

# CRECIENDO EN SALUD

## CASE REPORT

BENTON COUNTY, OREGON

Evaluation of the Healthy Kids, Healthy Communities National Program

December 2009 to December 2013



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**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.<sup>1</sup>

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](http://www.healthykidshealthycommunities.org).

**Figure 1: Map of the 49 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](http://www.transtria.com/hkhc).

### Creciendo en Salud

Benton County Health Department, Corvallis Parks and Recreation Department, and local nonprofit agencies formed the Creciendo en Salud (Growing in Health) partnership to improve the health status for youth and families in Benton County, Oregon, with a primary focus on lower-income children, Latinos, and children of seasonal farm workers. Benton County Health Department was the lead agency for the Creciendo en Salud partnership, but staffing and responsibilities were split between Benton County Health Department and Corvallis Parks and Recreation. The partnership and capacity-building strategies of partnership included:

- **Community Engagement:** The partnership collaborated with many community organizations and residents to build trust and increase involvement among residents, particularly lower-income and minority populations, in policy development, advocacy, and community change.
- **Latino Engagement in Local Food Systems:** Benton County Health Department collaborated with the Oregon Food Bank and Western Oregon University to conduct community-based participatory research in Benton, Linn, and Polk counties to engage and involve Latinos in the local food system with the goal of improving access to healthy food.

See Appendix A: Creciendo en Salud Evaluation Logic Model and Appendix B: Partnership and Community Capacity Survey Results for additional information.

Along with partnership and capacity-building strategies, the Creciendo en Salud partnership incorporated assessment and community engagement activities to support the partnership and the healthy eating and active living strategies.

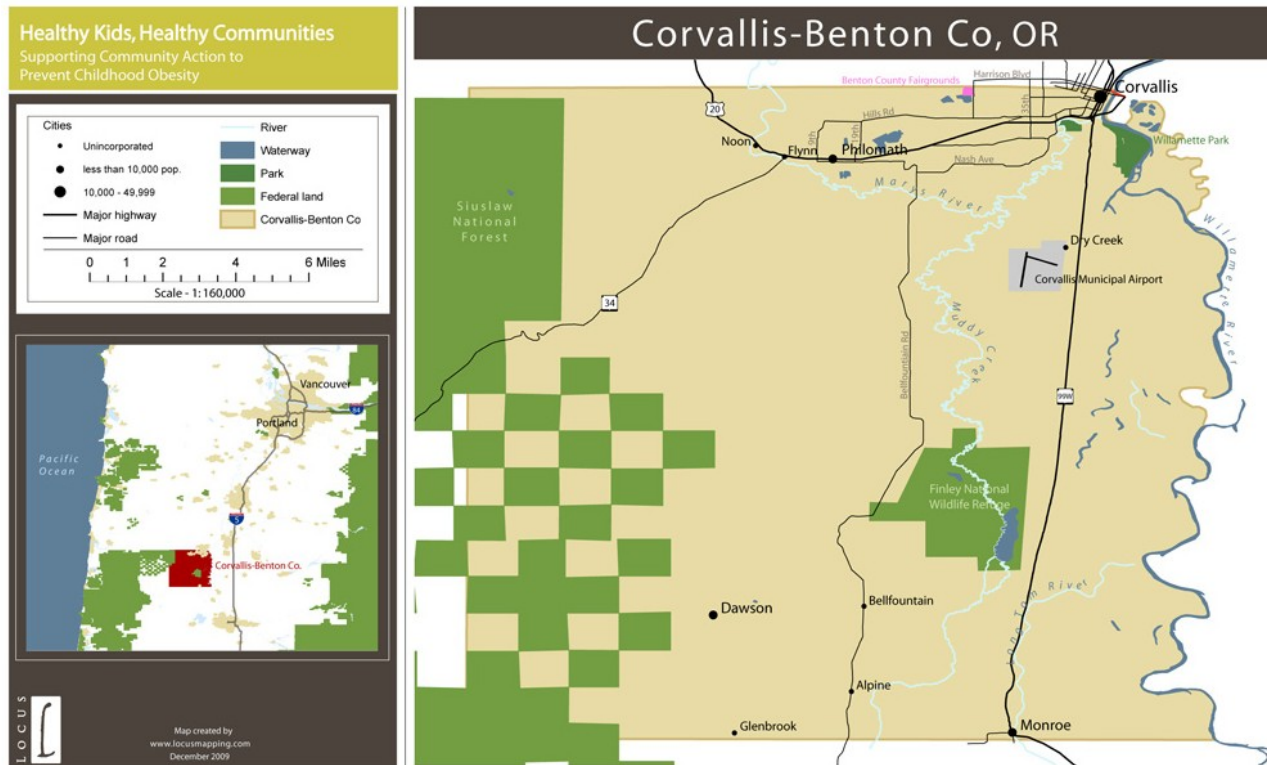
The healthy eating and active living strategies of Creciendo en Salud included:

- **Parks and Play Spaces:** Creciendo en Salud worked to create new parks and play spaces and increase access to physical activity opportunities.
- **Healthy Eating:** The partnership worked to increase access to healthy food with policy implementation and community engagement around the local food system. Creciendo en Salud also partnered to support community garden efforts with a Community Garden Master Plan and new gardens throughout Benton County.
- **Active Transportation:** Creciendo en Salud focused on advocacy and community engagement to improve safe access to multi-modal transportation in South Corvallis.

COMMUNITY DEMOGRAPHICS

Benton County, Oregon is located in the western portion of the state, in the Willamette Valley region (Figure 2). Benton County is the 11<sup>th</sup> largest county in Oregon with a total population of 85,579.<sup>2</sup> Nearly two-thirds of Benton County residents live in Corvallis, approximately 20% live in unincorporated townships, rural farms, and rural residences (e.g. Monroe and Adair), and the remaining live in smaller towns including North Albany (pop. 7,258) and Philomath (pop. 4,584).<sup>3,4</sup>

Figure 2: Map of Benton County, OR<sup>7</sup>



The partnership focused its efforts on primarily lower-income children and families, many of which are Latinos and children of migrant and seasonal farm workers, in the South Corvallis and surrounding unincorporated rural areas of Benton County. South Corvallis, once the industrial center of Corvallis, has seen substantial residential and commercial growth over the past decade and is now home to 6,780 residents with 42% of those persons living in households with incomes at or below 185% of the poverty level. Nearly 12% of South Corvallis residents identify as Hispanic/Latino.<sup>5</sup> The South Corvallis neighborhood is home to the Tunison neighborhood and Lincoln Elementary, populations specifically targeted by the partnership. Approximately, 36% of Lincoln Elementary students are Hispanic/Latino and 67.4% receive free/reduced lunch.<sup>6</sup>

South Benton County, including the City of Monroe, has a population of 3,808. Approximately 8.1% of south Benton County and Monroe residents identify as Latino, and 36.1% live below the federal poverty level (Table 1).

INFLUENCE OF SOCIAL DETERMINANTS

Economy

Economic conditions have heavily impacted area farm and mill industries. The subsequent closing of mills and the mechanization of farms negatively impacted employment in the area. In Corvallis, many businesses have closed (e.g., grocery stores, restaurants, gas stations). Although industries and farms are experiencing a downturn, there are opportunities in wineries, tourism development, and institutional investment. In addition, Oregon State University is a major employer in the area.

Affordable Housing

The growth of the Oregon State University student population has impacted affordable housing options in the area. To meet the demand for students, housing developers have redesigned existing one- and two-bedroom

**Table 1: Benton County, OR Area Demographics**

	Population	African American	Hispanic / Latino (of any race)	White	Poverty rate	Per capita income	Median household income
Benton County <sup>2,3</sup>	85,579	0.9%	6.4%	87.1%	21%	\$26,370	\$47,716
Corvallis <sup>2,3</sup>	54,461	1.1%	7.4%	79.8%	28.9%	\$24,033	\$37,793
South Corvallis Neighborhood <sup>5</sup>	7,045		10.4%	90.2%	22.6%	\$20,210	\$40,709
South Benton County (including Monroe) <sup>5</sup>	3,808		8.1%		36.1%		
Monroe <sup>2,3</sup>	617	0.2%	16.2%	89%	8.1%	\$21,483	\$40,347

apartments and single and block family units into four- and five-bedroom student condominiums. Affordable housing designed for students has not only decreased affordable housing options for low-income residents, but has also increased pedestrian and vehicle traffic around the housing units. Several community organizations, such as Willamette Neighborhood Housing Services and Linn Benton Healthy Equity Alliance, have worked with local government and residents to address affordable housing options for low-income families.

**Schools**

Affordable housing options also increased relocation and commuting among area residents which impacted school enrollment. School district budget allocation is based on school enrollment, and many school districts have experienced financial strain. Struggling school districts have limited funds for after-school programs and the costs associated with joint use agreements.

**Politics**

There have been lower levels of participation among low income and Latino residents in local government processes as compared to other groups in the project area. The overall community historically has been very involved and engaged on issues related to community livability, the e.g. the library campaign, Tunison Park, and active efforts to include different voices from residents that are often not heard due to barriers to participate in the political process. However, existing pockets of high poverty of the project area has traditional lacked civic engagement and community empowerment. It has been difficult to find community members and organizations that will cooperate for mutual benefits. This is especially true in rural, more isolated areas that have limited capacity to meet the needs of the community and of those marginalized such as Latino and families living in affordable housing rentals. The absence of civic engagement networks such as neighborhood associations, social clubs, or cooperative groups make it especially difficult to motivate civic leaders, community members and local organizations to have a collective impact.

**Transportation**

South 3rd Street/Highway 99 divides Corvallis and acts as a barrier for pedestrians and bicyclists. It has been a challenge to balance the need for high-speed traffic and pedestrian/bicycle usage. Both state and federal funds have legally mandated requirements (e.g., environmental inspections) that significantly impact the cost of projects. In some cases, Corvallis prefers to exchange federal funds for reduced state funds to expedite certain projects. Although Corvallis and Benton County collaborate on transportation proposals sent to Oregon Department of Transportation, project planning and implementation across multiple jurisdictions and planning departments is an additional challenge for transportation projects in the area.

Corvallis street design standards require developers to include sidewalks in all new development and redevelopment projects. Developers are required to mitigate the impact of a development with active transportation design in proportion to the impact created from the development. About 97% of major streets in the city of Corvallis have bike lanes. Additional bike lanes are being developed through retrofitting.



## CRECIENDO EN SALUD PARTNERSHIP

### Lead Agency and Leadership Teams

Benton County Health Department (BCHD) and Corvallis Parks and Recreation Department formed the Creciendo en Salud partnership to improve the health status for youth and families in Benton County, Oregon, with a primary focus on lower-income children, Latinos, and children of seasonal farm workers. The partnership specifically targeted children and families in South Corvallis and the surrounding unincorporated, rural areas of Benton County. Using a three pronged approach, the partnership focused on engaging families and children in policy development, strengthening partnership and collaboration among government entities, and implementing local policies and environmental changes across the county.

Although Creciendo en Salud was formally created as a result of HKHC funding, collaborations and informal partnerships focusing on healthy eating and active living existed for over ten years in Benton County. Created and funded in 2002, an interdisciplinary collaboration of Benton County departmental directors formed Healthy Active Community Environments. The group was tasked with addressing general policy and environmental changes, including the built environment, and its impact on the health of the community. The Healthy Active Community Environments partnership served as the impetus to seek HKHC funding and expand the county's efforts around healthy eating and active living. It continues to meet and receives Benton County general funds annually to support projects throughout the county. The BCHD director is a member of Healthy Active Community Environments, allowing the Healthy Active Community Environments and Creciendo en Salud to complement and support efforts across the county.

BCHD was the lead agency for the Creciendo en Salud partnership, but staffing and responsibilities of the workplan were split between BCHD and Corvallis Parks and Recreation. This collaboration allowed the partnership to work at both the city and county level. As part of this unique approach, the Project Coordinator was jointly supervised and located at both the BCHD and Corvallis Parks and Recreation Department.

- **Project Coordinator:** The original Project Coordinator had been involved with the healthy eating and active living movement for over eight years. She started as an intern to conduct focus groups and needs assessments with the Latino community, focusing specifically on Latina women. Beginning in 2012, the Community Health Navigator for BCHD became the Co-Project Coordinator and transitioned into the role singularly in 2013. The Project Coordinator helped develop the partnership workplan and track its implementation, organize, and connect partners, as well as support them in their efforts. Additionally, the Project Coordinator provided technical assistance on grant writing, collaboration on complementary grants and projects, and relationship building between city and county governments and residents, especially within the Latino community.
- **Project Director:** The BCHD Health Promotion Program Manager served as the Project Director for the entirety of HKHC funding. The Project Director provided overall guidance to the partnership and strategic support for all of its strategies and initiatives. The Project Director was instrumental in understanding the systems influencing healthy eating and active living in Benton County and bringing an overall cohesiveness to the partnership's efforts.

### Partnership Organization and Collaboration

The partnership facilitated more meaningful collaboration across disciplines. Through the development of common goals and strategies, BCHD, Corvallis Parks and Recreation, city and county department, and partner organizations communicated more often and utilized more effectively resources. Partners appreciated the integrated approach to strategies and valued operating as part of a larger system. Although various partners had been involved in policy and environment change prior to HKHC, the partnership allowed that work to expand.



Creciendo en Salud logo. Photo source: HKHC



The partnership had political support from elected officials and government employees at both the county and city level. The expansion of the partnership demonstrated to elected officials that the partnership was viable and beneficial to area residents, thus reducing resistance and reluctance to move agreements and contracts forward with the partnership. Additionally, many county and city elected officials and department directors were directly involved with the partnership and allowed their staff to attend meetings and devote staff time to the partnership's efforts, including the Corvallis City Council and mayor, Benton County Public Works Department Director, and the Transportation Division of the City of Corvallis Public Works Department.

Creciendo en Salud placed special emphasis on reaching the Latino community with the addition of bilingual staff and services. As a result of the partnership's guidance and leadership, many partners added bilingual staff to their organizations. The inclusion of bilingual staff improved the quality of outreach, built the capacity of English-only speaking staff, and improved service delivery.

Note: See Appendix C for a complete list of partners.

### Sustainability of the Partnership and Initiative

The current staff members have all been working with the partnership since the beginning of HKHC, but many have shifted partnership roles and responsibilities over the funding period. Staff were reassigned tasks based on the characteristics of projects and the priorities of the BCHD. Because of this fluid approach, staff members were cross-trained, and BCHD made efforts to ensure capacity building and institutional memory. Partnership staff believe that this capacity building will allow Creciendo's strategies and efforts to continue into the future.

Throughout HKHC funding, BCHD conducted community health assessments and developed the Benton County Community Health Improvement Plan. Many of the partnership's strategies and initiatives were incorporated in the plan, including strategies related to food insecurity, obesity, and transportation. Partnership staff noted that HKHC helped BCHD organize its community engagement efforts and helped to focus its strategic planning efforts.

"In many ways the HKHC plan has become our little mini strategic plan for all of our collective efforts." -Partnership Staff

### PARTNERSHIP FUNDING

As part of HKHC, grantees were expected to secure a cash and/or in-kind match to equal at least 50% of the RWJF funds over the entire grant period. HKHC funding strengthened the partnership, particularly the relationship between BCHD and Corvallis Parks and Recreation. Many partners regularly provided in-kind support to the partnership. For example, the City of Corvallis Parks and Recreation Department hosted partnership meetings and other events, while the BCHD provided food for HKHC meetings.

Creciendo en Salud used a portion of its funding to connect partners to capacity-building resources. The president of the Tunison Neighborhood Association was sponsored to attend the Smart Growth Conference to build the capacity of the neighborhood and advocate for its needs.

In addition to the matching funds, the partnership was successful in leveraging additional funds, due in part to the reputation of the lead agency. Additional funding was secured from: Centers for Disease Control (CDC) and Prevention Racial and Ethnic Approaches to Community Health (REACH), Northwest Health Foundation; Oregon State Health Department; Oregon Parks and Recreation Department; National Heart, Lung, and Blood Institute; and the Environmental Protection Agency.

#### Future Funding

As part of the partnership's sustainability planning, partnership staff applied for and received funding to continue its work into the future. BCHD, in collaboration with Boys and Girls Club, Corvallis School District, Corvallis Parks and Recreation, received a US Department of Education 21st Century Community Learning Center Grant to support after-school programming at the two Title 1 schools (i.e., Lincoln Elementary, Garfield Elementary). The programming will focus on nutrition and physical activity. The CDC Reach grant continued through September 2014 to support project staffing and program implementation. Additional sustainability funding sources included Oregon Health Division's Healthy Communities and Tobacco Prevention and Education grant funding, Oregon Office of Equity and Inclusion's funding for the Benton Linn Health Equity Alliance, Benton County Chronic Disease Prevention funding through Benton County unrestricted funds and regional funding to address health disparities through Oregon's Health Transformation and Coordinated Care Organization (CCO) model.

For additional funding information see Appendix D: Sources and Amounts of Funding Leveraged.

## COMMUNITY ASSESSMENT

### General Assessments

Creciendo en Salud collaborated with the Corvallis Sustainability Coalition to complete a neighborhood audit, assessing walkability, bikeability, food access, and presence of parks in the South Corvallis area. Creciendo en Salud translated the inventory into Spanish and conducted the audit with a group of 30 Latina women. Along with BCHD Health Navigator staff, the partnership and Latina women audited and photographed six routes in the South Corvallis area, assessing walkability and bikeability, street aesthetics, safety, and other features along the routes.

The partnership also completed a literature review, resident survey, focus groups, key informant interviews, and a walkability audit to identify key strategies and focus for the partnership.

- **Resident Survey:** In collaboration with Willamette Neighborhood Housing Services, 320 surveys were mailed to residents in South Corvallis neighborhoods, and 131 residents replied. The results were used to identify assets and needs related to community involvement, access to clean and safe parks, walking and bicycling behavior, and the use of community resources.
- **Focus Groups:** Five focus groups were conducted with 30-45 Latina women on healthy eating, active transportation, and physical activity.
- **Key Informant Interviews:** Three key informant interviews were conducted with ten city and county staff. Those interviews included: City of Corvallis' Community Development, Parks and Recreation, and Transportation staff; Benton County Health Department, Community Development, Parks, and Public Works staff; and local WIC staff, a school nurse, and a community nurse with experience working with children and families in the target area.
- **Walkability Audit of South 3<sup>rd</sup> Street:** Seven streets surrounding Lincoln Elementary were audited by neighborhood residents.

Results of the assessments were used in strategy specific work and informed portions of the partnership's active transportation assessments (i.e., South 3rd Street/Highway 99 Health Impact Assessment, Healthy Streets initiative).

### Parks and Play Spaces

Results from the general partnership assessments indicated that families perceived a lack of culturally-appropriate and financially-accessible recreational programming and a lack of safe and age-appropriate play spaces in their neighborhood. Based on the assessments, Creciendo en Salud focused its physical activity strategies on increasing bilingual and local recreational programming, increasing financial access to recreational programming, and improving neighborhood parks and play spaces. Assessment results were shared with City of Corvallis Parks and Recreation and Monroe City officials to prioritize parks and recreation needs and to seek additional funding. Needs assessment results were also used in the successful grant applications for the Tunison Park renovations and Monroe baseball field construction.

The partnership conducted additional physical activity assessments to further inform its efforts around parks and play spaces, including:

- **Vending Survey:** Osborn Aquatic Vending Sales Assessment found vending sales to be predominantly unhealthy: 34% energy drinks; 33% sports drinks; 31% fruit juices with high fructose corn syrup or cane sugar; and the remainder an assortment of waters. Another vending machine sold 90% soda.
- **Parks and Play Spaces Environmental Audit:** Environmental audits were conducted at Cloverland Park and Tunison Park in 2012. Selected results can be found in Table 2 and the summary report can be found in Appendix E.
- **Parks and Play Spaces Direct Observation:** Direct observations were conducted at Tunison Park in 2012, prior to environmental changes to the playground and play space. The partnership intends to collect post-intervention direct observations in 2014. Selected results can be found in Table 3 and the summary report can be found in Appendix F.



**Table 2: Parks and Play Spaces Environmental Audit**

- Both Tunison Park and Cloverland Park are multi-use, publically accessible parks and the overall condition of both parks was considered average/good.
- Signs with the park names were present during the audits; however, general information and park amenities were scarce at both locations.
- Parking was available at both locations, although only Tunison Park had a parking lot on-site.
- Both audited parks had swings, monkey bars/climbing bars, and slides available for use.
- Green space was present in both Cloverland Park and Tunison Park, with benches, drinking fountains, and trash cans available.
- Sports facilities (fields or courts) were available at both locations.

**Table 3: Parks and Play Spaces Direct Observation**

Across age groups	Within each age group
<ul style="list-style-type: none"> <li>• The greatest percent of activity counts observed were children in moderate physical activity (32.2%).</li> <li>• A low proportion of counts overall (8.5%) were noted as very active, as compared to individuals observed being sedentary (37.3%) or in moderate activity (54.2%).</li> <li>• Children comprised the majority of activity counts counted during the audit (61.0%).</li> </ul>	<ul style="list-style-type: none"> <li>• The majority of activity counts in children were recorded as moderate physical activity (52.8%).</li> <li>• The majority of activity counts in adults were recorded as moderate physical activity (54.5%).</li> <li>• Adolescents activity counts were primarily observed as sedentary (54.5%).</li> </ul>

**Access to Healthy Food**

BCHD collaborated with the Oregon Food Bank and Western Oregon University to conduct community-based participatory research in Benton, Linn, and Polk counties to engage and involve Latinos in the local food system with the goal of improving access to healthy food. The *Latino Engagement in Local Food Systems* project was funded by the Northwest Health Foundation, Kaiser Permanente Community Fund, and HKHC. Partnership staff, BCHD, and partners conducted assessments to identify barriers to healthy food and worked to build community capacity to increase resident involvement in the local food system. Partnership staff provided technical assistance and leadership for assessment activities. Several interviews and seven focus groups were conducted in Benton, Linn, and Polk Counties. The interviews and focus groups revealed the following:

- Cost, language, and lack of knowledge/information about local food are barriers to access.
- Financial assistance at farmers’ markets, community gardens, and nutrition and cooking classes were known access points to local food.
- Improved collaboration, outreach, and partnership to improve access are methods to improve access to the local food system.

In addition to the *Latino Engagement in Local Food Systems* project, the partnership conducted several assessments to further inform its access to healthy food strategy. Partnership staff provided input and technical assistance into the South Corvallis Food Center Feasibility Report completed by Ten Rivers Food Web. The report found that a food center was not feasible due to a lack of organization interest in leadership and available property. At the request of Corvallis City Council, and with funding from Northwest Health Foundation, Creciendo en Salud and BCHD staff conducted a health impact assessment for a zoning proposal to expand urban agriculture in Corvallis. The City of Corvallis requested the health impact assessment to identify opportunities and barriers to food access and production. Results of the health impact assessment informed changes to the Land Development Code. The partnership conducted 12 key informant interviews with current local garden managers and regional program coordinators to provide examples of best

practices and identify priorities for the Corvallis Community Garden Master Plan. The partnership conducted a corner store environmental audit at 27 corner stores in Benton County (See Appendix G). Selected results include:

- All 27 of the corner stores accepted WIC, SNAP, and EBT.
- Fresh fruits were available at 17 corner stores and fresh vegetables were available in seven corner stores. Six of these stores had both fresh fruits and vegetables available. Eleven of the stores located fresh fruits in baskets or bins near the register. Ninety-five percent of the fresh fruits and vegetables available were rated as “Average or Good Quality.”
- Sugar-sweetened beverages were available in all corner stores.
- Tobacco was sold in all corner stores and 22 of the stores displayed tobacco advertisements.

### Active Transportation

#### South 3rd St/Highway 99 Health Impact Assessment

BCHD received funding (\$15,000) from the Oregon Health Authority to conduct a health impact assessment on traffic speed for South 3rd Street/Highway 99 in South Corvallis. The assessment was designed to look at active transportation, traffic safety, and access to services (i.e., grocery stores, schools, hospitals). The health impact assessment report included baseline conditions, community perceptions, and policy and environmental improvement recommendations for the Oregon Department of Transportation. The initial partnership assessments were used to inform the community resident perceptions and experiences sections of the report. Findings from the survey, focus groups, and walkability audit revealed that residents perceived a lack of safety and options for walking and biking in the community. Based on road conditions and community perceptions, the health impact assessment report recommended a reduced speed limit along South 3rd between Avery Avenue; expanded and improved medians, bicycle and pedestrian paths, sidewalks; and identification of the area with signage and painted lanes. The report also recommended a need for additional assessment of business sales and visits for businesses adjacent to South 3rd Street/Highway 99, local motorist perceptions and attitudes regarding traffic speed along this segment of the roadway, and bicycling and walking rates by age and race/ethnicity.

The partnership also conducted street design direct observations on Alexander Avenue and South 3rd Street/Highway 99 (see Appendix H). Results included:

- Both street segments were accessible, and sidewalks were in usable condition.
- Children, adolescents, and adults were identified on both streets during the audits.
- Children comprised the majority of activity counts on Alexander Avenue, while nearly all activity counts on South 3rd Street/Hwy 99 were attributed to adults.
- Auditors noted activity counts of people engaged in walking, jogging/running, biking, and skate boarding.

#### Corvallis Healthy Streets

Corvallis Public Works was awarded an Environmental Protection Agency Urban Waters Grant for a healthy streets planning initiative. Corvallis Healthy Streets is a planning effort to treat storm water, develop alternative transportation routes, expand urban green space, and improve community health along city streets.<sup>8</sup> The partnership conducted three focus groups with South Corvallis residents to solicit feedback and input into resident experiences and perceptions on walkability, bikeability, and storm water treatment. Corvallis Public Works created an online, interactive mapping tool for residents to identify and mark barriers and opportunities for specific street segments and areas. Partners and city staff hope to incorporate Complete Streets policies into the guidelines under development to address storm water runoff into the Willamette River and area streams.

## PLANNING AND ADVOCACY EFFORTS

### Community Outreach and Engagement

Recognizing the importance of engaging residents, the partnership focused much of its efforts on capacity building and community mobilization. The partnership collaborated with many community organizations and residents to build trust and increase involvement among residents, particularly vulnerable populations, in policy development, advocacy, and community change. Residents were given the opportunity to attend workshops and trainings, testify before City Council and Commissions, and determine priorities and strategies for the partnership. During the first year, several community forums were held to inform community residents the ability of policy and environmental changes to impact childhood obesity and the benefits of robust and

“It’s not just education and it’s not just policy change. You have to have both happening.” -Partnership staff

sustained community engagement. Creciendo en Salud’s inclusive multicultural approach to community engagement led to staff being appointed for the City of Corvallis City Council’s Public Participation Task Force. This group is revising the city’s current processes and structures into a more effective, inclusive,

and efficient community engagement program. Creciendo en Salud’s techniques to engage low income community members in city government processes has been noted and identified as an ongoing success

Many key partner organizations were well-established as community leaders and conveners for the partnership’s targeted populations. Key community engagement partners included:

- BCHD Health Navigators: BCHD staff members who worked to bridge the gap between lower-income and minority populations and government services (i.e., WIC coupons, immunizations).
- Casa Latiños Unidos de Benton County (CLUBC): a grassroots community organization that works towards promoting well-being of Latino Families.
- Organizacion de Latinas Unidas (OLU): a community group of Latina women that guided the partnership and served as key outreach partners, connecting friends and family and the community to partnership activities and strategies.
- Tunison Neighborhood Association: a key partner in connecting the partnership to neighborhood residents. The collaboration served to ensure that the partnership’s strategies and policies met the residents’ needs.

### Youth Community Engagement

Creciendo en Salud engaged area youth by partnering with established youth organizations and area schools. Several assessment projects and workshops were held with youth and youth organizations specifically to foster community engagement. Youth engagement included:

- A Photovoice project with Monroe High School students to assess environmental factors that influenced physical activity and healthy eating through the collection of photographs documenting the factors.
- Key informant interviews with area youth organizations to assess current youth engagement around healthy eating and active living.
- Focus groups with the Benton County Youth Commission and Corvallis Parks and Recreation Youth Advisory Board to assess access to healthy eating and active living.
- Multiple workshops with youth on topics such as racism, classism, health disparities, leadership, civic engagement, and advocacy.
- Training opportunities for local organizations on fostering youth development and engagement.

### Parks and Recreation Community Engagement

To ensure that lower-income and Spanish-speaking residents were involved with parks and recreation program and service planning, the partnership hosted

“So through collecting contact information [at block parties], when it came time to rally the troops, we had ways to connect with people to get the community resident buy-in to support this.” –Partnership Staff



block parties, provided childcare and dinner for evening meetings, and collaborated with community organizations.

Block parties were useful in identifying community needs in the Tunison neighborhood and resulted in changes to Corvallis Parks and Recreation services, advocacy, and the environment (i.e., increased and extended programs and services, improvements to Family Assistance Program, advocacy for Tunison-Avery Trail, Tunison Park renovations).

The regular gathering of residents led to a renewal of the Tunison Neighborhood Association and a consistent contact for convening and informing the neighborhood of projects and policy work. As a result of the community engagement successes in the Tunison neighborhood, Corvallis Parks and Recreation hosted a community input session in Spanish for the Corvallis Parks and Facilities Master Plan to gather resident input and feedback.

### Advocacy

#### Tunison-Avery Trail

Identified in the 1998 South Corvallis Area Refinement Plan as a potential pedestrian and bicycle trail, the Tunison-Avery Trail did not advance to the Corvallis Capital Improvement Program for planning and funding opportunities. Renewed efforts toward the Tunison-Avery trail began in response resident's need for a safe walking and biking route along Highway 99. The Tunison block party kicked off the re-formation of the Tunison Neighborhood Association and the beginning of the Tunison-Avery trail campaign.

Partnership staff presented the results of the community survey, focus groups, and stakeholder interviews to the Corvallis Bicycle and Pedestrian Advisory Commission. The assessment results, along with a presentation by the Tunison Neighborhood Association about community interest in bike paths, led to the convening of a transportation stakeholder group with residents, bicycle advocates, and city and county transportation staff. Subsequently, a citizen coalition, Safe Paths to South Corvallis, was formed to address the lack of alternative transportation options in the neighborhood. Safe Paths to South Corvallis served to advocate for funding and policies for the Tunison-Avery trail and educate community residents and business owners about the need for the trail.

City government officials recommended efforts be made to add the trail to the Corvallis Capital Improvement Program list. The Capital Improvement Program list is a five-year outline of capital improvement expenditures for Corvallis. Projects identified on the list receive strategic planning and funding support, as available. The partnership solicited community support through letters and petitions from community-based organizations and individuals. Through continued community organizing efforts, including testimonies from residents and partnership staff to the Capital Improvement Program Commission, the residents and partnership succeeded in adding the Tunison-Avery trail on the Capital Improvement Project List for 2012-2017. Corvallis City Manager directed city staff to begin a feasibility study on the implementation of the trail. In 2012, the Bicycle and Pedestrian Advisory Commission rated the Tunison-Avery trail at the top of its Capital Improvement Program list for 2013-2018. The Corvallis Bicycle and Pedestrian Coordinator then applied for grant funding to support the feasibility study.

#### South 3rd Street/Highway 99

The Oregon Department of Transportation considered increasing traffic speed, including an increase through a school zone, along South 3rd Street/Highway 99. In response, a Health Impact Assessment (HIA) was conducted to address residents' concerns around accessibility and safety of the area. The goals of the HIA, based on vulnerable populations (e.g., low-income residents, Latino residents, youth, older adults), were to: 1) provide recommendations to maximize health benefits and minimize health risks related to speed limit and other health outcomes, 2) engage community members and stakeholders in an HIA process on decisions that affects them, and 3) address community needs and concerns through a comprehensive approach. Creciendo en Salud provided the South 3rd Street/Highway 99 Health Impact Assessment report to the Oregon Department of Transportation to advocate for a lower speed limit along South 3rd Street/Highway 99 as a traffic calming measure. The Oregon Department of Transportation did not incorporate the recommendations but BCHD and Corvallis Parks and Recreation incorporated traffic calming on South 3rd Street/Highway 99 in the BCHD's Community Health Improvement Plan.



Farmers' Market Tour and Baile Folklórico. Photo source: HKHC Dashboard

### Parks and Recreation Services

As part of a City Council effort to provide a sustainable budget, Corvallis Parks and Recreation Department faced reductions in parks and recreation programs and services. Since 2010, the overall budget reductions were approximately \$465,500. This reduction amount includes predictable, yet uncontrollable expense increases (e.g., personnel, materials and supplies). In response, community residents testified to Corvallis City Council about the value of Corvallis Parks and Recreation's Family Assistance program and other supporting services. In addition, the Cost Recovery Model included support for the Family Assistance Program. Corvallis Parks and Recreation continues to develop alternative revenue strategies which would decrease reliance on City property taxes.

### Programs and Promotions

#### Farmers' Market

As part of Creciendo en Salud's efforts to increase lower-income and Latino residents' access to local food, the partnership collaborated with Corvallis-Albany Farmers' Market, OSU Extension Service, Linn Benton Health Equity Alliance, and Ten Rivers Food Web to increase awareness of and participation at area farmers' markets. Partners utilized a double SNAP benefit program, conducted farmers' market tours, and held events to promote the markets.

- **That's My Farmer:** Although SNAP, WIC Fruit and Veggie Vouchers, and WIC Farm Direct Vouchers were accepted at area markets, there was limited utilization of the benefits. In an effort to increase interest of and access to fresh fruit and vegetables at local markets, Creciendo en Salud used funds from BCHD and area organizations to offer double benefits to SNAP recipients. HKHC funds were used for the planning and convening of fundraising meetings and promotional events. Once the funding for the pilot program ended, the partnership transitioned the program to Ten Rivers Food Web to ensure sustainability. Ten Rivers Food Web received funding from Meyer Memorial Trust to support the program and continues to collaborate with a stakeholder group, which includes BCHD, to provide this program to lower-income families.
- **Market Tours:** The partnership hosted guided tours for Latino residents at area farmers' markets. Participants were able to tour the market, sample local produce, and meet Spanish-speaking vendors to become more familiar with the market. The event also included cooking demonstrations, education on SNAP usage, and baile folklórico (folk dancing) performances by 4-H and OLU participants. All of the events were offered to the general public with targeted outreach to the Latino community. The partnership was also able to distribute additional WIC vouchers during select events. Distributing coupons onsite, rather than at WIC clinics, was a great opportunity to increase redemption rates, especially for many WIC clients who were unable to commit time to collect the coupons at the clinics and then take them to the market. The tours were later led by members of Organización de Latinas Unidas.

Daily and monthly aggregate records of sale and redemption of tokens were tracked, and the Corvallis-Albany Farmers' Market reported a 19.2% increase in SNAP usage from 2011 to 2012.

## PARKS AND PLAY SPACES

Creciendo en Salud worked to improve access to parks and play spaces and participation in physical activity opportunities with bilingual program offerings, streamlined Parks and Recreation practices, new and improved parks and play spaces, and county and city planning documents.

### Policy, Practice, and Environmental Changes

Parks and Play Spaces policy, practice, and environmental changes included:

- Institutional policies were modified for the Family Assistance Program and a cost recovery model was adopted for Corvallis Parks and Recreation services by the Corvallis Parks Advisory Board and City Council.
- Healthy vending policies were adopted for Corvallis Parks and Recreation facilities by the Corvallis Parks Advisory Board and City Council.
- An updated Benton County Natural Areas and Park Master Plan was adopted by Benton County Natural Areas and Parks Department and a new Monroe Parks Master Plan was adopted by Monroe City Council.
- Tunison Park improvements were implemented from 2011 to 2014. A grant was received in 2011 from Oregon State Parks for improvements to be made June 2013. The community collected data in August 2011 at the Tunison Block Park, Soccer Tournament, and at the Tunison Community Room. A park clean-up was held and equipment was installed in the fall of 2013, which accounted for 75% of the installation. As part of the process, Tunison Neighborhood Association volunteers, alongside volunteers from Willamette Neighborhood Housing Services, First United Methodist Church, Love Corvallis, and BCHD, participated in work days to complete 25% of the planned improvements. Volunteers refurbished swing sets and a fire truck climber and cleared neighborhood paths leading to the park. Work crews installed a dinosaur skeleton climber, playground equipment, and a walking path to complete Phase One of the park improvements. The remaining 25% of the park (e.g., irrigation, landscaping) was completed in Spring 2014.
- Improvements were made to a Monroe baseball field. The field in Monroe was an existing baseball field that had been neglected for the past ten years. The space was rebuilt with new backboards, seating, and grass.

For additional information see Figure 3: Parks and Play Spaces Infographic.

### Complementary Programs/Promotions

In response to the request for neighborhood and bilingual recreation opportunities, Corvallis Parks and Recreation and BCHD partnered with Lincoln Elementary to formalize and sustain the school's Escuelita de Fútbol (little school of soccer) program. Parents, teachers, BCHD and Corvallis Parks and Recreation created a workplan to promote the after-school soccer program among neighborhood families and to staff the program with bilingual instructors. After the changes were implemented, the partnership saw an increase of participation, particularly from Latino families. The formalization of the Escuelita de Fútbol program served as a model for Corvallis Parks and Recreation to develop and implement recreational programming for lower-income and Spanish-speaking Corvallis residents. Because of the interest and success of Escuelita de Fútbol, the department offered additional bilingual programs (e.g. Zumba, swimming) and hired a bilingual, bicultural coordinator with a We Can! grant from National Heart, Lung, and Blood Institute to bridge the gap between residents and the Corvallis Parks and Recreation department. Community engagement and collaboration were used as opportunities to build lower-income and minority families' capacity to be involved with policy work around chronic disease prevention.

In addition, Corvallis Parks and Recreation combined HKHC and CDC REACH funding to increase social media presence



Creciendo en Salud Partnership Billboard. Photo Source: HKHC Dashboard



and designed and posted bilingual billboards in the area promoting physical activity opportunities.

### Implementation

#### Cost Recovery Model and Family Assistance Program

Corvallis Parks and Recreation created a cost recovery model to categorize departmental services based on the benefit to the community rather than the benefit to the individual. Programs and services with the most benefit to individuals were designed to support and subsidize programs and services that provided a community-wide benefit. As part of the cost recovery model, changes were made to the Family Assistance Program to increase participation. The Family Assistance Program is a scholarship program that allows families and individuals to receive financial assistance between 50 and 100% of program costs depending on income level. Although the city had operated a Family Assistance Program for many years, enrollment in the program was minimal. Corvallis Parks and Recreation implemented an improved registration process to simplify program enrollment, allowing eligibility for Federal Assistance Programs (e.g., WIC, Medicaid, Free and Reduced Lunch Program) to automatically qualify individuals into the Corvallis Parks and Recreation Family Assistance program. The revised practices, along with a new Parks and Recreation cost recovery model for all Parks and Recreation services, were adopted by Corvallis City Council and implemented in 2012. The simplified registration process along with intentional and culturally appropriate outreach, increased utilization of Family Assistance scholarships from 15 to 64%.

#### Healthy Vending

The healthy vending guidelines were based on the Nutrition Standards for All Foods Sold in School as required by the Healthy, Hunger-Free Kids Act of 2010 by the United States Department of Agriculture. While seeking changes to vending policies, Parks and Recreation staff voiced concerns about a possible revenue loss with a vending policy change. A workgroup was formed to research best practices, create educational materials, and create a timeline for seeking vending policy change. The policy was adopted by Corvallis City Council and will be implemented initially at the Osborn Aquatic Center in 2014. Vending machines and concessions, including snack items, entrée items and beverages will be required to follow the guidelines. The healthy vending policy will be reviewed annually to determine impact on revenue by Corvallis Parks and Recreation staff members.

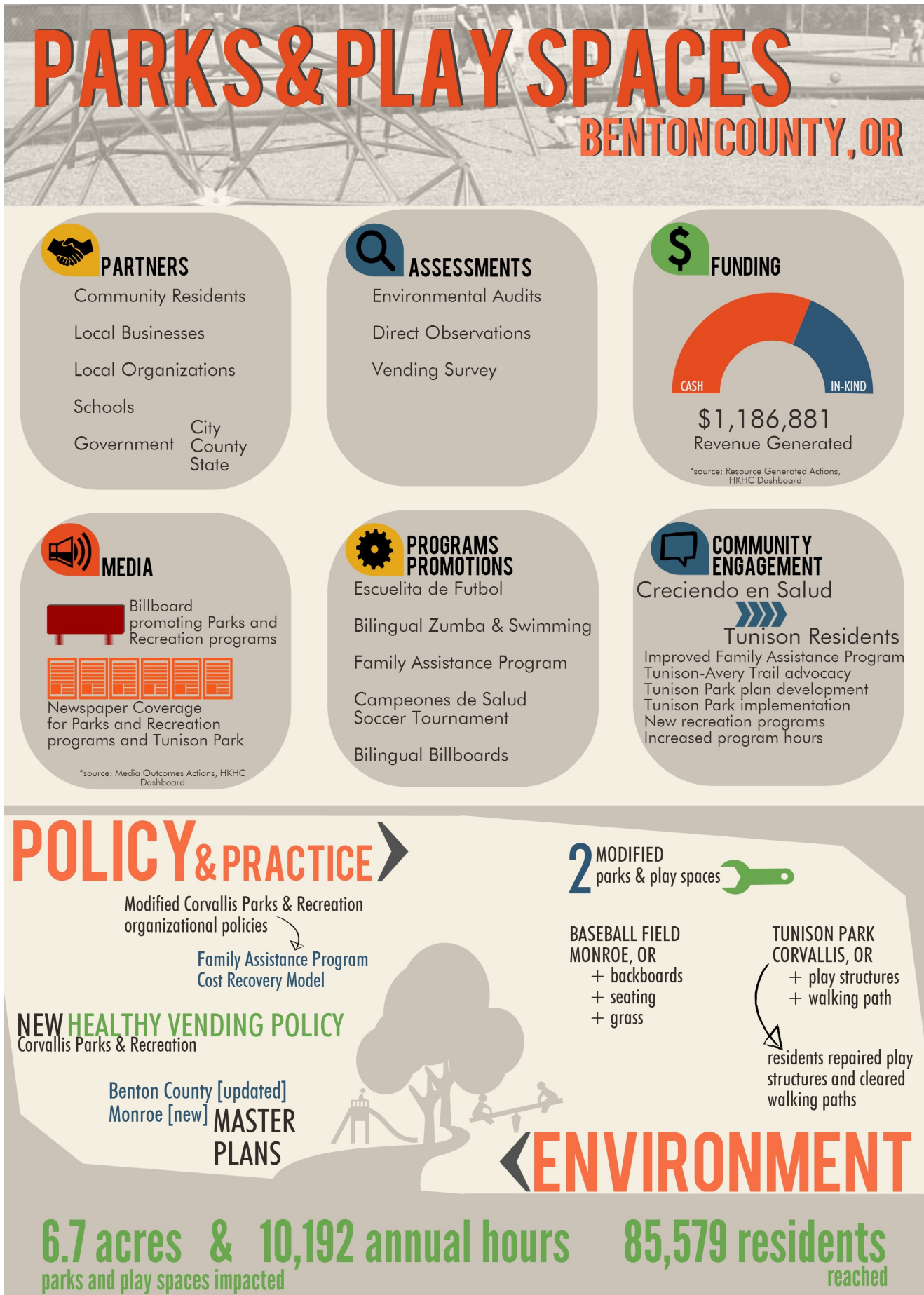
#### Park Improvements

A draft plan for Tunison Park was developed from a community visioning process. Residents contributed significantly to the park planning process, from redesign to renovation. BCHD staff provided Spanish interpreters at the resident input meetings. Adults and youth voiced ideas for amenities, provided feedback on plans, and committed to volunteering for portions of the renovations process. The draft plan included the addition of play equipment, modification and beautification of existing play structures, walking paths, mosaics for art work and murals, space for gardening, a soccer field, and a volleyball court. The park's Tunison Community Room, which provides meeting and program space, was also slated in the draft plan to be renovated to accommodate cooking, Zumba classes, and childcare. The Tunison Park renovation was included on the Corvallis Capital Improvement Plan project list for 2012-2013. Funding for the Tunison Park



Tunison Park, Pre and Post Modifications. Photo source: Transtria and Corvallis-Gazette Times<sup>9</sup>

Figure 3: Parks and Play Spaces Infographic





## COMMUNITY GARDENS

Creciendo en Salud collaborated with the City of Corvallis, housing developments, and elementary schools to support community garden efforts with a Community Garden Master Plan and new gardens throughout Benton County.

### Policy, Practice, and Environmental Changes

Community Garden policy, practice and environmental changes included:

- The Corvallis Community Garden Master Plan was adopted in 2012.
- City of Corvallis adopted amendments to the Land Development Code to permit vacant industrial lots to be used for crops and to allow local food to be grown and processed on private and public property. Changes to the code were adopted as a result of the health impact assessment on urban agriculture.
- A new school and community garden at Lincoln Elementary.
- Community Sharing Garden developed and managed by Willamette Neighborhood Association at their Tunison housing site.



Willamette Housing Community Garden Plots. Photo source: Transtria LLC

### Complementary Programs and Promotions

Creciendo en Salud collaborated with area organizations to provide outreach and program materials for existing garden programs in Spanish. The partnership also developed community garden promotional materials to encourage participation in local gardens and to support the Community Garden Master Plan effort.

### Implementation

#### Community Garden Master Plan

The partnership and Corvallis Parks and Recreation convened several community visioning events in the Spring and Summer of 2011 with youth and adult residents, garden managers, non-profit environmental organizations, Oregon State University Horticulture faculty, Corvallis Parks and Recreation, and BCHD. In addition, key informant interviews with City Park and Recreational Departments in Washington, Oregon and Washington provide information for the development of the plan. The advisory committee developed the Community Garden Master Plan, which was adopted by City Council in 2012, based on best practices but tailored to meet Corvallis' needs and completed a visioning exercise for community garden locations. The master plan allowed for community access to public land, mainly parks, for use as gardens. The available land was in compliance with land use, zoning, and wetlands requirements and was prioritized and identified to the community-based on soil quality and neighborhood need. The plan also outlined the process and financial responsibilities for the creation and maintenance of gardens on public land. The plan stated that groups are required to raise 30% of the start-up costs, and additional financial support may be available from other grants. Liability insurance is covered by the city. Community organizations and residents are responsible for the majority of the maintenance, with additional support from the city as needed. There are no water user fees, and since the gardens are located on park land, amenities such as restrooms, fountains, benches, and sheds are available. The Community Garden Master Plan update was part of the Corvallis Park Master Plan Update which was undergoing final editing in 2014.



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### APPENDIX A: CRECIENDO EN SALUD EVALUATION LOGIC MODEL

In the first year of the grant, this evaluation logic model identified healthy eating and active living strategies with associated 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 Creciendo en Salud 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).

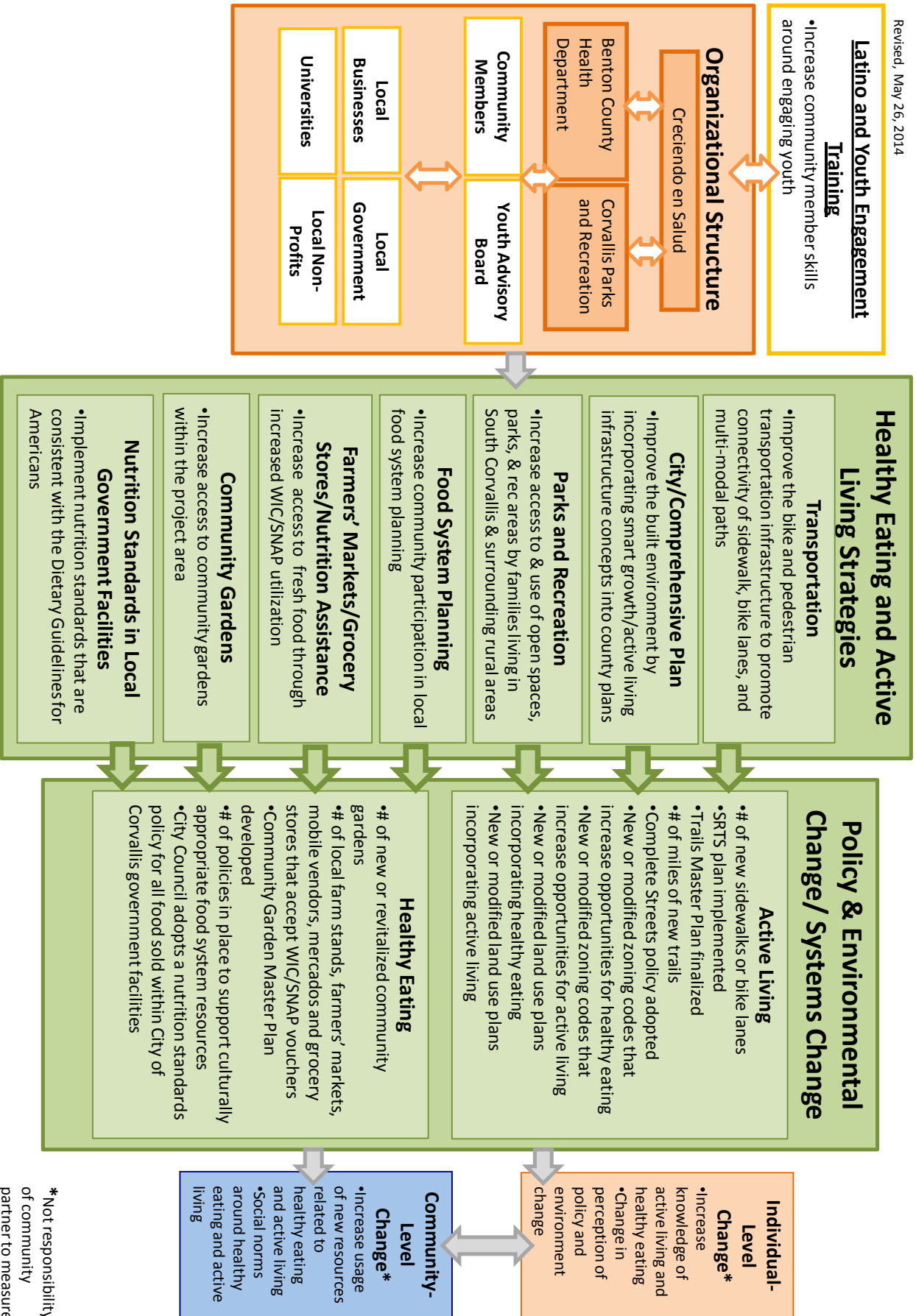
The healthy eating and active living strategies of Creciendo en Salud partnership included:

- *Parks and Play Spaces*: Creciendo en Salud created new parks and play spaces and worked to increase physical activity opportunities.
- *Healthy Eating*: The partnership worked to increase access to healthy food with policy implementation and community engagement around the local food system. Creciendo en Salud also partnered to support community garden efforts with a Community Garden Master Plan and new gardens throughout Benton County.
- *Active Transportation*: Creciendo en Salud focused on advocacy and community engagement to improve safe access to multi-modal transportation in South Corvallis.

# Corvallis-Benton County, OR HKHC Logic Model

Benton County Health Department

Revised, May 26, 2014



## APPENDIX B: PARTNERSHIP AND COMMUNITY CAPACITY SURVEY RESULTS

## Partnership and Community Capacity Survey

To enhance understanding of the capacity of each community partnership, an online survey was conducted with project staff and key partners involved with Creciendo en Salud during the final year of the grant. Partnership capacity involves the ability of communities to identify, mobilize, and address social and public health problems.<sup>1-3</sup>

*Methods*

Modeled after earlier work from the Prevention Research Centers and the Evaluation of Active Living by Design<sup>4</sup>, an 82-item partnership capacity survey solicited perspectives of the members of the Creciendo en Salud 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 Creciendo en Salud in the following areas: structure and function of the 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***Structure and Function of the Partnership (n=5 items)**

A total of 20 individuals responded from Creciendo en Salud partnership. Of the sample, 13 were female (65%) and 7 were male (35%). The majority of respondents were all between the ages of 26-45 (10, or 50%) or 46-65 (8, or 40%). One respondent was between 18-25, and one was 66 or older. Fifty-three percent of respondents identified themselves as White and 47% as Hispanic or Latino. No other races or ethnicities were identified.

Respondents were asked to identify their role(s) in the partnership or community. Of the 30 identified roles, five were representative of the Community Partnership Lead (17%) and nine were Community Partnership Partners (30%). Four respondents self-identified as Community Partnership Leaders (13%) and eight as Community Members (27%). The remaining four roles were identified as Public Officials (13%). Individuals participating in the survey also identified their organizational affiliation. Forty percent of respondents (n=8) indicated affiliation to a local government agency (city or county), while three claimed affiliation to schools/school districts (15%) and three were associated to a faith- or community-based organization (15%). Two respondents identified themselves with neighborhood organizations (10%), while university or research/evaluation organizations and advocacy organizations each had one affiliation (5% each). No respondents were affiliated to child care or afterschool organizations or health care organizations.



**APPENDIX B: PARTNERSHIP AND COMMUNITY CAPACITY SURVEY RESULTS, cont.****Leadership (n=8 items)**

Overall, the majority of responses showed agreement or strong agreement (92% total) to statements suggesting that the partnership had an established group of core leaders who had the skills to help the partnership achieve its goals. Responses also indicated that participants in the survey felt the core leadership is organized and retains the skills to help the partnership and its initiatives succeed. Respondents strongly agreed (74%) or agreed (16%) that leaders worked to motivate others, work with diverse groups, and strived to follow through on initiative promises. Responses to the survey showed believed at least one member of the leadership team lived in the community (95% agree/strongly agree), and leaders were perceived to have shown compassion to the community members with whom they worked (90% agree/strongly agree).

When asked if they agreed with statements suggesting that at least one member of the leadership team retained a respected role in the community, 90% of respondents agreed or strongly agreed, while 10% of respondents did not support the idea or were unsure (5% disagree, 5% did not know).

**Partnership Structure (n=24 items)**

Respondents generally felt that the partnership adequately provided the necessary in-kind space, equipment, and supplies for partners to conduct business and meetings related to partnership initiatives (61% agree/strongly agree). Yet, 22% of respondents felt unsure provision of space and equipment was sufficient. Most (77%) also agreed that the partnership has processes in place for dealing with conflict, organizing meetings, and structuring goals, although 10% responded “I don’t know”, indicating a lack of familiarity in this area, and 8% felt these processes were not established. Partnership members (leadership and partners) were generally perceived by respondents to be involved in other communities and with various community groups, bridging the gaps between neighboring areas and helping communities work together (84%), though 6% did not agree with these claims and 10% did not know.

Though the majority (71%) of respondents indicated agreement with statements about the partnership’s effectiveness in seeking learning opportunities, developing the partnership, and planning for sustainability, 15% of responses disagreed, and 9% were not aware of partnership activities specific to development and sustainability, and 5% did not provide a response.

**Relationship with Partners (n=4 items)**

Eighty-eight percent of responses to statements about leadership and partner relationships were positive (agree or strongly agree), indicating that the majority of respondents felt the partners and leadership trusted and worked to support each other.

**Partner Capacity (n=18 items)**

Nearly all responses (89% agree/strongly agree) indicated that respondents felt partners possess the skills and abilities to communicate with diverse groups of people and engage decision makers (e.g., public officials, community leaders). Furthermore, 83% of individuals responding to the survey felt that partners were dedicated to the initiative, interested in enhancing a sense of community, and motivated to create change.

**Political Influence of Partnership (n=2 items)**

Respondents felt that the leadership is visible within the community, with 88% of responses supporting statements that the leadership is known by community members and works directly with public officials to promote partnership initiatives.

**Perceptions of Community and Community Members (n=22 items)**

Statements suggesting that the community was a good place to live, with community members who share the same goals and values, help each other, and are trustworthy were supported by 83% of survey responses, while 14% of respondents indicated a lack of knowledge about these community attributes. Respondents also strongly supported suggestions that community members help their neighbors, though respondents agreed that some community members may take advantage of others if given the chance. Respondents were less convinced that community members would intervene on behalf of another individual in their community in

## APPENDIX B: PARTNERSHIP AND COMMUNITY CAPACITY SURVEY RESULTS, cont.

cases of disrespect, disruptive behavior, or harmful behavior. While 57% agreed or strongly agreed, 25% disagreed/strongly disagreed. The remaining 18% of responses indicated that some respondents did not know how community members would act in these situations.

Most survey participants (85%) felt community members were aware of the partnership's initiatives and activities; however, 10% of those responding to the survey disagreed with these statements and 5% strongly felt community members were not aware. Ninety percent of respondents agreed that the partnership equally divides resources among different community groups in need (e.g., racial/ethnic minorities, lower income), though 10% disagreed and felt resources were not equally distributed.

Overall, respondents agreed or strongly agreed that partners and members of the community maintained active involvement in partnership decisions and activities (87%), and have the opportunity to function in leadership roles and participate in the group decision-making process (92%).

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## Partnership and Community Capacity Survey Respondent Summary

Community Partnership

**Benton County**

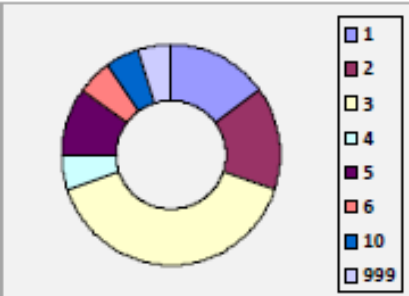
Respondents (n= 20 )

### Respondent Characteristics

Gender		Identified Race/Ethnicity				Identified Role	
Female	13	American Indian or Alaskan Native	0	Hispanic or Latino	9	Community Partnership Lead	5
Male	7	Asian	0	Not Hispanic or Latino	0	Community Partnership Partner	9
No response	0	White	10	Don't know/ Unsure ethnicity	0	Community Leader	4
Age Range		African American/ Black	0	Refused to identify ethnicity	0	Community Member	8
18-25	1	Pacific Islander/ Native Hawaiian	0	Other ethnicity	0	Public Official	4
26-45	10					Other role	0
46-65	8						
66+	1						
No response	0						

### Type of Affiliated Organization

Faith- or Community Based Organization	3	15.0%	(1)
School (district, elementary, middle, high)	3	15.0%	(2)
Local Government Agency (city, county)	8	40.0%	(3)
University or Research/Evaluation Organization	1	5.0%	(4)
Neighborhood Organization	2	10.0%	(5)
Advocacy Organization	1	5.0%	(6)
Health Care Organization	0	0.0%	(7)
Child Care or Afterschool Organization	0	0.0%	(8)
Other	1	5.0%	(10)
No response	1	5.0%	(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	35.00%	Strongly disagree	4.44%
Agree	26.11%	I don't know	22.22%
Disagree	2.22%	No response	10.00%

#### 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	50.91%	Strongly disagree	3.64%
Agree	38.18%	I don't know	4.09%
Disagree	0.00%	No response	3.18%

APPENDIX B: PARTNERSHIP AND COMMUNITY CAPACITY SURVEY RESULTS, cont.

Community Partnership

<b>Community and community members</b>			
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	39.09%	Strongly disagree	1.36%
Agree	43.64%	I don't know	13.64%
Disagree	0.91%	No response	1.36%
<b>Partner and community involvement</b>			
Participants provided level of agreement to statements indicating partners and the community were actively involved in partnership activities, meetings, and decisions.			
Strongly agree	59.00%	Strongly disagree	4.00%
Agree	33.00%	I don't know	4.00%
Disagree	0.00%	No response	0.00%
<b>Partner and partnership development</b>			
Participants provided level of agreement to statements suggesting the partnership and its partners seek ways learn, develop, and enhance sustainability.			
Strongly agree	26.00%	Strongly disagree	3.00%
Agree	45.00%	I don't know	9.00%
Disagree	12.00%	No response	5.00%
<b>Partnership structure, organization, and goals</b>			
Participants provided level of agreement to statements suggesting partnership has processes in place related to structure, meeting organization, and goals.			
Strongly agree	45.00%	Strongly disagree	5.00%
Agree	31.67%	I don't know	10.00%
Disagree	3.33%	No response	5.00%
<b>Relationship between partners and leadership</b>			
Participants provided level of agreement to statements indicating the leadership and partners trust and support each other.			
Strongly agree	56.25%	Strongly disagree	3.75%
Agree	31.25%	I don't know	6.25%
Disagree	0.00%	No response	2.50%
<b>Community members intervene</b>			
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	31.67%	Strongly disagree	10.00%
Agree	25.00%	I don't know	18.33%
Disagree	15.00%	No response	0.00%
<b>Leadership motivation</b>			



APPENDIX B: PARTNERSHIP AND COMMUNITY CAPACITY SURVEY RESULTS, cont.

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	73.75%	Strongly disagree	5.00%
Agree	16.25%	I don't know	3.75%
Disagree	0.00%	No response	1.25%

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	5.00%
Agree	26.67%	I don't know	5.00%
Disagree	1.67%	No response	1.67%

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	48.75%	Strongly disagree	5.00%
Agree	35.00%	I don't know	10.00%
Disagree	1.25%	No response	0.00%

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	58.75%	Strongly disagree	5.00%
Agree	26.25%	I don't know	6.25%
Disagree	2.50%	No response	1.25%

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	72.50%	Strongly disagree	2.50%
Agree	20.00%	I don't know	5.00%
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	46.67%	Strongly disagree	5.00%
Agree	36.67%	I don't know	5.00%
Disagree	5.00%	No response	1.67%

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	52.50%	Strongly disagree	2.50%
Agree	35.00%	I don't know	7.50%
Disagree	0.00%	No response	2.50%

APPENDIX B: PARTNERSHIP AND COMMUNITY CAPACITY SURVEY RESULTS, cont.

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	85.00%	Strongly disagree	5.00%
Agree	10.00%	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	70.00%	Strongly disagree	5.00%
Agree	20.00%	I don't know	5.00%
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	40.00%	Strongly disagree	5.00%
Agree	45.00%	I don't know	10.00%
Disagree	0.00%	No response	0.00%
Division of resources			
Participants provided level of agreement to a statements suggesting that resources are equally divided among different community groups (e.g., racial/ethnic, lower income).			
Strongly agree	65.00%	Strongly disagree	5.00%
Agree	25.00%	I don't know	0.00%
Disagree	5.00%	No response	0.00%

**APPENDIX C: PARTNER LIST**

<b>Creciendo en Salud</b>	
<b>Organization/Institution</b>	<b>Partner</b>
College/University	Oregon State University Extension Service of Benton and Linn Counties Western Oregon University
Foundation	Northwest Health Foundation (NWHF)
Government	City of Corvallis Parks and Recreation Department Public Works Department Transportation Department Benton County Board of Commissioners Community Planning Health Department State of Oregon Commission for Children and Families Department of Health and Human Services, Health Promotion and Chronic Disease Prevention
Other Community-Based Organizations	Benton-Linn Health Equity Alliance Casa Latinos Unidos de Benton County (CLUBC) Community Food Center (Linn Benton Food Share) Corvallis-Albany Farmers' Market Corvallis Environmental Center (CEC) Corvallis Sustainability Coalition Ecumenical Ministries of Oregon First United Methodist Church Love Corvallis Oregon Food Bank Organización de Latinas Unidas (OLU Ladies) SouthSide Youth Outreach Strengthening Rural Families (SRF) Ten Rivers Food Web Tunison Neighborhood Association Willamette Neighborhood Housing Service
Policy/Advocacy Organization	Safe Paths to South Corvallis
Schools	Corvallis School District

APPENDIX D: SOURCES AND AMOUNTS OF FUNDING LEVERAGED

### Sources of Revenue

Community Partnership	Benton County		
Resource source		Amount	Status
Individual/private donor	Year		
Other			
	2010		Annual total
			\$1,000.00
		\$1,000.00	Accrued
Sum of revenue generated by resource source		\$1,000.00	

Local government	Year		
Matching funds			
	2010		Annual total
			\$2,988.00
		\$2,988.00	Accrued
	2011		Annual total
			\$1,560.00
		\$1,560.00	Accrued
	2012		Annual total
			\$32,375.00
		\$12,011.00	Accrued
		\$20,364.00	Accrued
	2013		Annual total
			\$128,023.00
		\$21,523.00	Accrued
		\$56,500.00	Accrued
		\$50,000.00	Accrued
Other			
	2009		Annual total
			\$49,850.00
		\$49,850.00	Accrued
Sum of revenue generated by resource source		\$214,796.00	

State government	Year		
Matching funds			
	2010		Annual total
			\$14,670.00
		\$1,050.00	Accrued
		\$13,620.00	Accrued
	2011		Annual total
			\$8,613.00
		\$7,363.00	Accrued
		\$1,250.00	Accrued
	2012		Annual total
			\$119,865.00



APPENDIX D: SOURCES AND AMOUNTS OF FUNDING LEVERAGED, cont.

Community Partnership		Benton County		
Resource source			Amount	Status
			\$76,100.00	Accrued
			\$7,332.00	Accrued
			\$24,395.00	Accrued
			\$12,038.00	Accrued
	2013		Annual total	\$83,215.00
			\$50,000.00	Accrued
			\$8,820.00	Accrued
			\$24,395.00	Accrued
Other				
	2009		Annual total	\$125,000.00
			\$125,000.00	Accrued
	2011		Annual total	\$390,000.00
			\$390,000.00	Accrued
	2013		Annual total	\$353,226.00
			\$338,226.00	Accrued
			\$15,000.00	Accrued
Sum of revenue generated by resource source			\$1,094,589.00	
National government		Year		
Other				
	2009		Annual total	\$25,000.00
			\$25,000.00	Accrued
	2011		Annual total	\$5,000.00
			\$5,000.00	Accrued
	2012		Annual total	\$56,500.00
			\$56,500.00	Accrued
	2013		Annual total	\$232,155.00
			\$232,155.00	Accrued
Sum of revenue generated by resource source			\$318,655.00	
Foundation		Year		
HKHC funds				
	2009		Annual total	\$32,046.00
			\$669.00	Accrued

APPENDIX D: SOURCES AND AMOUNTS OF FUNDING LEVERAGED, cont.

Community Partnership	Benton County		
Resource source		Amount	Status
		\$3,437.00	Accrued
		\$10,000.00	Accrued
		\$450.00	Accrued
		\$3,748.00	Accrued
		\$355.00	Accrued
		\$12,997.00	Accrued
		\$390.00	Accrued
	2010		Annual total \$91,473.00
		\$9,643.00	Accrued
		\$3,460.00	Accrued
		\$997.00	Accrued
		\$5,590.00	Accrued
		\$860.00	Accrued
		\$70,760.00	Accrued
		\$163.00	Accrued
	2011		Annual total \$71,218.00
		\$500.00	Accrued
		\$54,189.00	Accrued
		\$692.00	Accrued
		\$8,536.00	Accrued
		\$1,362.00	Accrued
		\$5,939.00	Accrued
	2012		Annual total \$122,379.00
		\$10,592.00	Accrued
		\$430.00	Accrued
		\$2,092.00	Accrued
		\$8,445.00	Accrued
		\$5,242.00	Accrued
		\$874.00	Accrued
		\$16,429.00	Accrued
		\$78,275.00	Accrued
	Matching funds		

APPENDIX D: SOURCES AND AMOUNTS OF FUNDING LEVERAGED, cont.

Community Partnership		Benton County		
Resource source			Amount	Status
	2010			Annual total
			\$15,001.00	
			\$5,500.00	Accrued
			\$8,001.00	Accrued
			\$1,500.00	Accrued
	2011			Annual total
			\$43,089.00	
			\$10,457.00	Accrued
			\$21,632.00	Accrued
			\$11,000.00	Accrued
		Other		
	2010			Annual total
			\$30,000.00	
			\$30,000.00	Accrued
	2011			Annual total
			\$350,000.00	
			\$300,000.00	Accrued
			\$50,000.00	Accrued
Sum of revenue generated by resource source			\$755,206.00	
Non-profit organization		Year		
		Matching funds		
	2013			Annual total
			\$3,412.00	
			\$3,412.00	Accrued
Sum of revenue generated by resource source			\$3,412.00	
Grand Total				\$2,387,658.00

**APPENDIX E: PARKS AND PLAY SPACES ENVIRONMENTAL AUDIT REPORT**

**APPENDIX F: PARKS AND PLAY SPACES DIRECT OBSERVATION REPORT**

**APPENDIX G: CORNER STORES ENVIRONMENTAL AUDIT REPORT**

**APPENDIX H: STREET DESIGN DIRECT OBSERVATION REPORT**



Creciendo en Salud

Parks and Play Spaces  
Environmental Audit

**Summary Report**

Prepared by Transtria LLC



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## OVERVIEW

Creciendo en Salud, 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 environmental change initiatives. In order to better understand the impact of their work in parks and play spaces, partnership representatives collected environmental audit data for two parks throughout the Partnership's catchment area.

## RESULTS

- Both Tunison Park and Cloverland Park are multi-use, publically accessible parks in Benton County.
- Overall condition of both parks was considered average/good.
- Signs with the park names were present during the audits; however, general information and park amenities were scarce at both locations
- Parking was available at both locations, although only Tunison Park had a parking lot on-site.
- Both audited parks had swings, monkey bars/climbing bars, and slides available for use.
- Green space was present in both Cloverland Park and Tunison Park, with benches, drinking fountains, and trash cans available.
- Sports facilities (fields or courts) were available at both locations.



## **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. Healthy Kids, Healthy Communities places special emphasis on reaching children who are at highest risk for obesity on the basis of race/ethnicity, income, and/or geographic location.

Benton County, Oregon was selected as one of 49 communities to participate in HKHC, and the Benton County Health Department is the lead agency for their community partnership, Creciendo en Salud. Creciendo en Salud has chosen to focus its work on parks and play spaces, community gardens, farmers' markets, and active transportation. 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](http://www.transtria.com).

In order to better understand the impact of their work in parks and recreation, representatives chose to participate in the enhanced evaluation data collection activities. This supplementary evaluation focuses on the six cross-site HKHC strategies, including: parks and play spaces, active transportation, farmers' markets, corner stores, physical activity standards in childcare settings, and nutrition standards in childcare settings. Communities use two main methods as part of the enhanced evaluation, direct observation and environmental audits. Benton County chose to collect data on parks and play spaces using both direct observation and environmental audit methods. This report focuses on data collected using environmental audit methods.

## **METHODS**

### **Parks and Play Spaces Environmental Audit**

The parks and play spaces environmental audit tool was used to collect data (see Appendix A). 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 Benton County'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 two parks in Benton County. The following parks were included in the assessment: Cloverland Park and Tunison Park. One auditor completed the assessments between August 27 and August 28, 2012. One Transtria staff member entered the data and a second Transtria staff member conducted validity checks to ensure accuracy and validity of the data. A total of 498 data points were checked and one error was found (99.80% correct), which was resolved.



## RESULTS

### Cloverland Park

#### *Setting*

Cloverland Park is a multi-feature, publically accessible park, approximately 4.7 acres in size. It is not located adjacent to any schools. For the purposes of the environmental audit, auditors visually sectioned the park into five areas: a playground, open green space, tennis courts, a baseball diamond, and a wooded area.

#### *Accessibility*

While Cloverland Park had no on-site parking lot for patrons, auditors observed available on-street parking and lighted sidewalks that lead directly to the park's entrance. The entrance itself was accessible to individuals using a wheelchair or stroller. Streets adjacent to the park were striped with bike lanes, sharrows or have bike signage, though they did not have crosswalks near or at the park entrance. The park was also lacking options for bicycle parking.

#### *Facility characteristics*

The park had restrooms or portable toilets available for use, but no showers or locker rooms. The park did not have any beverage vending machines present.

#### *Signage and barriers to entry*

Signs indicating the park name were present during the audit, but the sign(s) did not provide hours of operation. The park did not require entrance fees and was not restricted by gates or fences (with or without locks) that inhibit its use by the public.

#### *Playground features*

The playground area and features at Cloverland Park were categorized as being in average/good condition. Auditors noted the presence of two toddler swings, two youth swings, one tire swing, one slide, three monkey bars/climbing bars, one sandbox, and three "bouncy toys." Playground surfaces were covered with woodchip/mulch, sand, or open green space.

#### *Sports and recreation features*

One baseball field and two tennis courts were available at Cloverland Park. Both sports features were determined to be in average/good condition.

#### *Aesthetic features and amenities*

All of the aesthetic features and amenities noted by the auditors were in average/good condition. Auditors noticed access to green space, three picnic tables, four benches, shade trees and drinking fountains. Trash containers were also present in the park.

### *Trash and vandalism*

Overall, auditors observed “a little/some” garbage and litter at the park and did not see broken glass, graffiti, evidence of drug or alcohol use, or sex paraphernalia. Yet, the presence of “a lot” of cigarette butts was specifically noted.

## **Tunison Park**

### *Setting*

Tunison Park covers approximately two acres of land and is a multi-feature, publically accessible park. Auditors observed access to green space, playground equipment, and sports facilities.

### *Accessibility*

A parking lot and on-street parking were observed during the audit at Tunison Park. Bicycles can be placed in one of the three identified bicycle parking spaces. Lighted sidewalks guide users to the park’s entrance, which was stated as being accessible to persons in wheelchairs or individuals using strollers.



### *Facility characteristics*

Tunison Park did not feature any of the following amenities: restrooms/portable toilets, showers/locker rooms, or vending machines.

### *Signage and barriers to entry*

The park’s sign had its name on one side of it; however, the sign lacked information about hours of operation. No fees for entrance were identified during the observation. Barriers to public use, such as gates or fences (with or without locks) around the perimeter of the park were not seen during the observation.

### *Playground features*

Children using the playground at Tunison Park had access to the following identified features: two toddler swings, two youth swings, one slide, four monkey bars/ climbing bars, and a “rocking elephant.” The surfaces of the playground were covered in woodchip/mulch, paved, or

were open green space. All features of the playground were noted by the auditors to be in average/good condition.

#### *Sports and recreation features*

One multi-use field in average/good condition was identified by auditors. In addition, one and a half basketball courts were seen at the park, which received a condition rating of “poor”.

#### *Aesthetic features and amenities*

Several amenities were available for use at Tunison Park. The audit noted the presence of open green space, three picnic tables, drinking fountains, and fire pits/grills. Trash containers were also seen “on opposite ends of the park.”

#### *Trash and vandalism*

In general, auditors observed “a little/some” garbage/litter at Tunison Park. The presence of evidence of drug or alcohol use was also recorded, as were “a lot” of cigarette butts.

#### **Key Takeaways**

- Both Tunison Park and Cloverland Park are multi-use, publically accessible parks in Benton County.
- Overall condition of both parks was considered average/good.
- Signs with the park names were present during the audits; however, general information and facility characteristics/amenities (showers/locker rooms) were absent at both locations
- Parking was available at both locations, although only Tunison Park had a parking lot on-site.
- Both audited parks had swings, monkey bars/climbing bars, and slides available for use.
- Green space was present in both Cloverland Park and Tunison Park, with benches, drinking fountains, and trash cans available.
- Sports facilities (fields or courts) were available at both locations.

## Appendix A

<b>Table 1: Park Characteristics</b>	<b>Cloverland Park</b>	<b>Tunison Park</b>
<b>Setting</b>		
Multi-feature publically accessible park	X	X
Publically accessible green space		X
<b>Accessibility</b>		
Parking area on-site		X
On-street parking next to play space	X	X
Sidewalk on street leading to entrance	X	X
Sidewalk/pedestrian lighting present	X	X
Wheelchair or stroller can easily enter play space	X	X
Bicycle parking		X
Bike lane, sharrow, or bike signage on street adjacent to play space	X	
Restroom/portable toilet	X	
<b>Signage and barriers to entry</b>		
Signage that indicates the park or play space name	X	X
<b>Aesthetic features and amenities</b>		
Green Space (average/good condition)	X	X
No beach present	X	X
No decorative water fountains present	X	X
Drinking fountains (average/good condition)	X	X
No shelters present	X	X
Benches (average/good condition)	X	
No benches present		X
Picnic tables (average/good condition)	X	X
Trash containers (average/good condition)	X	X
Grills/fire pits (average/good condition)		X
No grills/fire pits present	X	
No fruit and vegetable gardens present	X	X
Shade trees (average/good condition)	X	
No other gardens and plants present	X	



<b>Table 1, cont. Park Characteristics</b>	<b>Cloverland Park</b>	<b>Tunison Park</b>
<b>Trash and vandalism</b>		
A little/some garbage/litter	X	X
No broken glass present	X	X
No graffiti/tagging present	X	X
No evidence of alcohol or other drug use	X	
A little/some evidence of alcohol or other drug use		X
No sex paraphernalia present	X	X

<b>Table 2: Number of Park Features, by Condition</b>	<b>Cloverland Park</b>		<b>Tunison Park</b>	
	<b>Poor</b>	<b>Average/Good</b>	<b>Poor</b>	<b>Average/Good</b>
<b>Playground features*</b>				
Swings, toddler	0	2	0	2
Swings, youth	0	2	0	2
Swings, tire	0	1	0	0
Slides	0	1	0	1
Monkey bars/climbing bars	0	3	0	4
Sandboxes	0	1	0	0
Other play areas	0	3 (bouncy top)	0	1 (rocking elephant)
Surface area of play space	woodchips/mulch, sand, grass or dirt		woodchips/mulch, grass or dirt, paved area	
<b>Sports and recreation features*</b>				
Fields, baseball only	0	1	0	0
Fields, multi-use	0	0	0	1
Courts, basketball only	0	0	1.5	0
Courts, tennis only	0	2	0	0

\*Note: None of features had lighting present

**Table 3: Characteristics *not* present in any park**

Lighted parking area

Bus/transit stop present

Crosswalks present at all intersections

Shower/locker room on-site

Vending machines

Entrance fee

Gate/fence partially restricting access to play space

Locked fence or other physical barrier that prevents access

Marked four-square courts

Marked hopscotch areas

## Appendix B

**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"/>
			<b>Signage and barriers to entry</b>		
			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>										
<b>Swings/slides/monkey bars/sandboxes/ground games</b>										
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.)										
<b>Fields/Courts/Pool/Tracks/Trails</b>										
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.

Creciendo en Salud

Parks and Play Spaces  
Direct Observations

**Summary Report**

Prepared by Transtria LLC



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## **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. Healthy Kids, Healthy Communities places special emphasis on reaching children who are at highest risk for obesity on the basis of race/ethnicity, income, and/or geographic location.

Benton County, Oregon was selected as one of 49 communities to participate in HKHC, and the Benton County Health Department is the lead agency for their community partnership, *Creciendo en Salud*. *Creciendo en Salud* has chosen to focus its work on corner stores, farmers' markets, parks and recreation, and street improvements. 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](http://www.transtria.com).

In order to better understand the impact of their work in parks and recreation, representatives chose to participate in the enhanced evaluation data collection activities. This supplementary evaluation focuses on the six cross-site HKHC strategies, including: parks and play spaces, active transportation, farmers' markets, corner stores, physical activity standards in childcare settings, and nutrition standards in childcare settings. Communities use two main methods as part of the enhanced evaluation, direct observation and environmental audits. Benton County chose to collect data on parks and play spaces using both direct observation and environmental audit methods. This report focuses specifically on the data collected through direct observation methods.

## **METHODS**

### **Parks and Play Spaces Direct Observation**

The parks and play spaces direct observation tool was adapted from the System for Observing Play and Leisure Activity (SOPLAY) and System for Observing Play and Recreation in Communities (SOPARC) tools, protocols, and operational definitions. Direct observation is a method used to assess individuals' behaviors in their natural setting. An Evaluation Officer from Transtria LLC trained representatives of Benton County community partnership on proper data collection methods using the tool.

Pre-intervention data were collected between August 27 and September 1, 2012. Post-intervention data were collected between March 15 and March 19, 2014.

The pre-intervention observations were all conducted on three days by three different observation teams. Observers collected data for 42 to 56 minutes per day. For the duration of each observation period, observers scanned the play space for one minute and recorded observations for one minute. The post-intervention observations were conducted on three days by three different observation teams. Observers collected data for 137-260 minutes per day. Each observation represents an individual's activity level in the area at the specified time. Because individuals may have exited and re-entered the area during observation periods, the individuals observed in each time period were not the same. This method allowed observers to capture overall changes in activity level as time lapsed, but it did not allow observers to record individual behavior changes.

During the scan, the observer completed the observation tool by tallying children in the designated area by age group (i.e., preschool = 3-5 years; elementary school = 6-10 years; middle school = 11-14 years; high school = 15+ years) and activity level (i.e., sedentary, moderate, or very active behaviors).

- **Sedentary** behaviors are defined as activities in which children are not moving (e.g., standing, sitting, playing board games).
- **Moderate** intensity behaviors require more movement but no strenuous activity (e.g., walking, biking slowly).
- **Very active** behaviors show evidence of increased heart rate and inhalation rate (e.g., running, biking vigorously, playing basketball).

Observers also reported the activity codes for the children in the designated area, including:

No Identifiable Activity	Aerobics	Baseball/Softball	Basketball
Dance	Football	Gymnastics	Martial Arts
Racquet Sports	Soccer	Swimming	Weight Training
Playground Games	Walking	Jogging/Running	None of the Above
		Volleyball	Biking

The activity code “No Identifiable Activity” was used to indicate no movement. The activity code “None of the Above” was used when an individual was engaging in an activity not included in the other activity codes.

In addition to recording individuals’ activity levels, observers created maps of the parks. The maps included a form for the setting, location, type of park area, condition of the area, any permanent modifications (the specific permanent alterations present that assist children in participating in physical activity such as lines painted on courts or basketball poles and nets; this does not include temporary improvements such as chalk lines and portable nets.), the presence of overlap modifications (e.g., the space has multiple improvements that overlap but cannot be used simultaneously such as a space that is used for both volleyball and basketball), and the surface type (e.g., gravel, grass).

One Transtria staff member entered the data and a second Transtria staff member conducted validity checks on 10% of observations (i.e., every tenth observation) to ensure accuracy and validity of the data. A total of 16,724 data points were entered. Of the 10% checked, zero errors were found among the 1672.4 observations (100% correct).

## RESULTS

### *Types of Activity- Activity Codes*

Several activities were observed during both the pre- and post- observations at Tunison Park. Across all age groups, more activities were observed during the post-observation. During the post-observation, children were seen engaged in basketball, football, playing other playground games, walking, jogging/running, and biking. Among adolescents observed during the post-observation, activities included playing basketball, walking, and jogging/running. During the post-observation, adults were seen playing basketball, playing other playground games, walking, and jogging/running. When the activity category of “none of the above” was specified

observers noted children playing on equipment, climbing on monkey bars, and slides; and adolescents, adults, and children engaged in yard clean-up (Table 1).

<b>Table 1: Presence or Absence of Activity Codes</b>						
<b>Activity</b>	<b>Pre-Observation</b>			<b>Post-Observation</b>		
	<b>Children</b>	<b>Adolescents</b>	<b>Adults</b>	<b>Children</b>	<b>Adolescents</b>	<b>Adults</b>
No identifiable activity	Absent	Absent	<b>Present</b>	<b>Present</b>	<b>Present</b>	<b>Present</b>
Basketball	Absent	Absent	Absent	<b>Present</b>	<b>Present</b>	<b>Present</b>
Football	Absent	Absent	Absent	<b>Present</b>	Absent	Absent
Soccer	Absent	<b>Present</b>	Absent	Absent	Absent	Absent
Other playground games	<b>Present</b>	<b>Present</b>	Absent	<b>Present</b>	Absent	<b>Present</b>
Walking	<b>Present</b>	<b>Present</b>	<b>Present</b>	<b>Present</b>	<b>Present</b>	<b>Present</b>
Jogging/Running	<b>Present</b>	Absent	Absent	<b>Present</b>	<b>Present</b>	<b>Present</b>
None of the above	<b>Present</b>	Absent	<b>Present</b>	<b>Present</b>	<b>Present</b>	<b>Present</b>
Biking	Absent	Absent	Absent	<b>Present</b>	Absent	Absent

### *Activity Counts*

Direct observations were conducted at Tunison Park in Benton County, Oregon. Pre-observations were collected in August and September 2012 and post-observations in March 2014. Activity levels were collected over a total of 480 one- to two- minute observation periods, with 145 observation periods for Area 1; 147 observations for Area 2; 111 observations for Area 3; and 77 observations for Area 4.

For the 480 observation periods, there were a total of 777 activity counts recorded by observers. The activity counts reflect activity levels at a particular moment in time as opposed to unique individuals observed. A person counted during the first minute of scanning is also counted during the fifth minute of scanning, if that person is still in the area. It is likely that the unique number of individuals observed in the area is a small fraction of the number of activity counts recorded for each site.

In order to better compare the data collected, the rate of activity (activity counts per hour) was calculated for all observations.

$$\frac{\text{Number of Activity Counts}}{\text{Total Number of Observation Periods}} \times 60 \text{ (minutes per hour)}$$

### *Rates of Activity across Age Groups*

There were 76 observations completed for the pre-observation and 404 completed for the post-observation. For the total of 480 pre- and post- observation periods, observers collected data for one minute and rested for one minute. The rate of activity was 64 activity counts per hour for pre and 713 activity counts for post.

In the pre-observation, half of all activity recorded was moderately active (50.0%), followed by sedentary behavior (34.4%). Moderately active children (29.7%) and sedentary children (20.3%)

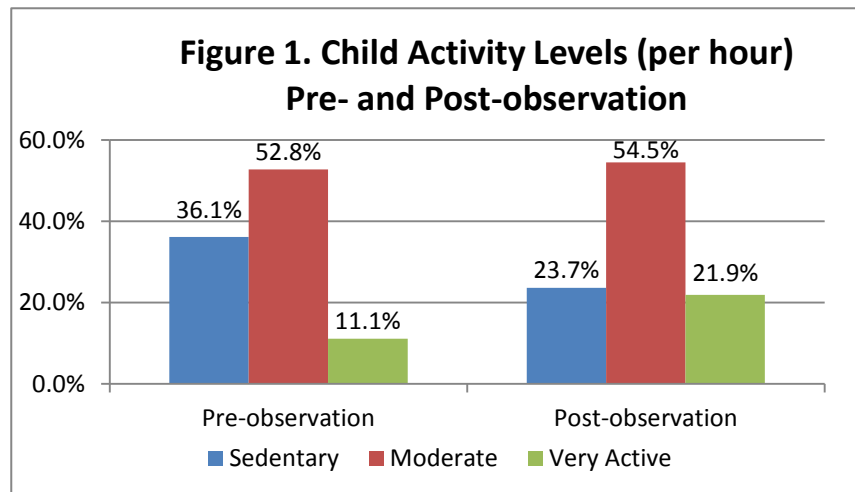
were most commonly observed groups. Similar to the pre-observation, moderately active (55.5%) and sedentary activity (33.4%) comprised the majority of activity observed during the post-observation. Moderately active children (25.5%), followed by moderately active adolescents (22.0%) were most commonly observed (Table 2).

**Table 2. Tunison Park (Pre- and Post-Observations) Activity Level across Age Groups (per hour)**

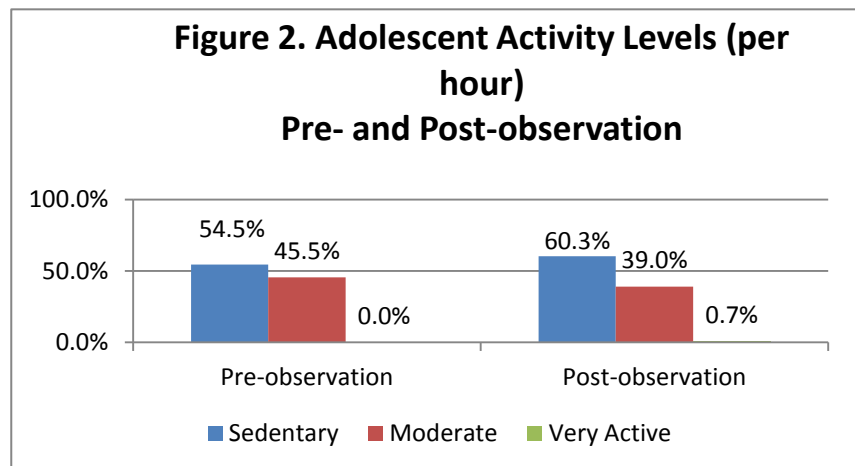
Age Group	Pre				Post			
	Sedentary	Moderate	Very Active	Total	Sedentary	Moderate	Very Active	Total
Children	20.3%	29.7%	6.3%	56.3%	11.1%	25.5%	10.2%	46.8%
Adolescents	9.4%	7.8%	0.0%	17.2%	12.3%	8.0%	0. %1	20.5%
Adults	4.7%	12.5%	9.4%	26.6%	10.0%	22.0%	0.7%	32.7%
Total	34.4%	50.0%	15.6%	100.0%	33.4%	55.5%	11.1%	100.0%

*Rate of Activity within Age Groups*

Activity levels within each group indicate that during the pre- and post-observation the majority of children’s activity levels were moderate (52.8%, 54.5%) (Figure 1). During the post-observation, very active behavior was observed more frequently for children (21.9%) compared to the pre-observation period (11.1%). Concurrently, a decrease in sedentary behavior was observed for children during the post-observation period (23.7%) compared to the pre-observation period (36.1%).

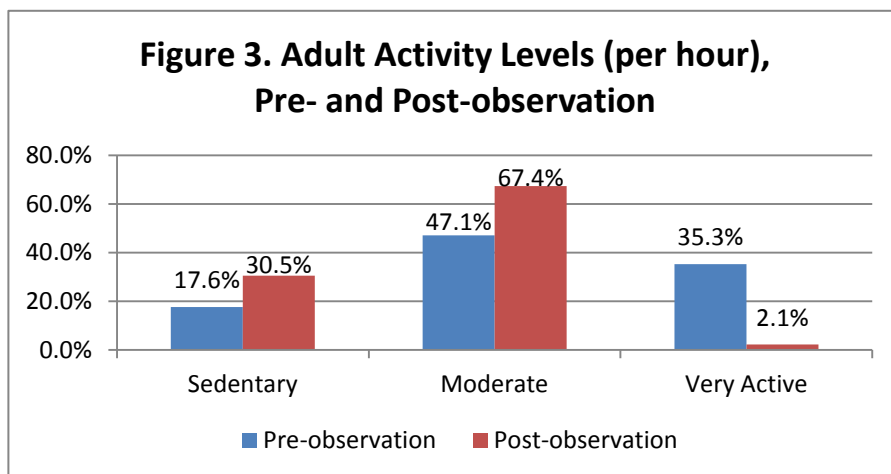


Among adolescents, sedentary activity was observed most frequently during the pre- observation period (54.5%) and increased during the post-observation period (60.3%) (Figure 2). Moderate activity was observed more often for adolescents during the pre-observation (45.5%) compared to the post-



observation (39.0%). During the pre-observation, no adolescents were observed in very active behavior. A small increase in very active behavior was observed during the post-observation (0.7%) for adolescents.

During the pre-observation, activity levels among adults were mostly moderately active (47.1%), followed by very active (35.3%) and sedentary (30.5%) behaviors (Figure 3). During the post-observation, the majority of adults were engaged in moderate activity (67.4%), which was an increase in activity levels per hour compared to the pre-observation. However, adults were less frequently observed engaging in very active behaviors during the post-observation (2.1%) compared to the pre-observation (35.3%). Sedentary behavior among adults increased from pre-observation (17.6%) to post-observation (30.5%).



### Results by Observation Area

#### Observation Area 1

##### Rate of Activity across Age Groups

The majority of those observed in Area 1 during the pre-observation were engaged in moderate activity (43.8%), followed by sedentary (43.8%), and very active (12.5%) behavior. In the post-observation, 67.8% of those observed engaged in moderate activity, followed by sedentary (29.8%) and very active (2.4%) behavior (Table 3).

	Pre-observation				Post-observation			
	Sedentary	Moderate	Very Active	Total	Sedentary	Moderate	Very Active	Total
Children	28.1%	21.9%	9.4%	59.4%	6.3%	17.6%	1.0%	24.9%
Adolescents	15.6%	6.3%	3.1%	25.0%	18.0%	10.2%	0.5%	28.8%
Adults	0.0%	15.6%	0.0%	15.6%	5.4%	40.0%	1.0%	46.3%
Total	43.8%	43.8%	12.5%	100%	29.8%	67.8%	2.4%	100%

##### Rate of Activity within Age Groups

Activity levels within age groups indicate that during the pre-observation activity levels of children were mostly sedentary (47.4%), followed by moderate (36.8%), and very active (15.8%) behavior. From pre- to post- observation, moderate active behavior among children increased, sedentary behavior decreased, and very active behavior decreased (Table 4).



Among adolescents observed during the pre-and post- observation, activity levels were primarily sedentary (62.5%), followed by moderate (25.0%), and very active (12.5%) behavior. Similar to the pre-observation, during the post-observation, adolescents were observed mostly in sedentary behavior (62.7%), followed by moderate (35.6%), and very active (1.7%) behavior (Table 4).

During the pre-observation, all adults were observed engaging in moderate activity levels (100%). During post-observation, the majority of adults were observed in moderate activity (86.3%), followed by sedentary (11.6%), and very active (2.1%) behavior (Table 4).

	Pre-observation				Post-observation			
	Sedentary	Moderate	Very Active	Total	Sedentary	Moderate	Very Active	Total
Children	47.4%	36.8%	15.8%	100%	25.5%	70.6%	3.9%	100%
Adolescents	62.5%	25.0%	12.5%	100%	62.7%	35.6%	1.7%	100%
Adults	0.0%	100%	0.0%	100%	11.6%	86.3%	2.1%	100%

## **Observation Area 2**

### *Rate of Activity across Age Groups*

The majority of those observed in Area 2 during the pre-observation were engaged in moderate activity (57.1%), followed by sedentary (28.6%), and very active (14.3%) behavior. Similar to the pre-observation, the majority of those observed during the post-observation were moderately active (46.0%). However, the rate of observations of very active behavior increased (23.3%), and as did the rate of sedentary behavior (30.7%) (Table 5).

	Pre-observation				Post-observation			
	Sedentary	Moderate	Very Active	Total	Sedentary	Moderate	Very Active	Total
Children	14.3%	50.0%	7.1%	71.4%	20.1%	38.2%	22.3%	80.6%
Adolescents	0.0%	7.1%	0.0%	7.1%	4.9%	0.6%	0.0%	5.5%
Adults	14.3%	0.0%	7.1%	21.4%	5.8%	7.1%	1.0%	13.9%
Total	28.6%	57.1%	14.3%	100%	30.7%	46.0%	23.3%	100%

### *Rate of Activity within Age Groups*

Activity level within age groups indicated that during the pre-observation, activity levels of children were mostly moderate (70.0%), followed by sedentary (20.0%), and very active (10.0%). From pre-to post- observation, very active behavior increased, moderate activity decreased, and sedentary behavior increased (Table 6).

All adolescents observed during the pre-observation were engaged in moderately active behavior (100%). However, during the post-observation, the majority of adolescents were observed in sedentary behavior (88.2%), while 11.8% were engaged in moderate activity (Table 6).

During the pre-observation, adults were either sedentary (66.7%) or very active (33.3%). From pre- to post- observation, moderately active behavior increased, while sedentary activity decreased. Adults were observed to be less engaged in very active behavior during the post-observation compared to the pre-observation (Table 6).

	Pre-observation				Post-observation			
	Sedentary	Moderate	Very Active	Total	Sedentary	Moderate	Very Active	Total
Children	20.0%	70.0%	10.0%	100%	24.9%	47.4%	27.7%	100%
Adolescents	0.0%	100%	0.0%	100%	88.2%	11.8%	0.0%	100%
Adults	66.7%	0.0%	33.3%	100%	41.9%	51.2%	7.0%	100%

### **Observation Area 3**

#### *Rate of Activity across Age Groups*

Those observed in Area 3 during the pre-observation were either engaged in moderate activity (60%) or sedentary behavior (40%). Similar to the pre-observation, the majority of those observed in the post-observation were moderately active (55.3%) and sedentary (43.5%). Yet, 1.2% of observations in Area 3 were of very active behavior during the post-observation (Table 7).

	Pre-observation				Post-observation			
	Sedentary	Moderate	Very Active	Total	Sedentary	Moderate	Very Active	Total
Children	20.0%	10.0%	0.0%	30.0%	0.0%	3.1%	1.2%	4.3%
Adolescents	10.0%	20.0%	0.0%	30.0%	17.4%	21.1%	0.0%	38.5%
Adults	10.0%	30.0%	0.0%	40.0%	26.1%	31.1%	0.0%	57.1%
Total	40.0%	60.0%	0.0%	100%	43.5%	55.3%	1.2%	100%

#### *Rate of Activity within Age Groups*

Activity levels within age groups indicate that during the pre-observation, activity levels of children were either sedentary (66.7%) or moderately active (33.3%). From pre- to post-observation, activity level in Area 3 increased for children who were either moderately active (71.4%) or very active (28.6%). During the post-observation, no children were observed in sedentary behavior (Table 8).

During the pre-observation, adolescents were observed in either moderately active (66.7%) or sedentary (33.3%) behavior. Similarly, during the post-observation, adolescents were observed in moderately active (54.8%) or sedentary (45.2%) behavior. Adolescents were not observed being very active in Area 3 during either the pre- or the post- observation times (Table 8).

Adults observed in Area 3 during the pre-observation were either moderately active (75.0%) or sedentary (25.0%). Similarly, during the post-observation, adults were observed in moderate activity (54.3%) or sedentary behavior (45.7%). Adults were not observed being very active in Area 3 during either the pre- or the post- observation times (Table 8).

	Pre-observation				Post-observation			
	Sedentary	Moderate	Very Active	Total	Sedentary	Moderate	Very Active	Total
Children	66.7%	33.3%	0.0%	100%	0.0%	71.4%	28.6%	100%
Adolescents	33.3%	66.7%	0.0%	100%	45.2%	54.8%	0.0%	100%
Adults	25.0%	75.0%	0.0%	100%	45.7%	54.3%	0.0%	100%

#### **Observation Area 4**

##### *Rate of Activity across Age Groups*

No individuals were observed in Area 4 during the pre-observation. In contrast, the majority of those observed during the post-observation were adults (57.1%) and adolescents (38.5%). The majority of all individuals observed were engaged in moderate activity (55.3%), followed by sedentary (43.5%), and very active (1.2%) behavior (Table 9).

	Pre-observation				Post-observation			
	Sedentary	Moderate	Very Active	Total	Sedentary	Moderate	Very Active	Total
Children	No individuals observed				0.0%	3.1%	1.2%	4.3%
Adolescents					17.4%	21.1%	0.0%	38.5%
Adults					26.1%	31.1%	0.0%	57.1%
Total					43.5%	55.3%	1.2%	100%

No individuals were observed in Area 4 during the pre-observation. During the post-observation in Area 4, activity level within age groups indicates that children either moderately active (71.4%) or very active (28.6%). No children were observed in sedentary behavior in Area 4 (Table 10).

During the post-observation in Area 4, adolescents were observed in either moderately active (54.8%) or sedentary (45.2%) behavior. No adolescents were observed in very active behavior in Area 4 (Table 10).

Adults observed in Area 4 during the post-observation were observed in moderate activity (54.3%) or sedentary behavior (45.7%). No adults were observed in very active behavior in Area 4 (Table 10).

	Pre-observation				Post-observation			
	Sedentary	Moderate	Very Active	Total	Sedentary	Moderate	Very Active	Total
Children	No individuals observed				0.0%	71.4%	28.6%	100%
Adolescents					45.2%	54.8%	0.0%	100%
Adults					45.7%	54.3%	0.0%	100%

**Appendix A- Direct Observation Tool**





## Parks and Play Spaces Direct Observation

### Introduction

This tool and protocol were developed by the evaluation team from Transtria LLC (Laura Brennan, PhD, MPH, Principal Investigator; Allison Kemner, MPH; Tammy Behlmann, MPH; Jessica Stachecki, MSW, MBA; Carl Filler, MSW) and Washington University Institute for Public Health (Ross Brownson, PhD, Co-Principal Investigator; Christy Hoehner, PhD, MSPH) as well as feedback from national advisors and partners. This tool and protocol were adapted from the System for Observing Play and Leisure Activity (SOPLAY) and System for Observing Play and Recreation in Communities (SOPARC) tools, protocols, and operational definitions.

Funding was provided for the *Evaluation of Healthy Kids, Healthy Communities* by a grant from the Robert Wood Johnson Foundation (#67099). Transtria LLC is leading the evaluation and dissemination activities from April 2010 to March 2014. For more information about the evaluation, please contact Laura Brennan ([laura@transtria.com](mailto:laura@transtria.com)) or Allison Kemner ([akemner@transtria.com](mailto:akemner@transtria.com)).

### Prior to conducting the observations

#### Safety

- Assess the safety of the environment for observing before entering the area:
- If dangerous or suspicious activities are taking place, leave the premises, notify the Project Director or Coordinator, and determine whether to schedule a new observation.
- If weather conditions (ice or snow, thunder or lightning) are not ideal for collecting data, leave the premises, notify the Project Director or Coordinator, and determine whether to schedule a new observation period.

#### Items to remember

- Pencils, a copy of the paper tools for all data collectors, clipboards
- Comfortable shoes, umbrella (if it's raining), sunscreen
- Data collectors' contact information (in case of emergency)
- List and map of sites for data collection, identifying boundaries of the area
- Letter from the Project Director or Coordinator explaining the reason for data collection
- Transportation to and from the site for observers, if needed

### Direct Observation schedule

Recommended timeframe for observations:

- Scan one area for 15-30 minutes.
- Scans should last for 30 seconds to 1 minute (depending on the number of people in the area).
- There should be a 1 minute rest between scans.

Schedule observations at different times of the day (2-3 times per day recommended). Example times:

- Morning (7:30 AM)
- Noon (11:30 AM)
- Afternoon (3:30 PM)
- Evening (6:30 PM)

Schedule observations for multiple times a week (2-3 days recommended). Example schedules:

- Two weekdays (Monday through Friday) and one weekend day (Saturday and Sunday)
- Example: Tuesday, Thursday, Saturday

# Evaluation of Healthy Kids, Healthy Communities

## Parks and Play Spaces Direct Observation Mapping Table (Instruction Sheet)

The purpose of mapping is to record various features in different parks and play space settings. Completing the map will allow for a better understanding of the individual behaviors observed in the designated play spaces.

Before observing activities, recorders should have knowledge of the play space where they are going to conduct observations. A rough sketch should be made of the overall park or play space (and how it has been divided into areas for different observers, if necessary). In the case where multiple play spaces are observed, each area should be numbered on the sketch. In addition, all permanent structures and natural and constructed boundaries should be recorded in the sketch. A copy of the sketch should be retained for reference during data analysis.

Below you will find detailed descriptions for each column within the Parks and Play Spaces Mapping Table.

**Park or play space:** All descriptive details about the park or play space should be easily referenced between the sketched map and the Mapping Table. From the sketched map, place the area number in the first column of the Mapping Table and follow the row across to complete all categories. [Note: The area numbers will also be referenced in the "Parks and Play Spaces observation tool."]

**Setting:** Record whether the play space being used is a park, playground, recreation facility, or other space (specify).

**Location:** Record whether the play space being used is indoors or outdoors.

**Type:** Choose from the following categories.

- Court: An area marked for basketball, volleyball, racquetball, and/or other court games. It contains permanent markings specifically for court games.
- Field: An area marked for football, soccer, baseball, and/or other field games. It contains permanent markings or goals, backstops, or other features specifically for field games.
- Playground: A self-contained space for swinging, sliding, climbing, or other types of play.
- Pool: Consists of wading or swimming pool and the surrounding space.
- Gym: A large indoor space primarily for physical activity and game play.
- Multi-purpose room: An auditorium, classroom, studio, or other indoor space that may be used for physical activity (e.g., dance, aerobics, strength training).
- Multi-purpose field: An open, outdoor, unmarked field that may be used for physical activity.
- Other (specify): Record any other type of area not specified above.

**Condition:** This section provides basic descriptive information about the designated play space.

- Accessible: Play space is not restricted from public use (e.g., area is not locked or rented to a private party).
- Usable: Play space is safe for physical activity (e.g., equipment is in good condition)
- Supervised: Play space is supervised by personnel (e.g., staff, teachers, volunteers). The supervisor must be in or adjacent to this specific area.
- Organized: Physical activity programs (i.e., scheduled, with leadership by school or agency personnel apparent) are occurring in the play space (e.g., intramurals, interscholastic practices, fitness classes).
- Equipment: Equipment is provided (e.g., balls, jump ropes). *Do not* mark if the equipment is permanent (e.g., basketball hoops) or is owned by people in the park or play space. [Note: The equipment may be provided by parks and recreation, schools, or other organizations/agencies.]

**Surface:** Record what type of surface is present on the majority of each play space. Choose from the following: sand/dirt, grass, gravel, wood chips/ mulch, foam/ rubber/ tile, cement/ pavement, hardwood, carpet, and other (specify).

**Intervention:** Record the specific intervention changes that assist children in participating in physical activity in this play space. This will include modifications such as lines painted on courts (e.g., four-square), cuts in the grass or field areas (e.g., baseball diamonds), and poles (basketball hoops, etc.). **Do not** record temporary improvements such as chalk lines and portable nets. A modification identifies what the area is primarily designed for, regardless of how it used at a particular time. Identify spaces that have multiple improvements that overlap but cannot be used simultaneously. For instance, a court space may have poles and painted lines that are used for both volleyball and basketball.

## Evaluation of Healthy Kids, Healthy Communities

**Parks and Play Spaces Mapping Table**

Play Space Name/Address: \_\_\_\_\_ Observer Name: \_\_\_\_\_

Community Partnership: \_\_\_\_\_ Weather Condition: \_\_\_\_\_ Date: \_\_\_\_\_

Play Space	Setting	Location	Type	Condition	Surface	Intervention
<b>1</b>	<input type="checkbox"/> Park <input type="checkbox"/> Rec. facility <input type="checkbox"/> Other:	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	<input type="checkbox"/> Court <input type="checkbox"/> Field <input type="checkbox"/> Playground <input type="checkbox"/> Pool <input type="checkbox"/> Gym <input type="checkbox"/> Multi-purp. room <input type="checkbox"/> Multi-purp. field <input type="checkbox"/> Other:	<input type="checkbox"/> Accessible <input type="checkbox"/> Usable <input type="checkbox"/> Supervised <input type="checkbox"/> Organized <input type="checkbox"/> Equipment <input type="checkbox"/> Other:	<input type="checkbox"/> Sand/dirt <input type="checkbox"/> Grass <input type="checkbox"/> Gravel <input type="checkbox"/> Wood chips/ mulch <input type="checkbox"/> Foam/ rubber/ tile <input type="checkbox"/> Cement/ pavement <input type="checkbox"/> Hardwood <input type="checkbox"/> Carpet <input type="checkbox"/> Other:	
<b>2</b>	<input type="checkbox"/> Park <input type="checkbox"/> Rec. facility <input type="checkbox"/> Other:	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	<input type="checkbox"/> Court <input type="checkbox"/> Field <input type="checkbox"/> Playground <input type="checkbox"/> Pool <input type="checkbox"/> Gym <input type="checkbox"/> Multi-purp. room <input type="checkbox"/> Multi-purp. field <input type="checkbox"/> Other:	<input type="checkbox"/> Accessible <input type="checkbox"/> Usable <input type="checkbox"/> Supervised <input type="checkbox"/> Organized <input type="checkbox"/> Equipment <input type="checkbox"/> Other:	<input type="checkbox"/> Sand/dirt <input type="checkbox"/> Grass <input type="checkbox"/> Gravel <input type="checkbox"/> Wood chips/ mulch <input type="checkbox"/> Foam/ rubber/ tile <input type="checkbox"/> Cement/ pavement <input type="checkbox"/> Hardwood <input type="checkbox"/> Carpet <input type="checkbox"/> Other:	
<b>3</b>	<input type="checkbox"/> Park <input type="checkbox"/> Rec. facility <input type="checkbox"/> Other:	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	<input type="checkbox"/> Court <input type="checkbox"/> Field <input type="checkbox"/> Playground <input type="checkbox"/> Pool <input type="checkbox"/> Gym <input type="checkbox"/> Multi-purp. room <input type="checkbox"/> Multi-purp. field <input type="checkbox"/> Other:	<input type="checkbox"/> Accessible <input type="checkbox"/> Usable <input type="checkbox"/> Supervised <input type="checkbox"/> Organized <input type="checkbox"/> Equipment <input type="checkbox"/> Other:	<input type="checkbox"/> Sand/dirt <input type="checkbox"/> Grass <input type="checkbox"/> Gravel <input type="checkbox"/> Wood chips/ mulch <input type="checkbox"/> Foam/ rubber/ tile <input type="checkbox"/> Cement/ pavement <input type="checkbox"/> Hardwood <input type="checkbox"/> Carpet <input type="checkbox"/> Other:	

Evaluation of Healthy Kids, Healthy Communities

Parks and Play Spaces Mapping Table

Play Space	Setting	Location	Type	Condition	Surface	Intervention
4	<input type="checkbox"/> Park <input type="checkbox"/> Rec. facility <input type="checkbox"/> Other:	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	<input type="checkbox"/> Court <input type="checkbox"/> Field <input type="checkbox"/> Playground <input type="checkbox"/> Pool <input type="checkbox"/> Gym <input type="checkbox"/> Multi-purp. room <input type="checkbox"/> Multi-purp. field <input type="checkbox"/> Other:	<input type="checkbox"/> Accessible <input type="checkbox"/> Usable <input type="checkbox"/> Supervised <input type="checkbox"/> Organized <input type="checkbox"/> Equipment <input type="checkbox"/> Other:	<input type="checkbox"/> Sand/dirt <input type="checkbox"/> Grass <input type="checkbox"/> Gravel <input type="checkbox"/> Wood chips/ mulch <input type="checkbox"/> Foam/ rubber/ tile <input type="checkbox"/> Cement/ pavement <input type="checkbox"/> Hardwood <input type="checkbox"/> Carpet <input type="checkbox"/> Other:	
5	<input type="checkbox"/> Park <input type="checkbox"/> Rec. facility <input type="checkbox"/> Other:	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	<input type="checkbox"/> Court <input type="checkbox"/> Field <input type="checkbox"/> Playground <input type="checkbox"/> Pool <input type="checkbox"/> Gym <input type="checkbox"/> Multi-purp. room <input type="checkbox"/> Multi-purp. field <input type="checkbox"/> Other:	<input type="checkbox"/> Accessible <input type="checkbox"/> Usable <input type="checkbox"/> Supervised <input type="checkbox"/> Organized <input type="checkbox"/> Equipment <input type="checkbox"/> Other::	<input type="checkbox"/> Sand/dirt <input type="checkbox"/> Grass <input type="checkbox"/> Gravel <input type="checkbox"/> Wood chips/ mulch <input type="checkbox"/> Foam/ rubber/ tile <input type="checkbox"/> Cement/ pavement <input type="checkbox"/> Hardwood <input type="checkbox"/> Carpet <input type="checkbox"/> Other:	
6	<input type="checkbox"/> Park <input type="checkbox"/> Rec. facility <input type="checkbox"/> Other:	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	<input type="checkbox"/> Court <input type="checkbox"/> Field <input type="checkbox"/> Playground <input type="checkbox"/> Pool <input type="checkbox"/> Gym <input type="checkbox"/> Multi-purp. room <input type="checkbox"/> Multi-purp. field <input type="checkbox"/> Other:	<input type="checkbox"/> Accessible <input type="checkbox"/> Usable <input type="checkbox"/> Supervised <input type="checkbox"/> Organized <input type="checkbox"/> Equipment <input type="checkbox"/> Other:	<input type="checkbox"/> Sand/dirt <input type="checkbox"/> Grass <input type="checkbox"/> Gravel <input type="checkbox"/> Wood chips/ mulch <input type="checkbox"/> Foam/ rubber/ tile <input type="checkbox"/> Cement/ pavement <input type="checkbox"/> Hardwood <input type="checkbox"/> Carpet <input type="checkbox"/> Other:	

# Evaluation of Healthy Kids, Healthy Communities

## Parks and Play Spaces Direct Observation Instruction Sheet

Use the following codes and definitions to assist you in completing the observation tool.

**Observers:** Observers will be split into groups of two to observe different areas at the same time (see example below). Areas correspond with the play spaces on the Parks and Play Spaces Mapping Table.

Play Space 1:	Observer 1
	Observer 2
Play Space 2:	Observer 3
	Observer 4

**Start Time:** This is the clock time for the beginning of each observation period. Each observation will last the same amount of time (with the length of time dependent on the number of individuals within the observed area) with a one minute break in-between observations to record (see below for an example). In the first column, record the start time for each period of observation.

Period 1:	Minute 1 – Observation
	Minute 2 – Break/Record
Period 2:	Minute 3 – Observation
	Minute 4 – Break/Record
Period 3:	Minute 5 – Observation
	Minute 6 – Break/Record

**Map:** Before observation begins, the observers will split the street into sections (e.g., segments and intersections) and each observer will be responsible for observing his/her section. The observers should record the area number in the second column of the observation tool.

**Scanning:** When scanning an area, observers should start on the far right end of the area and scan to the left side, then back to the right side for the duration of the scan time. During the scan, the observer should complete the observation tool by tallying activity by age group, in addition to reporting the activity codes for the age group. You should count the same individual's activity level multiple times if they enter your line of vision more than once in the scan time. However, only mark each activity code one time per scan time (see below).

**Ages:** Each age category has its own count. Please provide the number of youth or individuals represented during the observation period participating in different intensity levels of activity and their specific activity (i.e., activity code).

**Activity Level (Sedentary, Moderate, Very Active):** During scans of the target area, all people should be accounted for as either participating in very active, moderate, or sedentary behaviors. Mark a tally mark for each individual in the proper activity level and age box (i.e. if you see a 14 year old walking, put a tally mark in moderate under Adolescent).

- **Sedentary** behaviors are defined as activities in which people are not moving (e.g. standing, sitting, playing board games)
- **Moderate** intensity behaviors require more movement but no strenuous activity (e.g. walking, biking slowly)
- **Very active** behaviors show evidence of increased heart rate and inhalation rate (e.g. running, biking vigorously, playing basketball)

**Activity Codes:** Define what tasks individuals are participating in during the scanning period. All codes are labeled at the bottom of the observation tool. Use each code only one time per observation period (e.g., write "14" once in the space for activity codes even if more than one individual is observed walking).



**Creciendo en Salud**

**Corner Stores Environmental  
Audits**

**Summary Report**

Prepared by Transtria LLC



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## **Overview**

Creciendo en Salud, 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 corner stores, representatives of Creciendo en Salud, located in Benton County, Oregon, collected environmental audit data on 27 corner stores throughout the Partnership's target and surrounding areas.

## **Results**

- All 27 of the corner stores accepted WIC, SNAP, and EBT.
- Fresh fruits were available at 17 corner stores.
- Eleven of the stores located fresh fruits in baskets or bins near the register.
- Fresh vegetables were available in seven corner stores.
- Both fresh fruits and vegetables were available at six corner stores.
- Ninety-five percent of the fresh fruits and vegetables available were rated as "Average or Good Quality."
- Sugar sweetened beverages were available in all corner stores.
- Tobacco was sold in all corner stores.
- Twenty-two of the stores had tobacco advertisements present.

## **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](http://www.healthykidshealthycommunities.org).

Located in Benton County, Oregon, the Benton County Health Department was selected to lead the local HKHC partnership, Creciendo en Salud. Creciendo en Salud has chosen to focus its work on corner stores, farmers' markets, parks and recreation, and street improvements. They have also worked to increase community participation in local food system planning and to ensure that smart growth/active living infrastructure concepts are incorporated into county plans.

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](http://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](http://www.transtria.com/hkhc)).

In order to better understand the impact of their work around corner stores, representatives of Creciendo en Salud chose to participate in the enhanced evaluation data collection activities. Creciendo en Salud completed their enhanced evaluation activities for corner stores using the environmental audit method.

## **Methods**

The corner stores environmental audit tool was adapted from the Nutrition Environment Measurement Survey in Stores (NEMS-S), an evidence based tool designed to assess nutrition environments including the availability and pricing differences between healthier and less-healthy options. Environmental audits assess the presence or absence of different features as well as the quality or condition of the physical environment. Overall, this audit attempts to determine the quality of specific corner stores pertaining to the availability of healthy food options, particularly access to fruits and vegetables. An Evaluation Officer from Transtria trained community members on proper data collection methods using the tool.

In this case, the audits were developed to assess the healthy eating supports and barriers that support a healthy lifestyle in corner stores in Benton County. Audits were conducted at 27 corner stores from four different areas in Benton County by community members trained by an experienced staff member at Transtria. One auditor completed the audits between December 10, 2012, and January 3, 2013. Transtria staff performed data entry and validation. Double data entry was performed to ensure accuracy of data.

## Overall Results

### *WIC/SNAP/EBT*

All 27 of the corner stores accepted WIC, SNAP, and EBT. None of the stores displayed a sign for WIC. Fourteen of the stores displayed a sign for SNAP/Food Stamps and EBT. None of the stores placed WIC/SNAP signs near WIC/SNAP approved products.

### *Fresh fruits and vegetables*

Fresh fruits were available at 17 corner stores. Stores that had six or more unique fruits available included the Project Area's 7-Eleven and Dari Mart and Corvallis' Circle K and 7-Eleven. In 11 of the stores, the fresh fruits were located in baskets or bins near the register. University Market was the only store with fresh fruit located at the front of the store. Three stores offered freshly cut fruits for sale, one store in the Project Area and two stores in Corvallis. The most frequently available (found in at least 10 of the corner stores) fruits were apples, bananas, and oranges. Fruits were found to be of "Average or Good Quality" in 22 of the 27 corner stores, bananas were found to be of "Poor Quality" in three stores, and limes were found to be of "Poor Quality" in two stores.

<b>Fruit</b>	<b># of stores present</b>
Apples	16
Bananas	13
Oranges	10
Lemons	9
Limes	9
Pineapple (not mixed fruit)	2
Strawberries	2
Watermelon (not mixed fruit)	1
Cranberries	1
Grapes	1
Fruit Medley	2

Fresh vegetables were available in seven corner stores. Two stores had fresh vegetables located in a basket or bin near the register, Dari Mart in the Project Area and Western Market in Corvallis. The Project Area Dari Mart was also the only store that had fresh vegetables located at the front of the store. The most frequently available (found in at least three of the corner stores) vegetables were carrots, onions, tomatoes, and iceberg lettuce. Vegetables were found to be of "Average or Good Quality" in all of the stores.

<b>Vegetables</b>	<b># of stores present</b>
Onions	6
Tomatoes	4
Carrots	3
Iceberg Lettuce	3
Celery	2
Mushrooms	2
Potatoes	2
Avocados	1
Green Peppers	1
Sweet Potatoes	1
Cucumbers	1
Garlic	1
Mixed Vegetables	1

Six corner stores had both fresh fruits and vegetables. Five of the stores had fresh produce clearly labeled by name, price, and unit of sale; one store had produce labeled by price and unit of sale; and one store had produced labeled by unit of sale only.

#### *Sugar Sweetened Beverages*

Sugar sweetened beverages were available in all corner stores.

#### *Tobacco*

Tobacco was sold in all corner stores. Twenty-two of the stores had tobacco advertisements present; 15 stores had advertisements both inside and outside the store, five stores had advertisements outside the store only, and one store had advertisements inside the store only. All of the stores had tobacco products located behind the counter, ten stores had tobacco products on displays or bins next to the register, and one store had tobacco products in a vending machine.

#### **Key Takeaways**

- All 27 of the corner stores accepted WIC, SNAP, and EBT.
- Fresh fruits were available at 17 corner stores.
- Eleven of the stores located fresh fruits in baskets or bins near the register.
- Fresh vegetables were available in seven corner stores.
- Both fresh fruits and vegetables were available at six corner stores.
- Ninety-five percent of the fresh fruits and vegetables available were rated as “Average or Good Quality.”
- Sugar sweetened beverages were available in all corner stores.
- Tobacco was sold in all corner stores.
- Twenty-two of the stores had tobacco advertisements present.



## Results by Area

### Project Area

A total of four corner stores were surveyed in the Project Area. The Project Area is defined as South Corvallis and the adjoining rural areas.

#### *WIC/SNAP/EBT*

All four of the corner stores accepted WIC, SNAP, and EBT. None of the stores displayed a sign for WIC. Two of the stores displayed a sign for SNAP/Food Stamps and EBT. None of the stores placed WIC/SNAP signs near WIC/SNAP approved products.

#### *Fresh fruits and vegetables*

Fresh fruits were available at all four corner stores and all four had fresh fruits located in baskets or bins near the register. All corner stores sold apples and bananas, three sold oranges, three sold lemons and limes, and two sold pineapple. Fruits were found to be of “Average or Good Quality” in three of the four corner stores and limes were found to be of “Poor Quality” in one store. Fresh vegetables were available in three corner stores; Circle K was the only store that did not sell fresh vegetables. Dari Mart was the only store that had fresh vegetables located in a basket or bin near the register and located at the front of the store. Dari Mart offered a variety of fresh vegetables including avocados, carrots, celery, green peppers, mushrooms, onions, tomatoes, iceberg lettuce, cucumbers, and garlic. Vegetables were found to be of “Average or Good Quality” in all stores. Two of the stores had fresh produce clearly labeled by name, price, and unit of sale; one store had produce labeled by price; and one store had produced labeled by unit of sale only.

Store	# of unique fruits	# of unique vegetables
RFP	1	4
7-Eleven 2363-22935C	8	1
Dari Mart	6	10
Circle K #1022	5	0

#### *Sugar Sweetened Beverages*

Sugar sweetened beverages were available in all corner stores.

#### *Tobacco*

Tobacco was sold in all corner stores and all stores had tobacco advertisements present; two stores had advertisements both inside and outside the store, one store had advertisements outside the store only, and one store had advertisements inside the store only. All of the stores had tobacco products located behind the counter and Dari Mart had tobacco products in a vending machine.

### Key Takeaways

- All four of the corner stores accepted WIC, SNAP, and EBT.
- Fresh fruits were available at all four corner stores.
- All corner stores had fresh fruits located in baskets or bins near the register.
- Fresh vegetables were available in three corner stores.
- Sugar sweetened beverages were available in all corner stores.
- Tobacco was sold in all of the corner stores.

## City of Corvallis

A total of 11 corner stores were surveyed in greater Corvallis, outside of the Project Area.

### *WIC/SNAP/EBT*

All 11 of the corner stores accepted WIC, SNAP, and EBT. None of the stores displayed a sign for WIC. Five of the stores displayed a sign for SNAP/Food Stamps and EBT. None of the stores placed WIC/SNAP signs near WIC/SNAP approved products.

### *Fresh fruits and vegetables*

Fresh fruits were available at seven corner stores. Four stores had fresh fruits located in baskets or bins near the register and University Market had fresh fruits located at the front of the store. Two of the stores, Circle K and 7-Eleven, had freshly cut fruit for sale. Seven stores sold apples, five stores sold lemons and limes, four stores sold bananas, and four stores sold oranges. Fruits were found to be of “Average or Good Quality” in five of the seven stores that sold fruit, bananas were found to be of “Poor Quality” in one store, and limes were found to be of “Poor Quality” in one store. Fresh vegetables were available in one corner store. Western Market sold onions in a basket or bin near the register. Vegetables were found to be of “Average or Good Quality” in the one corner store where vegetables were available. Three of the stores had fresh produce clearly labeled by name, price, and unit of sale.

Store	# of unique fruits	# of unique vegetables
US Market	0	0
University Market	3	0
Jackson's Food Store	0	0
Country Market & Deli	0	0
26th Superette	4	0
Western Market	5	1
US Market #185	0	0
T & G Market	2	0
Dari Mart #13	1	0
Circle K #292	7	0
7-Eleven 2363-17105E	7	0

### *Sugar Sweetened Beverages*

Sugar sweetened beverages were available in all corner stores.

### *Tobacco*

Tobacco was sold in all corner stores. Seven stores had tobacco advertisements present both inside and outside the store and one store had tobacco advertisements outside the store only. All of the stores had tobacco products located behind the counter and three stores had tobacco products on displays or bins next to the register.

#### **Key Takeaways**

- All 11 of the corner stores accepted WIC, SNAP, and EBT.
- Fresh fruits were available at seven corner stores.
- Four stores had fresh fruits located in baskets or bins near the register.
- Fresh vegetables were available in one corner store.
- Sugar sweetened beverages were available in all corner stores.
- Tobacco was sold in all of the corner stores.

### **City of Philomath**

A total of six corner stores were surveyed in Philomath, a small town five miles west of Corvallis.

#### *WIC/SNAP/EBT*

All six of the corner stores accepted WIC, SNAP, and EBT. None of the stores displayed a sign for WIC. Four of the stores displayed a sign for SNAP/Food Stamps and EBT. None of the stores placed WIC/SNAP signs near WIC/SNAP approved products.

#### *Fresh fruits and vegetables*

Fresh fruits were available at three corner stores. Two stores had fresh fruits located in baskets or bins near the register. Three stores sold bananas, two stores sold apples, and two stores sold oranges. Fruits were found to be of “Average or Good Quality” in two of the three stores and bananas were found to be of “Poor Quality” in one store. Fresh vegetables were not available in any of the six stores. Of the stores that sold fresh fruits, none of them had fresh produce clearly labeled by name, price, or unit of sale.

Store	# of unique fruits	# of unique vegetables
Shell	1	0
Tri Valley Food Mart	0	0
Westgate Deli	3	0
Chevron	0	0
Jonas Market	3	0
Towne Pump	0	0

### *Sugar Sweetened Beverages*

Sugar sweetened beverages were available in all corner stores.

### *Tobacco*

Tobacco was sold in all corner stores. Four stores had tobacco advertisements present both inside and outside the store and two stores had tobacco advertisements outside the store only. All of the stores had tobacco products located behind the counter and five stores had tobacco products on displays or bins next to the register.

#### **Key Takeaways**

- All six of the corner stores accepted WIC, SNAP, and EBT.
- Fresh fruits were available at three corner stores.
- Two stores had fresh fruits located in baskets or bins near the register.
- Fresh vegetables were not available in any of the six stores.
- Sugar sweetened beverages were available in all corner stores.
- Tobacco was sold in all of the corner stores.

### **Rural Stores**

A total of six corner stores were surveyed in the rural areas of Benton County. These include stores in unincorporated areas of Benton County and on the outskirts of other cities.

### *WIC/SNAP/EBT*

All six of the corner stores accepted WIC, SNAP, and EBT. None of the stores displayed a sign for WIC. Three of the stores displayed a sign for SNAP/Food Stamps and EBT. None of the stores placed WIC/SNAP signs near WIC/SNAP approved products.

### *Fresh fruits and vegetables*

Fresh fruits were available at three corner stores. One store, City Limits Country Store, had fresh fruits located in baskets or bins near the register. Three stores sold apples, two stores sold bananas, and two stores sold lemons and limes. Fruits were found to be of “Average or Good Quality” in two of the three stores and bananas were found to be of “Poor Quality” in one

store. Fresh vegetables were available in three corner stores. Across the stores, fresh vegetables were found at the back and middle of the stores and on low shelves. Vegetables were found to be of “Average or Good Quality” in all stores. One store had fresh produce clearly labeled by price and unit of sale.

Store	# of unique fruits	# of unique vegetables
Blodgett Country Store	5	4
City Limits Country Store	1	0
Jackson's Food Store	0	0
Alsea Mercantile Co.	4	7
Kings Valley Store	0	2
Village Food Mart	0	0

### *Sugar Sweetened Beverages*

Sugar sweetened beverages were available in all corner stores.

### *Tobacco*

Tobacco was sold in all corner stores and four stores had tobacco advertisements present. Two stores had tobacco advertisements present both inside and outside the store and one store had tobacco advertisements outside the store only. All of the stores had tobacco products located behind the counter and two stores had tobacco products on displays or bins next to the register.

#### **Key Takeaways**

- All six of the corner stores accepted WIC, SNAP, and EBT.
- Fresh fruits were available at three corner stores.
- One store had fresh fruits located in baskets or bins near the register.
- Fresh vegetables were available in three corner stores.
- Sugar sweetened beverages were available in all corner stores.
- Tobacco was sold in all of the corner stores.

## Appendix A: Tables

**Table 1: Vendor characteristics by area**

Vendor Characteristic	Project Area (N=4)	City of Corvallis (N=11)	City of Philomath (N=6)	Rural Stores (N=6)	Overall (N=27)
<i>WIC/SNAP/EBT</i>					
Store accepts WIC/SNAP/EBT	4	11	6	6	27
Sign for WIC	0	0	0	0	0
Sign for SNAP/Food stamps	2	5	4	3	14
Sign for EBT	2	5	4	3	14
Other discount	0	0	0	0	0
WIC/SNAP signs near WIC/SNAP approved products	0	0	0	0	0
<i>Fresh fruits</i>					
Fresh fruits available	4	7	3	3	17
Fresh fruits located at back of the store	1	2	0	0	3
Fresh fruits located in middle of the store	1	0	1	2	4
Fresh fruits located at front of the store	0	1	0	0	1
Fresh fruits located on a high shelf	0	2	1	0	3
Fresh fruits located on a middle shelf	2	0	0	0	2
Fresh fruits located on a low shelf	1	0	0	0	1
Fresh fruits located in baskets or bin near the register	4	4	2	1	11
Fresh fruits located in other place in store	0	0	0	0	0
Freshly cut fruits for sale	1	2	0	0	3



**Table 1 cont.: Vendor characteristics by area**

<b>Vendor Characteristic</b>	<b>Project Area (N=4)</b>	<b>City of Corvallis (N=11)</b>	<b>City of Philomath (N=6)</b>	<b>Rural Stores (N=6)</b>	<b>Overall (N=27)</b>
<i>Fresh vegetables</i>					
Fresh vegetables available	3	1	0	3	7
Fresh vegetables located at back of the stores	2	0	NA	1	3
Fresh vegetables located in middle of the store	1	0	NA	2	3
Fresh vegetables located at front of the store	1	0	NA	0	1
Fresh vegetables located on a high shelf	0	0	NA	0	0
Fresh vegetables located on a middle shelf	2	0	NA	0	2
Fresh vegetables located on a low shelf	2	0	NA	1	3
Fresh vegetables located in baskets or bin near the register	1	1	NA	0	2
Fresh vegetables located in other place in store	1	0	NA	0	1
Freshly cut vegetables for sale	1	0	NA	0	1
<i>Product signage and pricing (for fresh fruits/vegetables only)</i>					
Products are identified by name	2	3	0	0	5
Clear signs document the price	3	3	0	1	7
Units are appropriately labeled	3	3	0	1	7
Discounts for larger sales	1	0	0	0	1
<i>Beverages</i>					
Sugar Sweetened Beverages	4	11	6	6	27
<i>Tobacco</i>					
Store sells tobacco products	4	11	6	6	27
Tobacco advertisements present	4	8	6	4	22
Tobacco advertisements inside the store	3	8	6	3	20
Tobacco advertisements outside the store	3	7	4	2	16
Tobacco products located behind counter	4	11	6	6	27
Tobacco products on display, in bins, next to the register	0	3	5	2	10
Tobacco products in a vending machine	1	0	0	0	1
Other location of tobacco products	1	1	0	0	2

**Table 2: Presence and absence of fruits and vegetables in all stores**

	RFP	7-Eleven 2363-22935C	Dari Mart	Circle K #x22	US Market	University Market	Jackson's Food Store	Country Market & Deli	26th Superette	Western Market	US Market #x85	T & G Market	Dari Mart #x3	Circle K #292	7-Eleven 2363-x7x5E	Shell	Tri Valley Food Mart	Westgate Deli	Chevron	Jonas Market	Towne Pump	Blodgett Country Store	City Limits Country Store	Jackson's Food Store	Alsea Mercantile Co.	Kings Valley Store	Village Food Mart
<i>Fruits:</i>																											
Apples		x	x	x		x			x	x		x	x	x	x			x		x		x	x		x		
Bananas	x	x	x	x						x		x		x	x	x		x		x						x	
Blackberries																											
Blueberries																											
Cantaloupes																											
Cherries																											
Cranberries																							x				
Grapefruit																											
Grapes																							x				
Honeydews																											
Kiwis																											
Lemons		x	x	x		x			x	x				x	x											x	
Limes		x	x	x		x			x	x				x	x											x	
Mangos																											
Nectarines																											
Oranges		x	x	x					x	x				x	x			x		x		x					
Papayas																											
Peaches																											
Pears																											
Pineapples			x											x													
Plum																											
Raspberries																											
Strawberries		x													x												
Tangerines																											
Watermelons		x																									
Fruit Medley		x												x	x												

**Table 2 cont.: Presence and absence of fruits and vegetables in all stores**

	RFP	7-Eleven 2363-22935C	Dari Mart	Circle K #x22	US Market	University Market	Jackson's Food Store	Country Market & Deli	26th Superette	Western Market	US Market #x85	T & G Market	Dari Mart #x3	Circle K #292	7-Eleven 2363-x7x5E	Shell	Tri Valley Food Mart	Westgate Deli	Chevron	Jonas Market	Towne Pump	Blodgett Country Store	City Limits Country Store	Jackson's Food Store	Alsea Mercantile Co.	Kings Valley Store	Village Food Mart			
<i>Vegetables:</i>																														
Artichokes																														
Asparagus																														
Avocados			x																											
Broccoli																														
Brussel sprouts																														
Cabbages																														
Carrots			x																			x			x					
Cauliflower																														
Celery			x																							x				
Collard Greens																														
Corn																														
Cucumber			x																											
Green beans			x																							x				
Garlic			x																											
Green peppers																														
Kale																														
Lettuce- Iceberg	x		x											x																
Lettuce- Romaine																														
Lima beans																														
Mushrooms			x																				x							
Okra																														
Onions	x		x							x													x			x	x			
Potato	x														x															
Radishes																														
Red peppers																														
Spinach																														
Summer squash																														
Sweet potatoes																														
Tomatoes	x		x																								x			
Mixed veg.		x																									x			

**Table 3: Project Area fruit and vegetable characteristics**

Produce Item	RFP				7-Eleven 2363-22935C				Dari Mart				Circle K #1022			
	Price	Unit	Quality	Quantity	Price	Unit	Quality	Quantity	Price	Unit	Quality	Quantity	Price	Unit	Quality	Quantity
<i>Fruits:</i>																
Apples					\$0.99	Each	Good	A lot	\$1.29	Per pound	Good	A lot	\$0.89	Each	Good	A lot
Bananas	\$0.75	Each	Good	Some	2/\$1.00	Each	Good	A lot	\$0.99	Per pound	Good	A lot	\$0.89	Each	Good	A lot
Oranges					\$0.99	Each	Good	A lot	\$1.29	Per pound	Good	A lot	\$0.89	Each	Good	A lot
Pineapples									\$1.99	Each	Good	A lot				
Lemons					\$0.69	Each	Good	Some	Available				\$0.89	Each	Good	Some
Limes					\$0.69	Each	Poor	A lot	Available				\$0.89	Each	Good	Some
Strawberries					\$2.99	Each, 6 oz cont	Good	Few								
Tangerines																
Watermelons					\$2.99	Each, 12 oz cont	Good	Few								
Fruit Medley					\$2.99	Each, 12 oz cont	Good	Some								
<i>Vegetables:</i>																
Avocados									\$1.49	Each	Good	A lot				
Carrots									\$0.99	Per box/bag	Good	A lot				
Celery									\$1.19	Bunch	Good	Some				
Cucumber									\$0.99	Each	Good	A lot				
Garlic									\$0.49	Each	Good	A lot				
Green peppers									\$0.99	Each						
Lettuce-Iceberg	\$2.00	Each	Good	Some					\$0.99	Each	Good	A lot				
Mushrooms									\$1.79	Per pound	Good	A lot				
Onions	\$1.00	Each	Good	A lot					\$0.49	Per pound	Good	A lot				
Potato	\$2.95	Per box/bag	Good	Few												
Tomatoes	\$1.00	Each	Good						\$0.99	Per pound	Good	A lot				
Mixed vegetables					\$3.99	10oz chopped										

**Appendix B: Corner Stores Environmental Audit Tool**

# Evaluation of Healthy Kids, Healthy Communities

## Corner Stores Environmental Audit Tool

Corner store name: \_\_\_\_\_

Address: \_\_\_\_\_

Size of corner store (square feet): \_\_\_\_\_

Auditor 1: \_\_\_\_\_

Auditor 2: \_\_\_\_\_

Corner store ID (for Transtria use only): \_\_\_\_\_

Community Partnership: \_\_\_\_\_

Date: \_\_\_\_\_

Audit Start Time: \_\_\_\_ : \_\_\_\_ ○ AM ○ PM

Audit End Time: \_\_\_\_ : \_\_\_\_ ○ AM ○ PM

### Section A: Store hours of operation, store exterior, employee characteristics, and store interior

Overall store			Store exterior (cont.)			
1. What are the store days and hours of operation?			3.b. Sign for SNAP/Food stamps		<input type="checkbox"/> No	<input type="checkbox"/> Yes
1.a. Sunday (Check yes or no.) Enter operating hours (open/close):	<input type="checkbox"/> No	<input type="checkbox"/> Yes	3.c. Sign for EBT		<input type="checkbox"/> No	<input type="checkbox"/> Yes
1.b. Monday (Check yes or no.) Enter operating hours (open/close):	<input type="checkbox"/> No	<input type="checkbox"/> Yes	3.d. Other discount, specify:		<input type="checkbox"/> No	<input type="checkbox"/> Yes
1.c. Tuesday (Check yes or no.) Enter operating hours (open/close):	<input type="checkbox"/> No	<input type="checkbox"/> Yes	4. Is a school visible from the store? (If no, skip to Question 5.)		<input type="checkbox"/> No	<input type="checkbox"/> Yes
1.d. Wednesday (Check yes or no.) Enter operating hours (open/close):	<input type="checkbox"/> No	<input type="checkbox"/> Yes	4.a. Primary (Elementary and/or middle school)		<input type="checkbox"/> No	<input type="checkbox"/> Yes
1.e. Thursday (Check yes or no.) Enter operating hours (open/close):	<input type="checkbox"/> No	<input type="checkbox"/> Yes	4.b. Secondary (High school)		<input type="checkbox"/> No	<input type="checkbox"/> Yes
1.f. Friday (Check yes or no.) Enter operating hours (open/close):	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<b>Employee characteristics</b>			
1.g. Saturday (Check yes or no.) Enter operating hours (open/close):	<input type="checkbox"/> No	<input type="checkbox"/> Yes	5. Do employees use gloves when handling food?		<input type="checkbox"/> No	<input type="checkbox"/> Yes
<b>Store exterior</b>			6. Do employees greet customers?		<input type="checkbox"/> No	<input type="checkbox"/> Yes
2. Are the following items present outside the store?			7. Do employees wear uniforms?		<input type="checkbox"/> No	<input type="checkbox"/> Yes
2.a. Legible sign(s) to identify the store	<input type="checkbox"/> No	<input type="checkbox"/> Yes	8. Other, specify:		<input type="checkbox"/> No	<input type="checkbox"/> Yes
2.b. Accessible entrance (allows entry for strollers and wheelchairs)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<b>Store interior</b>			
2.c. Security features (security guard(s) and/or security camera(s))	<input type="checkbox"/> No	<input type="checkbox"/> Yes	9. Are the following items present inside the store?			
2.d. Seating (benches, tables/chairs)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	9.a. ATM		<input type="checkbox"/> No	<input type="checkbox"/> Yes
2.e. Windows blocked by bars, signs, or tinting	<input type="checkbox"/> No	<input type="checkbox"/> Yes	9.b. Wide aisles to accommodate strollers and wheelchairs		<input type="checkbox"/> No	<input type="checkbox"/> Yes
2.f. Gas pumps	<input type="checkbox"/> No	<input type="checkbox"/> Yes	9.c. Licenses/permits visibly displayed		<input type="checkbox"/> No	<input type="checkbox"/> Yes
2.g. Bicycle parking	<input type="checkbox"/> No	<input type="checkbox"/> Yes	9.d. Store map or signs for aisles listing types of products		<input type="checkbox"/> No	<input type="checkbox"/> Yes
2.h. Public transit stop visible from the store entrance	<input type="checkbox"/> No	<input type="checkbox"/> Yes	9.e. Recipe cards or preparation instructions		<input type="checkbox"/> No	<input type="checkbox"/> Yes
2.i. Sidewalk adjacent to store entrance	<input type="checkbox"/> No	<input type="checkbox"/> Yes	9.f. Free samples of <u>healthy</u> products		<input type="checkbox"/> No	<input type="checkbox"/> Yes
2.j. Parking lot adjacent to store entrance	<input type="checkbox"/> No	<input type="checkbox"/> Yes	9.g. WIC/SNAP signs near WIC/SNAP approved products		<input type="checkbox"/> No	<input type="checkbox"/> Yes
2.k. Other, specify:	<input type="checkbox"/> No	<input type="checkbox"/> Yes	9.h. Point of purchase prompts for <u>healthy</u> products (e.g., "Five-a-day")		<input type="checkbox"/> No	<input type="checkbox"/> Yes
3. Does the store accept WIC/SNAP/EBT? (If no, skip to Question 4.)			9.i. Other, specify:		<input type="checkbox"/> No	<input type="checkbox"/> Yes
3.a. Sign for WIC	<input type="checkbox"/> No	<input type="checkbox"/> Yes				

### Comments?



## Evaluation of Healthy Kids, Healthy Communities

### Section B: Fresh fruits, fresh vegetables, product signage and pricing, canned/frozen fruits/vegetables, other foods, tobacco and alcohol

Fresh fruits			Product signage and pricing (for fresh fruits and vegetables only) (If none, skip to Question 17.)		
10. Are fresh fruits available? (If no, skip to Question 13)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	16. Indicate whether the following are true for <b>most</b> fresh fruit and vegetable products.		
11. Where are the fresh fruits located?			16.a. Products are identified by name.		<input type="checkbox"/> No
11.a. At the back of the store	<input type="checkbox"/> No	<input type="checkbox"/> Yes	16.b. Clear signs document the price.		<input type="checkbox"/> No
11.b. In the middle of the store	<input type="checkbox"/> No	<input type="checkbox"/> Yes	16.c. Units are appropriately labeled (e.g., weight, box, bunch).		<input type="checkbox"/> No
11.c. At the front of the store	<input type="checkbox"/> No	<input type="checkbox"/> Yes	16.d. Discounts for larger sales		<input type="checkbox"/> No
11.d. On a high shelf	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<b>Frozen or canned fruits/vegetables</b>		
11.e. On a middle shelf	<input type="checkbox"/> No	<input type="checkbox"/> Yes	17. How many types of canned fruits are available? (Circle one.)		
11.f. On a low shelf	<input type="checkbox"/> No	<input type="checkbox"/> Yes	None (0)	Limited (1-3 types)	Variety (4+ types)
11.g. Baskets or bin near the register	<input type="checkbox"/> No	<input type="checkbox"/> Yes	18. How many types of canned vegetables are available? (Circle one.)		
11.h. Other, specify:	<input type="checkbox"/> No	<input type="checkbox"/> Yes	None (0)	Limited (1-3 types)	Variety (4+ types)
12. Are there freshly cut fruits for sale?	<input type="checkbox"/> No	<input type="checkbox"/> Yes	19. How many types of frozen fruits are available? (Circle one.)		
<b>Go to the Attachment for Section B: Fresh fruits: Fruit availability, price, quality, and quantity.</b>			None (0)	Limited (1-3 types)	Variety (4+ types)
<b>Fresh vegetables</b>			20. How many types of frozen vegetables are available? (Circle one.)		
13. Are fresh vegetables available? (If no, skip to Question 16.)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	None (0)	Limited (1-3 types)	Variety (4+ types)
14. Where are the fresh vegetables located?			<b>Other foods</b>		
14.a. At the back of the store	<input type="checkbox"/> No	<input type="checkbox"/> Yes	21. What types of grains are offered?		
14.b. In the middle of the store	<input type="checkbox"/> No	<input type="checkbox"/> Yes	21.a. Whole grains (e.g., bread, flour, oatmeal, brown rice, pasta) (Check first ingredient, it should be whole.)		<input type="checkbox"/> No
14.c. At the front of the store	<input type="checkbox"/> No	<input type="checkbox"/> Yes	21.b. Other grain products (e.g., white breads, rice, pasta)		<input type="checkbox"/> No
14.d. On a high shelf	<input type="checkbox"/> No	<input type="checkbox"/> Yes	22. What other types of <u>healthier</u> foods are offered?		
14.e. On a middle shelf	<input type="checkbox"/> No	<input type="checkbox"/> Yes	22.a. Low-fat or non-fat dairy foods (e.g., low-fat yogurts or cheeses)		<input type="checkbox"/> No
14.f. On a low shelf	<input type="checkbox"/> No	<input type="checkbox"/> Yes	22.b. Lean meats, fish, poultry		<input type="checkbox"/> No
14.g. Baskets or bin near the register	<input type="checkbox"/> No	<input type="checkbox"/> Yes	22.c. Nuts, seeds, or dry beans		<input type="checkbox"/> No
14.h. Other, specify:	<input type="checkbox"/> No	<input type="checkbox"/> Yes	22.d. Low-fat prepared meals (e.g., baked chicken)		<input type="checkbox"/> No
15. Are there freshly cut vegetables for sale?	<input type="checkbox"/> No	<input type="checkbox"/> Yes	22.e. Low-fat frozen meals (e.g., Lean Cuisine, Healthy Choice)		<input type="checkbox"/> No
<b>Go to the Attachment for Section B: Fresh vegetables: Vegetable availability, price, quality, and quantity.</b>			22.f. Other, specify:		<input type="checkbox"/> No

**Comments?**

## Evaluation of Healthy Kids, Healthy Communities

### Section B: Fresh fruits, fresh vegetables, product signage and pricing, canned/frozen fruits/vegetables, other foods, tobacco and alcohol (cont.)

Other foods (cont.)			Other foods (cont.)		
23. What other types of foods with minimal nutritional value are offered?			25.c. Sugar sweetened beverages (e.g., soda, tea, sports drink)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
23.a. Potato chips/corn chips/popcorn	<input type="checkbox"/> No	<input type="checkbox"/> Yes	25.d. Other, specify:	<input type="checkbox"/> No	<input type="checkbox"/> Yes
23.b. Ice cream/frozen desserts	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<b>Tobacco and alcohol</b>		
23.c. Cakes/cookies/doughnuts	<input type="checkbox"/> No	<input type="checkbox"/> Yes	26. Does the store sell tobacco products? <i>(If no, skip to Question 29.)</i>	<input type="checkbox"/> No	<input type="checkbox"/> Yes
23.d. Candy/chocolate	<input type="checkbox"/> No	<input type="checkbox"/> Yes	27. Are there tobacco advertisements present? <i>(If no, skip to Question 28.)</i>	<input type="checkbox"/> No	<input type="checkbox"/> Yes
23.e. Regular to high-fat prepared meals (e.g., fried chicken)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	27.a. Inside the store	<input type="checkbox"/> No	<input type="checkbox"/> Yes
23.f. Regular to high-fat frozen meals (e.g., Hungry Man)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	27.b. Outside the store	<input type="checkbox"/> No	<input type="checkbox"/> Yes
23.g. Other, specify:	<input type="checkbox"/> No	<input type="checkbox"/> Yes	28. Where are the tobacco products?		
24. Is milk available? <i>(If no, skip to Question 25.)</i>	<input type="checkbox"/> No	<input type="checkbox"/> Yes	28.a. Behind the counter	<input type="checkbox"/> No	<input type="checkbox"/> Yes
24.a. Skim milk	<input type="checkbox"/> No	<input type="checkbox"/> Yes	28.b. On displays, in bins, next to the register	<input type="checkbox"/> No	<input type="checkbox"/> Yes
24.b. 1% milk	<input type="checkbox"/> No	<input type="checkbox"/> Yes	28.c. In a vending machine	<input type="checkbox"/> No	<input type="checkbox"/> Yes
24.c. 2% milk	<input type="checkbox"/> No	<input type="checkbox"/> Yes	28.d. Other, specify:	<input type="checkbox"/> No	<input type="checkbox"/> Yes
24.d. Whole or Vitamin D milk	<input type="checkbox"/> No	<input type="checkbox"/> Yes	29. Does the store sell alcohol products? <i>(If no, audit is complete.)</i>	<input type="checkbox"/> No	<input type="checkbox"/> Yes
24.e. Flavored whole milk	<input type="checkbox"/> No	<input type="checkbox"/> Yes	30. Are there alcohol advertisements present? <i>(If no, skip to Question 31.)</i>	<input type="checkbox"/> No	<input type="checkbox"/> Yes
24.f. Flavored skim, 1%, or 2% milk	<input type="checkbox"/> No	<input type="checkbox"/> Yes	30.a. Inside the store	<input type="checkbox"/> No	<input type="checkbox"/> Yes
24.g. Rice milk	<input type="checkbox"/> No	<input type="checkbox"/> Yes	30.b. Outside the store	<input type="checkbox"/> No	<input type="checkbox"/> Yes
24.h. Soy milk	<input type="checkbox"/> No	<input type="checkbox"/> Yes	31. Where are the alcohol products?		
24.i. Lactaid	<input type="checkbox"/> No	<input type="checkbox"/> Yes	31.a. Behind the counter	<input type="checkbox"/> No	<input type="checkbox"/> Yes
25. Are other beverages available? <i>(If no, skip to Question 26.)</i>	<input type="checkbox"/> No	<input type="checkbox"/> Yes	31.b. In the freezer/cooler section	<input type="checkbox"/> No	<input type="checkbox"/> Yes
25.a. Water	<input type="checkbox"/> No	<input type="checkbox"/> Yes	31.c. On displays, in bins, next to the register	<input type="checkbox"/> No	<input type="checkbox"/> Yes
25.b. 100% juice	<input type="checkbox"/> No	<input type="checkbox"/> Yes	31.d. Other, specify:	<input type="checkbox"/> No	<input type="checkbox"/> Yes

**Comments?**

Attachment for Section B: 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	
32. Apples												
33. Bananas												
34. Blackberries												
35. Blueberries												
36. Cantaloupes												
37. Cherries												
38. Cranberries												
39. Grapefruits												
40. Grapes												
41. Honeydew melons												
42. Kiwis												
43. Mangos												
44. Nectarines												
45. Oranges												
46. Papayas												
47. Peaches												
48. Pears												
49. Pineapples												
50. Plums												
51. Raspberries												
52. Strawberries												
53. Tangerines												
54. Watermelons												
55. Other:												
56. Other:												
57. Other:												

Attachment for Section B: 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	
58. Artichokes												
59. Asparagus												
60. Avocados												
61. Broccoli												
62. Brussels sprouts												
63. Cabbages												
64. Carrots												
65. Cauliflower												
66. Celery												
67. Collard greens												
68. Corn												
69. Green beans												
70. Green peppers												
71. Kale												
72. Lentils												
73. Lettuce – Romaine												
74. Lima beans												
75. Mushrooms												
76. Okra												
77. Onions												
78. Radishes												
79. Red peppers												
80. Spinach												
81. Summer squash												
82. Sweet potatoes												
83. Tomatoes												
84. Other:												
85. Other:												
86. Other:												

Creciendo en Salud

Street Design Direct Observation

## **Summary Report**

Prepared by Transtria LLC



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## **OVERVIEW**

Creciendo en Salud, 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 environmental change initiatives. In order to better understand the impact of their work in active transportation and street design, partnership representatives of Creciendo en Salud, located in Benton County, Oregon, performed direct observations on street segments throughout the partnership's catchment area, including: Highway 99 (First AH Co-op) and Alexander (Lincoln Elementary School).

## **RESULTS**

- Both street segments were accessible and sidewalks were in usable condition.
- Children, adolescents, and adults were identified on both streets during the audits.
- Auditors noted twice as many activity counts on Alexander Avenue than on Third Street/Highway 99.
- Children registered the majority of activity counts on Alexander Avenue, while nearly all activity counts on Third St/Hwy 99 were attributed to adults.
- Auditors noted activity counts of people engaged in walking, jogging/running, biking, and skate boarding.

## **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. Healthy Kids, Healthy Communities places special emphasis on reaching children who are at highest risk for obesity on the basis of race/ethnicity, income, and/or geographic location.

Benton County, Oregon was selected as one of 49 communities to participate in HKHC, and the Benton County Health Department is the lead agency for their community partnership, *Creciendo en Salud*. Benton County has chosen to focus its work on parks and recreation, corner stores, farmers' markets, and street improvements. 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](http://www.transtria.com).

In order to better understand the impact of their work on street improvements, *Creciendo en Salud* representatives chose to participate in the enhanced evaluation data collection activities. This supplementary evaluation focuses on the six cross-site HKHC strategies, including: parks and play spaces, active transportation (e.g., street design), farmers' markets, corner stores, physical activity standards in child care settings, and nutrition standards in childcare settings. Communities use two main methods as part of the enhanced evaluation, direct observation and environmental audits. Benton County chose to collect data on active transportation using the direct observation method.

## **METHODS**

### **Street Design Direct Observation**

The street design direct observation tool was adapted from the System for Observing Play and Leisure Activity (SOPLAY) and System for Observing Play and Recreation in Communities (SOPARC) tools, protocols, and operational definitions. Direct observation is a method used to assess individuals' behaviors in their natural setting. An Evaluation Officer from Transtria LLC trained representatives of Benton County's community partnership on proper data collection methods using the tool.

Data were collected between September 18-22, 2013 at the following two intersections/segments: 1) South 3<sup>rd</sup>/Highway 99 (First Alternative Natural Foods Co-op South Store) and 2) Alexander Avenue (Lincoln Elementary School).

The observations were all conducted two times a day (morning and afternoon/evening) on three days by three different observers. Observers collected data for a total of 52 to 54 minutes per street per day. For the duration of each observation period, observers scanned the street for one minute and recorded observations for one minute. Each observation represents an individual's activity level in the area at the specified time. Because individuals may have exited and re-entered the area during observation periods, the individuals observed in each time period were not the same. This method allowed observers to capture overall changes in activity level as time lapsed, but it did not allow observers to record individual behavior changes.

During the scan, the observer completed the observation tool by tallying children in the designated area by age group (i.e., Infants and Toddlers = 0-2 years; Children = 3-12 years; Adolescent = 13-18 years; Adults = 18+ years) and activity level (i.e., sedentary, moderate, or very active behaviors).

- **Sedentary** behaviors are defined as activities in which children are not moving (e.g., standing, sitting, playing board games).
- **Moderate** intensity behaviors require more movement but no strenuous activity (e.g., walking, biking slowly).
- **Very active** behaviors show evidence of increased heart rate and inhalation rate (e.g., running, biking vigorously, playing basketball).

Observers also reported the activity codes for the children in the designated area, including:

No Identifiable Activity	Walking	Speed walking	Biking
Roller-blading	Jogging	Skate boarding	Other activity

The activity code “No Identifiable Activity” was used to indicate no movement. The activity code “None of the Above” was used when an individual was engaging in an activity not included in the other activity codes. Activity levels of infants and toddlers were not included in the analysis.

In addition to recording individuals’ activity levels, observers created maps of the street segments. These data were collected once for each of the two segments observed. The maps included a form for the setting, location, type of intersection, condition of the intersection (e.g., accessible or usable for all types of pedestrians/cyclists), and any permanent modifications (e.g., alterations present that assist people in using the intersections such as ramps for wheelchairs).

One Transtria staff member entered the data and a second Transtria staff member conducted validity checks on 10% of observations (i.e., every tenth observation) to ensure accuracy and validity of the data. Of the 10% checked, zero errors were found among the 4,536 observations (100% correct).

## RESULTS

Direct observations were conducted at two street segments (First Alternative Natural Foods Co-op South Store and Lincoln Elementary School) between September 18 and September 22, 2012. (See Appendix A)

Children’s activity levels and counts were collected in one-minute observation periods. The activity counts reflect children’s activity levels at a particular moment in time as opposed to unique individuals observed. A person counted during the first minute of scanning is also counted during the fifth minute of scanning, if that person is still in the area. It is likely that the unique number of individuals observed in the area is a small fraction of the number of activity counts recorded for each site.

In order to better compare the data collected, the rate of activity (activity counts per hour) was calculated for all observations.

**Number of activity counts**  
**Total number of observation periods**

**X 60 (minutes per hour)**

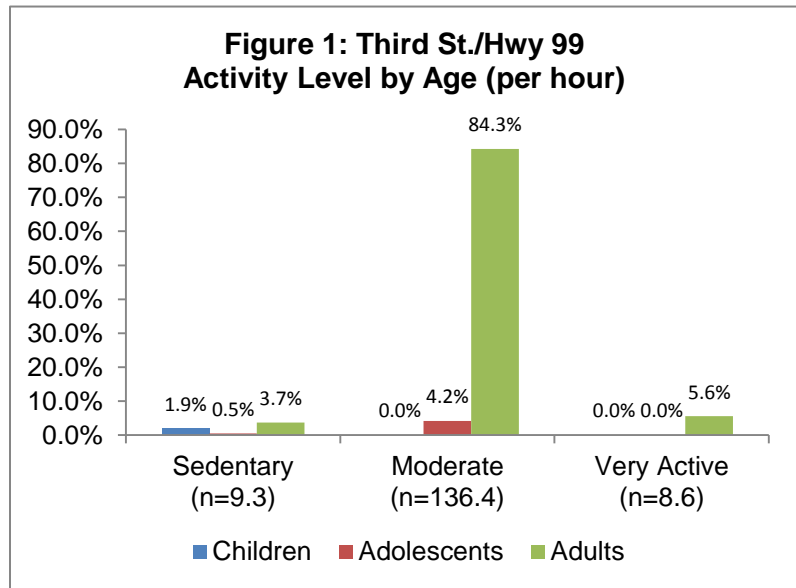
Alexander Avenue and Third Street/Highway 99 were both street segments, with the audited segment of Third Street/Highway 99 also including an intersection. Both sites were considered accessible by auditors and had cement sidewalks in usable condition. The asphalt bike lane on Third Street/Highway 99 was usable as well.

**Activity Rates by Street Segment**

*Third Street/Highway 99*

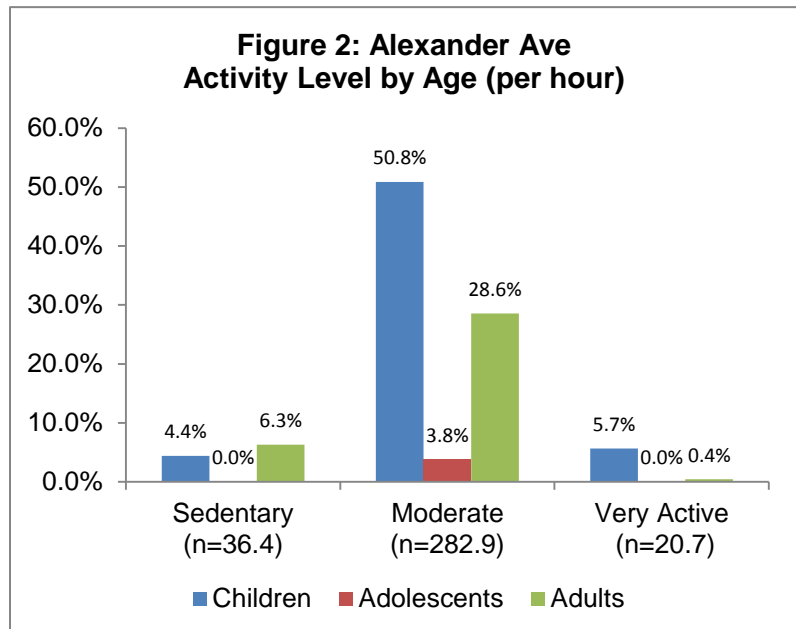
On Third Street/Highway 99, auditors completed 14, one-minute observation periods per assessment each day for a total of 84 observation periods (two assessments per day on three days). With 216 total activity counts, the rate of activity for Third Street was 154 activity counts per hour. The vast majority of activity counts recorded reflected adults 18 and over (84.3%).

Adolescents accounted for 4.6% of the total activity counts, and 1.9% of activity counts were attributed to children (See Figure 1). All of the activity counts observed for children on this street segment were recorded as sedentary, while 90% of adolescents observed were engaged in moderate physical activity. No sedentary or very active activity counts were attributed to adolescents, nor were any moderate to very active counts seen in children.



*Alexander Avenue*

On Alexander Avenue, participants completed 14, one-minute observation periods per assessment each day for a total of 84 observation periods (two assessments per day on three days). With 476 total activity counts, the rate of activity for Alexander was 340 activity counts per hour. Children on Alexander Ave represented 60.9% of the activity counts, most of which were recorded as moderate activity (83.4%). (See Figure 2).

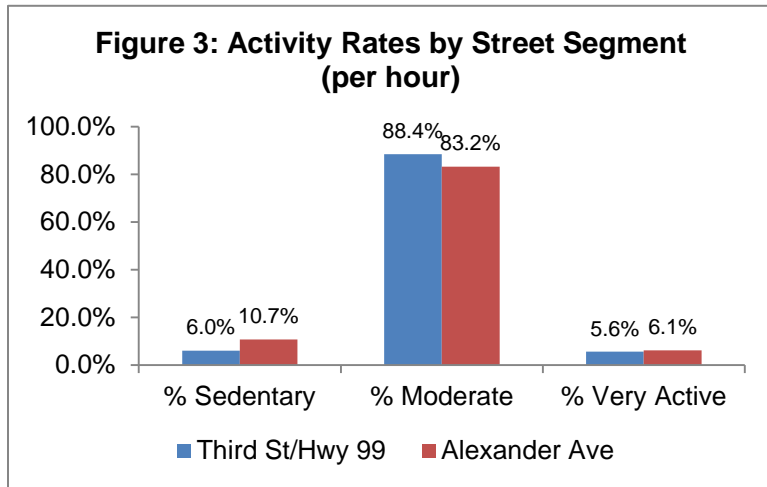


*Comparison*

Third Street/Highway 99 and Alexander Avenue were audited at the same time of day each day of the audit (within 30 minutes). Weather conditions were also consistent between the two segments for each observation period.

Across all age groups, the majority of activity counts seen

in both street segments were counted as moderate physical activity, although Alexander Avenue counted over twice the number of activity counts than Third St/Hwy 99 (See Table 1). Activity rates (activity counts per hour) were similar across both sites (e.g., 88.4% on Third St/Hwy 99 and 83.2% on Alexander Ave for moderate activity). (See Figure 3).



Street Segment	Sedentary (%)	Moderate (%)	Very Active (%)	Total
Third St/Hwy 99	9.3 (6.0%)	136.4 (88.4%)	8.6 (5.6%)	154.3
Alexander Ave	36.4 (10.7%)	282.9 (83.2%)	20.7 (6.1%)	340.0

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Activity by Street Segment

*Third Street/Highway 99*

Activities seen on the Third St/Hwy 99 street segment were limited to walking, jogging/running, biking, and skate boarding (coded as “none of the above”). Adolescents were seen walking and biking, and adults were observed in all four activities. Since all children were coded as sedentary, no activity codes were noted for this age group (See Table 2).

Third St/Hwy 99	Children	Adolescents	Adults
No identifiable activity	Absent	Absent	Absent
Aerobics	Absent	Absent	Absent
Basketball	Absent	Absent	Absent
Dance	Absent	Absent	Absent
Football	Absent	Absent	Absent
Soccer	Absent	Absent	Absent
Other playground games	Absent	Absent	Absent
Walking	Absent	<b>Present</b>	<b>Present</b>
Jogging/Running	Absent	Absent	<b>Present</b>
None of the above	Absent	Absent	<b>Present</b>
Biking	Absent	<b>Present</b>	<b>Present</b>

## Alexander Avenue

Individuals engaged in activity on Alexander Ave were seen walking, biking, jogging/running, and skate boarding (coded as “none of the above”). Individuals in all three age groups (children, adolescents, and adults) were seen walking and biking. Adults were observed walking, jogging/running, and biking, while biking and jogging/running were the only identified activities for the adolescent age group. Children were seen engaged in all four of the observed activities (See Table 3).

<b>Table 3: Presence or Absence of Activity Codes, Alexander Ave</b>			
<b>Alexander Ave</b>	<b>Children</b>	<b>Adolescents</b>	<b>Adults</b>
No identifiable activity	Absent	Absent	Absent
Aerobics	Absent	Absent	Absent
Basketball	Absent	Absent	Absent
Dance	Absent	Absent	Absent
Football	Absent	Absent	Absent
Soccer	Absent	Absent	Absent
Other playground games	Absent	Absent	Absent
Walking	<b>Present</b>	<b>Present</b>	<b>Present</b>
Jogging/Running	<b>Present</b>	Absent	<b>Present</b>
None of the above	<b>Present</b>	Absent	Absent
Biking	<b>Present</b>	<b>Present</b>	<b>Present</b>

### **Key Takeaways**

- Both street segments were accessible and sidewalks were in usable condition.
- Children, adolescents, and adults were identified on both streets during the audits.
- Auditors noted twice as many activity counts on Alexander Avenue than on Third Street/Highway 99.
- Children registered the majority of activity counts on Alexander Avenue, while nearly all activity counts on Third St/Hwy 99 were attributed to adults.
- Auditors noted activity counts of people engaged in walking, jogging/running, biking, and skate boarding.

**Appendix A—Data Tables**

<b>Alexander Ave - Activity Rates by Age per Hour (% of total)</b>				
	Sedentary	Moderate	Very Active	Total
Children	15.0 (4.4%)	172.9 (50.8%)	19.3 (5.7%)	207.1 (60.9%)
Adolescents	0.0 (0.0%)	12.9 (3.8%)	0.0 (0.0%)	12.9 (3.8%)
Adults	21.4 (6.3%)	97.1 (28.6%)	1.4 (0.4%)	120.0 (35.3%)
<b>Total</b>	<b>36.4 (10.7%)</b>	<b>282.9 (83.2%)</b>	<b>20.7 (6.1%)</b>	<b>340.0 (100%)</b>

<b>Third St./Hwy 99 - Activity Level by Age per Hour (% of total)</b>				
	Sedentary	Moderate	Very Active	Total
Children	2.9 (1.9%)	0.0 (0.0%)	0.0 (0.0%)	2.9 (1.9%)
Adolescents	0.7 (0.5%)	6.4 (4.2%)	0.0 (0.0%)	7.1 (4.6%)
Adults	5.7 (3.7%)	130.0 (84.3%)	8.6 (5.6%)	144.3 (93.5%)
<b>Total</b>	<b>9.3 (6.0%)</b>	<b>136.4 (88.4%)</b>	<b>8.6 (5.6%)</b>	<b>154.3 (100%)</b>

<b>Percent Activity Level by Street Segment, Stratified by Age</b>		
<b>Children</b>		
	Alexander Ave	Third St./Hwy 99
Sedentary	7.2%	100.0%
Moderate	83.4%	0.0%
Very Active	9.3%	0.0%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Adolescents</b>		
	Alexander Ave	Third St./Hwy 99
Sedentary	0.0%	10.0%
Moderate	100.0%	90.0%
Very Active	0.0%	0.0%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Adults</b>		
	Alexander Ave	Third St./Hwy 99
Sedentary	17.9%	4.0%
Moderate	81.0%	90.1%
Very Active	1.2%	5.9%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>



## Appendix B – Street Design Direct Observation Tool

## Street Design Direct Observation

### Introduction

This tool and protocol were developed by the evaluation team from Transtria LLC (Laura Brennan, PhD, MPH, Principal Investigator; Allison Kemner, MPH; Tammy Behlmann, MPH; Jessica Stachecki, MSW, MBA; Carl Filler, MSW) and Washington University Institute for Public Health (Ross Brownson, PhD, Co-Principal Investigator; Christy Hoehner, PhD, MSPH) as well as feedback from national advisors and partners. This tool and protocol were adapted from the System for Observing Play and Leisure Activity (SOPLAY) and System for Observing Play and Recreation in Communities (SOPARC) tools, protocols, and operational definitions.

Funding was provided for the *Evaluation of Healthy Kids, Healthy Communities* by a grant from the Robert Wood Johnson Foundation (#67099). Transtria LLC is leading the evaluation and dissemination activities from April 2010 to March 2014. For more information about the evaluation, please contact Laura Brennan ([laura@transtria.com](mailto:laura@transtria.com)) or Allison Kemner ([akemner@transtria.com](mailto:akemner@transtria.com)).

### Prior to conducting the observations

#### Safety

- Assess the safety of the environment for observing before entering the area:
  - If dangerous or suspicious activities are taking place, leave the premises, notify the Project Director or Coordinator, and determine whether to schedule a new observation.
  - If weather conditions (ice or snow, thunder or lightning) are not ideal for collecting data, leave the premises, notify the Project Director or Coordinator, and determine whether to schedule a new observation period.

#### Items to remember

- Pencils, a copy of the paper tools for all data collectors, clipboards
- Comfortable shoes, umbrella (if it's raining), sunscreen
- Data collectors' contact information (in case of emergency)
- List and map of sites for data collection, identifying boundaries of the area
- Letter from the Project Director or Coordinator explaining the reason for data collection
- Transportation to and from the site for observers, if needed

### Direct Observation schedule

Recommended timeframe for observations:

- Count street users crossing an imaginary plane for 15-30 minutes.
- Counts should last for 30 seconds to 1 minute (depending on the number of people in the area).
- There should be a 1 minute rest between recorded observations.

Schedule observations at different times of the day (2-3 times per day recommended). Example times:

- Morning (7:30 AM)
- Noon (11:30 AM)
- Afternoon (3:30 PM)
- Evening (6:30 PM)

Schedule observations for multiple times a week (2-3 days recommended). Example schedules:

- Two weekdays (Monday through Friday) and one weekend day (Saturday and Sunday)
- Example: Tuesday, Thursday, Saturday

### Street Design Direct Observation Mapping Table (Instruction Sheet)

The purpose of mapping is to record various features on different street segments or intersections. Completing the map will allow for a better understanding of the individual behaviors observed in the designated street segment or intersection.

Before observing activities, recorders should have knowledge of the segment or intersection where they are going to conduct observations. A rough sketch should be made of the overall street (and if it has been divided into areas for different observers as necessary). Each segment, intersection, or area should be numbered on the sketch. In addition, all permanent structures and natural and constructed boundaries should be recorded in the sketch. A copy of the sketch should be retained for reference during data analysis.

Below you will find detailed descriptions for each column within the Street Design Mapping Table.

**Street segment or intersection:** All descriptive details about the street(s) should be easily referenced between the sketched map and the Mapping Table. From the sketched map, place the area number in the first column of the Mapping Table and follow the row across to complete all categories. [Note: The area numbers will also be referenced in the second sheet: "Street Design Direct Observation tool."]

**Setting:** Record whether the area is a street segment, intersection, or other thoroughfare (specify).

**Type:** Record the types of facilities to support active transportation or recreation (i.e., non-motorized). Choose from the following categories.

- Trail/greenway: A designated trail or greenway for active transportation or recreation immediately adjacent to the segment or intersection.
- Sidewalk: A continuous, designated walking route through the segment or intersection.
- Bike lane or sharrows: A continuous, designated biking route through the segment or intersection.
- Public transit: A sign, bench, or covered shelter indicating the availability of public transportation in the segment or intersection.
- Other (specify): Record any other type of facility that supports active transportation or recreation not specified above.

**Condition:** This section provides basic descriptive information about the designated segment or intersection.

- Accessible: Segment or intersection is not restricted from public use (e.g., sidewalk is not blocked off for construction).
- Usable: Segment or intersection is safe for pedestrians (including wheelchairs, walkers, and strollers), bicyclists, and public transit users (e.g., no high speed traffic).
- Amenities: Segment or intersection has public drinking fountains, restrooms, benches, trash bins, shade trees, or other characteristics to facilitate public use of the segment or intersection.
- Other (specify): Record any other descriptive information not specified above.

**Intervention:** Record the specific intervention changes that assist children in walking, biking, or using public transit in this segment or intersection. This will include modifications such as street markings (e.g., sharrows, bike lanes), sidewalk or street improvements (e.g., curb cuts, speed humps), and signage (e.g., "Share the Road," pedestrian crossing). **Do not** record temporary improvements such as portable speed trailers.

Street Design Mapping Table

Street or Intersection Name: \_\_\_\_\_ Observer Name: \_\_\_\_\_

Community Partnership: \_\_\_\_\_ Weather Condition: \_\_\_\_\_ Date: \_\_\_\_\_

Segment/ Intersection	Setting	Type	Condition	Intervention
1	<input type="checkbox"/> Street Segment <input type="checkbox"/> Intersection <input type="checkbox"/> Other:	<input type="checkbox"/> Trail/greenway <input type="checkbox"/> Sidewalk <input type="checkbox"/> Bike lane <input type="checkbox"/> Public transit <input type="checkbox"/> Other:	<input type="checkbox"/> Accessible <input type="checkbox"/> Usable <input type="checkbox"/> Amenities <input type="checkbox"/> Other:	
2	<input type="checkbox"/> Street Segment <input type="checkbox"/> Intersection <input type="checkbox"/> Other:	<input type="checkbox"/> Trail/greenway <input type="checkbox"/> Sidewalk <input type="checkbox"/> Bike lane <input type="checkbox"/> Public transit <input type="checkbox"/> Other:	<input type="checkbox"/> Accessible <input type="checkbox"/> Usable <input type="checkbox"/> Amenities <input type="checkbox"/> Other:	
3	<input type="checkbox"/> Street Segment <input type="checkbox"/> Intersection <input type="checkbox"/> Other:	<input type="checkbox"/> Trail/greenway <input type="checkbox"/> Sidewalk <input type="checkbox"/> Bike lane <input type="checkbox"/> Public transit <input type="checkbox"/> Other:	<input type="checkbox"/> Accessible <input type="checkbox"/> Usable <input type="checkbox"/> Amenities <input type="checkbox"/> Other:	
4	<input type="checkbox"/> Street Segment <input type="checkbox"/> Intersection <input type="checkbox"/> Other:	<input type="checkbox"/> Trail/greenway <input type="checkbox"/> Sidewalk <input type="checkbox"/> Bike lane <input type="checkbox"/> Public transit <input type="checkbox"/> Other:	<input type="checkbox"/> Accessible <input type="checkbox"/> Usable <input type="checkbox"/> Amenities <input type="checkbox"/> Other:	
5	<input type="checkbox"/> Street Segment <input type="checkbox"/> Intersection <input type="checkbox"/> Other:	<input type="checkbox"/> Trail/greenway <input type="checkbox"/> Sidewalk <input type="checkbox"/> Bike lane <input type="checkbox"/> Public transit <input type="checkbox"/> Other:	<input type="checkbox"/> Accessible <input type="checkbox"/> Usable <input type="checkbox"/> Amenities <input type="checkbox"/> Other:	

**Street Design Direct Observation Instruction Sheet**

Use the following codes and definitions to assist you in completing the observation tool.

**Observers:** Observers will be split into groups of two to observe different segments, intersections, or parts of segments and intersections (depending on volume of users) at the same time. See the example below that corresponds with the segments and intersections on the Street Design Mapping Table.

Segment 1:	Observer 1
	Observer 2
Segment 2:	Observer 3
	Observer 4

**Start Time:** This is the clock time for the beginning of each observation period. Each observation will last the same amount of time (with the length of time dependent on the number of individuals within the observed area) with a one minute break in-between observations to record (see below for an example). In the first column, record the start time for each period of observation.

Period 1:	Minute 1 – Observation
	Minute 2 – Break/Record
Period 2:	Minute 3 – Observation
	Minute 4 – Break/Record
Period 3:	Minute 5 – Observation
	Minute 6 – Break/Record

**Map:** Before observation begins, the observers will split the street into sections (e.g., segments and intersections) and each observer will be responsible for observing his/her section. The observers should record the appropriate number in the second column of the observation tool.

**Counting:** When counting users in the segment or intersection, the observer should identify an imaginary plane in front of them. Each time a user crosses that plane, the observer should complete the observation tool by tallying activity by age group, in addition to reporting the activity codes for the age group. Try to count each individual only one time, recording the activity code and intensity level (see below). [Note: the imaginary plane should only include one side of the segment or intersection to increase accuracy of the counts, particularly along busy thoroughfares. In addition, individuals passing back-and-forth should only be counted once, if possible.]

**Ages:** Each age category has its own count. Please provide the number of individuals represented during the observation period participating in different intensity levels of activity and their specific activity (i.e., activity code).

**Activity Level:** During counts of individuals passing through the imaginary plane, all people should be accounted for as either participating in very active, moderate, or sedentary behaviors. Mark a tally for each individual in the proper activity level and age box (i.e., if you see a 14 year old walking, put a tally mark in Moderate under Adolescents).

- **Sedentary** behaviors are defined as activities in which people are not moving (e.g., standing, sitting).
- **Moderate** intensity behaviors require more movement but no strenuous activity (e.g., walking, biking slowly).
- **Very active** behaviors show evidence of increased heart rate and inhalation rate (e.g., running, biking vigorously, playing basketball).

**Activity Codes:** During counts of individuals passing through the imaginary plane, all people should be accounted for as participating in a specific activity. All codes are labeled at the bottom of the observation tool.

