:

- Adopt a Complete Streets Policy
- Seek to establish a multimodal path system
- Pursue the rehabilitation of existing sidewalk system at the rate of 2,000 feet of sidewalk per year
- The city to facilitate the movement of students related to its secondary and high education facilities
- Include standards for bike racks in private and public developments

In the public facilities section, the following components were added:

- Develop new park facilities in six locations
- Seek to develop a greenway system based upon location outlined in the Future Land Use Map

In addition, the City of Holly Springs committed efforts to expand recreation and environmental amenities that supported community health, such as new and expanded parks and greenways systems and the addition and renovation of sidewalks.

City of Olive Branch Comprehensive Plan

The HKHC partnership worked with city officials to update the City of Olive Branch's Comprehensive Plan that originally only included a one-sentence section on active living. After planning, an expanded plan that included goals and recommendations for parks, open spaces, and recreation, was adopted in May 2012.

Population Reach

The revised Comprehensive Plans targeted residents in the City of Holly Springs and the City of Olive Branch.

ACTIVE TRANSPORTATION

The partnership worked to increase active transportation opportunities in the tri-county area through passing Complete Streets Policies, creating design standards for sidewalks, and installing bike lanes and sidewalks.

Policy, Practice, and Environmental Changes

The following policy, practice, and environmental changes occurred as a result of HKHC:

DeSoto County

- The City of Hernando collaborated with HKHC and Get A Life! to pass a Complete Streets Resolution in April 2010.
- A Helmet Policy was passed in 2012 for youth under the age of 18 years.
- In 2012, new bike lanes were constructed in the City of Hernando to make biking safer.
- In 2013, new sidewalks were installed connecting the east and west sides of the city.

Marshall County

- The Town of Byhalia passed a Complete Streets Resolution in December 2011.
- In 2013, the City of Holly Springs passed a Complete Streets Policy.
- Design standards were created for sidewalks in Byhalia and Holly Springs.

Tate County

- The City of Senatobia passed a Complete Streets and Sidewalk Ordinance for new development.
- In 2012, a Helmet Policy was passed for youth under the age of 18 years.
- A new school walking trail was installed in September 2013 at Senatobia Middle School with funds raised by community leaders and the Parent Teacher Organization.



Photo provided by Transtria LLC

In addition to the changes mentioned above, the Mississippi Department of Transportation (MDOT) adopted a bicycle/pedestrian resolution on March 2011. Through the resolution, MDOT planned to implement a policy considering the development of multi-purpose trails and wide-paved shoulders during planning of new highways and re-construction of existing highways. The resolution complemented work supported by the HKHC partnership.

For additional information see Figure 3: Active Transportation Infographic.

Complementary Programs/Promotions

The partnership planned and implemented several events to promote active transportation. In October 2011, more than 600 students and faculty from a local elementary school in DeSoto County participated in Walk to School Day. The City of Hernando developed a Walking School Bus for Oak Grove Central Elementary. In addition, the partnership's Safe Routes to School efforts were recognized through the National Safe Routes to Schools Newsletter (July 2010).

Implementation

Complete Streets Resolutions

Complete Streets Policies or Resolutions were passed in all three of the tri-county areas.

In April 2010, the City of Hernando passed a Complete Streets Policy with the support of HKHC partners and

Get A Life! The work will include improvements such as marking bike lanes, repairing sidewalks, installing biking signs and routes, and marking crosswalks. The partnership provided \$5,000 to the City of Hernando to assist with the implementation process of the policy.

In December 2011, the Town of Byhalia passed a Complete Streets Policy at a board meeting with the assistance of the HKHC Project Director and Project Coordinator.

The City of Holly Springs passed a Complete Streets Policy in March 2013, along with the passing of the city's new Comprehensive Plan. The plan included the following language: increasing walking and bicycling offers the potential for improved health, reduced traffic congestion, a more livable community, and more efficient use of road space and resources; the City of Holly Springs General Development Plan calls for the development of a pedestrian friendly community with sidewalks and bike paths; the City of Holly Springs will implement policies and procedures with construction, reconstruction, or other changes to transportation facilities to support the creation of Complete Streets including capital improvements, re-channelization projects, and major maintenance, recognizing that all streets are different.

Bike Lanes and Sidewalks

The HKHC partnership collaborated with the City of Hernando and the City of Olive Branch to work on several bicycle and pedestrian improvements.

The partnership supported Hernando in designating new bike lanes. Meetings were held with bikers and local residents to gain input on where the new lanes should be installed. In 2010, The City of Olive Branch was awarded \$128,000 from the American Recovery and Reinvestment Act funding to install bike lanes along a 1.3-mile stretch of road. The City of Southaven received a \$150,000 grant from the Transportation Alternative Program for new sidewalks and bike lanes.

In 2012, the partnership worked with the Mississippi Department of Transportation to sign an agreement that connected the east and west sides of Hernando through the use of an underpass tunnel. The tunnel ran under Interstate 55 and allowed pedestrians and bicyclists to travel from one part of the city to another. In 2013, the City of Hernando provided funds (\$15,000) to install a new stretch of sidewalk that would allow safer travel. The sidewalk was 400 feet long and 5 feet wide, covering a total of 2,000 square feet.

In the future, the City of Hernando plans to add curb cuts to sidewalks that comply with the Americans with Disabilities Act (ADA). DC Greenways plans to purchase new bike lane signs for Olive Branch.

Helmet Law

In May 2012, DeSoto and Tate Counties passed the helmet law for youth under 18 years of age. The cities also provided free helmets to youth, if needed.

Safe Routes to School

Representatives from the partnership attended meetings for Safe Routes to School (SRTS) and provided information to each community within the tri-county region. The partnership offered assistance if a community was interested in pursuing an SRTS grant.

The City of Senatobia received a \$238,000 SRTS grant from Missouri Department of Transportation for new sidewalks as well as reconstruction of several existing sidewalks. The city matched 20%. The installation was scheduled to begin in the fall of 2012. The city also planned to install lights and reflectors on the school crosswalks.

In September 2013, a community walking track was installed at Senatobia Middle School with funds raised by the community and funds from the Community Foundation of Northwest Mississippi.

Population Reach

The active transportation initiatives targeted residents of DeSoto, Marshall, and Tate Counties.

Figure 3: Active Transportation Infographic



Challenges

The HKHC partnership and its partners experienced the following challenges while working to improve active transportation across the tri-county area:

- Cities tried to improve sidewalks in the past, but oftentimes encountered cost barriers.
- The City of Senatobia passed a Complete Streets Ordinance and Sidewalk Ordinance for new development; however, the town was old and new development was not happening.
- A bus route could be eliminated due to funds being used to create a pedestrian and bicycle pathway in the City of Hernando.

Sustainability

The partnership plans to continue to collaborate with DeSoto, Marshall, and Tate Counties as they improve active transportation. Some projects will move forward with funding received during HKHC, such as the SRTS grant in Senatobia.

GREENWAYS/BUEWAYS

The partnership worked to expand and connect greenways/trails and blueways along the Coldwater River in the tri-county area.

Policy, Practice, and Environmental Changes

The following policy, practice, and environmental changes occurred as a result of HKHC:

- In November 2011, the DeSoto County Greenways expanded to Bass Landing Park with a bike trail connection.
- In June 2011, a 4.7-mile mountain bike trail was established at Bayou Point as the result of a partnership between the Corps of Engineers and the Mid-South Trails Association.
- DeSoto County added amenities, including benches and landscaping, to the greenways in April 2012.
- In 2012, the Johnson Creek Trail was established as the first leg of the greenways project.
- In 2012, rules and regulations were created for the DeSoto County Greenways.
- Design and construction of a few trailhead and trails at the Crockrum Civic Center.
- DeSoto County Greenways joined with Tunica County to develop the Great River Road Bike Trail in 2011.

Complementary Programs/Promotions

The partnership helped to promote the greenways and blueways in the community. In September 2010, a hike was held during the DeSoto County Health and Fitness Day. A Coldwater River Canoe and Kayak Trail website was developed in 2012. A map of the Coldwater River Trail was created and included on the new website. A Greenway Summit, sponsored by the River Partnership of Community Foundations, was held to inform elected officials, board of supervisors, and other interested groups about the greenway project.

Future activities along the blueway will be planned by the new DeSoto County Parks and Greenways District.

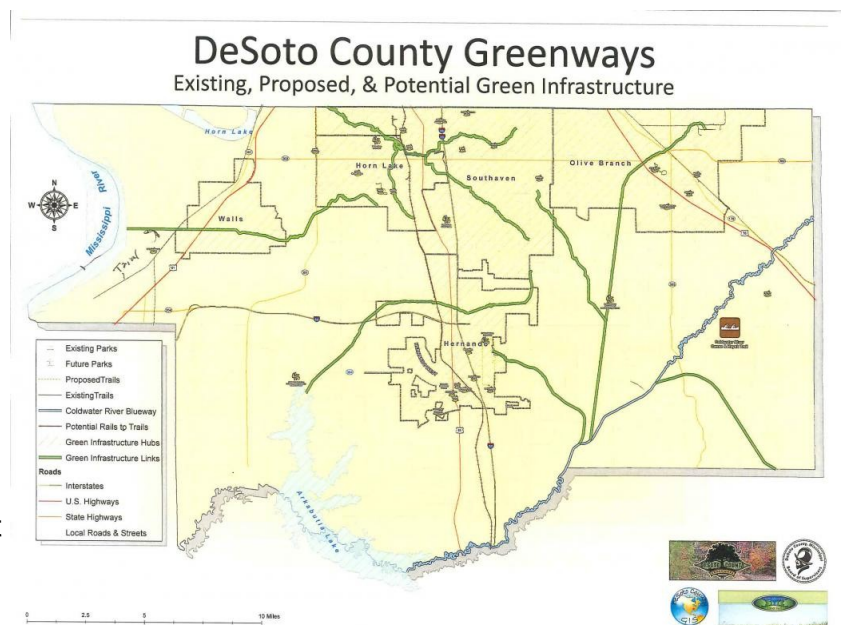
Implementation

Greenways

The partnership hoped to connect greenways throughout the three counties starting in Desoto County near the Mississippi River (Figure 4). In 2011, the DeSoto County Greenways expanded to Bass Landing Park. DeSoto County Greenways signed a Memorandum of Understanding with the US Army Corps of Engineers to incorporate the Coldwater River Nature Trail as part of the existing countywide greenway system. The Coldwater River Nature Trail consisted of two hiking trails, one three miles in length and the other five miles in length. The Johnson Creek Trail was paved and a 4.7-mile bike trail was constructed at Bayou Point. Lastly, amenities (e.g., benches, landscaping) were added in April 2012 to the new section of greenways.

The DeSoto County Greenways adopted a set of rules and regulations in 2012 pertaining to the trails. The rules included permits, protection, easements, and postings.

Figure 4: DeSoto County Greenways Map (dashboard)



In 2011, DeSoto County and local municipal officials received \$2.26 million from the Mississippi Department of

Transportation for greenway projects (e.g., pave Johnson Creek Trail). DeSoto County Greenways also received \$1.4 million from the Mississippi Transportation Commission to enhance portions of the greenway system. Entergy gave the Northwest Mississippi Land Trust \$100,000 for construction of the Johnson Creek Trail. Twenty acres were donated to the Northwest Mississippi Land Trust for the DeSoto County Greenways to be used as an outdoor classroom for a local high school. In December 2013, the DeSoto County Greenways received a \$50,000 grant from the Regional Greenprint Consortium to develop a comprehensive green resources plan and to update the DeSoto County Greenway Plan.

Blueways

The partnership had also hoped to create blueways that would allow residents to use the local rivers such as Coldwater. The Coldwater River runs through each of the three counties. A community champion worked hard to make the Coldwater River a blueway with canoes, boats, and guided tours.

Population Reach

The greenway and blueway initiative was targeted toward residents in Desoto, Marshall, and Tate Counties.

Challenges

The partnership and its partners encountered the following challenges:

- The community champion who led the blueways efforts passed away, halting the level of activity of the initiative.
- The cost for improving blueways was very high, impeding the partnership from moving forward.
- Flooding continued to be a major barrier to working on the blueways.

Sustainability

The partnership plans to continue moving forward with the greenway and blueway initiative. Currently, partners are working to update the Greenway Plan and to apply for additional funding for greenway projects.



Photo provided by Healthy Kids, Healthy Communities of Desoto, Marshall, and Tate counties.

PARKS AND PLAY SPACES

To increase active living in the tri-county area, the partnership worked with local partners to improve park amenities and facilities.

Policy, Practice, and Environmental Changes

The following policy, practice, and environmental changes occurred as a result of HKHC:

DeSoto County

- The Hernando DeSoto County Park was expanded from 1.5 acres to 41 acres in 2012.
- New park signs were placed at ten DeSoto County parks.
- Amenities were installed at the Hernando DeSoto Park, including landscaped pathways, and benches.
- The DeSoto County Parks and Recreation District was established.
- In December 2012, members of the Southern Modern Woodmen Chapter planted ten trees at the Cockrum Community Park.
- New playground equipment (e.g., swings, slides, climbing wall) was installed at Lake Cormorant Community Park, Eudora Park, and Cockrum Community Park.



Photo provided by the Healthy Kids, Healthy Communities of Desoto, Marshall, and Tate Counties

Marshall County

- Improvements were made to the Byhalia Park walking trail.
- New play equipment was installed at Byhalia Park.

Tate County

- In May 2012, a new park and playground were installed in the City of Senatobia through funding from KaBoom! and funds raised by the community.

Complementary Programs/Promotions

The Hernando Parks and Recreation Department held healthy eating and active living sessions on Tuesday and Thursday nights in 2011. The sessions were free, and a \$100 cash prize was given to a weight loss winner. The parks department also held activities (e.g., 18-mile Ride and Seek, ballroom dancing lessons) and organized sports (e.g., men's basketball league) to get residents active.

Implementation

DeSoto County

In 2011, The Desoto County Board of Supervisors and the Yazoo Levee Board signed an agreement to turn over the Hernando DeSoto County Park (formally the Bass Landing Park) to the DeSoto County Greenways, which expanded the area from 1.5 acres to 41 acres. In collaboration with the County Parks Commission new signs were added to all ten of the DeSoto County Parks with funds from the parks maintenance budget.

The city of Hernando proposed the development of a new park, Renaissance Park. A public meeting was held to gather input from the community on what types of features were desired for the park. Consultants drew plans for the park in October 2012. The parks department is exploring grant options to obtain Americans with Disabilities Act (ADA) accessible playground equipment for the proposed Renaissance Park.

In December 2012, DeSoto County Supervisors allocated \$16,000 each for playground equipment (e.g., swings, slides, climbing wall) at Lake Cormorant Community Park, Cockrum Community Park, and Eudora

Park. During the same month, members of the Southern Modern Woodmen Chapter planted ten trees at the Cockrum Community Park.

The City of Hernando donated one acre of land for a skateboard in February 2012. Fundraising and applying for grants will begin. A skate park group is raising money using Facebook. A professional is drawing up plans for the park.

In addition, the City of Olive Branch received \$37,500 for a new trail in an existing park, and Hernando was awarded a \$600,000 Transportation Enhancement Grant to develop a linear park for pedestrians and cyclists.

Parks and Recreation District

The DeSoto County Board of Supervisors developed a new Parks and Recreation District. The board appointed seven community members to be Park Commissioners, one of which was the HKHC Project Director. The commissioners met monthly to discuss budget, funding, and park improvements.

A formal public/private partnership agreement between DeSoto County Board of Supervisors, DeSoto County Economic Development Council, and the DeSoto County Parks Commissioners was signed as a cooperative agreement promoting and managing DeSoto County Parks and Greenways. The agreement allocated \$142,500 in 2013 for administrative costs associated with promoting and managing the parks and greenways.



Photo provided by Healthy Kids, Healthy Communities of DeSoto, Marshall, and Tate County.

Marshall County

The walking track at the Byhalia City Park was expanded, and a new playground was built.

Tate County

A group of residents and aldermen began initial discussions to build a new park in Senatobia. In 2011, a 30-acre area of land was donated to the Land Trust by a family in Senatobia. The Senatobia Parks and Recreation Committee applied to become a Playful City, USA. The partnership provided support to the group to become a Playful City, USA and to apply for a KaBoom! grant. The remaining funds needed for the play area was raised by the community. Senatobia received the designation of Playful City, USA, which allowed the community to obtain the \$25,000 grant to build a new playground in the park. The main donor for the playground was Sycamore Bank; therefore, the park was named Sycamore Park. More than 250 volunteers helped build the park in May 2012.

Population Reach

The parks and play spaces initiative was targeted toward residents in DeSoto, Marshall, and Tate Counties.

Challenges

The partnership identified the following challenges while improving parks and play spaces in the tri-county area:

- The City of Byhalia did not have a parks and recreation department or director, which would have been helpful during the process of expanding the park's walking track and constructing a new playground.
- The new Sycamore Park in Senatobia was built on land that was not close to residential areas or schools. There were no connections, such as bike lanes or trails to the downtown area.

Sustainability

In June 2013, a formal agreement was signed between the DeSoto County Board of Supervisors, DeSoto County Economic Development Council, and the DeSoto County Parks Commissioners to promote and manage DeSoto County Parks and Greenways moving forward.

FARMERS' MARKETS

The partnership collaborated with cities in the tri-county area to increase access to fresh produce through the development of farmers' markets, acceptance of Supplemental Nutrition Assistance Program (SNAP) vouchers, and certification of established farmers' markets.

Policy, Practice, and Environmental Changes

The following policy, practice, and environmental changes occurred as a result of HKHC:

- In 2011, the City of Holly Springs established a farmers' market on its historic square.
- The City of Horn Lake developed a farmers' market in 2011, which was located on the parking lot of the city hall.
- In the summer of 2012, the City of Olive Branch established a market after receiving training from the partnership.
- The Tate County Farmers' Market and Hernando Farmers' Market received certification in 2013.
- Local markets were able to accept Supplemental Nutrition Assistance Program (SNAP) vouchers and Senior Vouchers as of December 2013.



Photo provided by Healthy Kids, Healthy Communities of DeSoto, Marshall, and Tate Counties.

Complementary Programs/Promotions

The partnership collaborated with several local partners to plan and conduct events (e.g., grand opening) to promote the local farmers' markets.

The DeSoto County Community Health Council collaborated with the partnership to establish Fit and Fresh Saturdays for the Hernando Farmers' Market. Free activities were planned by volunteers during the market season (May 1-October 26). Targeted 45-minute activities were held for adults, seniors, and kids.

In 2012, the Hernando Farmers' Market distributed fresh produce to Catholic Social Services that worked with a low-income area in Hernando every Monday morning. The Mayor and Community Development Director/HKHC Project Coordinator delivered the produce.

The markets were also promoted through local resources, including the Mississippi Magazine (2010), DeSoto Magazine (2010), and Hernando Farmers' Market Newsletters.

Implementation

HKHC assisted in the establishment of the Olive Branch Farmers' Market, Holly Springs Farmers' Market, and continuation of the Hernando and Tate County Farmers' Market through trainings and technical assistance.

Trainings

A farmers' market training for food safety, marketing, and certification was held at the Gale Center in Hernando on March 7, 2011. The partnership, City of Hernando, and the Mississippi State University Extension Service sponsored the event. Approximately 70 participants came from Hernando, Holly Springs, Senatobia, Horn Lake, Clarksdale, Batesville, and other nearby communities. In February 2012, a farmers' market vendor training was held in Hernando. The training was sponsored by the partnership to certify vendors to sell at the market. Lastly, farmers' market trainings were held in the fall of 2012 with the community of Cockrum and the City of Olive Branch.

Farmers' Market Development

In 2011, the City of Horn Lake developed a farmers' market on the parking lot of the city hall. The market was

open every Saturday from July through October. During the same year, the City of Holly Springs established a farmers' market on its historic square. The market operated through October, and about six vendors sold each time. The Holly Springs Main Street Association, in collaboration with the vendors, developed the guidelines for the market.

The Olive Branch Farmers' Market opened in the summer of 2012. The market operated from 2-6 PM every Friday. The number of vendors and clientele had increased since the market's opening.

Tate County developed a plan to make physical improvements, such as an expansion to the Tate County Farmers' Market, which was operated by the local Extension Service with support from the Corps of Engineers. The market set a grand opening for June 2012 to celebrate the 20-year-old market. The HKHC partnership collaborated with Tate County Farmers' Market to submit a grant to the US Department of Agriculture Farmers' Market Promotion for \$63,000 for marketing and to hire a part-time Farmers' Market Manager.

Farmers' Market Certification

In 2011, the Hernando Farmers' Market received certification by the Mississippi Department of Agriculture and Commerce as part of the Mississippi Farmers' Market Certification Program in July 2010. The program was designed to identify and promote markets where fruits, vegetables, and plant materials were sold. The Hernando Market was open on Saturdays from 8 AM until 1 PM. The market was recertified in July of 2013.

The Tate County Farmers' Market also received certification from the Mississippi Department of Agriculture and Commerce as part of the Farmers' Market Program.

Nutrition Assistance

The partnership assisted Hernando and Tate Counties with distribution of Senior Vouchers through the US Department of Agriculture. Electronic Benefit Transfer (EBT) was available at some of the markets to accept Supplemental Nutrition Assistance Program (SNAP) vouchers.

Population Reach

The farmers' market initiative targeted residents in the tri-county area, although the Hernando Farmers' Market also served residents in the surrounding communities (e.g., Tunica, Lafayette, West Tennessee).

Challenges

The partnership identified a few challenges with the farmers' market initiative:

"I bet we haven't had two people come to our market with EBT cards and we've been offering it for two years..." - Staff

- Although EBT was accepted at markets the participation was extremely low.
- The partnership was unable to get Double Value coupons accepted at the market; however, several markets were able to accept Supplemental Nutrition Assistance Program (SNAP) vouchers and Senior Vouchers.
- Markets were often competing with each other for vendors and consumers, especially those that operated on the same day.
- It was difficult getting the word out to potential vendors and consumers. For example, the Tate County Farmers' Market, which had been open 20 years, struggled to attract new and consistent vendors.

Sustainability

The partnership plans to continue supporting the new farmers' markets established in Holly Springs, Horn Lake, and Olive Branch, in addition to the Hernando and Tate Counties markets that had previously existed.

OTHER HEALTHY EATING STRATEGIES

To increase access to healthy foods in the tri-county area, the partnership supported several community initiatives including a regional food hub, learning gardens, an organic farm, mobile food pantry, and community health partner awards.

Policy, Practice, and Environmental Changes

The following policy, practice, and environmental changes occurred with the support of the HKHC partnership:

- In 2012, the Mid-South Food Bank opened a mobile food pantry that traveled to DeSoto and Marshall Counties.
- A regional food hub, 4Rivers Fresh Foods, was established and launched in July 2013.
- A local master gardener and volunteer assisted DeSoto County elementary schools with the development of 14 raised gardens.
- In Marshall County, Byhalia Middle School, with assistance from the Byhalia Garden Club, established ten raised beds.
- There were four new community gardens developed in DeSoto County (Walls Library Community Garden, Horn Lake, and Hernando) and one in Tate County (City of Coldwater's Community Garden).
- River City Management Group, an HKHC partner, developed an organic farm in Marshall County to serve local restaurants.



Photo provided by Healthy Kids, Healthy Communities of DeSoto, Marshall, and Tate Counties

Complementary Programs/Promotions

Community Health Partner Program

In 2012, the partnership created a Community Health Partner Program for local restaurants as an incentive for providing healthy options. Interested restaurants were required to complete an application that would determine if healthy options were provided. An award and window decal were presented to restaurants that qualified. The application was made available to all restaurants in the eight counties served by the Community Foundation of Northwest Mississippi. The first award for providing healthy options was received in October 2012 by Buon Cibo, which was a restaurant in Hernando. Then in December 2012, Hazel's Family Restaurant in Olive Branch and the Memphis Street Café in Hernando received awards. As of December 2013, a total of six applications were received, and four had been awarded. Feedback was offered to those who did not qualify.

Gardens

In 2011, eleven schools in DeSoto County participated in a Celebration of Seeds, which was the planting of herbs and vegetables on school property. Participants were educated on team building, responsibility, nutrition, and gardening. In addition, the partnership provided each of the counties with resources and training for starting a community garden.

Implementation

Regional Food Hub

The HKHC Project Director met with the Mississippi Commissioner of Agriculture and Commerce in August of 2012 to discuss the idea of a Regional Food Hub. The discussions and work of the Regional Health Council and HKHC led to the establishment of 4Rivers Fresh Foods. The regional food hub, established in July 2013, served the DeSoto County area, but will eventually serve all ten counties that are a part of the Community

Foundation of Northwest Mississippi network. Initial funding (\$30,000) for Phase One of the hub came from the Foundation and its Endowment for the Future of Northwest Mississippi. Partners that provided monetary or in-kind support included Stern Cardiovascular Foundation, Red Square Fish and Meat Market, DeSoto Athletic Club, and Fillin Station Grille. Ten producers were a part of the food hub.

Partners that planned the hub decided to purchase Biz Pro, an online organizational website that was used by other food hubs. The site allowed consumers to go online to see who the producers or farmers were and learn about their products. Customers were also able to place orders through the site. A part-time manager was hired for the hub, and a business plan was developed. Volunteers helped with distribution and pick-ups.

The boxes of produce were sold for \$15 (small) or \$25 (large), and the hub was able to accept Supplemental Nutrition Assistance Program (SNAP) benefits. As of October 2013, there were about 75 subscribers.

Gardens

The HKHC partnership supported the development of new gardens in DeSoto, Tate, and Marshall Counties. The partnership assisted the DeSoto County Master Gardeners in establishing a garden teaching tool and demonstration garden in 2013. The partnership assisted the DeSoto County Praise Garden for two years as a project of Heartland Church, City of Horn Lake, and the Chamber of Commerce. In 2012, the Walls Library community garden was established with the support of HKHC. In addition, a total of 14 raised garden beds were developed in after-school programs in DeSoto County elementary schools.

The town of Coldwater in Tate County developed a community garden in 2012 on US Army Corps of Engineers land. Produce grown at the garden included tomatoes, butter beans, string beans, squash, cucumbers, and sweet potatoes. Community members were allowed to pick produce on certain days for no charge.

In Marshall County, Byhalia Middle School, with assistance from the Byhalia Garden Club, established ten raised beds. In 2013, the Bluejays Junior Garden Club was responsible for planning, planting, maintaining, and harvesting the gardens. Students planned to sell their harvest at a local farmers' market.

Mobile Food Pantry

Once a month, local residents in DeSoto and Marshall Counties received fresh produce and other staples from the Mid-South Mobile Food Pantry. Qualified recipients came to a designated meeting place to receive at least 40 pounds of food, including fresh produce. Recipients also received education and health screenings.

The Community Foundation of Northwest Mississippi funded the pantry in Marshall County. United Way provided funding for the pantry in DeSoto County.

Organic Farm

HKHC partner River City Management Group developed an organic farm in 2010 to serve local restaurants owned by the company.

Population Reach and Impact

The HKHC healthy eating initiatives targeted residents of DeSoto, Marshall, and Tate Counties, although some activities were directed toward certain areas or neighborhoods.

The mobile food distribution in Marshall County assisted 2,012 low-income households since 2012 and provided over 100,236 pounds of food since February 2013.

Sustainability

The food hub will continue to operate with funding from the Community Foundation of Northwest Mississippi. Eventually, the producers of the food hub would like to become an LLC, for-profit business.

The partnership, along with the Community Foundation of Northwest Mississippi, plans to continue supporting the healthy eating initiatives in the tri-county area.

SUSTAINABILITY OF THE PARTNERSHIP AND INITIATIVE

The HKHC partnership's work on healthy eating and active living will continue through the Regional Health Council. The council is funded through a W.K. Kellogg Foundation grant (\$350,000). The Foundation hopes that the development of an Endowment for the Future of Northwest Mississippi will help to continue childhood obesity prevention work.

The lead agency and partnership provided training and technical assistance throughout the duration of the HKHC grant to help each community build the skills and capacity needed to continue the initiative moving forward.

REFERENCES

1. Healthy Kids, Healthy Communities National Program Office. *Home and About*. 2009. <<http://www.healthykidshealthycommunities.org/>>. Accessed January 10, 2014
2. United States Census Bureau. *QuickFacts*. 2010. <<http://www.quickfacts.census.gov/>>. Accessed January 10, 2014.
3. Healthy Kids, Healthy Communities National Program Office. *Desoto, Marshall, and Tate Counties, Mississippi*. 2013. <<http://www.healthykidshealthycommunities.org/communities/desoto-marshall-and-tate-counties-ms>>. Accessed March 14, 2014.
4. University of Wisconsin Population Health Institute and RWJF. “County Health Rankings and Roadmaps: A Healthier Nation, County by County.” 2013. <<http://www.countyhealthrankings.org/app/mississippi/2013/desoto/county/outcomes/overall/snapshot/by-rank>>. Accessed March 14, 2014.
5. Community Foundation of Northwest Mississippi. *About Us*. 2013. <<http://cfnm.org/about-us/>>. Accessed March 14, 2014.

APPENDIX A: EVALUATION LOGIC MODEL

In the first year of the grant, this evaluation logic model identified short-term, intermediate, and long-term community and system changes for a comprehensive evaluation to demonstrate the impact of the strategies to be implemented in the community. This model provided a basis for the evaluation team to collaborate with the Healthy Kids, Healthy Communities of DeSoto, Marshall, Tate Counties partnership to understand and prioritize opportunities for the evaluation. Because the logic model was created at the outset, it does not necessarily reflect the four years of activities implemented by the partnership (i.e., the workplans were revised on at least an annual basis).

The healthy eating and active living strategies of Healthy Kids, Healthy Communities of the DeSoto, Marshall, and Tate Counties partnership included:

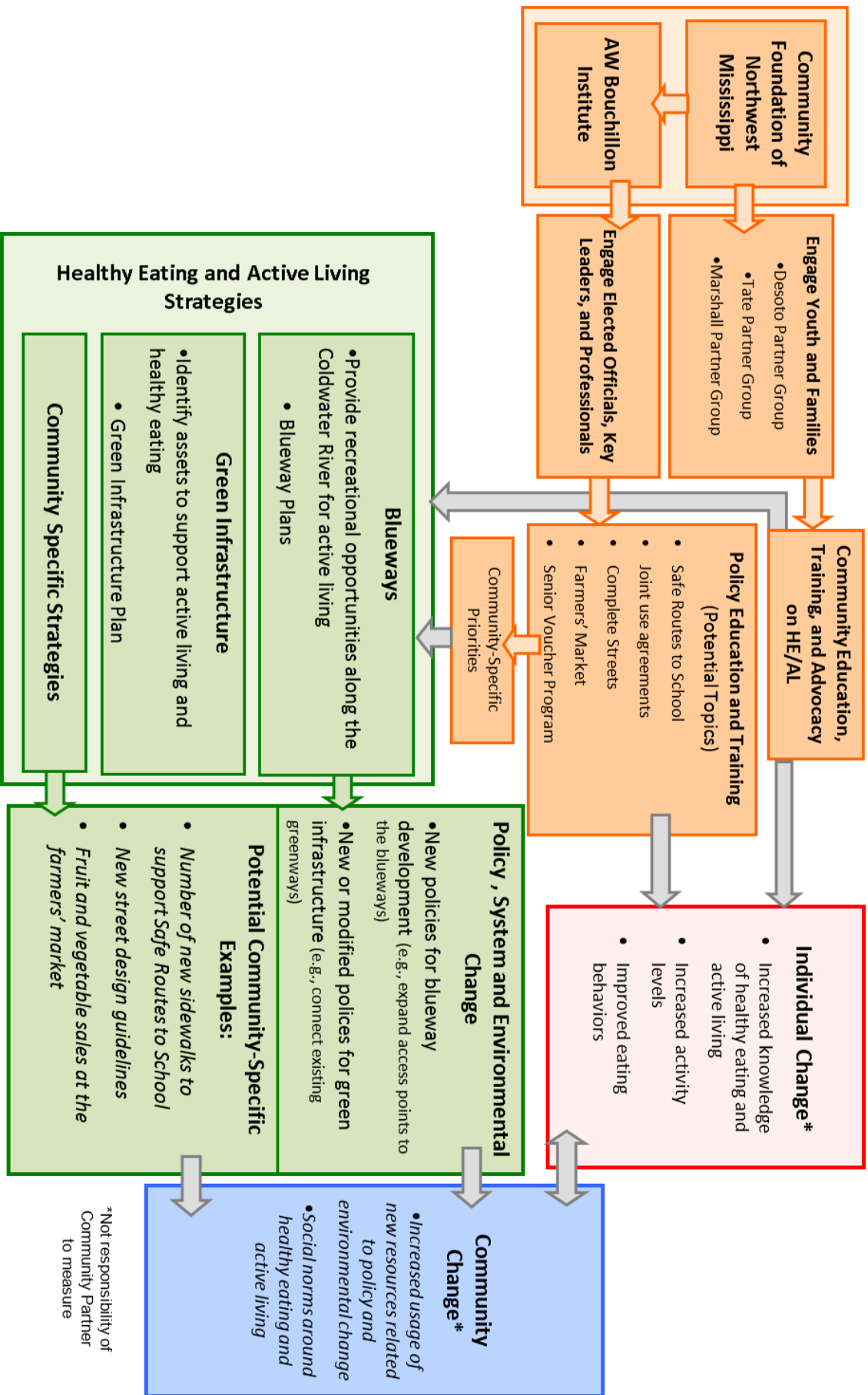
- **Comprehensive Plans:** The Cities of Olive Branch and Holly Springs revised and expanded their Comprehensive Plans to include recommendations for active living.
- **Active Transportation:** The cities of Holly Springs, Byhalia, Senatobia, and Hernando adopted a Complete Streets Policy. Design standards were created for sidewalks in Byhalia and Holly Springs, and a grant was received from the Mississippi Department of Transportation to upgrade sidewalks in Senatobia. Since 2010, Hernando added bike lanes and a new stretch of sidewalk that connected the east and west sides of the city. In addition, an agreement with the Mississippi Department of Transportation and Hernando was signed for the use of an underpass to connect the city, and a new walking track was installed at Senatobia Middle School.
- **Greenways/Blueways:** In 2011, DeSoto County and local municipal officials received \$2.26 million from the Mississippi Department of Transportation for greenway projects. The projects included pavement of the Johnson Creek trail; an extension of the Bass Landing Park trail; design and construction of a new trailhead and trails at the Crockrum Civic Center; construction of an asphalt bicycle path/walking trail from the Central Park. In 2012, a set of rules and regulations was created for the DeSoto County Greenways. A comprehensive update of the Greenways Plan is currently underway and will be completed after December 14, 2013.
- **Parks and Play Spaces:** To increase active living in the tri-county area, several environmental changes were made. New play equipment was installed at parks in DeSoto, Marshall, and Tate Counties. New signs identifying the park name were placed in ten DeSoto County parks, and improvements were made to the walking trail in Byhalia. Land donations were received to develop a new park in Senatobia, expand a park in DeSoto County, and to build a skate park in the City of Hernando. In addition, a DeSoto County Parks and Recreation District was established.
- **Farmers' Markets:** The City of Holly Springs and City of Olive Branch established farmers' markets. Two existing markets, Tate County Farmers' Market and Hernando Farmers' market received certification from the Mississippi Farmers' Market Certification Program. In 2013, the markets were able to start accepting Supplemental Nutrition Assistance Program (SNAP) and Senior Vouchers.
- **Other Healthy Eating Strategies:** To increase access to healthy foods in the tri-county area, the partnership supported several community initiatives including the creation of a regional food hub, development of learning gardens, establishment of a mobile food pantry, and providing community health partner awards for healthy restaurants.

APPENDIX A: EVALUATION LOGIC MODEL

Desoto/Marshall/Tate Counties, MS HKHC Logic Model

Community Foundation of Northwest Mississippi (CFNM)

Revised: March 18, 2011



*Not responsibility of Community Partner to measure

APPENDIX B: PARTNERSHIP AND COMMUNITY CAPACITY SURVEY RESULTS

To enhance understanding of the capacity of each community partnership, an online survey was conducted with project staff and key partners involved with Healthy Kids, Healthy Communities of Desoto, Marshall, and Tate Counties during the final year of the grant. Partnership capacity involves the ability of communities to identify, mobilize, and address social and public health problems.¹⁻³

Methods

Modeled after earlier work from the Prevention Research Centers and the Evaluation of Active Living by Design,⁴ an 82-item partnership capacity survey solicited perspectives of the members of the Healthy Kids, Healthy Communities of Desoto, Marshall, and Tate Counties partnership on the structure and function of the partnership. The survey questions assisted evaluators in identifying characteristics of the partnership, its leadership, and its relationship to the broader community.

Questions addressed respondents' understanding of Healthy Kids, Healthy Communities of Desoto, Marshall, and Tate Counties in the following areas: partnership capacity and functioning, purpose of partnership, leadership, partnership structure, relationship with partners, partner capacity, political influence of partnership, and perceptions of community members. Participants completed the survey online and rated each item using a 4-point Likert-type scale (strongly agree to strongly disagree). Responses were used to reflect partnership structure (e.g., new partners, committees) and function (e.g., processes for decision making, leadership in the community). The partnership survey topics included the following: the partnership's goals are clearly defined, partners have input into decisions made by the partnership, the leadership thinks it is important to involve the community, the partnership has access to enough space to conduct daily tasks, and the partnership faces opposition in the community it serves. The survey was open between September 2013 and December 2013 and was translated into Spanish to increase respondent participation in predominantly Hispanic/Latino communities.

To assess validity of the survey, evaluators used SPSS to perform factor analysis, using principal component analysis with Varimax with Kaiser Normalization (Eigenvalue >1). Evaluators identified 15 components or factors with a range of 1-11 items loading onto each factor, using a value of 0.4 as a minimum threshold for factor loadings for each latent construct (i.e., component or factor) in the rotated component matrix.

Survey data were imported into a database, where items were queried and grouped into the constructs identified through factor analysis. Responses to statements within each construct were summarized using weighted averages. Evaluators excluded sites with ten or fewer respondents from individual site analyses but included them in the final cross-site analysis.

Findings

Ten of the project staff and key partners involved with Healthy Kids, Healthy Communities of Desoto, Marshall, and Tate Counties completed the survey.

References

1. Goodman RM, Speers MA, McLeroy K, et al. Identifying and defining the dimensions of community capacity to provide a basis for measurement. *Health Educ Behav.* Jun 1998;25(3):258-278.
2. Israel BA, Schulz AJ, Parker EA, Becker AB. Review of community-based research: assessing partnership approaches to improve public health. *Annu Rev Public Health.* 1998;19:173-202.
3. Roussos ST, Fawcett SB. A review of collaborative partnerships as a strategy for improving community health. *Annu Rev Public Health.* 2000;21:369-402.
4. Baker E, Motton F. Is there a relationship between capacity and coalition activity: The road we've traveled. American Public Health Association 131st Annual Meeting. San Francisco, CA; 2003.

APPENDIX B: PARTNERSHIP AND COMMUNITY CAPACITY SURVEY RESULTS

Partnership and Community Capacity Survey Respondent Summary

Community Partnership

Desoto/Marshall/Tate Cou

Respondents (n= **10**)

Respondent Characteristics

| Gender | | Identified Race/Ethnicity | | | | Identified Role | |
|-------------|---|-----------------------------------|----|-------------------------------|---|-------------------------------|---|
| Female | 7 | American Indian or Alaskan Native | 0 | Hispanic or Latino | 0 | Community Partnership Lead | 2 |
| Male | 3 | Asian | 0 | Not Hispanic or Latino | 0 | Community Partnership Partner | 3 |
| No response | 0 | White | 10 | Don't know/ Unsure ethnicity | 0 | Community Leader | 2 |
| Age Range | | African American/ Black | 0 | Refused to identify ethnicity | 0 | Community Member | 4 |
| 18-25 | 0 | Pacific Islander/ Native Hawaiian | 0 | Other ethnicity | 0 | Public Official | 1 |
| 26-45 | 2 | | | | | Other role | 1 |
| 46-65 | 7 | | | | | | |
| 66+ | 1 | | | | | | |
| No response | 0 | | | | | | |

Type of Affiliated Organization

| | | | |
|--|---|-------|-------|
| Faith- or Community Based Organization | 1 | 10.0% | (1) |
| School (district, elementary, middle, high) | 1 | 10.0% | (2) |
| Local Government Agency (city, county) | 3 | 30.0% | (3) |
| University or Research/Evaluation Organization | 0 | 0.0% | (4) |
| Neighborhood Organization | 0 | 0.0% | (5) |
| Advocacy Organization | 1 | 10.0% | (6) |
| Health Care Organization | 0 | 0.0% | (7) |
| Child Care or Afterschool Organization | 0 | 0.0% | (8) |
| Other | 4 | 40.0% | (10) |
| No response | 0 | 0.0% | (999) |

Partnership and Community Capacity Data

Provision of required space and equipment

Participants provided level of agreement to statements indicating the community partnership provided adequate space, equipment, and supplies to conduct business and meetings.

| | | | |
|----------------|--------|-------------------|--------|
| Strongly agree | 35.56% | Strongly disagree | 0.00% |
| Agree | 41.11% | I don't know | 22.22% |
| Disagree | 0.00% | No response | 1.11% |

Partner skills and communication

Participants provided level of agreement to statements supporting partner skills and ability to communicate with and engage multiple types of people (e.g., public officials, community leaders).

| | | | |
|----------------|--------|-------------------|--------|
| Strongly agree | 38.18% | Strongly disagree | 0.00% |
| Agree | 50.00% | I don't know | 1.82% |
| Disagree | 0.00% | No response | 10.00% |

APPENDIX B: PARTNERSHIP AND COMMUNITY CAPACITY SURVEY RESULTS

Community Partnership

| | | | |
|---|--------|-------------------|--------|
| Community and community members | | | |
| Participants provided level of agreement to statements suggesting the communities are good places to live, and that community members are helpful, can be trusted, and share the same goals or values. | | | |
| Strongly agree | 28.18% | Strongly disagree | 0.00% |
| Agree | 60.00% | I don't know | 8.18% |
| Disagree | 0.00% | No response | 3.64% |
| Partner and community involvement | | | |
| Participants provided level of agreement to statements indicating partners and the community were actively involved in partnership activities, meetings, and decisions. | | | |
| Strongly agree | 40.00% | Strongly disagree | 0.00% |
| Agree | 46.00% | I don't know | 4.00% |
| Disagree | 0.00% | No response | 10.00% |
| Partner and partnership development | | | |
| Participants provided level of agreement to statements suggesting the partnership and its partners seek ways learn, develop, and enhance sustainability. | | | |
| Strongly agree | 32.00% | Strongly disagree | 0.00% |
| Agree | 58.00% | I don't know | 6.00% |
| Disagree | 0.00% | No response | 4.00% |
| Partnership structure, organization, and goals | | | |
| Participants provided level of agreement to statements suggesting partnership has processes in place related to structure, meeting organization, and goals. | | | |
| Strongly agree | 31.67% | Strongly disagree | 0.00% |
| Agree | 55.00% | I don't know | 13.33% |
| Disagree | 0.00% | No response | 0.00% |
| Relationship between partners and leadership | | | |
| Participants provided level of agreement to statements indicating the leadership and partners trust and support each other. | | | |
| Strongly agree | 50.00% | Strongly disagree | 0.00% |
| Agree | 45.00% | I don't know | 2.50% |
| Disagree | 0.00% | No response | 2.50% |
| Community members intervene | | | |
| Participants provided level of agreement to statements indicating that community members can be counted on intervene in instances where someone is disrespectful, disruptive, or harmful to another community member. | | | |
| Strongly agree | 13.33% | Strongly disagree | 10.00% |
| Agree | 43.33% | I don't know | 13.33% |
| Disagree | 16.67% | No response | 3.33% |
| Leadership motivation | | | |

APPENDIX B: PARTNERSHIP AND COMMUNITY CAPACITY SURVEY RESULTS

Community Partnership

| | | | | |
|---|--------|-------------------|--------|--|
| Participants provided level of agreement to statements suggesting the leadership is motivated to help others, work with diverse groups, shows compassion, and follows through. | | | | |
| Strongly agree | 65.00% | Strongly disagree | 0.00% | |
| Agree | 35.00% | I don't know | 0.00% | |
| Disagree | 0.00% | No response | 0.00% | |
| Community member and partner participation | | | | |
| Participants provided level of agreement to statements indicating that community members and partners have opportunities to serve in leadership roles and participate in group decision-making. | | | | |
| Strongly agree | 60.00% | Strongly disagree | 0.00% | |
| Agree | 36.67% | I don't know | 3.33% | |
| Disagree | 0.00% | No response | 0.00% | |
| Involvement in other communities | | | | |
| Participants provided level of agreement to statements suggesting leadership and partners are involved in other communities and various community groups, and help communities work together. | | | | |
| Strongly agree | 45.00% | Strongly disagree | 0.00% | |
| Agree | 42.50% | I don't know | 2.50% | |
| Disagree | 0.00% | No response | 10.00% | |
| Community member willingness to assist | | | | |
| Participants provided level of agreement to statements suggesting most community members help neighbors and solve community problems. It also suggested some community members may take advantage of others. | | | | |
| Strongly agree | 42.50% | Strongly disagree | 0.00% | |
| Agree | 42.50% | I don't know | 5.00% | |
| Disagree | 0.00% | No response | 10.00% | |
| Core leadership and leadership skills | | | | |
| Participants provided level of agreement to statements suggesting the community partnership has a core leadership group organizing efforts, and that leaders have the skills to help the partnership achieve its goals. | | | | |
| Strongly agree | 60.00% | Strongly disagree | 0.00% | |
| Agree | 40.00% | I don't know | 0.00% | |
| Disagree | 0.00% | No response | 0.00% | |
| Partner motivation | | | | |
| Participants provided level of agreement to statements indicating that partners won't give up in their efforts to create change and increase sense of community through the partnership. | | | | |
| Strongly agree | 56.67% | Strongly disagree | 0.00% | |
| Agree | 43.33% | I don't know | 0.00% | |
| Disagree | 0.00% | No response | 0.00% | |
| Visibility of leadership | | | | |
| Participants provided level of agreement to statements suggesting the leadership is known in the community and works with public officials. | | | | |
| Strongly agree | 50.00% | Strongly disagree | 0.00% | |
| Agree | 40.00% | I don't know | 0.00% | |
| Disagree | 0.00% | No response | 10.00% | |

APPENDIX B: PARTNERSHIP AND COMMUNITY CAPACITY SURVEY RESULTS

Community Partnership

| Leadership lives in the community | | | |
|--|--------|-------------------|--------|
| Participants provided level of agreement to a statement indicating that at least one member of the leadership resides within the community. | | | |
| Strongly agree | 70.00% | Strongly disagree | 0.00% |
| Agree | 30.00% | I don't know | 0.00% |
| Disagree | 0.00% | No response | 0.00% |
| Leadership has a respected role in the community | | | |
| Participants provided level of agreement to a statement that suggests at least one member of the leadership team has a respected role in the community. | | | |
| Strongly agree | 60.00% | Strongly disagree | 0.00% |
| Agree | 40.00% | I don't know | 0.00% |
| Disagree | 0.00% | No response | 0.00% |
| Community partnership initiatives are known | | | |
| Participants provided level of agreement to a statement suggesting that community members are aware of the partnership's initiatives and activities. | | | |
| Strongly agree | 30.00% | Strongly disagree | 0.00% |
| Agree | 50.00% | I don't know | 10.00% |
| Disagree | 0.00% | No response | 10.00% |
| Division of resources | | | |
| Participants provided level of agreement to statements suggesting that resources are equally divided among different community groups (e.g., racial/ethnic, lower income). | | | |
| Strongly agree | 60.00% | Strongly disagree | 0.00% |
| Agree | 40.00% | I don't know | 0.00% |
| Disagree | 0.00% | No response | 0.00% |

APPENDIX C: PARTNER LIST

| Healthy Kids, Healthy Communities of DeSoto, Marshall, and Tate Counties | |
|--|---|
| Organization/Institution | Partner |
| Business/Industry/Commercial | Baptist-Memorial Blue Cross, Blue Shield Cedar Hill Farms Entergy Looney Ricks Kiss Mid-South Trails Association |
| Colleges/Universities | Mississippi State University Extension Service School of Food Science, Nutrition and Health Promotion Rust College |
| Foundation | Aaron E. Henry Community Health Services Center, Inc. Community Foundation of Northwest Mississippi Alliance for a Healthier Generation |
| Government Organizations | City of Hernando City of Holly Springs City of Horn Lake City of Olive Branch City of Senatobia DeSoto County Board of Supervisors DeSoto County Greenways and Parks Hernando Parks and Recreation Department Mississippi Department of Transportation Mississippi State Department of Health Mississippi State Department of Agriculture and Commerce Town of Byhalia |
| Other Community-Based Organizations | A.W. Bouchillon Institute for Community Planning Gale Community Center Healthy Congregation Main Street Association in Holly Springs Marshall County Health Council Mid-South Food Bank North Mississippi Land Trust |
| Other Youth Organization | Olive Branch YMCA |
| Policy/Advocacy Organizations | Hernando Bicycle Club National Audobon Society (MS) |
| Schools | Byhalia High School DeSoto County Schools |

APPENDIX D: SOURCES AND AMOUNTS OF FUNDING LEVERAGED

| Sources of Revenue | | | |
|---|-------------------------------|--------------|--------------|
| Community Partnership | Desoto/Marshall/Tate Counties | | |
| Resource source | Year | Amount | Status |
| Business | | | |
| Matching funds | | | |
| | 2010 | | Annual total |
| | | \$1,000.00 | Accrued |
| | 2011 | | Annual total |
| | | \$1,000.00 | Accrued |
| Sum of revenue generated by resource source | | \$2,000.00 | |
| Individual/private donor | | | |
| Matching funds | | | |
| | 2010 | | Annual total |
| | | \$1,755.00 | Accrued |
| | 2011 | | Annual total |
| | | \$1,755.00 | Accrued |
| Sum of revenue generated by resource source | | \$4,310.00 | |
| Local government | | | |
| Matching funds | | | |
| | 2010 | | Annual total |
| | | \$5,000.00 | Accrued |
| | 2011 | | Annual total |
| | | \$7,000.00 | Accrued |
| Sum of revenue generated by resource source | | \$182,250.00 | |
| Other | | | |
| | 2012 | | Annual total |
| | | \$166,250.00 | Accrued |
| | | \$16,000.00 | Accrued |
| | 2013 | | Annual total |
| | | \$142,500.00 | Accrued |
| Sum of revenue generated by resource source | | \$336,750.00 | |

APPENDIX D: SOURCES AND AMOUNTS OF FUNDING LEVERAGED

| Community Partnership | | Desoto/Marshall/Tate Counties | |
|---|-----------------------|-------------------------------|----------------------------------|
| Resource source | | Amount | Status |
| State government | | | |
| | Year | | |
| | Other | | |
| | 2012 | | Annual total \$10,000.00 |
| | | \$10,000.00 | Accrued |
| | 2013 | | Annual total \$238,000.00 |
| | | \$238,000.00 | Accrued |
| Sum of revenue generated by resource source | | \$248,000.00 | |
| Foundation | | | |
| | Year | | |
| | HKHC funds | | |
| | 2009 | | Annual total \$76,858.00 |
| | | \$2,029.00 | Accrued |
| | | \$10,182.00 | Accrued |
| | | \$24,488.00 | Accrued |
| | | \$40,159.00 | Accrued |
| | 2010 | | Annual total \$106,054.00 |
| | | \$17,379.00 | Accrued |
| | | \$2,029.00 | Accrued |
| | | \$42,146.00 | Accrued |
| | | \$44,500.00 | Accrued |
| | 2011 | | Annual total \$16,376.00 |
| | | \$16,376.00 | Accrued |
| | 2012 | | Annual total \$95,678.00 |
| | | \$22,830.00 | Accrued |
| | | \$23,665.00 | Accrued |
| | | \$42,146.00 | Accrued |
| | | \$7,037.00 | Accrued |
| | Matching funds | | |
| | 2010 | | Annual total \$1,500.00 |
| | | \$1,500.00 | Accrued |
| | 2011 | | Annual total \$126,500.00 |
| | | \$125,000.00 | Accrued |
| | | \$1,500.00 | Accrued |

APPENDIX D: SOURCES AND AMOUNTS OF FUNDING LEVERAGED

| Community Partnership | | Desoto/Marshall/Tate Counties | |
|---|------|-------------------------------|----------------------------------|
| Resource source | Year | Amount | Status |
| | 2012 | | Annual total \$164,328.00 |
| | | \$1,500.00 | Accrued |
| | | \$125,000.00 | Accrued |
| | | \$33,328.00 | Accrued |
| | | \$4,500.00 | Accrued |
| | 2013 | | Annual total \$155,164.00 |
| | | \$13,500.00 | Accrued |
| | | \$125,000.00 | Accrued |
| | | \$16,664.00 | Accrued |
| Sum of revenue generated by resource source | | \$742,458.00 | |
| Non-profit organization | | Year | |
| Matching funds | | | |
| | 2011 | | Annual total \$5,000.00 |
| | | \$2,000.00 | Accrued |
| | | \$3,000.00 | Accrued |
| | 2012 | | Annual total \$5,000.00 |
| | | \$5,000.00 | Accrued |
| Other | | | |
| | 2011 | | Annual total \$37,768.00 |
| | | \$37,768.00 | Accrued |
| | 2012 | | Annual total \$8,000.00 |
| | | \$8,000.00 | Accrued |
| | 2013 | | Annual total \$45,000.00 |
| | | \$30,000.00 | Accrued |
| | | \$15,000.00 | Accrued |
| Sum of revenue generated by resource source | | \$100,768.00 | |
| School | | Year | |
| Matching funds | | | |
| | 2010 | | Annual total \$7,000.00 |
| | | \$1,000.00 | Accrued |
| | | \$1,000.00 | Accrued |
| | | \$5,000.00 | Accrued |

APPENDIX D: SOURCES AND AMOUNTS OF FUNDING LEVERAGED

| Community Partnership | | Desoto/Marshall/Tate Counties | |
|---|------|-------------------------------|----------------|
| Resource source | Year | Amount | Status |
| | 2011 | | Annual total |
| | | | \$3,000.00 |
| | | \$3,000.00 | Accrued |
| Sum of revenue generated by resource source | | \$10,000.00 | |
| Other | | Year | |
| Matching funds | | | |
| | 2010 | | Annual total |
| | | | \$30,000.00 |
| | | \$30,000.00 | Accrued |
| | 2011 | | Annual total |
| | | | \$30,000.00 |
| | | \$30,000.00 | Accrued |
| | 2012 | | Annual total |
| | | | \$30,000.00 |
| | | \$30,000.00 | Accrued |
| | 2013 | | Annual total |
| | | | \$30,000.00 |
| | | \$30,000.00 | Accrued |
| Other | | | |
| | 2013 | | Annual total |
| | | | \$50,000.00 |
| | | \$50,000.00 | Accrued |
| Sum of revenue generated by resource source | | \$170,000.00 | |
| Grand Total | | | \$1,614,286.00 |

APPENDICES E & F: ENVIRONMENTAL AUDIT REPORTS

- Appendix E: Farmers Market Environmental Audit Report
- Appendix F: Parks and Play Spaces Environmental Audit Report

Healthy Kids, Healthy Communities of DeSoto, Marshall, and Tate Counties

Farmers' Market Environmental Audits

Summary Report

Prepared by Transtria LLC



Table of Contents

| | |
|--|----|
| Overview..... | 3 |
| Background..... | 5 |
| Methods..... | 5 |
| Overall Results..... | 6 |
| Results by Market | 7 |
| Appendix A: Tables..... | 10 |
| Appendix B: Farmers' Market Environmental Audit Tool | 16 |

OVERVIEW

DeSoto, Marshall, and Tate's Healthy Kids, Healthy Communities, one of 49 Healthy Kids, Healthy Communities partnerships, is part of a national program of the Robert Wood Johnson Foundation whose primary goal is to implement healthy eating and active living policy, system, and environment change initiatives. In order to better understand the impact of their work around farmers' markets, representatives of DeSoto-Marshall-Tate, collected environmental audit data in farmers' markets throughout DeSoto County. The following three farmers' markets were included in the assessment: Tate County Farmers' Market, Hernando Farmers' Market, and Olive Branch Farmers' Market.

OVERALL RESULTS

Overall Market

- Two of the three markets audited were open year-round, with Monday through Saturday morning and afternoon hours.
- All of the markets were open at least once a week during their respective operating seasons.
- All of the markets had legible signs to identify the market.
- None of the markets were located near a public transit stop.
- A third (66%) of the markets accepted WIC/SNAP/EBT.

Vendor Characteristics

- The number of vendors across the farmers' markets ranged from 11 to more than 40.
- At least 50% of the market vendors at each market sold fresh produce.
- All of the vendors had clean and well-organized displays.

Product Signage and Pricing

- The amount of products identified by name varied by market. Tate County had signage for most (51%-99%) of products, while Hernando and Olive Branch had some (1%-50%) signage.
- One of the markets had mostly (51%-99%) clear signs documenting product prices and the other two had some (1%-50%) signs documenting product prices.

Availability of nutrient-dense and minimally nutritious foods

- Tate County Farmers' Market had no canned or frozen fruits or vegetables.
- The market in Hernando had limited amounts (1-3 types) of canned fruits and canned vegetables. There were no frozen fruits and vegetables.
- The Olive Branch Farmers' Market had no canned fruits, but did have a variety (4+ types) of canned vegetables. The market had no frozen fruits or vegetables.
- Only one market offered high-fiber, whole grain foods. Healthier foods, such as lean meats, fish, and poultry were also offered at this market.
- Sweet foods (e.g., cookies, cakes) were offered at two of the markets.
- Milk was available at one market and included two types; 2% and whole/Vitamin D.

Availability and quality of fresh produce

- Auditors did not indicate the quality or quantity of fresh produce available at two of the markets.

- When reported, the quality of all fresh produce was “good” (top quality, good color, fresh, firm, and clean).
- When reported, the quantity of all fresh produce was “a lot” (10+), with the exception of honeydew melons, which were “few” (<3) in quantity.
- The range of fresh fruit was between one type and three types. The range of fresh vegetables was between four and twelve types.
- The most common unit for purchasing fresh produce was individually/each, followed by box/bag. Other units for purchasing were per pound and by the bunch.

Cost of Produce

- Fresh fruit was more expensive to purchase overall than fresh vegetables. The range in price for fresh fruit was between \$2.00 and \$8.00 and the range in price for fresh vegetables was \$0.50 and \$3.00.
- Among vegetables sold by the box/bag, radishes cost the least (\$0.50) and summer squash and broccoli cost the most (\$3.00).
- Blackberries were the most expensive fruit (\$8.00) among fruit sold by the box and blueberries were the least expensive (\$3.50).

BACKGROUND

Healthy Kids, Healthy Communities (HKHC) is a national program of the Robert Wood Johnson Foundation (RWJF) whose primary goal is to implement healthy eating and active living policy, system, and environmental change initiatives that can support healthier communities for children and families across the United States. HKHC places special emphasis on reaching children who are at highest risk for obesity on the basis of race/ethnicity, income, and/or geographic location. For more information about HKHC, please visit www.healthykidshealthycommunities.org.

Located in DeSoto-Marshall-Tate, MS, the Community Foundation of Northwest Mississippi was selected to lead the local HKHC partnership. The partnership has chosen to focus its work on farmers' markets, community gardens, parks and recreation, greenway and blueway plans, and complete streets.

Transtria LLC, a public health evaluation and research consulting firm located in St. Louis, Missouri, is funded by the Robert Wood Johnson Foundation to lead the evaluation and dissemination activities from April 2010 to March 2014. For more information about the evaluation, please visit www.transtria.com/hkhc. A supplementary enhanced evaluation component focuses on six cross-site HKHC strategies, including: parks and plays spaces, street design, farmers' markets, corner stores, physical activity standards in childcare settings, and nutrition standards in childcare settings. Communities are trained to use two main methods as part of the enhanced evaluation, direct observation and environmental audits. Tools and training are provided by Transtria staff (see www.transtria.com/hkhc).

In order to better understand the impact of their work in farmers' markets, representatives of DeSoto-Marshall-Tate chose to participate in the enhanced evaluation data collection activities. The partnership completed their enhanced evaluation activities for farmers' markets using the environmental audit method.

METHODS

The Farmers' Market Environmental Audit Tool was modified from three existing environmental audit tools including the Farmers' Market Vendor Evaluation (created by Monika Roth), Farmers' Market Evaluation, Mystery Shopping-Farmers' Market (created by marketumbrella.org), and Nutrition Environment Measurement Survey-NEMS (created by Glanz et al.). Environmental audits assess the presence or absence of different features as well as the quality or condition of the physical environment. The tool captures overall market operations (e.g., months, days and hours of operation, accessibility, government nutrition assistance programs), vendor display areas (e.g., space and equipment), product signage and pricing (e.g., clear signs, unit and price labeled, discounts for larger sales), frozen/canned fruits and vegetables (e.g., quantity and variety of frozen or canned fruits and vegetables), other foods (e.g., availability of healthier options and foods with minimal nutritional value) and the availability, pricing, quality, and quantity of fresh fruits and vegetables.

Four markets were selected throughout DeSoto-Marshall-Tate for data collection. An Evaluation Officer from Transtria LLC trained community members and partnership staff on proper data collection methods using the tool and data collection was completed between during three different time periods. One market was audited on August 25, 2012. The second market was audited during June 2013 and the third was audited during July 2013. Transtria staff performed data entry and validation, including double data entry to ensure accuracy of the data. Agreement of data entry was 98.66% and all errors were fixed.

OVERALL RESULTS

Overall Market

Two of the three markets audited were open year-round, with Monday through Saturday morning and afternoon hours. All of the markets were open at least once a week during their operating seasons. All of the markets had legible signs to identify the market. None of the markets were located near a public transit stop. A third (66%) of the markets accepted WIC/SNAP/EBT.

Vendor Characteristics

The number of vendors across the farmers' markets ranged from 11 to more than 40. At least 50% of the market vendors at each market sold fresh produce. Each market had visible signs with farmers'/businesses' names, although it varied between "some" (1%-50%) or "most" (51%-99%). All of the vendors were reported to have clean and well-organized displays.

Product Signage and Pricing

The amount of products identified by name (e.g., with signage) varied by market. Tate County had signage for a lot (51%-99%) of products, while Hernando and Olive Branch had some (1%-50%) signage. One of the markets had mostly (51%-99%) clear signs documenting product prices and the other two had some (1%-50%) signs documenting product prices.

Availability of nutrient-dense and minimally nutritious foods

Tate County Farmers' Market had no canned or frozen fruits or vegetables. The market in Hernando had limited (one to three types) amounts of canned fruits and canned vegetables, but no frozen fruits and vegetables. The Olive Branch Farmers' Market had no canned fruits, but did have a variety (four or more types) of canned vegetables. Only one market offered high-fiber, whole grain foods. This same market was the only one to offer healthier foods, such as lean meats, fish, and poultry. Sweet foods (e.g., cookies, cakes) were offered at two of the markets. Milk was available at one market and included two types; 2% and whole/Vitamin D.

Availability and quality of fresh produce

Auditors did not indicate the quality or quantity of fresh produce available at two of the markets. When reported, the quality of all fresh produce was "good" (top quality, good color, fresh, firm, and clean). When reported, the quantity of all fresh produce was "a lot" (ten or more), with the exception of honeydew melons, which were "few" (less than three) in quantity. Across all markets, the range of fresh fruit was between one type and three types and vegetables ranged between four and twelve types. The most common unit for purchasing fresh produce was individually, followed by box/bag. Other units for purchasing were per pound and by the bunch.

Cost of Produce

Fresh fruit was more expensive to purchase overall than fresh vegetables. The range in price for fresh fruit was between \$2.00 and \$8.00 and the range in price for fresh vegetables was \$0.50 and \$3.00. Among vegetables sold by the box/bag, radishes cost the least (\$0.50) and summer squash and broccoli cost the most (\$3.00). Blackberries were the most expensive fruit (\$8.00) among fruit sold by the box and blueberries were the least expensive (\$3.50).

RESULTS BY MARKET

Tate County Farmers' Market

Overall market

The Tate County Farmers' Market was open year-round (January through December). Although the hours of operation were not indicated, the market was open during the morning and afternoon on Monday through Saturday every week. The market featured legible signage to identify the market's name. Both the entrance and aisles were accessible and easy to maneuver. Auditors indicated that WIC/SNAP/EBT was accepted, but the only signage present was for WIC acceptance. The market did not have an ATM on-site or an information booth.

Vendor characteristics

There were over 40 vendors present at the market that sold goods and over 40 that also sold fresh produce. Auditors indicated that a lot (>25%) of vendors displayed visible signs with businesses' names, product names, product prices, and product units. A lot (>25%) of the vendor displays were clean and well-organized. None of the vendors were reported to have power cords taped down at their displays to prevent tripping.

Product signage and pricing

A lot (>25%) of vendors at the Tate County Farmers' Market identified products by name, had clear signage documenting the price of goods, and unit prices were labeled appropriately.

Availability of nutrient-dense and minimally nutritious foods

No frozen fruits or vegetables were sold at the market; similarly, no canned fruits or vegetables were sold at the market. No high-fiber, whole grain foods or lean meats, fish, or poultry were offered. The healthier foods that were offered at the market included nuts, seeds, or dry beans. No minimally nutritious foods (e.g., salty foods, ice cream, candy) were offered at the market. No types of milk (e.g., 2%, skim, Vitamin D) were sold.

Availability and quality of fresh produce

Tate County Farmers' Market offered three types of fresh fruits (cantaloupe, honeydew, watermelon) and four types of fresh vegetables (green peppers, summer squash, eggplant, Irish potatoes). All fruits were sold individually. Three of the vegetables were sold by the pound and the other was sold individually. Auditors indicated that the quality of all the fresh produce sold at the market was good (top quality, good color, fresh, firm, and clean). Aside from honeydew melons, the quantity all of the fresh produce available at the market was a lot (ten or more); there were only a few (less than three) honeydews available.

Cost of produce

The most expensive fruit was watermelon (\$3.00). Both cantaloupe and honeydew melons cost \$2.00. The lowest priced vegetable was green peppers (\$0.50 each) and the other vegetables were all \$1.00 per pound.

Hernando Farmers' Market

Overall market

The Hernando Farmers' Market was open April through October. The market was open weekly on Saturday, with morning and afternoon hours between 8:00 AM and 1:00 PM. The market featured an accessible entrance with room to maneuver around the market. A parking lot and on-street parking were located adjacent to the farmers' market. A variety of different amenities were present at this market, including: an on-site market manager, legible signage identifying the market name, seating (e.g., benches, tables/chairs), and an ATM. Events and activities were also hosted at the market. Patrons were equipped to navigate the market because market maps (e.g., maps with directions to market, site map with vendors) were provided as well as an information booth/table. The market accepted WIC/SNAP/EBT but signage was only posted for SNAP acceptance.

Vendor characteristics

Thirty-three vendors sold only produce at the market; two vendors sold produce in combination with other products; and forty-one vendors sold no produce. Auditors indicated that the amount of produce sold was sufficient for the vendors' space in all cases. Some vendors (1% to 50%) had visible signs with farmers'/business' names. All of the vendors had clean and well-organized displays and power cords taped down to prevent tripping.

Product signage and pricing

It was reported that only some vendors (1% to 50%) identified products by name; had clear signs documenting the price; and had product units appropriately labeled.

Availability of nutrient-dense and minimally nutritious foods

A limited (one to three types) amount of both canned vegetables and canned fruits were available at the market. No frozen fruits or vegetables were sold at the market. Healthier foods were available, including: high-fiber, whole grain foods and lean meats, fish, and poultry. Foods with minimal nutritional value were offered but limited to sweet foods (e.g., cookies, cakes). Hernando Farmers' Market was the only market that sold milk; two different types (2% and whole/Vitamin D) were available.

Availability and quality of fresh produce

Three types of fresh fruits were available at the market, including: blackberries, blueberries, and peaches. Seven types of fresh vegetables (asparagus, broccoli, cabbages, kale, onions, summer squash, tomatoes) were available at the market. All of the fresh fruit was sold by the box/bag. Three of the fresh vegetables were sold by the bunch; two of the fresh vegetables were sold individually (i.e., each); and one was sold by the pound. Auditors did not indicate the quality or quantity of any of the fresh produce available at the market. See Table 3 for more details about fresh produce availability.

Cost of produce

Fresh fruit prices ranged from \$3.50 to \$8.00, with blackberries being the most expensive. Fresh vegetable prices ranged from \$1.00 to \$3.00. Of the fresh vegetables sold by the bunch, radishes were the least expensive (\$1.00) and asparagus was the most expensive (\$3.00). Of the fresh vegetables sold individually, cabbages cost more than broccoli (\$2.00 and \$3.00, respectively).

Olive Branch Farmers' Market

Overall market

The Olive Branch Farmers' Market was open May through October, during Friday morning and afternoon hours, every week. Hours of operation were not specified. The market featured an accessible entrance with room to maneuver around the market. A parking lot was located adjacent to the farmers' market. Two other features present included an on-site market manager and a legible sign identifying the market.

Vendor characteristics

Six vendors sold only produce at the market; three vendors sold produce in combination with other products; and five vendors did not sell any produce. All vendors had a sufficient amount of produce for their space/stall. Most vendors (51% to 99%) had visible signs with farmers'/business' names and all vendors had clean and well-organized displays.

Product signage and pricing

Some vendors (1% to 50%) identified products by name and had clear signage documenting product price. Most vendors labeled product units appropriately.

Availability of nutrient-dense and minimally nutritious foods

No canned fruits were available at the market, but a variety (four or more) of canned vegetables was available. No frozen fruits or vegetables were sold. No healthier foods (e.g., high-fiber, whole grain foods) were offered, and foods with minimal nutritional value were limited to sweet foods (e.g., cookies, cakes).

Availability and quality of fresh produce

One type of fresh fruit (strawberries) was available at the market. Twelve different types of fresh vegetables were available at the market, including: broccoli, brussels sprouts, cabbages, carrots, kale, onions, radishes, red peppers, summer squash, and tomatoes. Two types of fresh vegetables (green beans, green peppers) were marked as available at the market, but pricing and unit of purchase were not indicated. Six of the fresh vegetables were available for purchase by the box/bag. Three of the fresh vegetables (kale, onions, red peppers) were available for purchase individually (i.e., each). Tomatoes were available for purchase by the pound. Auditors did not indicate the quality or quantity of fresh produce available at the market. See Table 3 for more details about fresh produce availability.

Cost of produce

The range of fresh produce prices at the market was between \$0.50 and \$3.00. Of the fresh vegetables sold by the box/bag, radishes were the least expensive (\$0.50) and broccoli and summer squash were the most expensive (\$3.00). Of fresh vegetables sold individually, red peppers were the least expensive (\$0.50) and kale was the most expensive (\$2.00).

Appendix A: Tables

Table 1: Overall Market Information

| Characteristics Present | Tate County Farmers' Market | Hernando Farmers' Market | Olive Branch Farmers' Market |
|---------------------------------------|-----------------------------|--------------------------|------------------------------|
| Months of operation: January | X | | |
| Months of operation: February | X | | |
| Months of operation: March | X | | |
| Months of operation: April | X | X | |
| Months of operation: May | X | X | X |
| Months of operation: June | X | X | X |
| Months of operation: July | X | X | X |
| Months of operation: August | X | X | X |
| Months of operation: September | X | X | X |
| Months of operation: October | X | X | X |
| Months of operation: November | X | | |
| Months of operation: December | X | | |
| Days of operation: Monday | X | | |
| Days of operation: Tuesday | X | | |
| Days of operation: Wednesday | X | | |
| Days of operation: Thursday | X | | |
| Days of operation: Friday | X | | X |
| Days of operation: Saturday | X | X | |
| Market is open on Monday morning | X | | |
| Market is open on Monday afternoon | X | | |
| Market is open on Tuesday morning | X | | |
| Market is open on Tuesday afternoon | X | | |
| Market is open on Wednesday morning | X | | |
| Market is open on Wednesday afternoon | X | | |
| Market is open on Thursday morning | X | | |
| Market is open on Thursday afternoon | X | | |
| Market is open on Friday morning | X | | |

Table 1 (continued): Overall Market Information

| Characteristics Present | Tate County Farmers' Market | Hernando Farmers' Market | Olive Branch Farmers' Market |
|--|------------------------------------|---------------------------------|-------------------------------------|
| Market is open on Friday afternoon | X | | |
| Market is open on Saturday morning | X | X | |
| Market is open on Saturday afternoon | X | X | |
| Operating Hours open: | | 8:00 AM | |
| Operating Hours close: | | 1:00 PM | |
| Frequency of operation: 1 day a week | | X | X |
| Frequency of operation: 2-6 days a week | X | | |
| Features: Accessible entrance | X | X | X |
| Features: Room to maneuver around market | X | X | X |
| Features: On-site market manager* | | X | X |
| Features: Legible signs to identify market | X | X | X |
| Features: Seating | | X | |
| Features: Events/activities | | X | |
| Features: ATM | | X | |
| Features: Information booth/table | | X | |
| Features: Market maps | | X | |
| Features: Parking lot adjacent to farmers' market* | | X | X |
| Features: On-street parking adjacent to farmers' market* | | X | |
| Market accepts WIC/SNAP/EBT | X | X | |
| Sign for WIC | X | | |
| Sign for SNAP/Food stamps | | X | |
| How many vendors sell only produce?* | | 33 | 6 |
| How many vendors sell produce and other products?* | | 2 | 3 |
| How many vendors sell no produce?* | | 41 | 5 |
| Number of vendors who sell goods at the market** | 40+ | | |
| Number of vendors who sell fresh produce at the market** | 40+ | | |

Table 1 (continued): Overall Market Information

| Characteristics Present | Tate County Farmers' Market | Hernando Farmers' Market | Olive Branch Farmers' Market |
|---|--|-------------------------------------|---|
| Amount of produce sufficient for vendor space: All* | | X | X |
| Visible signs with farmers'/businesses' names: Some* | | X | |
| Visible signs with farmers'/businesses' names: Most* | X | | X |
| Clean and well-organized displays: All | X | X | X |
| Power cords taped down to prevent tripping: All* | | X | |
| Power cords taped down to prevent tripping: No vendors | X | | |
| <i>Product signage and pricing (for fresh fruits/vegetables only)</i> | | | |
| Products are identified by name: Most* | X | | |
| Products are identified by name: Some | | X | X |
| Clear signs document the price: Most* | X | | |
| Clear signs document the price: Some | | X | X |
| Units are appropriately labeled: Most | X | | X |
| Units are appropriately labeled: Some | | X | |
| <i>Frozen or canned fruits/vegetables</i> | | | |
| How many types of canned fruits are available: None* | | | X |
| How many types of canned fruits are available: Limited* | | X | |
| How many types of canned vegetables are available: Limited* | | X | |
| How many types of canned vegetables are available: Variety* | | | X |
| How many types of frozen fruits are available: None* | | X | X |
| How many types of frozen vegetables are available: None* | | X | X |
| How many types of canned fruits are available: None* | | | X |
| No canned fruits available** | X | | |

Table 1 (continued): Overall Market Information

| Characteristics Present | Tate County Farmers' Market | Hernando Farmers' Market | Olive Branch Farmers' Market |
|---|--|-------------------------------------|---|
| <i>Frozen or canned fruits/vegetables (continued)</i> | | | |
| No canned vegetables available** | X | | |
| No frozen fruits available** | X | | |
| No frozen vegetables available** | X | | |
| <i>Other foods</i> | | | |
| High-fiber, whole grain foods available | | X | |
| Healthier foods: Lean meats, fish, poultry | | X | |
| Healthier foods: Nuts, seeds, or dry beans | X | | |
| Minimal nutritional value: Sweet foods | | X | X |
| Milk available: 2% | | X | |
| Milk available: Whole or Vitamin D | | X | |

*on new tool

**on old tool

Table 2: Characteristics *not* Found

| | |
|---|---|
| <p><i>Overall market:</i></p> <ul style="list-style-type: none">Security featuresPublic transit stop*WIC/SNAP/EBT customers use tokens to make purchases at the market*Other discount*Discounts for larger sales** <p><i>Healthier foods:</i></p> <ul style="list-style-type: none">Cottage cheese or low-fat yogurtLow-fat prepared meals | <p><i>Foods with minimal nutritional value:</i></p> <ul style="list-style-type: none">Salty foodsIce cream/frozen dessertsCandy/chocolateRegular to high-fat prepared meals <p><i>Milk:</i></p> <ul style="list-style-type: none">Skim milk1%Flavored whole milkFlavored skim, 1%, or 2%Rice milkSoy milkLactaid |
|---|---|

*on new tool

** on old tool

Table 3: Fresh Fruit and Vegetable Availability, Price, Quality, and Quantity

| Produce Item | Tate County Farmers' Market | | | | Hernando Farmers' Market | | Olive Branch Farmers' Market | |
|-----------------------|-----------------------------|--------|---------|----------|--------------------------|--------|------------------------------|--------|
| | Price | Unit | Quality | Quantity | Price | Unit | Price | Unit |
| <i>Fruits</i> | | | | | | | | |
| Blackberries | | | | | \$8.00 | box | | |
| Blueberries | | | | | \$3.50 | box | | |
| Cantaloupes | \$2.00 | each | good | a lot | | | | |
| Honeydews | \$2.00 | each | good | few | | | | |
| Peaches | | | | | \$5.00 | box | | |
| Strawberries* | | | | | | | \$2.50 | -- |
| Watermelons | \$3.00 | each | good | a lot | | | | |
| <i>Vegetables</i> | | | | | | | | |
| Asparagus | | | | | \$3.00 | bunch | | |
| Broccoli | | | | | \$3.00 | each | \$3.00 | box |
| Brussels sprouts | | | | | | | \$1.50 | box |
| Cabbages | | | | | \$2.00 | each | \$2.00 | box |
| Carrots | | | | | | | \$1.00 | box |
| Green beans** | | | | | | | X | |
| Green peppers** | \$0.50 | each | good | a lot | | | X | |
| Kale | | | | | \$2.00 | bunch | \$2.00 | each |
| Onions | | | | | \$1.00 | bunch | \$1.00 | each |
| Radishes | | | | | | | \$0.50 | box |
| Red peppers | | | | | | | \$0.50 | each |
| Spinach | | | | | | | | |
| Summer squash* | \$1.00 | per lb | good | a lot | \$3.00 | -- | \$3.00 | box |
| Tomatoes | | | | | \$2.50 | per lb | \$2.50 | per lb |
| Other: Eggplant | \$1.00 | per lb | good | a lot | | | | |
| Other: Irish potatoes | \$1.00 | per lb | good | | | | | |
| Other: Potatoes | | | | | | | | |

*auditors did not indicate unit

**auditors indicated product price by marking "X"

Farmers' Market Environmental Audit Tool

Farmers' market name: _____
 Address: _____
 Number of vendors: _____
 Auditor 1: _____
 Auditor 2: _____

Farmers' market ID (for Transtria use only): _____
 Community partnership: _____
 Date: _____
 Audit start time: ____ : ____ ○ AM ○ PM
 Audit end time: ____ : ____ ○ AM ○ PM

| Section A: Overall market | | | | | | Section A: Overall market (cont.) | | | |
|--|--------------------------|--------------------------|----------------|--------------------------|--------------------------|--|--|--------------------------|--------------------------|
| 1. What are the market months of operation? | | | | | | 4.c. Security features (security guard(s) and/or security camera(s)) | | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.a. January | <input type="checkbox"/> | <input type="checkbox"/> | 1.g. July | <input type="checkbox"/> | <input type="checkbox"/> | 4.d. On-site market manager | | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.b. February | <input type="checkbox"/> | <input type="checkbox"/> | 1.h. August | <input type="checkbox"/> | <input type="checkbox"/> | 4.e. Legible signs to identify the market | | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.c. March | <input type="checkbox"/> | <input type="checkbox"/> | 1.i. September | <input type="checkbox"/> | <input type="checkbox"/> | 4.f. Seating (e.g., benches, tables/chairs) | | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.d. April | <input type="checkbox"/> | <input type="checkbox"/> | 1.j. October | <input type="checkbox"/> | <input type="checkbox"/> | 4.g. Events/activities (e.g., yoga, live music) | | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.e. May | <input type="checkbox"/> | <input type="checkbox"/> | 1.k. November | <input type="checkbox"/> | <input type="checkbox"/> | 4.h. ATM | | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.f. June | <input type="checkbox"/> | <input type="checkbox"/> | 1.l. December | <input type="checkbox"/> | <input type="checkbox"/> | 4.i. Information booth/table | | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. What are the market days and hours of operation? | | | | | | 4.j. Market maps (e.g., maps with directions to market, site map with vendors) | | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.a. Sunday (Check yes or no.) Enter operating hours (open/close): | | | | <input type="checkbox"/> | <input type="checkbox"/> | 4.k. Public transit stop visible from the farmers' market | | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.b. Monday (Check yes or no.) Enter operating hours (open/close): | | | | <input type="checkbox"/> | <input type="checkbox"/> | 4.l. Parking lot adjacent to farmers' market | | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.c. Tuesday (Check yes or no.) Enter operating hours (open/close): | | | | <input type="checkbox"/> | <input type="checkbox"/> | 4.m. On-street parking adjacent to farmers' market | | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.d. Wednesday (Check yes or no.) Enter operating hours (open/close): | | | | <input type="checkbox"/> | <input type="checkbox"/> | 4.n. Other, specify: | | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.e. Thursday (Check yes or no.) Enter operating hours (open/close): | | | | <input type="checkbox"/> | <input type="checkbox"/> | 5. Does the market accept WIC/SNAP/EBT? (If no, skip to Question 6) | | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.f. Friday (Check yes or no.) Enter operating hours (open/close): | | | | <input type="checkbox"/> | <input type="checkbox"/> | 5.a. Sign for WIC | | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.g. Saturday (Check yes or no.) Enter operating hours (open/close): | | | | <input type="checkbox"/> | <input type="checkbox"/> | 5.b. Sign for SNAP/Food stamps | | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. What is the frequency of operation? (Circle one.) | | | | | | 5.c. WIC/SNAP/EBT customers use tokens to make purchases at the market. | | <input type="checkbox"/> | <input type="checkbox"/> |
| Daily | | 2-6 days a week | | | | 5.d. Other discount, specify: | | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 day a week | | 1-3 days a month | | | | Section B: Vendor characteristics | | | |
| 4. What features are present in the market? | | | | | | Fill in the appropriate number of vendors for the next three items. | | | |
| 4.a. Accessible entrance (allows entry for strollers and wheelchairs) | | | | <input type="checkbox"/> | <input type="checkbox"/> | 6. How many vendors sell only produce? | | | |
| 4.b. Room to maneuver around market (e.g., wheelchairs, strollers) | | | | <input type="checkbox"/> | <input type="checkbox"/> | 7. How many vendors sell produce and other products? | | | |
| Comments? | | | | | | 8. How many vendors sell no produce? | | | |

Evaluation of Healthy Kids, Healthy Communities

| Section B: Vendor characteristics (cont.) | | | | Section D: Frozen or canned fruits/vegetables (cont.) | | |
|--|---------------------|--------------------|-----|---|---------------------------------|--------------------|
| 9. Circle the most appropriate response for each item. | | | | 14. How many types of frozen vegetables are available? (Circle one.) | | |
| 9.a. Amount of produce sufficient for vendor space | | | | None (0) | Limited (1-3 types) | Variety (4+ types) |
| None | Some | Most | All | Section E: Other foods | | |
| 9.b. Visible signs with farmers'/ businesses' names | | | | 15. Are any high-fiber, whole grain foods offered (e.g., whole wheat bread or pasta, brown rice)? | | |
| None | Some | Most | All | <input type="checkbox"/> No | <input type="checkbox"/> Yes | |
| 9.c. Clean and well-organized displays | | | | 16. What other types of <u>healthier</u> foods are offered? | | |
| 9.d. Power cords taped down to prevent tripping | | | | 16.a. Cottage cheese or low-fat yogurt | | |
| None | Some | Most | All | <input type="checkbox"/> No | <input type="checkbox"/> Yes | |
| 9.e. Power cords taped down to prevent tripping | | | | 16.b. Lean meats, fish, poultry | | |
| None | Some | Most | All | <input type="checkbox"/> No | <input type="checkbox"/> Yes | |
| Section C: Product signage and pricing (for fresh fruits and vegetables only) | | | | 16.c. Nuts, seeds, or dry beans | | |
| 10. Circle the most appropriate response for each item. | | | | 16.d. Low-fat prepared meals (e.g., baked chicken) | | |
| None | Some | Most | All | <input type="checkbox"/> No | <input type="checkbox"/> Yes | |
| 10.a. Products are identified by name. | | | | 16.e. Other, specify: | | |
| None | Some | Most | All | <input type="checkbox"/> No | <input type="checkbox"/> Yes | |
| 10.b. Clear signs document the price. | | | | 17. What other types of foods with minimal nutritional value are offered? | | |
| None | Some | Most | All | 17.a. Salty foods (e.g., potato chips, popcorn) | | |
| 10.c. Units are appropriately labeled (e.g., weight, box, bunch). | | | | 17.b. Ice cream/frozen desserts | | |
| None | Some | Most | All | <input type="checkbox"/> No | <input type="checkbox"/> Yes | |
| 10.d. Discounts for larger sales | | | | 17.c. Sweet foods (e.g., cookies, cakes) | | |
| None | Some | Most | All | <input type="checkbox"/> No | <input type="checkbox"/> Yes | |
| Go to the Attachments for Section C: Fresh fruits: Fruit availability, price, quality, and quantity; and Fresh vegetables: Vegetable availability, price, quality, and quantity | | | | 17.d. Candy/chocolate | | |
| Section D: Frozen or canned fruits/vegetables | | | | 17.e. Regular to high-fat prepared meals (e.g., fried chicken) | | |
| 11. How many types of canned fruits are available? (Circle one.) | | | | 17.f. Other, specify: | | |
| None (0) | Limited (1-3 types) | Variety (4+ types) | | <input type="checkbox"/> No | <input type="checkbox"/> Yes | |
| 12. How many types of canned vegetables are available? (Circle one.) | | | | 18. Is milk sold? (If no, audit is complete.) | | |
| None (0) | Limited (1-3 types) | Variety (4+ types) | | <input type="checkbox"/> No | <input type="checkbox"/> Yes | |
| 13. How many types of frozen fruits are available? (Circle one.) | | | | 18.a. Skim milk | | |
| None (0) | Limited (1-3 types) | Variety (4+ types) | | <input type="checkbox"/> No | <input type="checkbox"/> Yes | |
| | | | | 18.b. 1% | | |
| | | | | 18.c. 2% | | |
| | | | | 18.d. Whole or Vitamin D milk | | |
| | | | | 18.e. Flavored whole milk | | |
| | | | | 18.f. Flavored skim, 1%, or 2% milk | | |
| | | | | 18.g. Rice milk | | |
| | | | | 18.h. Soy milk | | |
| | | | | 18.i. Lactaid | | |

Comments?

Attachment for Section C: Fresh fruit availability, price, quality, and quantity

| Fruit | a. Not Available | b. Lowest price | c. Unit/Weight | | | | d. Quality | | e. Quantity | | | f. Comments |
|---------------------|------------------|-----------------|----------------|-------------|------|-------|------------|------|-------------|----------|--------|-------------|
| | | | Per pound (lb) | Per box/bag | Each | Bunch | Avg./Good | Poor | A lot 10+ | Some 3-9 | Few <3 | |
| 19. Apples | | | | | | | | | | | | |
| 20. Bananas | | | | | | | | | | | | |
| 21. Blackberries | | | | | | | | | | | | |
| 22. Blueberries | | | | | | | | | | | | |
| 23. Cantaloupes | | | | | | | | | | | | |
| 24. Cherries | | | | | | | | | | | | |
| 25. Cranberries | | | | | | | | | | | | |
| 26. Grapefruits | | | | | | | | | | | | |
| 27. Grapes | | | | | | | | | | | | |
| 28. Honeydew melons | | | | | | | | | | | | |
| 29. Kiwis | | | | | | | | | | | | |
| 30. Mangos | | | | | | | | | | | | |
| 31. Nectarines | | | | | | | | | | | | |
| 32. Oranges | | | | | | | | | | | | |
| 33. Papayas | | | | | | | | | | | | |
| 34. Peaches | | | | | | | | | | | | |
| 35. Pears | | | | | | | | | | | | |
| 36. Pineapples | | | | | | | | | | | | |
| 37. Plums | | | | | | | | | | | | |
| 38. Raspberries | | | | | | | | | | | | |
| 39. Strawberries | | | | | | | | | | | | |
| 40. Tangerines | | | | | | | | | | | | |
| 41. Watermelons | | | | | | | | | | | | |
| 42. Other: | | | | | | | | | | | | |
| 43. Other: | | | | | | | | | | | | |
| 44. Other: | | | | | | | | | | | | |

Attachment for Section C: Fresh vegetable availability, price, quality, and quantity

| Vegetable | a. Not Available | b. Lowest price | c. Unit/Weight | | | | d. Quality | | e. Quantity | | | f. Comments |
|-----------------------|------------------|-----------------|----------------|-------------|------|-------|------------|------|-------------|----------|--------|-------------|
| | | | Per pound (lb) | Per box/bag | Each | Bunch | Avg./Good | Poor | A lot 10+ | Some 3-9 | Few <3 | |
| 45. Artichokes | | | | | | | | | | | | |
| 46. Asparagus | | | | | | | | | | | | |
| 47. Avocados | | | | | | | | | | | | |
| 48. Broccoli | | | | | | | | | | | | |
| 49. Brussels sprouts | | | | | | | | | | | | |
| 50. Cabbages | | | | | | | | | | | | |
| 51. Carrots | | | | | | | | | | | | |
| 52. Cauliflower | | | | | | | | | | | | |
| 53. Celery | | | | | | | | | | | | |
| 54. Collard greens | | | | | | | | | | | | |
| 55. Corn | | | | | | | | | | | | |
| 56. Green beans | | | | | | | | | | | | |
| 57. Green peppers | | | | | | | | | | | | |
| 58. Kale | | | | | | | | | | | | |
| 59. Lentils | | | | | | | | | | | | |
| 60. Lettuce – Romaine | | | | | | | | | | | | |
| 61. Lima beans | | | | | | | | | | | | |
| 62. Mushrooms | | | | | | | | | | | | |
| 63. Okra | | | | | | | | | | | | |
| 64. Onions | | | | | | | | | | | | |
| 65. Radishes | | | | | | | | | | | | |
| 66. Red peppers | | | | | | | | | | | | |
| 67. Spinach | | | | | | | | | | | | |
| 68. Summer squash | | | | | | | | | | | | |
| 69. Sweet potatoes | | | | | | | | | | | | |
| 70. Tomatoes | | | | | | | | | | | | |
| 71. Other: | | | | | | | | | | | | |
| 72. Other: | | | | | | | | | | | | |
| 73. Other: | | | | | | | | | | | | |

Healthy Kids, Healthy Communities of DeSoto, Marshall, and Tate Counties

Parks and Play Spaces Environmental Audits

Summary Report

Prepared by Transtria LLC



Table of Contents

| | |
|--|----|
| Overview | 3 |
| Background | 4 |
| Methods | 4 |
| Results | 5 |
| Appendix A: Data Tables..... | 14 |
| Appendix B: Parks and Play Spaces Environmental Audit Tool | 19 |

Overview

DeSoto, Marshall, and Tate's Healthy Kids, Healthy Communities, one of 49 Healthy Kids, Healthy Communities partnerships, is part of a national program of the Robert Wood Johnson Foundation whose primary goal is to implement healthy eating and active living policy, system, and environment change initiatives. In order to better understand the impact of their work in parks and recreation, representatives of DeSoto-Marshall-Tate collected environmental audit data in parks and play spaces throughout DeSoto County. The following ten parks and play spaces were included in the assessment: Lake Cormorant Community Park and Trail, Cockrum Community Park and Trail, Fairview Park, DeSoto County Visitor Center Trail, Robertson-Donald Park, Hernando-DeSoto Park, The Arkabutla Lake Education and Nature Center Trail, Johnson Creek Greenway, Eudora Community Park and Trail, and Coldwater River Nature Trails.

Results

- All ten park spaces in DeSoto County were located outdoors and had clear signage indicating the park name.
- Almost all (90%) of the parks had a parking area on-site.
- There were no vending machines in the ten audited parks.
- None of the parks required entrance fees.
- All parks were accessible for wheelchair or stroller entry.
- All ten parks audited had sports or recreation features.
- None of the parks audited had broken glass, graffiti/tagging, evidence of alcohol or other drug use, or sex paraphernalia.
- All ten parks lacked sidewalk/pedestrian lighting, bicycle parking, a bus/transit stop, crosswalks at all intersections next to the play space, and a shower/locker room

Background

Healthy Kids, Healthy Communities (HKHC) is a national program of the Robert Wood Johnson Foundation (RWJF) whose primary goal is to implement healthy eating and active living policy, system, and environmental change initiatives that can support healthier communities for children and families across the United States. HKHC places special emphasis on reaching children who are at highest risk for obesity on the basis of race/ethnicity, income, and/or geographic location. For more information about HKHC, please visit www.healthykidshealthycommunities.org.

Located in DeSoto-Marshall-Tate, MS, the Community Foundation of Northwest Mississippi was selected to lead the local HKHC partnership. The partnership has chosen to focus its work on farmers' markets, community gardens, parks and recreation, greenway and blueway plans, and complete streets.

Transtria LLC, a public health evaluation and research consulting firm located in St. Louis, Missouri, is funded by the Robert Wood Johnson Foundation to lead the evaluation and dissemination activities from April 2010 to March 2014. For more information about the evaluation, please visit www.transtria.com/hkhc. A supplementary enhanced evaluation component focuses on six cross-site HKHC strategies, including: parks and plays spaces, active transportation, farmers' markets, corner stores, physical activity standards in childcare settings, and nutrition standards in childcare settings. Communities are trained to use two main methods as part of the enhanced evaluation, direct observation and environmental audits. Tools and training are provided by Transtria staff (see www.transtria.com/hkhc).

In order to better understand the impact of their work in parks and play spaces, representatives of DeSoto-Marshall-Tate chose to participate in the enhanced evaluation data collection activities. The partnership completed their enhanced evaluation activities for parks and play spaces using the environmental audit method.

Methods

The Parks and Play Spaces Environmental Audit Tool was used to collect data (see appendix). This tool and protocol were adapted from the Physical Activity Resource Assessment and the BTG-COMP Park Observation Form 2012. An Evaluation Officer from Transtria LLC trained members of DeSoto-Marshall-Tate's community partnership on proper data collection methods using the tool.

Environmental audits assess the presence or absence of different features as well as the quality or condition of the physical environment. This tool captures the setting, accessibility, vending machines, signage, barriers to entry, playground features (swings/slides/monkey bars/sandboxes/ground games), sports and recreation features (fields/courts/pools/tracks/trails), aesthetic features and amenities, trash and vandalism.

In this case, the audit tools were completed for ten parks in DeSoto, Marshall, and Tate Counties. The following parks were included in the assessment: Lake Cormorant Community Park and Trail, Cockrum Community Park and Trail, Fairview Park, DeSoto

County Visitor Center Trail, Robertson-Donald Park, Hernando-DeSoto Park, The Arkabutla Lake Education and Nature Center Trail, Johnson Creek Greenway, Eudora Community Park and Trail, and Coldwater River Nature Trails. One auditor completed the assessments between May 11, 2013 and June 4, 2013. Transtria staff performed data entry and validation. Double data entry was performed to ensure accuracy of data. Agreement of data entry was 99.6% and all errors were fixed.

Overall Results

Setting and accessibility

All ten park spaces in DeSoto County were located outdoors. Half of the spaces were multi-feature publically accessible parks, while three (30%) were publically accessible green spaces (i.e., no features such as sports fields or jungle gyms) and two (20%) were single-feature publically accessible parks.

Almost all (90%) of the parks had a parking area on-site, and one park had on-street parking next to the play space. There were no curbs or other barriers for wheelchairs or strollers entering the play spaces. Sixty percent of the parks had a restroom or portable toilet, although a few are only open during sports events. All ten parks lacked sidewalk/pedestrian lighting, bicycle parking, a bus/transit stop, crosswalks at all intersections next to the play space, and a shower/locker room.

Vending machines

There were no vending machines in the ten audited parks.

Signage and barriers to entry

All audited parks had signage indicating the park or play space name. None of the parks had a physical barrier or locked fence, although three had a gate or fence partially restricting access. No entrance fees were required.

Playground features

Half of the parks had playground features present in the play space. Three of the playgrounds had woodchip/mulch as the surface, while the other two had grass, dirt, or pea gravel.

One park had three toddler swings, which were all in good condition. Two parks had two youth swings and another had three, all in good condition. One to three slides were found in four of the parks. Four parks had monkey bars or climbing bars and three had

Key Takeaways

- All ten park spaces in DeSoto County were located outdoors and had clear signage indicating the park name.
- Almost all (90%) of the parks had a parking area on-site.
- All ten parks audited had sports or recreation features.
- None of the parks audited had broken glass, graffiti/tagging, evidence of alcohol or other drug use, or sex paraphernalia.
- All ten parks lacked sidewalk/pedestrian lighting, bicycle parking, a bus/transit stop, crosswalks at all intersections next to the play space, and a shower/locker room

climbing poles. Three of the parks had other play areas, including a counting board, play fort, and driving wheel.

Sports and recreation features

All ten parks audited had sports or recreation features. Four of the parks had baseball fields, which were in good condition. Three of the parks with baseball fields also had lighting. Trails were found at a majority (80%) of the parks, ranging from one to three trails per park that have at least one trail with two-way traffic. Other features were present in three parks, including a pond overlook, boat ramp, and educational stage area.

Aesthetic features and amenities

The green spaces at seven of the ten parks were reported in average/good condition, while three of the parks were in poor condition. A majority (60-80%) of the parks had benches, picnic tables, trash containers, grills/fire pits, and shade trees that were in average/good condition. A few parks had other gardens and plants (40%) and shelters (20%), which were all in average/good condition.



Picture 1: Trail at ARK

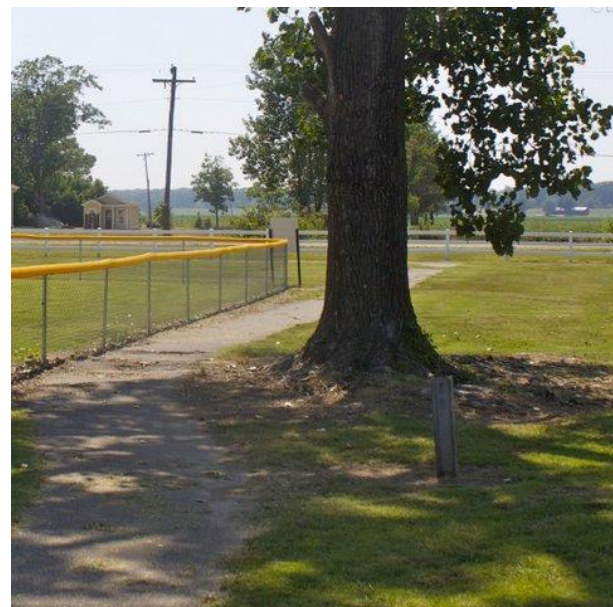
Trash and vandalism

Two of the parks had a little/some garbage or litter. None of the parks audited had broken glass, graffiti/tagging, evidence of alcohol or other drug use, or sex paraphernalia.

Results by Individual Park

Lake Cormorant Community Park and Trail

Setting and accessibility: Lake Cormorant Community Park and Trail was a multi-feature publically accessible park in an outdoor setting with lighted parking on-site. Covering eight acres, the park was located next to the Community Center. The restrooms are open only during ball practice and games. Lake Cormorant Community Park and Trail had a bike lane, sharrow, or signage adjacent to its play space. There were no vending machines present, but concession stands



Picture 2: Lake Cormorant Community Park and Trail

open during ballgames.

Playground features: The park had new playground equipment, including climbing bars, a pole, counting board, and driving wheel in addition to youth swings and slides. The large playground area had a surface consisting of woodchips/mulch.

Sports and recreation features: Two baseball fields with lighting were present. The park also had one asphalt/concrete trail with lighting and two-way traffic.

Aesthetic features and amenities: New benches, picnic tables, and trash containers were present and reported as being in good condition. Bleacher seating and shade trees were also present. The green space at this location was documented as being in poor condition.

Cockrum Community Park and Trail



Picture 3: Cockrum Community Park

Setting and accessibility: The Cockrum Community Park and Trail was a multi-feature publically accessible park in an outdoor setting with lighted on-site parking. The park was two and a half acres, and located next to the volunteer fire department and community center building. A restroom was located at the fire station, although access was restricted to when personnel were present.

Playground features: The park had new playground equipment, including climbing bars, a pole, counting board, and driving wheel in addition to youth swings and slides. The playground area was a large size with a surface consisting of woodchips/mulch.

Sports and recreation features: A two-way, four feet wide asphalt/concrete walking trail was present.

Aesthetic features and amenities: All of the features present (benches, picnic tables, trash containers, grills/fire pits) were reported as being in good condition. The park is bordered by mature trees, and newly planted shade trees by the trail and playground. Wildflowers were planted in the picnic area.



Picture 4: Playground at Cockrum Community Park

Fairview Park



Picture 5: Fairview Park

Setting and accessibility: Fairview Park was a single-feature publically accessible park with lighted parking on-site. A restroom was accessible at this location and open during ball games.

Playground features: There were no playground features noted at Fairview Park.

Sports and recreation features: One baseball field with lighting in good condition was present.

Aesthetic features and amenities: Green space was present at the park, although it was reported to be in poor condition.

The other features present (benches, picnic tables, trash containers, grills/fire pits, and shade trees) were in good condition.

DeSoto County Visitor Center Trail

Setting and accessibility: The DeSoto County Visitor Center Trail was a single-feature publically accessible trail with lighted on-site parking. A sidewalk was on the street leading to the entrance. Restrooms were located in the visitor center building at the trail head.

Playground features: There were no playground features at this trail.

Sports and recreation features: The DeSoto County Visitor Center Trail's surface was both natural (dirt or grass) and asphalt/concrete. It was a quarter mile in length and eight feet wide with little to no elevation. The two-way trail was restricted to hiking/foot traffic only and overlooked a pond.

Aesthetic features and amenities: The trail featured strategically placed benches, interpretive signage, native tree plantings, and a graphic introduction to the DeSoto County Greenways Program. Some features present along this trail (green space, decorative water fountains, benches, and trash containers) were reported as being in good condition, while other features (shade trees and other plants) were in poor condition.



Picture 6: DeSoto County Visitor Center Trail

Robertson-Donald Park

Setting and accessibility: Robertson-Donald Park was a multi-feature publically accessible park in an outdoor setting with lighted parking on-site, spanning 12.5 acres. There was a sidewalk on the street leading to the entrance. Restrooms were locked, although they are unlocked during baseball practices and games.

There were no vending machines, but concession stands are provided during baseball practices and games. A gate/fence partially restricting access to the park was present.

Playground features: The playground featured one slide and the equipment was plastic, restricting use to small children. The playground surface was reported to be in poor condition; comprised of pea gravel with high weeds.

Sports and recreation features: Two baseball fields with lighting were present.

Aesthetic features and amenities: A pavilion/shelter, picnic tables, and four sets of bleachers were present, all reported in good condition. The green space, drinking fountain, and trash containers were all reported to be in poor condition.



Picture 7: Robertson-Donald Park

Hernando-DeSoto Park

Setting and accessibility: The Hernando-DeSoto Park was a publically accessible green space on 41 acres. The parking area was on-site. No restrooms were present.

Playground features: There were no playground features.

Sports and recreation features: The trail, a mile in length and eight feet wide, was composed of a natural surface (dirt or grass). The difficulty level of the two-way trail was reported to be easy and was restricted to foot traffic. As the county's only public access to the Mississippi River, the park featured fishing and a boat ramp.

Aesthetic features and amenities: The green space, picnic tables overlooking the river, trash containers, grills/fire pits, shade trees, and other plants were reported in good condition.



Picture 8: Hernando-DeSoto Park

The Arkabutla Lake Education and Nature Center Trail (ARK)

Setting and accessibility: ARK was a publically accessible green space with on-site parking and portable restrooms. A gate/fence partially restricting access to the park was present.

Playground features: There were no playground features.

Sports and recreation features: Two trails were present at ARK. The nature trail was composed of a natural surface (dirt/grass) and spanned two miles in length and eight feet wide. The trail had little elevation, making the difficulty level of this trail easy. The trail was designated as a wildlife sanctuary, which meant travel is restricted to food traffic and no pets were allowed.



Picture 9: ARK Trail

Aesthetic features and amenities: ARK had two unique features available: an education area with seating and an education area with a stage. Interpretive signs along the trail listed area wildlife and tree identification markers. The trail had views of Arkabutla Lake, the existing swamp, and open space fields planted for wildlife habitat. The green space, benches, picnic tables, trash containers, shade trees, and other plants were all reported as being in good condition.

Johnson Creek Greenway

Setting and accessibility: The Johnson Creek Greenway was a publically accessible eight mile greenway. A gate/fence partially restricting access to the park was present.

Playground features: There were no playground features.

Sports and recreation features: Two trails (a three-mile and five-mile) were present. Each trail had a ten foot width and allowed for two-way traffic. Difficulty of these natural gravel trails was recorded as easy, with little to no elevation gain. Trail use was dedicated to biking and hiking.

Aesthetic features and amenities: Only a few features were present along the greenway; both green space and shade trees were reported as being in good condition, whereas other gardens and plants were reported as poor condition. The Johnson Creek Greenway included portions of the Entergy Utility easement on the south side of the creek and portions of the DeSoto County Regional Utility Authority easement on the north side of the creek.

Eudora Community Park and Trail

Setting and accessibility: The Eudora Community Park and Trail is a multi-feature publically accessible park in an outdoor setting. The park, located on 9.2 acres of land, had lighted on-site parking. Restrooms were available at the nearby fire station.

Playground features: The playground at this site featured climbing bars, a fireman pole, and a play fort, all reported as being in good condition. The playground surface was comprised of natural materials (grass or dirt).



Picture 10: Eudora Community Park and Trail

Sports and recreation features: One baseball field was present at the park, but no lighting was available. The trail was one-third of a mile, four feet wide, and allowed for two-way traffic. Difficulty of the trail was recorded as easy.

Aesthetic features and amenities: The green space, benches, picnic tables, trash containers, grills/fire pits, and shade trees were all reported to be in good condition.

Coldwater River Nature Trails

Setting and accessibility: The Coldwater River Nature Trails was a multi-feature publically accessible park in an outdoor setting with lighted parking on-site. A restroom was present at this location.



Picture 11: Coldwater River Nature Trails

Playground features: The playground, located at the trail head, had a surface of woodchips/mulch. Features present in the area included, three toddler swings, three youth swings, two slides and two monkey/climbing bars. All the features were reported to be in good condition.

Sports and recreation features: Three different length trails were present: two miles, three miles, and five miles. All three trails permitted two-way traffic and were open for both walking and biking use. The trail surface was dirt or grass and they traverse a

flat bottomland with little or no elevation gain.

Aesthetic features and amenities: The area included a bottomland hardwood and pine forest. A self-guided interpretive booklet was available at the trailhead, near the playground. Features present at the park included an outlook pier, green space, shelters, benches, picnic tables, trash containers, grills/fire pits, shade trees, and other plants.

The information in this report was funded by *Healthy Kids Healthy Communities of DeSoto, Tate, and Marshall Counties.*



Appendix A

Table 1: Playground Features

| Park | Toddler Swings | Youth Swings | Slides | Monkey or climbing bars | Other climbing feature | Other play features | Surface of play area | Comments from auditor |
|---|----------------|--------------|--------|-------------------------|------------------------|-------------------------------|----------------------|---|
| Lake Cormorant Community Park and Trail | 0 | 2 | 3 | 1 | 1 | Counting board, driving wheel | Woodchips/mulch | New equipment, nice with a large play area surrounding |
| Cockrum Community Park and Trail | 0 | 2 | 3 | 1 | 1 | Counting board, driving wheel | Woodchips/mulch | Very nice play equipment-new |
| Robertson-Donald Park | 0 | 0 | 1 | 0 | 0 | | Pea gravel | Poor play area-high weeds and plastic pulled up from under pea gravel |
| Eudora Community Park and Trail | 0 | 0 | 0 | 1 | 2 | Fireman pole and play fort | Grass/dirt | Climbing bars, fort, and pole is one piece |
| Coldwater River Nature Trails | 3 | 3 | 2 | 2 | 0 | | Woodchips/mulch | Playground equipment is located at the trail head |

*All of the features were rated as being in average/good condition. The following parks did not have playgrounds: Fairview Park, DeSoto County Visitor Center Trail, Hernando DeSoto Park, The Arkabutla Lake Education and Nature Center Trail (ARK), and Johnson Creek Greenway.

Table 2: Sports and Recreation Features

| Park | Baseball Fields | Trails | Trail Surface | Trail comments | Other features |
|--|-----------------|--------|------------------|--|----------------------|
| Lake Cormorant Community Park and Trail | 2* | 1* | Asphalt/concrete | | |
| Cockrum Community Park and Trail | 0 | 1 | Asphalt/concrete | 1/4 mile trail. 8 feet wide. | |
| Fairview Park | 1* | 0 | | | |
| DeSoto County Visitor Center Trail | 0 | 1 | Asphalt/concrete | 1/4 mile trail. 8 feet wide. Hiking, foot traffic only. Difficulty level = easy | Pond overlook |
| Robertson-Donald Park | 2* | 0 | | | |
| Hernando DeSoto Park | 0 | 1 | Dirt or grass | 1 mile trail. 8 feet wide. Difficulty level = easy. Foot travel only. | Boat ramp |
| The Arkabutla Lake Education and Nature Center Trail (ARK) | 0 | 2 | Dirt or grass | 2 mile trail. 8 feet wide. Hiking, foot traffic only. | Education stage area |
| Johnson Creek Greenway | 0 | 2 | Gravel | 8 miles total (1 trail = 3 miles, 1 trail = 5 miles). 10 feet wide. Difficulty level = easy | |
| Eudora Community Park and Trail | 1 | 1 | Asphalt/concrete | 1/3 mile trail. 4 feet wide. Difficulty level = easy. | |
| Coldwater River Nature Trails | 0 | 3 | Dirt or grass | 2, 3, and 5 mile trails. Walking, biking, running allowed. | |

*Lighting present at feature

All of the features were rated as being in average/good condition.

Table 3: Park Characteristics (setting and accessibility)

| Park Characteristics | Lake Cormorant Community Park and Trail | Cockrum Community Park and Trail | Fairview Park | DeSoto County Visitor Center Trail | Robertson-Donald Park | Hernando DeSoto Park | The Arkabutla Lake Education and Nature Center Trail (ARK) | Johnson Creek Greenway | Eudora Community Park and Trail | Coldwater River Nature Trails |
|--|---|----------------------------------|---------------|------------------------------------|-----------------------|----------------------|--|------------------------|---------------------------------|-------------------------------|
| Setting | | | | | | | | | | |
| Single-feature publically accessible park | | | X | X | | | | | | |
| Multi-feature publically accessible park | X | X | | | X | | | | X | X |
| Publically accessible green space | | | | | | X | X | X | | |
| Outdoor setting | X | X | X | X | X | X | X | X | X | X |
| Accessibility | | | | | | | | | | |
| Parking area on-site | X | X | X | X | X | X | X | | X | X |
| Lighted parking area | X | X | X | X | X | | | | X | X |
| On-street parking next to play space | | | | | | | | X | | |
| Sidewalk on street leading to entrance | | | | X | | | | | | |
| Wheelchair or stroller can easily enter space | X | X | X | X | X | X | X | X | X | X |
| Bike lane, sharrow, or bike signage on street adjacent to play space | X | | | | | | | | | |
| Restroom | X | | X | X | X | | X | | | X |

Table 4: Park Characteristics (signage, barriers to entry, trash and vandalism)

| Park Characteristics | Lake Cormorant Community Park and Trail | Cockrum Community Park and Trail | Fairview Park | DeSoto County Visitor Center Trail | Robertson-Donald Park | Hernando DeSoto Park | The Arkabutla Lake Education and Nature Center Trail (ARK) | Johnson Creek Greenway | Eudora Community Park and Trail | Coldwater River Nature Trails |
|---|---|----------------------------------|---------------|------------------------------------|-----------------------|----------------------|--|------------------------|---------------------------------|-------------------------------|
| Signage and barriers to entry | | | | | | | | | | |
| Signage that indicates the park or play space name | X | X | X | X | X | X | X | X | X | X |
| Gate/fence partially restricting access to play space | | | | | X | | X | X | | |
| Trash and vandalism | | | | | | | | | | |
| No garbage/litter present | X | X | | X | X | | X | X | X | X |
| A little/some garbage/litter | | | X | | | X | | | | |
| No broken glass present | X | X | X | X | X | X | X | X | X | X |
| No graffiti/tagging present | X | X | X | X | X | X | X | X | X | X |
| No evidence of alcohol or other drug use | X | X | X | X | X | X | X | X | X | X |
| No sex paraphernalia present | X | X | X | X | X | X | X | X | X | X |

Table 5: Aesthetic features and amenities by condition

| Park | Green Space | Drinking fountains | Shelters | Benches | Picnic Tables | Trash Containers | Grills/fire pits | Shade Trees |
|--|--------------------|---------------------------|-----------------|----------------|----------------------|-------------------------|-------------------------|--------------------|
| Lake Cormorant Community Park and Trail | Poor | None | None | Good | Good | Good | Good | Good |
| Cockrum Community Park and Trail | Good | None | None | Good | Good | Good | Good | Good |
| Fairview Park | Poor | None | None | Good | Good | Good | Good | Good |
| DeSoto County Visitor Center Trail | Good | None | None | Good | None | Good | None | Poor |
| Robertson-Donald Park | Poor | Poor | Good | None | Good | Poor | None | None |
| Hernando DeSoto Park | Good | None | None | Good | Good | Good | Good | Good |
| The Arkabutla Lake Education and Nature Center Trail (ARK) | Good | None | None | Good | Good | Good | None | Good |
| Johnson Creek Greenway | Good | None | None | None | None | None | None | Good |
| Eudora Community Park and Trail | Good | None | None | Good | Good | Good | Good | Good |
| Coldwater River Nature Trails | Good | None | Good | Good | Good | Good | Good | Good |

Parks and Play Spaces Environmental Audit Tool

Play space ID (*Transtria use only*): _____

"Play spaces" may refer to parks as well as other play spaces (e.g., playgrounds, pools, greenways).

Play space name: _____

Community partnership: _____

Address: _____

Date: _____

Hours of operation: Open _____ Close _____

Weather conditions: _____

No posted hours

Start time: ___ : ___ ○ AM ○ PM

Size of play space (acres): _____

End time: ___ : ___ ○ AM ○ PM

Auditor name: _____

Auditor name 2: _____

Section A: Setting, accessibility, vending machines, signage and barriers to entry

| Setting | | | Accessibility (cont.) | | |
|---|---------|--------------------|--|----|--------------------------|
| 1. What type of park or play space is this? (<i>Select only one.</i>) | | | 13. Is there a shower/locker room on-site? | | |
| 1.a. Single-feature publically accessible park | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 1.b. Multi-feature publically accessible park | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 1.c. Publically accessible green space (i.e., no features such as sports fields or jungle gyms) | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 1.d. Other publically accessible space (e.g., street with temporary play equipment) | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Is the play space adjacent to a school? (<i>If yes, print school name:</i>) | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 3. What is the setting of the play space? (<i>Circle one.</i>) | | | 14. Are there vending machines that sell beverages? (<i>If no, skip to Question 15</i>) | | |
| Indoor | Outdoor | Indoor and Outdoor | 14.a. Water (no additives) | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 14.b. 100% Juice | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 14.c. Skim milk | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 14.d. Sports or energy drinks | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 14.e. Diet soda | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 14.f. Sugar sweetened beverages (e.g., soda, fruit punch) | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 4. Is there a parking area on-site? (<i>If no, skip to Question 4</i>) | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 4.a. Is the parking area lighted? | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 5. Is there on-street parking next to the play space? | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 6. Is there a sidewalk on the street leading to the entrance? | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 6.a. Is sidewalk/pedestrian lighting present? | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 7. Can a wheelchair or stroller easily enter into the play space? (No curbs or other barriers) | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 8. Is there bicycle parking? | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 9. Is there a bike lane, sharrow, or bike signage on the street(s) adjacent to the play space? | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 10. Is there a bus/transit stop on a street adjacent to the play space? | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 11. Are there crosswalks present at all of the intersections next to the play space? | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 12. Is there a restroom/portable toilet? | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 15. Are there vending machines that sell food items? (<i>If no, skip to Question 16</i>) | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 15.a. Chips/crackers/pretzels (baked, low-fat) | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 15.b. Granola bars/cereal bars | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 15.c. Nuts/trail mix | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 15.d. Reduced fat cookies or baked goods | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 15.e. Candy, chips, cookies, snack cakes (sugar, salt, or fat) | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | Signage and barriers to entry | | |
| | | | 16. Is there signage that indicates the park or play space name? | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 17. Is there an entrance fee? | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 18. Is there a gate/fence partially restricting access to the play space? | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | | 19. Is there a locked fence around the perimeter or other physical barrier that prevents access? | | |
| | | | <input type="checkbox"/> | No | <input type="checkbox"/> |

Comments?

Section B: Playground features

| For the following items, please take note and document each feature by condition and whether or not there is lighting. | Number of features by condition | | | | | | | | Number of features with lighting* | |
|--|---------------------------------|---------|--------|---------|--------------|---------|--------|---------|-----------------------------------|-------|
| | Poor | | | | Average/Good | | | | Tally | Total |
| | Tally | | Total | | Tally | | Total | | | |
| | Indoor | Outdoor | Indoor | Outdoor | Indoor | Outdoor | Indoor | Outdoor | Outdoor Only | |
| 20. Check if no playground features are present in the play space. <input type="checkbox"/> No playground features <i>(Skip to Section C.)</i> <i>(Leave the items below blank if there are no playground features present.)</i> | | | | | | | | | | |
| Swings/slides/monkey bars/sandboxes/ground games | | | | | | | | | | |
| 21. Swings, toddler | | | | | | | | | | |
| 22. Swings, youth | | | | | | | | | | |
| 23. Slides | | | | | | | | | | |
| 24. Monkey bars/climbing bars | | | | | | | | | | |
| 25. Other climbing feature Specify: | | | | | | | | | | |
| 26. Sandboxes | | | | | | | | | | |
| 27. Marked four-square courts | | | | | | | | | | |
| 28. Marked hopscotch areas | | | | | | | | | | |
| 29a. Other play areas Specify: | | | | | | | | | | |
| 29b. Other play areas Specify: | | | | | | | | | | |

*Do not tally the number of lights. Tally the number of playground features with lighting present.

30. What is the surface for the playground *(check all that apply)*?
- Foam/rubber
 - Woodchip/mulch
 - Sand
 - Grass or dirt
 - Paved spaces (concrete or asphalt)
 - Other, specify: _____

Comments?

Section C: Sports and recreation features

| For the following items, please take note and document each feature by condition and whether or not there is lighting. | Number of features by condition | | | | | | | | Number of features with lighting* | |
|--|---------------------------------|---------|--------|---------|--------------|---------|--------|---------|-----------------------------------|-------|
| | Poor | | | | Average/Good | | | | Tally | Total |
| | Tally | | Total | | Tally | | Total | | | |
| | Indoor | Outdoor | Indoor | Outdoor | Indoor | Outdoor | Indoor | Outdoor | Outdoor Only | |
| 31. Check if no sports or recreation features are present in the play space. <input type="checkbox"/> No sports or recreation features (Skip to Section D.) (Leave the items below blank if there are no sports or recreation features present.) | | | | | | | | | | |
| Fields/Courts/Pool/Tracks/Trails | | | | | | | | | | |
| 32. Fields, soccer only | | | | | | | | | | |
| 33. Fields, football only | | | | | | | | | | |
| 34. Fields, baseball only | | | | | | | | | | |
| 35. Fields, multi-use | | | | | | | | | | |
| 36a. Other fields Specify: | | | | | | | | | | |
| 36b. Other fields Specify: | | | | | | | | | | |
| 37. Courts, basketball only | | | | | | | | | | |
| 38. Courts, tennis only | | | | | | | | | | |
| 39. Courts, volleyball only | | | | | | | | | | |
| 40. Courts, multi-use | | | | | | | | | | |
| 41a. Other courts Specify: | | | | | | | | | | |
| 41b. Other courts Specify: | | | | | | | | | | |
| 42. Pools (> 3ft deep) | | | | | | | | | | |
| 43. Wading pools/spray grounds (≤ 3ft deep) | | | | | | | | | | |
| 44. Skateboarding features (e.g., ramps, etc.) | | | | | | | | | | |
| 45. Exercise stations with signage | | | | | | | | | | |
| 46. Running/walking tracks | | | | | | | | | | |
| 47. Trails (If no trails, skip Questions 47a and 50 below.) | | | | | | | | | | |
| 47a. Two-way traffic on trails? | | | | | | | | | | |
| 48. Other features Specify: | | | | | | | | | | |
| 49. Other features Specify: | | | | | | | | | | |

*Do not tally the number of lights. Tally the number of sports/recreation features with lighting present.

50. What is the surface for the trails (choose one)?

- Asphalt/concrete
- Wood chips/mulch
- Gravel
- Dirt or grass
- Other, specify: _____

Comments?

Section D: Aesthetic features and amenities (outdoor play spaces only)

| For each aesthetic feature and amenity below, document the presence and condition. | Condition of feature or majority of features? | | |
|--|---|--------------|-------------|
| | Poor | Average/Good | Not present |
| 51. Green space | | | |
| 52. Beach | | | |
| 53. Decorative water fountains | | | |
| 54. Drinking fountains | | | |
| 55. Shelters | | | |
| 56. Benches | | | |
| 57. Picnic tables | | | |
| 58. Trash containers | | | |
| 59. Grills/fire pits | | | |
| 60. Fruit and vegetable gardens | | | |
| 61. Shade trees | | | |
| 62. Other gardens and plants | | | |
| 63. Other features Specify: | | | |

Section E: Trash and vandalism (outdoor play spaces only)

| Indicate the amount of the following types of trash or vandalism. | None | A little/Some | A lot |
|---|------|---------------|-------|
| 64. Garbage/litter | | | |
| 65. Broken glass | | | |
| 66. Graffiti/tagging | | | |
| 67. Evidence of alcohol or other drug use | | | |
| 68. Sex paraphernalia | | | |

Comments?

Please be sure to complete end time for the data collection at the beginning of this form.