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Model Practice Building: Case Examples

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Center for Public Health Systems Science; Andersen, Stephanie; Barth, Rachel; and Brossart, Laura, "Model Practice Building: Case Examples" (2012). *Center for Public Health Systems Science*. 95. <https://openscholarship.wustl.edu/cphss/95>

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Model Practice Building

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CASE EXAMPLES

Acknowledgements

We would like to acknowledge the contributions of our project team from the Center for Public Health Systems Science, the Saint Louis University School of Public Health, and the University of Colorado Colorado Springs Beth-El College of Nursing and Health Sciences:

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We would like to extend our sincere appreciation and thanks to the Model Practice Building grantees for their participation in the evaluation of the Healthy & Active Communities Initiative.

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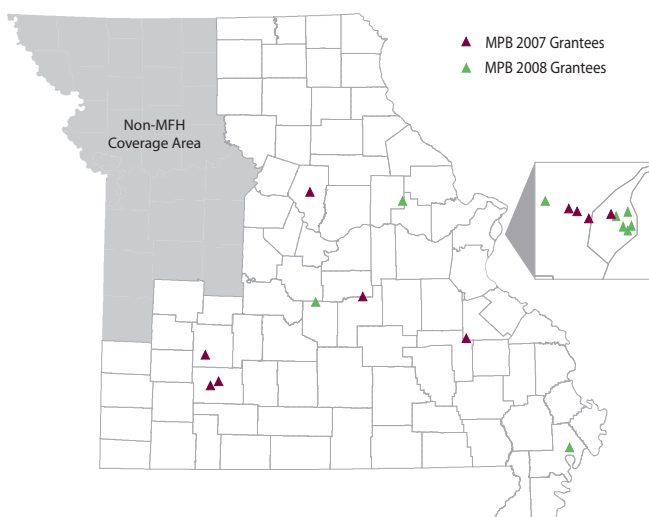
Introduction

Missouri has the 11th highest rate of adult obesity in the United States.¹

Residents in all of Missouri's 114 counties have obesity rates above 22% and overweight rates above 28%.² To stop this epidemic from growing and to improve the health of Missourians, the Missouri Foundation for Health (MFH) has invested over \$20 million to support 87 Healthy & Active Communities (H&AC) projects as of 2011. Research suggests that programming and education, combined with improved community design and public policies, encourages people to eat better and be more active throughout the day.³

To identify successful approaches to promoting healthy and active lifestyles, MFH funded communities to implement **environmental changes** (e.g., building community gardens), **policies** to encourage healthy eating and physical activity in schools, worksites, and the community (e.g., public use of athletic facilities), and **programs** targeting individual knowledge and behaviors (e.g., bike skills). In 2007 and 2008, 19 Model Practice Building (MPB) grantees were funded to become promising practices and, eventually, model projects for Missouri. Five MPB grantees were identified as Model Practices and are included as case examples in this report. The Model Practices and lessons learned were used by MFH to guide future funding decisions.

Figure 1. Model Practice Building Grantees



Which Projects are Model Practices for Missouri?

MFH defines a Model Practice as:

A practice exhibiting quantitative and qualitative evidence that the intervention has created some positive change to promote healthy and active living; active collaboration; replicable program components; and elements of sustainability.

A Model Practice must excel in the areas of innovation, effectiveness, and sustainability.

Innovation

A project will be considered innovative if some of the following criteria are present:

- Implementation of an environmental or policy approach
- Implementation of activities with a new population
- Implementation of activities in a new setting
- Addressing populations with disparities in healthy eating or active living
- The extent to which the grantee has:
 - Engaged partners from diverse sectors
 - Gathered evidence to guide the adaptation of an existing program or policy for a specific community

Effectiveness

Effectiveness pertains to the impact of the intervention on specified outcome criteria:

- The extent of the project's ability to reach the target population (i.e., percentage of target population reached versus percentage projected to be reached)
- The project design is linked to an existing evidence-based intervention or theory
- Fidelity of the project to evidence-based interventions

- The project can demonstrate that it has processes and procedures in place to measure project effectiveness
- The degree to which the project's effectiveness is demonstrated by its own internal evaluation results

Sustainability

The project is sustainable to the extent structures and processes exist that allow the project to leverage resources to implement policies and activities effectively over time. In this category, projects are not more or less sustainable than other projects. Rather, the tool identifies strengths and areas for improvement within each project across several sustainability domains. Sustainable projects will have evidence of:

- **Funding Stability** – the ability to make long-term plans based on a stable funding environment
- **Political Support** – the internal and external political environments which influence program funding, initiatives, and acceptance
- **Community Partnerships** – the engagement of external partners to facilitate the connection between the program and community
- **Organizational Capacity** – the resources to effectively manage the program and its activities
- **Project Improvement** – the ability to adapt and enhance the program to ensure its effectiveness
- **Surveillance and Evaluation** – the monitoring and evaluation of process and outcome data associated with program activities
- **Communications** – the strategic dissemination of program outcomes and activities with stakeholders, decision-makers, and the public
- **Public Health Impacts** – the effect of the program on health knowledge, attitudes, and behaviors
- **Strategic Planning** – the process to define program directions, goals, and strategies

The stronger the evidence for each of these components, the more likely the program represents a good investment that is suitable for replication across Missouri.

Selection Criteria

To assess innovation and effectiveness, funded projects were ranked on a 5-point scale by multiple raters (MFH program officers, external evaluation team, and

dissemination team) that were familiar with the MPB projects.

To assess sustainability, a Program Sustainability Assessment Tool was administered to grantees measuring a project's current practices and processes that increase the likelihood of sustaining project components.⁴

- This self-assessment tool was designed to help identify the strengths and weaknesses of a program's sustainability efforts and included all of the criteria identified above for the sustainability component.
- Activities in each sustainability domain were ranked on a scale of 1 "little to no extent" to 7 "to a great extent", the degree to which respondents felt their organization did each activity or practice.

Selected Case Examples

A total of five MPB grantees, two from the 2007 cohort and three from the 2008 cohort, were selected as Model Practices based on their evidence of innovation, effectiveness, and sustainability. Below is a description of the key components of these five MPB projects.

The Obesity Prevention Project in Polk County

The Polk County Health Center worked in 18 communities across five Missouri counties to promote healthy lifestyles by improving environments and policies and implementing programs. The *Obesity Prevention Project* targeted children and their families in local schools and the community.

The Obesity Prevention Project is a Model Practice because of its strong evidence of innovation (e.g., implementation of an environmental or policy approach), effectiveness (e.g., linked to existing evidence that environmental and policy approaches positively impact physical activity and healthy eating),⁵⁻⁹ and sustainability (e.g., environmental and policy changes will be sustained with little funding).

The Walking School Bus in Columbia, Missouri

The Columbia/Boone County Department of Public Health & Human Services (DPHHS) partnered with a variety of community agencies to support healthy eating and physical activity in Columbia, Missouri. This case

example will highlight the highly successful *Walking School Bus (WSB)* program involving over 400 children at 11 different schools. DPHHS, in collaboration with their partner, PedNet, developed a workshop on coordinating and marketing a *Walking School Bus* that is being disseminated across Missouri.

The *Walking School Bus* program is a Model Practice because of its strong evidence of innovation (e.g., adaptation of an existing effective WSB program in Kearney, Nebraska, for use in Columbia),¹⁰ effectiveness (e.g., linked to existing evidence that demonstrates WSB programs increase physical activity and decrease Body Mass Index (BMI)),^{10,11} and sustainability (e.g., program sustained by volunteer leaders and schools).

The Healthy Lifestyle Project in St. Louis, Missouri

Independence Center in St. Louis, Missouri, provides programs and services to adults with serious and persistent mental illnesses to assist them with living and working in the community, independently and with dignity. Adults with mental and physical disabilities have higher rates of obesity than the general population.¹² Independence Center's *Healthy Lifestyle Project* has a commitment to improving physical activity and healthy eating among their clients. The project has focused on providing opportunities for physical activity by developing a clubhouse with fitness facilities open to clients and staff, establishing vegetable gardens for use in the clubhouse cafeteria, and providing individual wellness coaching for clients.

The *Healthy Lifestyle Project* was selected as a Model Practice because of its strong evidence of innovation (e.g., implementing environmental and policy changes), effectiveness (e.g., project increased physical activity and healthy eating knowledge, behaviors, and weight loss in clubhouse members and employees), and sustainability (e.g., integrated wellness programs and policies into organization's strategic plan).

The Ten Toe Express project in St. Louis, Missouri

Citizens for Modern Transit coordinates a walking program, linking walking tours of neighborhoods with riding public transit. The program targets older

adults to encourage individuals to walk more and use public transit. Older adults with access to public transit are less isolated and more mobile than those without transportation.¹³ Public transit use can also help meet daily physical activity guidelines by increasing time spent walking to and from transit.¹⁴

The *Ten Toe Express* project was selected as a Model Practice because of its strong evidence of innovation (e.g., adaptation of an existing effective program in Portland, Oregon, for older adults in St. Louis),¹⁵ effectiveness (e.g., project demonstrated an increase in number of daily steps taken), and sustainability (e.g., leveraged additional funds to replicate project in a new population).

The Healthy, Active & Vibrant Communities Initiative in St. Louis, Missouri

Trailnet's *Healthy, Active & Vibrant Communities Initiative* focuses on policy, environmental, and social strategies to create long-term solutions to the obesity epidemic. Their *Healthy, Active & Vibrant Communities Toolkit* contains case studies of model programs, success stories, and practical tools to empower communities to create environmental and policy changes to support healthy and active living. Trailnet's community engagement process and use of the Toolkit has received national attention for its success.

The *Healthy, Active & Vibrant Communities Initiative* was selected as a Model Practice because of its strong evidence of innovation (e.g., engaged over 50 different partners), effectiveness (e.g., use of evidence-based strategies in development of a toolkit), and sustainability (e.g., presented and disseminated toolkit on local, statewide, and national levels).

Using the Case Examples

The remainder of this report highlights five case examples that can be used to:

- Provide examples of Model Practices to be disseminated across Missouri
- Inform MFH grant making strategies
- Position Missouri as a leader in building and promoting healthy and active communities

Polk County Health Center

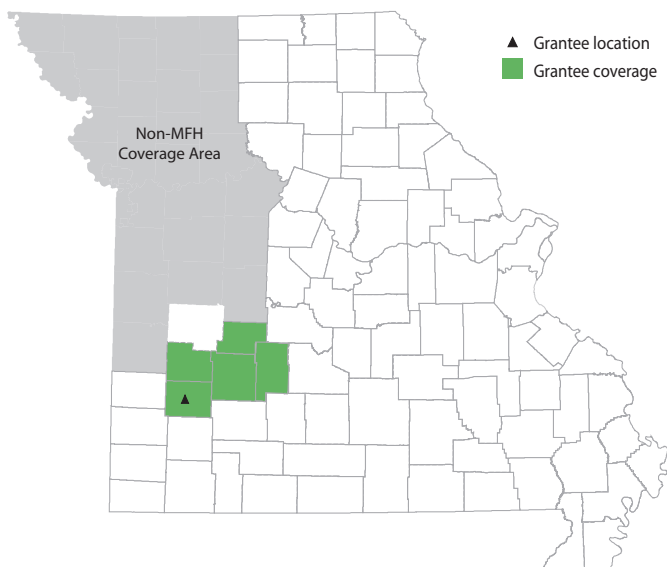
The Obesity Prevention Project

Overview

In 2007, The Missouri Foundation for Health (MFH) funded the Polk County Health Center (PCHC) to work in 18 communities in five rural southwest Missouri counties. The purpose of the *Obesity Prevention Project* was to promote healthy eating and physical activity by implementing environmental and policy changes that support healthy behaviors. This case example illustrates how the *Obesity Prevention Project* activities exemplify the Model Practice components of innovation, effectiveness, and sustainability.

“I think that we have positively impacted all 18 communities by improving access to physical activity and nutrition. In our rural area, of all the things that we could have done, I think that’s probably impacted the most people.”

Figure 2. Reach of the *Obesity Prevention Project*



Obesity Prevention Project Target Population:

- 18 rural communities
- Over 35% of adults are overweight in all five targeted counties²
- 19% to 24% of people in targeted counties live below the poverty level, compared to the Missouri average of 15%¹⁶

Objectives of the Obesity Prevention Project:

- Increase the number of places for physical activity and healthy eating
- Assist communities in implementing policies to support these efforts

Why the Obesity Prevention Project is a Model Practice

Innovation

- Implemented environmental and policy strategies to increase physical activity and healthy eating in rural communities with health disparities (e.g., walking trails, worksite wellness policies)
- Engaged 51 partners from 10 different sectors (e.g., schools, local businesses, community organizations) over the course of three years

Effectiveness

- Used existing evidence to identify the environmental and policy strategies to be implemented in each of the 18 communities
- Increased the number of facilities that support physical activity or healthy eating (e.g., exercise rooms, healthy vending machine options)
 - Over three years, the number of opportunities for physical activity and healthy eating increased by 19% (Table 1)

Sustainability

- Demonstrated funding stability by securing over \$450,000 in additional funding for project activitiesⁱ
- Provided training opportunities for 12 community leaders and 12 school superintendents to learn about creating environmental and policy changes to sustain support for physical activity and healthy eating in their communities
 - Knowledge and skills gained by partners in trainings will continue beyond the life of the grant
- Communicated project activities in a variety of ways, including 17 published newspaper articles on the implemented environmental changes in the targeted communities

Existing evidence has shown that environment and policy changes have the potential to positively impact physical activity and healthy eating.^{3,6-9} For example, the Task Force on Community Preventive Services found that interventions to increase access to places for physical activity combined with informational activities resulted in an average 48% increase in physical activity, 5% increase in aerobic capacity, and 8% increase in energy expenditure.³

Table 1. The Obesity Prevention Project Environmental and Policy Changes

	Type of Change	Example	Existing Evidence
Healthy Eating Environment Changes	Four healthy eating environment changes across four counties	Replaced soda with milk in school vending machines in two schools	Multi-component school based interventions that included healthy vending machine options have reduced fat intake and increased fruit and vegetable consumption. ⁶ Interventions are most effective when reducing access to unhealthy food and increasing healthy options. ^{6,17,18}
Physical Activity Environment Changes	34 physical activity environment changes across five counties	Healthy Active Community Running River Trail in Hickory County is a three mile multi-use trail with multiple connecting paths for trips of different lengths	The creation of multi-use walking trails increases physical activity, especially in low-income areas, where places for recreational physical activity are fewer. ¹⁹ People with easy access to trails also make trail use part of their routine, using trails daily or weekly. ²⁰
Advocacy and Policy Changes	18 school wellness policies updated	Joint use policies passed in eight school districts to share facilities and equipment with community residents	Communities with more schools locked on weekends have significantly higher BMI in girls than communities with accessible school facilities. ²¹ School nutrition and physical activity policies lead to reductions in fat intake, increases in fruit and vegetable consumption, and increases in physical activity and aerobic capacity. ^{3,6,22}

ⁱ Polk County Health Center secured a MFH Healthy & Active Communities Promising Strategies grant in 2010 (\$299,973). The Promising Strategies grant builds on the groundwork laid in the MPB project by partnering with local employers to implement physical activity and healthy eating environment and policy changes at worksites.

Why the Obesity Prevention Project was Successful

The mission of the Polk County Health Center is to promote and protect the health and safety of the people within Polk County through the development and implementation of health services based on assessed needs.

Community-Driven Efforts

One of the drivers of PCHC’s success has been the use of a community-driven effort in the targeted communities. Staying true to PCHC’s mission, the *Obesity Prevention Project* began by establishing a community coalition in each of the 18 communities. PCHC assisted local coalitions in implementing an assessment and planning process to facilitate environmental and policy changes within each community that consisted of these key steps:

- A coalition of key stakeholders was convened in each of the 18 communities to conduct an assessment of environmental changes that would be most beneficial to residents.
- The information gathered through the assessment was used to identify gaps in physical activity and healthy eating opportunities within the community that could be filled through an environmental and/or policy change.
- An action plan was developed within the first year of grant funding by each community, prioritizing the needs of the community and strategies to address the identified needs.
- Each community received \$7,700 to implement their selected environmental and/or policy change(s).
- All 18 communities were successful in implementing at least one environmental or policy change.

The coalition approach worked well to engage all the communities and increase support for implementing environmental and policy changes. This community-driven approach allowed communities to have a say in what types of changes would be implemented.

“The project has fostered coalitions in each community that are committed to improving the physical activity and healthy eating environment. The collaboration and teamwork within each of the communities has been one of the most positive outcomes of the project.”

Community coalitions bring together diverse talents and resources, build support for issues, increase the community’s and partners’ capacity for action, and minimize duplication of effort among partners.²³

Partnerships were Critical

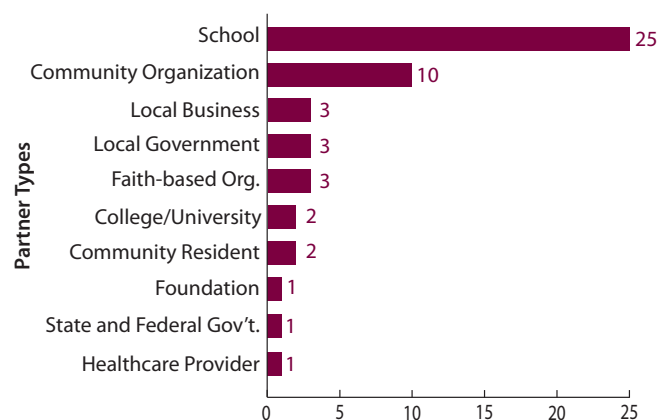
After identifying environment or policy gaps, each community considered other organizations or individuals needed to make the change happen. For example, a community that wanted to build a trail recruited a contractor who could donate time, materials, and labor.

- The *Obesity Prevention Project* engaged 51 partners over three years, across 10 different sectors (of 11 possible sectors).
- Partners most often contributed project marketing, nutrition and physical activity expertise and services, and in-kind resources (e.g., space, people’s time).

Creating and maintaining multi-sectoral partnerships is a promising strategy for addressing community health needs.⁵ Diverse partnerships can increase the capacity of partnerships to implement health projects by taking a comprehensive approach to coordinating strategies, programs, and sectors.^{23,24}

Overall, schools were identified as one of the most critical project partners because they contributed people’s time (e.g., school nurse to work on wellness policies to encourage healthier nutrition in students), space for project activities (e.g., exercise room for new equipment), and implemented policies to allow community access to environment changes at the schools (e.g., allowing 24-hour access to gym facilities).

Figure 3. Number of Total Partners by Type



“I think schools would be the most important partner that we have. Without them we wouldn’t be able to get into the school. And a lot of the projects we have completed have been at the schools, which has increased physical activity in the school - that would be my number one.”

Examples of School Contributions and Collaborations

- **Hermitage Schools (Hickory County):** allowed public use of school facilities for physical activity and provided space to house physical activity equipment (e.g., elliptical machines) purchased through the grant
- **Stockton Schools (Cedar County):** partnered with the *Obesity Prevention Project* to build a community walking trail
- **Dadeville Schools (Dade County):** provided space for physical activity equipment that could be accessed by community members free of charge

Schools and other community partners were important in helping the *Obesity Prevention Project* leverage additional resources to strengthen and expand project activities. These collaborations allowed PCHC to do more than what was funded through MFH.

“There’s been more people involved in the project than the county health department. We’ve increased buy-in because of those kinds of things that have happened.”

The initial grant money spent in each community was used as “seed money” to implement their overall project. For example, Hickory County started with the initial grant money to build a section of a walking trail but secured resources to build an additional 5K trail that cost over \$20,000.

Snapshot of One County’s Success: Polk County

Polk County is the largest of the five counties targeted by the *Obesity Prevention Project*. Within Polk County, six communities were engaged in project activities: Bolivar, Halfway, Humansville, Morrisville, Pleasant Hope, and Fair Play. Polk County was successful in implementing both healthy eating and physical activity changes in local schools and in the greater community.

Healthy Eating Changes

Healthy eating environment changes in Polk County took place mainly in local primary, middle, and high schools. Several schools in Polk County made changes to vending machines or cafeterias by limiting unhealthy choices and increasing the availability of healthy options. For example:

- **Bolivar, MO:**
 - The school nurse and district dietician at the middle school ensured that 50% of vending machine options had less than 35% of calories from fat and that beverage machines sold drinks in single serving sizes.
 - The middle school opened a school food store that sold healthy snack options for students during student privilege time.
 - The high school cold machine was stocked with healthier options such as yogurt, cheese, and juice. Vending machines and a la carte items in the cafeteria were labeled with nutritional content information.
 - The school district discouraged candy sales as fundraisers.
- **Fair Play, MO:**
 - Fair Play school banned soda and sugary drinks from being brought into the school or sold in the vending machines.
 - The school purchased a milk vending machine with grant funds.

In most schools, the school nurse played a key role in getting healthy eating changes implemented. The school nurse worked with the school advisory committee to review and update the school wellness policy to encourage healthy eating and physical activity in students.

Physical Activity Changes

Environment changes to support physical activity were implemented in all six communities in Polk County. For the physical activity environment and policy changes, a diverse set of partners were engaged to increase the availability of facilities for community members to be active. Partners included schools, local government, and community organizations (e.g., Rotary Club, Good Samaritans Boys Ranch). For example:

- Bolivar, MO:
 - The Rotary Club was a key partner, providing additional funding to build a community walking trail.
 - The City of Bolivar used grant money to expand sidewalks throughout the community and have begun planning a policy to require all new buildings to include sidewalks in construction.
 - The Good Samaritans Boys Ranch worked with the project to develop a rope course near one of the local trails that is accessible to the community.
- Fair Play, MO:
 - Exercise equipment, such as stationary bikes and weight machines, were purchased with grant money for the school's fitness center. To promote use of the facilities, the school passed a policy to allow the community 24-hour access to the facilities.

behaviors and created changes that will be sustained. The environmental and policy changes will continue to impact the residents of the participating communities indefinitely.

"Once you create a policy that supports physical activity and nutrition, it's most likely going to stay there."

Project staff are confident the coalitions created in connection with this project will be sustained and continue to identify and address other health issues in their communities. Project staff reported that the relationships they built with local partners, as well as the support they gained from the greater community, would help them continue obesity prevention efforts after MPB funding ended.

"It's really about those partnerships. People have been appreciative of what's happened and they've seen the positive outcomes from it, so that motivates them. It's not just us saying, 'This is what we need to do,' it's a community thinking, 'let's make our community better.'"

PCHC is currently expanding its obesity prevention efforts by focusing on worksites. With health department staff from Dade, Dallas, and Hickory Counties, PCHC is working with the region's employers to develop new worksite wellness policies and improve existing policies that promote healthy eating and physical activity at worksites throughout the region.

The Future of PCHC Obesity Prevention Efforts

The *Obesity Prevention Project* was successful in implementing at least one environment or policy change in each of the 18 target communities. The activities impacted the community, and community members are using the new parks, trails, and other amenities regularly.

By implementing an environmental and policy approach to decrease obesity, the project improved health



For more information on the *Obesity Prevention Project*, please contact:

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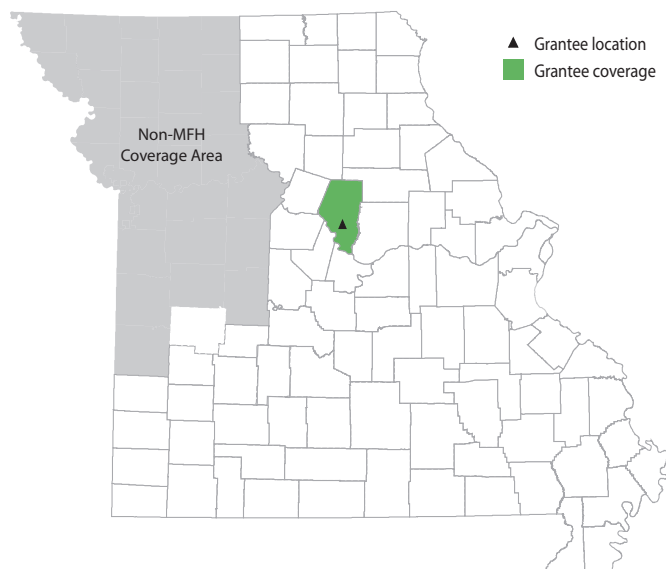
Columbia/Boone County Department of Public Health & Human Services

Healthy & Active Boone County

Overview

In 2007, The Missouri Foundation for Health (MFH) funded the Columbia/Boone County Department of Public Health & Human Services (DPHHS) to increase physical activity and improve nutrition in Columbia, Missouri. The project included a successful *Walking School Bus (WSB)* program that increased physical activity in children by providing a consistent and safe system for walking to and from school under adult supervision. The project also included a social marketing campaign to promote the *WSB* and increase awareness in the community. Based on lessons learned from the Columbia experience, project staff developed a *WSB* training workshop for other schools and non-profit organizations. The purpose of this case example is to illustrate how the *Walking School Bus* components (*WSB* program, social marketing, training workshop) exemplified the Model Practice components of innovation, effectiveness, and sustainability.

Figure 4. Reach of the *Healthy & Active Boone County* project



WSB Target Population:

- Targeted elementary-aged children and parents at Columbia Public Schools, as well as schools and nonprofit organizations interested in promoting physical activity in children
- Children between the ages 5-18 make up 13.9% of the Columbia population¹⁶
- 30% of children in Missouri are obese or overweight²⁵

DPHHS and a key partner, PedNet, worked closely with other partners to expand an existing *WSB* program. Prior to receiving the MPB grant, PedNet was awarded an Active Living by Design (ALbD) grant from the Robert Wood Johnson Foundation to support the development of an integrated bicycling, wheeling, and pedestrian network in Columbia. A *WSB* program was initiated as part of the ALbD grant. DPHHS secured MPB funding to continue to expand *WSB* efforts into additional schools. PedNet coordinated and managed most of the *WSB* program efforts, including recruitment and training of local college students and parents to serve as volunteers to lead *WSB* groups and recruit schools.

Objectives of the *Walking School Bus*:

- Increase the number of *WSB* schools from six to 10 in the first year of the grant
- Increase community awareness and participation in healthy and active behaviors using a social marketing approach
- Disseminate experiences and training to enable other communities to develop *WSBs*
- Within first 18 months of the grant, leverage other funding support to influence statewide policy for educational funding of *WSB* coordinators

Why the Walking School Bus is a Model Practice

Innovation

- Engaged partners from six different sectors (e.g., schools, colleges/universities, community organizations, local businesses, government agencies, and community residents) over the course of three years
- Implemented a strategy in Columbia that was successful in Kearney, Nebraska²⁶

Effectiveness

- More than 400 children from 11 schools participated in the WSB program
- Internal evaluation results showed a positive relationship between walking to school and reading ability and disciplinary referrals
- Ninety percent of community members surveyed were aware of the social marketing campaign messages

Sustainability

- Implemented 18 additional WSB programs in 15 schools across the state of Missouri as a result of the training workshops developed by the project
- Leveraged over \$455,000 in additional funding for project activitiesⁱⁱ
- Garnered local, state, and national media attention and recognition for the program

Why the Walking School Bus was Successful

Evidence-based Strategy: The Kearney Model

Previous research has demonstrated WSB programs to be effective strategies for increasing physical activity in children.^{10,26,27} Active commuting (i.e., walking or biking to school) has been associated with higher levels of physical activity in children.²⁸ A specific goal of *Healthy People 2010* was to increase the percentage of children who walk to school.²⁹ Additionally, the Institute of Medicine recommended walk-to-school programs as a potential strategy to increase physical activity in children.³⁰

Prior to implementing the WSB program, PedNet staff consulted a WSB program in Kearney, Nebraska (Table 2). The Kearney WSB was a research-based program that evaluated

The Kearney WSB program increased the number of children that walked to school. Regular walkers in the program received 25% more physical activity, gained 58% less body fat, and showed 50% smaller increases in BMI than children who were driven to school.²⁶

Table 2. Comparison of Kearney and Columbia WSB Models

	Kearney, Nebraska	Columbia, Missouri
City Characteristics	<ul style="list-style-type: none"> • 30,000 residents • Predominantly white • 17% of people living below poverty level¹⁶ 	<ul style="list-style-type: none"> • 94,000 residents • Predominantly white • 23% of people living below poverty level¹⁶
WSB Participants	• 200 elementary-aged children in 2 public schools	• 435 elementary-aged children in 11 public schools
Primary Aim	• To determine the efficacy of walking to and from school on physical activity levels and body composition	• To increase opportunities for children to walk to and from school
Recruitment Strategies	• Advertised at participating schools	• Implemented a community-wide social marketing approach to engage schools, children, and parents in WSB activities and increase awareness of the benefits of the WSB program

ii DPHHS' partner, PedNet, secured a MFH Healthy & Active Communities Promising Strategies grant in 2009 (\$294,650). The grant expands the WSB and social marketing components of the MPB project to low-income housing residents in the Columbia community. PedNet also successfully leveraged over \$65,000 in Safe Routes to School funds and \$80,000 from the GetAbout Columbia program of the City of Columbia.

the WSB’s impact on health-related outcomes. The Columbia WSB was closely modeled after the successful Kearney program, utilizing many of its components (e.g., use of university students to lead WSB groups, system to notify parents of weather cancellations) and tools (e.g., registration and liability forms).

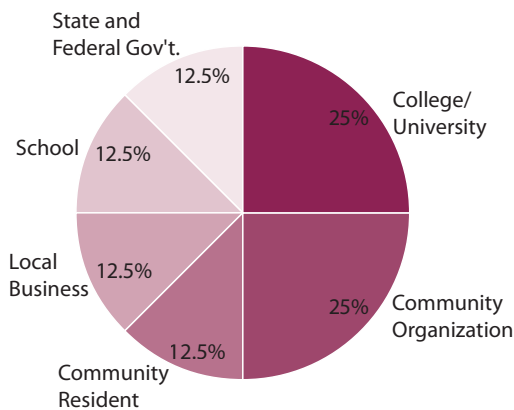
A significant addition to the Kearney model was Columbia’s use of a WSB liaison at each school. The parent, teacher, or staff member received a small stipend to coordinate WSB volunteers, track participation, and pass out incentives and prizes at their school. The liaison was a key contribution to the Columbia model as the WSB program was implemented on a larger scale than the Kearney model.

“We’ve increased the number of schools, and we now have a system where each school has either a parent, somebody from the PTA organization, a teacher, and in a couple of cases, the assistant principal, to manage many of the logistics at that one school.”

Partnerships were Critical

The success of the WSB was in part due to the diversity of project partners. The six types of partners engaged by the project (of 11 possible partner types) played a key role in supporting project efforts by promoting the WSB program, providing space and resources, and providing access to the target population.

Figure 5. Percentage of Partners by Type



Examples of Critical Partner Contributions and Collaborations

Project staff identified the YouZeum and the Columbia Public Schools as two of the most critical partners to the WSB program.

- The YouZeum, an interactive science center in Columbia, created a special WSB exhibit.
 - The YouZeum also provided office and meeting space for WSB program staff and partners.
 - The YouZeum’s contributions helped to increase awareness in the community about the WSB program and create buy-in from parents.
- Columbia Public Schools assisted PedNet in the coordination of the WSB program.
 - The Columbia Public Schools allowed the WSB into their schools and promoted the program with students.
 - The district was instrumental in helping staff recruit liaisons from the schools and advertise the program.
 - The Director of Physical Education and Health and Physical Education teachers helped engage children and parents in program activities.
 - Support from school administrators and staff was critical for sustaining the program in schools after funding ended.

With the help of these partners, WSB programs were implemented in 11 local schools, reaching 435 students. Getting local schools on board with the program was crucial for reaching the target population.

Effectiveness: The West Boulevard Elementary School Example

- PedNet collaborated with West Boulevard Elementary School to implement a WSB program using MPB and supplemental funding from a federal Safe Routes to School grant.
- Many of the school’s 307 students lived a long distance from school, making it challenging to walk to and from school each day. To address this issue, 50 children on two buses were dropped off at a park behind the school for a 15-minute walk to school.
- Internal evaluation results found that children who participated in the 15-minute walk to school every morning had a significantly higher level of reading ability than non-walkers. Feedback from school administrators and teachers also noted decreased disciplinary referrals.

“It was noticeable to staff, the kids who had walked through the park were calmer, better behaved, and had fewer referrals during the critical first 45 minutes of the school day.”

Successfully Reached Target Population: Social Marketing Campaign

DPHHS staff developed a social marketing campaign to promote the *WSB* program and increase awareness in the community. Project staff developed and tested social marketing messages (e.g., it's fun to walk to school with my friends). Messages targeted both children and parents and were used in a poster and radio campaign featuring local residents.

Informational campaigns are effective at promoting positive health outcomes. The Task Force on Community Preventive Services found that community-level informational campaigns increased energy expenditure by 16% and the percentage of active people by 4%.³

DPHHS administered community health surveys in 2010 to assess if community members had heard social marketing messages and were aware of healthy and active programs in Columbia. Of the 400 respondents, 90% had heard messages about eating healthier and getting more physical activity.

"They've put a tremendous amount of their social marketing funding into getting the [*WSB*] program on the radio and in the newspapers. The awareness in the community has gone up. That's why we've gone from 200 kids to over 400 [for *WSB*], and all of these new schools."

Program Replication: *WSB* Training Workshops

Based on the success in Columbia, PedNet developed a one-day curriculum that provides schools and parents with detailed action plans for launching a successful *WSB* program. In 2009, PedNet coordinated 10 *WSB* training workshops that were attended by over 100 participants representing 69 different schools throughout Missouri (e.g., Kansas City, Joplin, Springfield, Rolla).

PedNet leveraged funding from a Missouri Safe Routes to School grant to allow workshop participants to apply for a stipend to implement a *WSB* program in their community (e.g., incentives, supplies). Fifteen participating schools demonstrated effectiveness. Some highlights include:

- Ed V. Williams Elementary School (Springfield, MO):
 - Students participating in the morning and afternoon *WSB* program lost weight, improved grades, and increased school attendance.
- Reed Elementary School (Ladue, MO):
 - The school engaged the mayor on a walk with students along a route that included broken or incomplete sidewalks. Within weeks, the city started work on sidewalk repairs along the route.

The Future of *Walking School Bus* Efforts

Partnerships, volunteers, and political support will continue to make the *WSB* program a success for years to come.

School Partnerships and Volunteers Will Continue to be Critical Assets

PedNet has developed strong relationships with the Columbia Board of Education and school administration through continued collaboration on healthy and active efforts. The Assistant Superintendent championed the program and helped encourage schools to participate.

"He became a huge fan, a huge advocate. He speaks in public about the program, he communicates with the elementary school principals on a very regular basis, and he continually reinforces his positive view of the program."

Volunteers continue to be an important asset to the project. The project has 100 volunteer walk leaders, most of whom are university students. These volunteers will be instrumental in continuing *WSB* in the years ahead.

The Columbia *WSB* program has received national attention and has been featured in a number of publications and websites:

- Newsweek
- Time Magazine
- The Elementary Principal
- National Center for Safe Routes to School website
- Safe Routes to School National Partnership website

Political Support Will Secure Resources and Overcome Barriers

Through the *WSB* and other healthy living efforts, DPHHS and PedNet garnered political support and buy-in from the community. Historically, Columbia has had strong political support in their community for healthy and active living. The former mayor of Columbia was a huge supporter of healthy living and instrumental in fostering support for program activities both locally and nationally.

Political support helped the *WSB* program secure additional resources and overcome barriers. For example, one school's location in a high traffic area made it difficult for children to cross the street safely on their way to and from school. The project worked with policy makers to implement built environment changes to overcome this challenge (e.g. paint the crosswalk, install crosswalk signs).



The Pedestrian, Bicycling, and Transportation Network in Columbia Will Expand

The momentum gained through the *WSB* program and other obesity prevention efforts in Columbia will continue to expand and strengthen the pedestrian, bicycling, and transit network.

- In 2009, PedNet received a MFH Promising Strategies grant.
 - The grant is focused on implementing *WSB* programs at local public housing sites and addressing the environmental and policy factors that can impact walking to school.
 - The project also includes a social marketing component tailored to residents of public housing.

- Infrastructure improvements are being implemented in the target public housing areas including the development of “Walk Stops” (i.e., shelters including benches and other amenities) for *WSB* participants.
 - PedNet will continue to leverage funds from state and national sources for larger infrastructure improvements (e.g., a pedestrian crosswalk).
 - The project includes advocacy efforts to implement a Complete Streets policy around schools in Columbia.
- In 2010, Columbia was selected as one of the 50 communities from across the country funded through Robert Wood Johnson Foundation's Healthy Kids, Healthy Communities initiative to implement healthy eating and active living activities that support healthier communities for children and families.
 - Efforts focus on reaching children who are at greatest risk of obesity because of family income.
 - The purpose of the Columbia project is to research, develop, and implement policy, environmental, and systems changes that encourage healthy food and activity choices in low-income, predominantly African-American neighborhoods.
 - In 2011, PedNet received a Robert Wood Johnson Foundation Roadmaps to Health: Community Grant to work with other local partners on a Health Impact Assessment to influence public transportation expansion in Columbia. Additionally, the Central Missouri Community Action Agency (CMCA) received a MFH grant to complement this work. Both PedNet and CMCA have contracted with DPHHS to coordinate the assessment.
 - By expanding access to public transportation, the project hopes to improve access to jobs and health through expanded transit services.

For more information on the *Walking School Bus* program, please contact:

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Independence Center

Healthy Lifestyle Project

Overview

In 2008, Independence Center, a local community clubhouse that provides mental health services, a gathering space, and a supportive community for members with mental illnesses, received funding from the Missouri Foundation for Health (MFH) for their *Healthy Lifestyle Project*. This project is a continuation of the *Healthy Lifestyle Project* that was launched in 2006 with funding from MFH. The project was created to address obesity, nutrition, and physical inactivity among adults with serious and persistent mental illnesses.

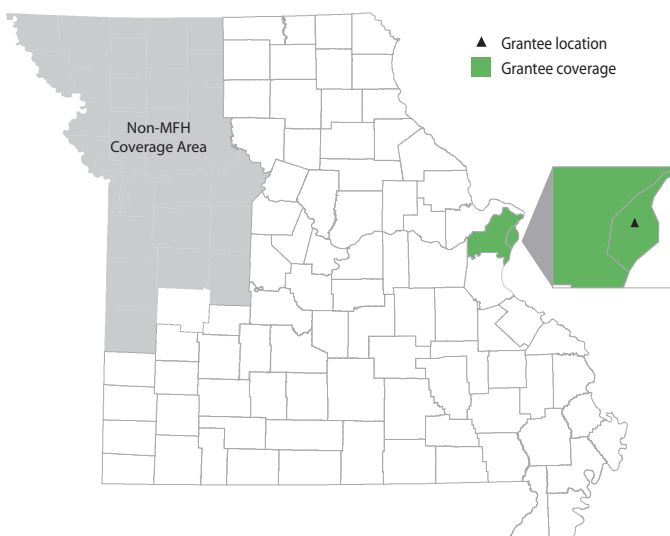
The mission of Independence Center is to provide a comprehensive system of high quality programs and services that assists adults in the St. Louis metropolitan area with serious and persistent mental illnesses to live and work in the community, independently and with dignity.

training of mental health agencies (Table 3). The project targeted adults with serious mental illness and the staff and agencies that work with them. The goal was to help members make healthier decisions at home and outside of Independence Center. The purpose of this case example is to illustrate how the *Healthy Lifestyle Project* exemplified the Model Practice components of innovation, effectiveness, and sustainability.

Independence Center Member Demographics:

- 50% African American, 48% White³¹
- 74% of members are between the ages of 18 and 55, with older adults representing the remaining 26%³¹
- 96% of members are below the federal poverty level
- 95% of members are overweight or obese

Figure 6: Reach of the *Healthy Lifestyle Project*



The 2008 Model Practice Building grant focused on practices that demonstrated positive results in the first grant: relationship building and specialized wellness services through the Take Charge program, healthy worksite policies and environmental changes, and

Objectives of the *Healthy Lifestyle Project*

- Enroll 245 current and new participants from Independence Center in the Take Charge program to participate in activities that promote healthy eating and physical activity
- Increase participant knowledge of healthy behaviors
- Increase staff activity levels and improve knowledge of healthy behaviors
- Integrate Take Charge model and Healthy Worksite practices into international clubhouse trainings

Why the *Healthy Lifestyle Project* is a Model Practice

Innovation

- Engaged nine partners representing six sectors (e.g., faith-based organizations, healthcare providers, state and federal governments, community organizations, local businesses, foundations)

- Implemented environmental and policy approaches to increase physical activity and healthy eating
- Addressed a population (e.g., adults with serious mental illnesses) with physical activity and healthy eating disparities

Individuals with mental illnesses were targeted in response to evidence indicating that adults with mental illness have twice the risk for obesity than the general population.¹²

Effectiveness

- Encouraged the implementation of wellness programs and policies by national and international clubhouses through the Clubhouse Colleague Training programⁱⁱⁱ

- Enrolled over 500 participants in the Take Charge wellness program since 2006
- Improved physical activity and healthy eating knowledge, healthy behaviors, and weight loss of members and staff

Sustainability

- Integrated wellness programs and policies into Independence Center’s strategic plan (e.g., job descriptions for staff include promotion of health and wellness activities)
- Partnered with Missouri Department of Mental Health to receive enhanced reimbursements for health and wellness services
- Leveraged additional funding from Daughters of Charity and WellPoint Foundation to sustain project
- Disseminated wellness model to other clubhouses and mental health organizations statewide, nationally, and internationally

Table 3. *Healthy Lifestyle Project Components*

Component	Activities	Outcomes
Take Charge Program	<ul style="list-style-type: none"> • Teach healthy eating practices, such as using nutrition labels, cooking on a budget, portion control, and healthy cooking techniques • Participants complete and track progress towards physical activity and healthy eating goals on a Lifestyle Profile • Offer opportunities for group physical activity, including walking clubs, weight loss support groups, and stretching and yoga classes • Wellness coaches focus on relationship building with participants to motivate and influence their lifestyle changes • Train Independence Center staff to incorporate health and wellness in sessions with members (e.g., parked ½ mile away and walk to doctor’s visits) 	<ul style="list-style-type: none"> • 72% of participants classified as high or moderate attendees improved Lifestyle Profile scores (i.e., tool to track healthy eating knowledge and behaviors) • Nearly half of participants lost weight and maintained that weight loss
Policy Changes	<ul style="list-style-type: none"> • Wellness policy encourages staff to set goals to increase physical activity during the day and to participate in health and wellness activities with members • Extend hours for the clubhouse Wellness Center to include evenings and weekends to allow staff use • Integrate wellness policy into strategic plan in 2009 	<ul style="list-style-type: none"> • Staff increased physical activity and healthy eating knowledge and healthy behaviors, and showed a decrease in weight
Environmental Changes	<ul style="list-style-type: none"> • Build vegetable gardens and use the produce in the clubhouse cafeteria 	<ul style="list-style-type: none"> • 68% of meals served in the cafeteria include healthy foods (e.g., low fat, low calorie, high fiber)
Training & Dissemination	<ul style="list-style-type: none"> • Train other mental health agencies in MFH service region on methods to integrate wellness and obesity prevention into mental health services • Provide tools and trainings to help agencies and clubhouses worldwide implement wellness activities 	<ul style="list-style-type: none"> • Trained 24 mental health agencies in Missouri • 17 clubhouses started wellness programs

ⁱⁱⁱ The Clubhouse Colleague Training program helps clubhouses implement and improve programs in their own communities. During trainings, participants learn about the culture, philosophy, and general operations of a clubhouse model program.³²

Why the Healthy Lifestyle Project was Successful

Effectiveness: The Take Charge Program

Independence Center began implementing Take Charge in 2006, which provides individualized wellness coaching and activities to members.

Individuals enrolled in the Take Charge program complete a Lifestyle Profile, which is used to determine the stage of change (e.g., contemplation, action, maintenance) of the member at time of enrollment. It also measures health and wellness knowledge and current healthy behavior activities.

The program implemented as part of the 2008 grant is based on early evidence of success from the initial program. Within 18 months of starting the 2006 program, Take Charge had enrolled over 350 members and was starting to see success in the following areas:

- 83% of enrolled members participated in healthy eating and physical activity programming
- 71% of participants increased knowledge about healthy behaviors
- 56% of participants attending action-oriented activities improved healthy behavior
- Over 100 participants attended a weight loss support group (average weight loss of 3.4 lbs)

Because of this evidence of success, Independence Center was funded in 2008 to be a Model Practice Building grantee. As noted in Table 3, they continue to show evidence of effectiveness.

“We were able to show outcomes that people were staying out of the hospital, we have more people employed, people are losing weight and improving their health.”

Staff-Participant Relationships were Critical

Early in implementation of the Take Charge program, Independence Center realized that when participants were engaged with a staff member in their Take Charge plans and activities, they had more positive outcomes. As a result, Independence Center formalized the role of wellness coaches, who build individual relationships with participating members.



- When participants enroll in the program, a designated wellness coach regularly follows up on participants' involvement in the program.
- Participants have access to a Wellness Center that is centrally located at Independence Center (an outcome of their original funding).
 - The Wellness Center hosts nutrition, weight loss, and exercise activities.
- Because Independence Center cares about the wellness of their staff, they also created a Healthy Worksite program.
 - As staff began to change their behaviors, they became role models for members participating in Take Charge.

“Staff orientations and testimonies, along with health fairs and celebrations, have begun to have an impact on our organizational culture. We are pleased to see that staff are committed.”

Sustainability through International Recognition

In the first year of funding, the International Center for Clubhouse Development (ICCD)^{iv} collaborated with Independence Center to expand its wellness training to other clubhouses worldwide.

^{iv} The ICCD was established in 1994 to promote the development of clubhouses, community centers that provide friendship, housing, education, employment, and healthcare for individuals with mental illness. The ICCD develops standards, facilitates training and certification, and promotes research and advocacy of clubhouses worldwide.³³

Independence Center staff trained over 17 clubhouses worldwide in the Take Charge program, including clubhouses in London, China, Canada, Finland, and 13 states.

- Independence Center is one of only a few clubhouses worldwide approved to provide the specialized training required for other agencies to be officially designated as clubhouses.

- Trainings now include a session dedicated to starting a wellness program for both members and staff based on the Take Charge model.

“As the second largest clubhouse in the world, we provide training to other clubhouses, and so we’re very much a leader in teaching them how to incorporate health and wellness into their work.”

- As a result of Independence Center’s success in providing health and wellness for clubhouse members, ICCD also updated their International Standards for Clubhouse Programs.
 - These requirements that must be met for clubhouse accreditation now state that all clubhouses need to address the health and wellness of people served.

Snapshot of One Participant’s Success: David’s Story

In the past, David, a member of Independence Center, had not bothered to look for fitness programs closer to home. Because of his condition, he was not comfortable in his neighborhood, struggled with socializing, and became isolated for long periods of time. David’s severe depression and the medications he takes to control his symptoms had caused significant weight gain. His newly diagnosed diabetes, weight gain, and thyroid condition contributed to bouts of anger. Before joining the Take Charge program, David had many obstacles to maintaining a wellness program.

When David decided to try the Take Charge program, he met Jenia, a staff member at Independence Center who was interested in wellness. They talked about the benefits of working out and paying more attention to his health. As they developed a relationship, David began exploring his feelings and desire to lose weight and get healthy. David began meeting with Jenia regularly and learned to

follow a fitness regimen. David and Jenia discussed how he could modify his diet and maintain his fitness routine. David began to eat smaller portions and learned what healthy items he could buy on his budget.

Within 18 months of joining the Take Charge program, David lost 100 lbs, and his life started changing. He started a new job, socialized more, and gained confidence in his routine and familiarity with those around him. Suddenly, David was someone who was motivating others to work out, just as Jenia had done for him.

The Future of the *Healthy Lifestyle Project*

The *Healthy Lifestyle Project* will continue to help members achieve their weight loss goals and live a healthier life. Several institutional changes and external funding will help sustain the project.

Institutional Changes

- All staff providing one-on-one case management services now also function as wellness coaches.
- The Wellness Center is now open 365 days a year.
 - Independence Center staff and members are trained to help keep the gym open.



- Independence Center leadership is committed to ensuring that wellness remains a key component of the culture.
 - The Board of Directors adopted a wellness policy.
 - The strategic plan now highlights that wellness is as important as employment and education to Independence Center’s mission.
 - The Worksite Wellness Committee continues to meet regularly to plan wellness activities for both members and staff.

External Funding

- The Department of Mental Health (DMH) now includes health and wellness activities in funding for group activities provided by the clubhouse.
 - When members use the Wellness Center or talk with staff and other members about wellness or health issues, Independence Center can bill DMH for that time.

“Not only did this help supplement the last two years of this project, but it also provides an ongoing funding mechanism that will ensure the sustainability of the project after MFH funding ends. The ability to bill for these services shows how strongly the DMH values health and wellness activities and their role in mental health.”
- The Daughters of Charity provided funding for health and wellness activities for participants over age 50.^v
- The WellPoint Foundation provided funding to assure the continuation of the wellness coach model and health education for 100 members.^{vi}

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^v In 2010, Daughters of Charity provided \$40,515 to Independence Center to support health and wellness for seniors.

^{vi} In 2010, the WellPoint Foundation provided \$51,479 to Independence Center to fund 100 participants in the Take Charge program.

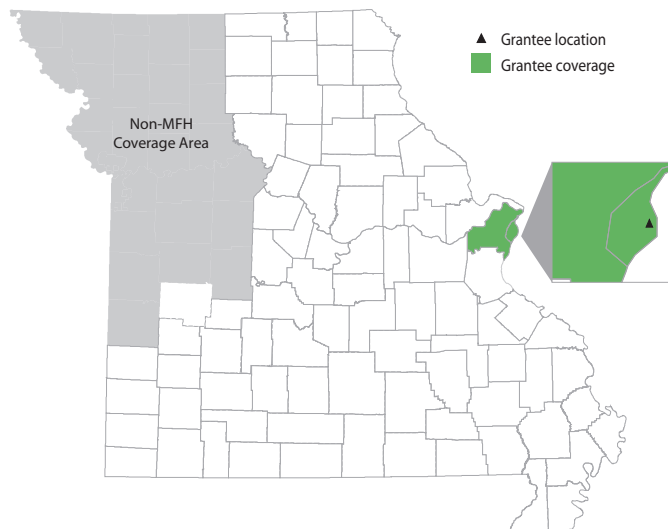
Citizens for Modern Transit

Ten Toe Express

Overview

In 2008, The Missouri Foundation for Health (MFH) funded Citizens for Modern Transit (CMT)'s *Ten Toe Express* project to link older adults with transit to increase their mobility, access to the community, and connectivity to neighbors. The active living program distributes walking kits to participants and holds weekly walking groups that utilize the transit system and walking to get to area destinations. The project is a continuation of work that began in 2006 with funding from MFH, and has since made a difference in walking and public transit use for more than 7,000 older adults in the St. Louis region (Table 4). The purpose of this case example is to illustrate how the *Ten Toe Express* project exemplified the Model Practice components of innovation, effectiveness, and sustainability.

Figure 7. Reach of the *Ten Toe Express* project



Objectives of the *Ten Toe Express*:

- Increase number of walking trips and total steps per week of at least 50% of new walking kit recipients
- Increase community awareness and participation in healthy and active behaviors using social marketing
- Recruit 25 volunteers and develop and implement a train-the-trainer program for partners and

volunteers on recruitment, registration, and distribution

- Create and disseminate five policy briefs on the built environment, recreational walking, and transportation systems

Ten Toe Express Target Population:

- Targeted adults 65 years of age and older living in the St. Louis region
- Nearly 66% of St. Louis area adults 65 years of age and older are overweight or obese, and 44% of older adults have high blood pressure²
- 38% of St. Louis area adults 65 years of age and older do not engage in any physical activity²

Why the *Ten Toe Express* is a Model Practice

Innovation

- Engaged partners from six different sectors over the course of three years (e.g., community organizations, healthcare providers, community residents)
- Adapted a walking program that had shown success in Portland, Oregon, to a new population

Effectiveness

- Increased physical activity and healthy eating knowledge (e.g., number of daily steps and fruit and vegetable servings)
- Developed processes and procedures to measure project success (e.g., baseline and follow-up surveys, focus groups, interviews, walking logs)

Sustainability

- Leveraged funding to replicate the project in new populations (e.g., commuters, Illinois transit users)
- Trained volunteer leaders to sustain walking groups

Why the *Ten Toe Express* was Successful

Table 4. History of CMT's *Ten Toe Express*

Year	Benchmark
2006-2007	Launch of <i>Ten Toe Express</i> in St. Louis <ul style="list-style-type: none"> • Funded by MFH (H&AC grant) • Goal: Link older adults with transit and increase physical activity
2007	Expansion of <i>Ten Toe Express</i> to St. Louis metro commuters <ul style="list-style-type: none"> • Funded by East-West Gateway Council of Governments (through federal Congestion Mitigation and Air Quality Improvement program) • Goal: Increase use of transit for transportation and awareness of transit and walking
2008	Continuation of <i>Ten Toe Express</i> & sustainability planning <ul style="list-style-type: none"> • Funded by MFH (MPB grant) • Goal: Create a replicable model and develop methods to sustain the program
2010	Expansion of <i>Ten Toe Express</i> to Illinois population <ul style="list-style-type: none"> • Funded by St. Clair County Transit District (through federal Congestion Mitigation and Air Quality Improvement program) • Goal: Increase transit use and walking among St. Clair County, IL, residents
2011	Funding to sustain <i>Ten Toe Express</i> <ul style="list-style-type: none"> • Funded by Missouri's federal Congestion Mitigation and Air Quality Improvement funds • Goal: Maintain walkable community programming

Evidence-based Strategy: The Portland Model

The St. Louis-based *Ten Toe Express* project was modeled after the successful *Ten Toe Express Walking Campaign* in Portland, Oregon. The Portland model educates residents on use of the local public transit system, connections between transit use and walking, and the health benefits of walking.

CMT and their partners closely modeled the St. Louis-based project after the Portland model, utilizing many of Portland's components and processes (e.g., organized neighborhood walks, used walking kits, pedometers, coupon books, education booklets). The St. Louis *Ten Toe Express* expanded the model to target adults over 65 years of age. Older adults often lack transportation options and as a result, access community resources like places for physical activity and healthy eating less often than adults with transportation.¹³

Transit use has been shown to help adults meet daily physical activity guidelines by increasing time spent walking to and from transit.¹⁴

The Portland model was modified to take into account special considerations for the older adult population

(e.g., walk distance, time of day) and to include nutritional components (e.g., healthy eating information, coupons to increase access to healthy options).

In Portland, over 50% of *Ten Toe Express* participants took at least one new trip by walking instead of driving. Participants reported walks helped them stay active, meet new people, and discover new neighborhoods, parks, and businesses.³⁴

Partnerships were Critical

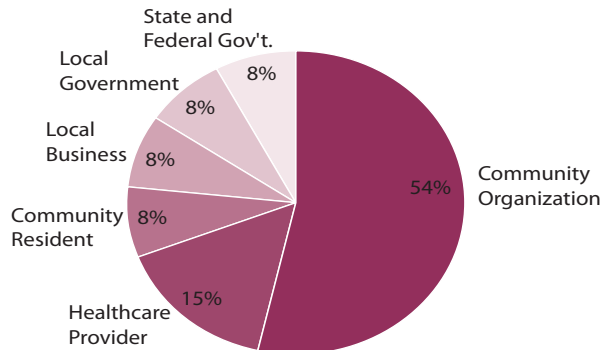
The success of *Ten Toe Express* was in part due to the diversity of partners engaged. These partners played a key role in supporting project efforts by promoting the project, providing access to the target population, and helping with replication and sustainability. Project staff identified St. Clair County Transit District, Metro (the bi-state development agency), and OASIS as three of the most critical partners to the project.

- St. Clair County Transit District sponsored CMT's application to Illinois' Congestion Mitigation and Air Quality (CMAQ) funding program.
 - The grant helped CMT replicate the project in a new population and make the walking program more sustainable by expanding to Illinois.

- Metro sponsored *Ten Toe Express* direct mailings to senior pass holders (a list of more than 10,000 St. Louis residents).
 - Many seniors were lower-income and harder to reach through other marketing channels.
 - Direct mailings allowed CMT to get information into more seniors' hands and market the program.

“Even though a lot of people are now technologically savvy, use the internet, use their phones and things like that, our older adult market, still a large population of them, especially the underserved markets, don't have that access. So without the very basic direct mail, we weren't reaching them.”
- OASIS provided a link to the older adult population in St. Louis.
 - OASIS helped with recruitment efforts and provided space at their centers for recruiting walk leaders, walk leader trainings, and distributing project information.

Figure 8. Percentage of Partners by Type



Effectiveness: Evaluating *Ten Toe Express*

“More and more individuals are adopting the program as a part of their everyday lives and making lifestyle changes based on the program components of using transit and walking more. Once we have them in the program, they are hooked.”

CMT's partner, Transtria, conducted a comprehensive evaluation of the *Ten Toe Express* project. The results highlight the project's effectiveness:

Project Successes

- Participants' knowledge of the recommended daily number of steps increased³⁵
- 29% increase in participants who walked as part of their daily routine³⁵
- 61% increase in participants who had met their goal to eat more fruits and vegetables in the past six months³⁵

Sustainability of *Ten Toe Express*

The *Ten Toe Express* project has strived to make the program sustainable for years to come by streamlining costs, recruiting volunteers, developing a train-the-trainer program, and securing additional funding.

- Moving from paper-based registration, data collection, maps, and schedules to a website has decreased printing costs substantially. The website is low cost and will be maintained by CMT for the near future.
 - The website also allows CMT to post additional information online (e.g., 85 suggested walking routes).
- Volunteers helped sustain interest in the project.

“A successful component of the program has been our dedicated core group of volunteers. They have really been helpful in drawing people into the program. They do a ton of work on their own. They research their destinations. They lead the groups. They continue to help us keep the program new and fresh.”

- In collaboration with Transtria, CMT developed a train-the-trainer workshop and manual to further sustain program components.
 - The purpose of the train-the-trainer workshops was to train program leaders how to implement the *Ten Toe Express* project.
 - Workshops targeted local organizations and current walk leaders.
- CMT continues to receive funding to keep the program running, including in-kind resources (e.g., Metro direct mailers, space at OASIS centers).
 - CMT is able to continue the program through 2013 due to Illinois and Missouri CMAQ funds.

Program Expansion and Replication

Collaboration with organizations like St. Clair County Transit District and the East-West Gateway Council of Governments has allowed the *Ten Toe Express* to expand to new populations through additional funding. In April 2011, CMT expanded *Ten Toe Express* walking trips to include Belleville, Illinois, neighborhoods.

“Expanding the program to Illinois has been a hugely successful component of this program. We’ve seen a big jump in numbers this year by branching out to Illinois riders as well as the Illinois communities.”

Also in 2011, CMT received additional funding through Missouri CMAQ funds to expand their programs to include a new health-based incentive program for commuters, including the *Ten Toe Express* project.

These successes have brought national attention to the St. Louis-based *Ten Toe Express*. Recently, the Denver, Colorado, region adapted the St. Louis model.



The Future of *Ten Toe Express* in St. Louis

Recently, CMT achieved regional and international recognition for the *Ten Toe Express* project.

- CMT received an Active Living Award in the Fall of 2011 from Trailnet for its *Ten Toe Express* project.

- In the Spring of 2012, CMT received the WTS (Women’s Transportation Seminar) Innovative Transportation Solutions award for its innovative programs to increase ridership on the transit system, including *Ten Toe Express*.

Building on these successes, the *Ten Toe Express* project continues to be sustained.

- The Spring 2012 *Ten Toe Express* walking program is currently underway with walking groups beginning to explore the St. Louis metro region by foot and transit.

Additionally, CMT is building relationships with new partners and looking at expanding once again.

- Future outreach may extend *Ten Toe Express* to specific communities through a partnership with Beyond Housing and potentially include children.

For more information on the *Ten Toe Express*, please contact:

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Trailnet

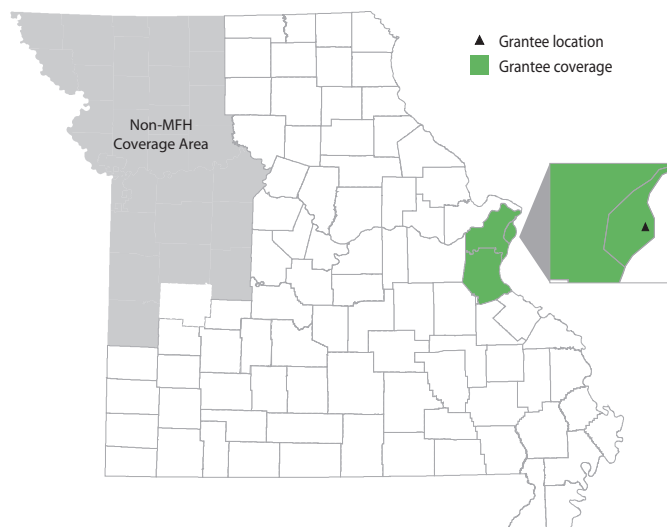
Healthy, Active & Vibrant Communities Initiative

Overview

In 2008, The Missouri Foundation for Health (MFH) funded Trailnet's *Healthy, Active & Vibrant Communities (HAVC) Initiative*. The project was a continuation of work funded by MFH in 2006, and continues today. The *HAVC Initiative* focuses on impacting policy, the built environment, and social networks to create population-level change in physical activity and healthy eating. Trailnet's *HAVC* model creates change by working with local governments and community residents in a collaborative, action planning process. Trailnet's role is to build capacity for healthy and active living by providing technical assistance to communities and connecting them to a larger network of resources. As communities become part of the larger regional healthy and active network, they build new partnerships and momentum for creating change in their communities.

The mission of Trailnet is to lead in fostering healthy and active living communities through innovative programs, planning, and policy that promotes walking and bicycling throughout the St. Louis bi-state region.

Figure 9. Reach of the *Healthy, Active & Vibrant Communities Initiative*



During the MPB grant, the *HAVC Initiative* targeted the residents of three low-income, racially diverse St. Louis communities, including one urban neighborhood (Old North St. Louis), one rural neighborhood (De Soto), and one suburban neighborhood (Ferguson) (Table 5). Within these communities, Trailnet acted as a catalyst to increase support for healthy and active lifestyles by building local leaders' capacity for creating change so that the communities could eventually take ownership of the initiative and lead the work. As part of the *HAVC Initiative*, Trailnet conducted readiness and needs assessments, created local taskforces, and developed community-specific action plans in each community (Table 6).

Table 5. Demographics of *HAVC* Target Communities

	De Soto ¹⁶	Ferguson ¹⁶	Old North ³⁶
Population	6,400	21,203	1,500
% African-American	2%	67%	70%
Poverty Rate	21%	18%	50%

Objectives of the *Healthy, Active & Vibrant Communities Initiative*:

- Facilitate implementation of policies in partner communities that support the creation of bikeable, walkable infrastructures
- Work with taskforce leadership to implement local action plans using the *HAVC* Toolkit, a resource guide of ideas and recommendations for improving the health of communities^{vii}
- Disseminate the *HAVC* model of working with communities to create institutional change
- Strengthen social networks and local resources around physical activity and healthy eating through walk, run, and bike events in each community

vii <http://trailnet.org/our-work/community-toolkit>

Why the Healthy, Active & Vibrant Communities Initiative is a Model Practice

Innovation

- Engaged 67 partners representing 10 partner types in project activities (e.g., local governments, community organizations, colleges and universities)

The *HAVC Initiative* was specifically designed around the growing obesity prevention evidence-base, using tools such as the CDC's Guide to Community Prevention Services,³⁷ the Strategic Alliance's ENACT tool,³⁸ and best practices in community engagement.³⁹

Effectiveness

- Created community change through the *HAVC* model (e.g., school wellness policies, local farmer's market)
- Recommended evidence-based strategies in *HAVC* Toolkit
- Evaluated use of Toolkit through online surveys and focus groups with target communities

Sustainability

- Presented and disseminated *HAVC* Toolkit locally, regionally, and nationally
- Leveraged additional funding for project activities
- Cultivated community ownership in each of the three target communities

Table 6. Key Components of the *Healthy, Active & Vibrant Communities Initiative*

Component	Example Activities	Example Outcomes
Dissemination	<ul style="list-style-type: none"> • Updated <i>HAVC</i> Toolkit and made it available online through Trailnet website (i.e., Toolkit 2.0) 	<ul style="list-style-type: none"> • Disseminated over 1,500 copies of the Toolkit to local and regional partners
Capacity Building and Technical Assistance	<ul style="list-style-type: none"> • Conducted readiness and needs assessments in the three communities • Provided opportunities for professional development of <i>HAVC</i> community leaders • Shared resources with the communities around ideas and lessons learned • Connected <i>HAVC</i> community leaders to larger initiatives throughout the region 	<ul style="list-style-type: none"> • <i>HAVC</i> communities created taskforces to prioritize projects and implement action plans based on assessment findings • Ferguson and St. Louis leaders attended Pro Walk/Pro Bike Conference in Seattle, Washington • Hosted annual convenings for <i>HAVC</i> community leaders to learn from regional experts
Built Environment	<ul style="list-style-type: none"> • Completed rendering projects in each community to identify built environment changes that could increase access to healthy foods and physical activity 	<ul style="list-style-type: none"> • De Soto created plans for walking trail, and Ferguson and Old North developed street improvements • Developed Bikeable-Walkable Master Plans in each community • Leveraged additional funding for Old North rendering to facilitate implementation of street improvements
Policy	<ul style="list-style-type: none"> • Worked with city officials in De Soto, Ferguson, and St. Louis City to adopt policies to support physical activity • Worked with De Soto and Jefferson County Health Department and to amend healthy eating policies 	<ul style="list-style-type: none"> • Adopted Complete Streets policies in De Soto, Ferguson, and St. Louis City (De Soto and Ferguson were the first Missouri municipalities to adopt Complete Streets ordinances) • Enacted policies to allow farmer's markets in De Soto
Social Networks	<ul style="list-style-type: none"> • Helped plan walk, run events in each community to strengthen social networks and community awareness • Worked with St. Louis City to include Old North neighborhood in Open Streets events • Helped Ferguson promote knowledge about and opportunities for healthy eating 	<ul style="list-style-type: none"> • Over 2,500 individuals participate in Ferguson Sunday Parkways annually • Over 900 individuals participated in Ferguson's Inaugural Twilight 5K, exceeding the goal of 100 • <i>HAVC</i> communities participated in Open Streets (i.e., community-wide events to encourage physical activity in car-free streets) • Created Eat Well Ferguson! to share healthy eating tips with the public and work with restaurants to identify healthy menu choices

Why the Healthy, Active & Vibrant Communities Initiative was Successful

Community Engagement was Critical

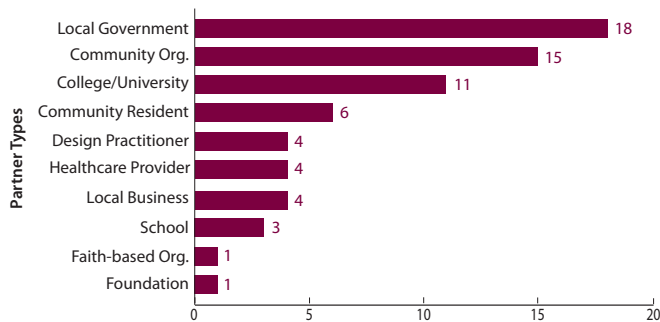
“Most people are champions just waiting to be developed, and it’s just a matter of how long and what kind of effort it takes to get them to buy-in.”

A key reason for the success of the *HAVC Initiative* is the use of community engagement principles and capacity-building technical assistance to empower the communities to support and promote healthy eating and active lifestyles. The *HAVC Initiative* built each community’s capacity for action by identifying needs of the community and bringing together leaders to develop community-driven solutions.

- The *HAVC Initiative* focused on low-income and at-risk communities, where opportunities for physical activity and healthy eating are often fewest.⁴⁰
- *HAVC Initiative* activities were tailored to complement the unique assets, needs, and interests of each community.

“The De Soto taskforce really wanted to get the farmer’s market going. So they just ran with it, and now they’ve got a farmer’s market.”

Figure 10. Number of Total Partners by Type



- The *HAVC Initiative* helps communities develop partnerships across broad sectors of their local communities by connecting them to a larger network of resources.
 - Together, Trailnet and the three target communities engaged 67 partners from 10 different sectors (of 11 possible partner types).
 - Local governments and community organizations comprised nearly half of partners

(49%) and helped to implement activities in the communities by serving on taskforces and hosting community events.

“Involving city staff helps you access other resources and implement activities. That’s been very helpful in Ferguson because part of their taskforce is the people that are the actual policymakers in Ferguson.”

Snapshot of One Community’s Success: The Griffith Elementary Crosswalk

Trailnet serves as a catalyst, bringing together key decision-makers to initiate efforts that will last well beyond Trailnet’s involvement. The flexibility of the *HAVC* model means that while Trailnet follows a general process for working with community partners, the communities themselves determine the actions they will take. This process is exemplified by the Griffith Elementary Crosswalk Project in Ferguson.



A student serving as a crossing guard was struck and died while in the crosswalk in front of Griffith Elementary School. This tragic accident sent shockwaves through the community. The Ferguson Police Department applied for and received a Safe Routes to Schools grant to enforce the school zone speed limit, and the community became very aware of students’ safety in the crosswalk.

Despite these efforts, children still had to traverse more than 60 feet of asphalt before reaching safety on the opposite side of the street. It is clear that engineers designed the route for fast speeds and large volumes of cars – pedestrians were an afterthought.

As a partner in the *HAVC Initiative*, the Live Well Ferguson! (LWF) taskforce had the opportunity to

Streets designed with only cars in mind limit transportation options, making walking and biking an inconvenient or dangerous option. Policies that consider multiple modes of transportation allow individuals to choose the method they use to get to school, work, or the grocery store.⁴¹

develop a Complete Streets rendering to help residents, staff, and city council members visualize how a street could be transformed to create a safer environment for pedestrians, cyclists, and drivers. The Griffith Elementary crosswalk was the obvious choice.

The LWF taskforce built on this opportunity to lead the effort to change the crosswalk. The taskforce:

- Hosted a site walk-through with students, school officials, city staff, and residents
- Convened a meeting with key city departments (e.g., police, fire, public works, planning), the county Department of Highways and Traffic, and school officials
- Identified “consensus changes” and proposed Complete Streets changes that needed further exploration
- Asked an urban designer to create two renderings: one of the consensus changes and one of the Complete Streets changes
- Built support for changes by presenting the renderings at school and neighborhood meetings and publishing changes in the local paper and online

LWF is working with the county Department of Highways and Traffic to identify steps to implement the changes. They are optimistic that the county will be a good partner in this effort; however, if the county is unwilling to improve the road, the community is prepared to advocate for the changes to improve the safety of their children.

Sustainability through Community Ownership

The *HAVC* model encourages sustainability and institutional change by building local ownership of the changes in each community. Trailnet staff have focused extensively on building the capacity of local leaders and their leadership teams to carry the work forward after grant funding ends. Through the *HAVC Initiative* process, community leaders and residents learn how to advocate for changes important to their community.

Activities intended to promote sustainability include:

- Increasing awareness of elected officials and community leaders
- Branding for the individual taskforces:



gethealthy DeSoto



- Developing community action plans based on community readiness and needs assessments
- Cultivating local leadership through the taskforces

The Future of the *Healthy, Active & Vibrant Communities Initiative*

External Funding

In November 2009, Trailnet received a Promising Strategies grant from MFH to work with an additional neighborhood, the City of Vinita Park, Missouri. The project includes Earn-2-Bikes classes, a collaboration to fund trail revitalization along the Vinita Park Memorial Trail, education for local businesses about bike commuting, and a policy initiative to adopt land use and street design standards that accommodate pedestrians and cyclists of all ages and abilities.

Continuing Work in the *HAVC* Communities

Additionally, all three communities have received their own Promising Strategies funding from MFH.

- In 2009, Jefferson County Health Department received funding to continue the Get Healthy De Soto farmers' market. The project includes:



- Capacity building trainings and seminars for farmers
 - Purchase of Electronic Benefit Transfer (EBT) equipment to increase access to fresh, local products to low-income families
- In 2010, Old North St. Louis Restoration Group received funding to establish a community food Co-Op. The project is working to:
- Establish EBT acceptance to increase access to healthy foods for low-income residents
 - Educate residents about healthy eating practices and healthy food availability
- In 2010, the City of Ferguson received funding to support the Live Well Ferguson! taskforce. The City is supporting walkability and bikeability throughout Ferguson by:
- Adopting urban design standards and form-based zoning
 - Implementing Complete Streets objectives in downtown Ferguson and at Griffith Elementary

The greatest success has been the sustainability of the Live Well Ferguson! effort. The taskforce is still running strong; they applied for and received MFH grant money to continue their efforts; and they now have a full-time staff person at City Hall to help manage events, activities, and meetings. With or without Trailnet, Live Well Ferguson! is now a fixture in the community and will continue for years to come.

Because of these successes, Trailnet was selected by MFH in 2010 to be a Technical Assistance Provider to Social Innovation in Missouri (SIM) grantees. SIM funding supports communities' efforts to expand physical activity options, encourage healthier food choices, and reduce overall tobacco use. In collaboration with Americans for Nonsmokers' Rights, Trailnet is providing technical assistance to grantees using the *HAVC* model.

Dissemination of the *HAVC* Model

Trailnet has been very successful in disseminating the *HAVC* model:

- The *HAVC* Toolkit presents an exciting vision for the future of communities around quality of life, health, vibrant local economies, and the environment.
- The Toolkit is used by community organizations across the country.

- The Toolkit includes action recommendations, case studies of model programs, and practical tools to encourage healthy and active lifestyles.
- The Toolkit tailors recommendations to eight key audiences (e.g., schools, community residents, workplaces, local governments).

"The Toolkit is something you can hold in your hand and it is full of resources and case studies. It just adds a little strength to our presence."

- Trailnet began the *HAVC* blog, which has surpassed 25,000 visits, to share ideas, updates, and resources.
- Trailnet presented the *HAVC* model at several national conferences, including the Pro Walk/Pro Bike, International Making Cities Livable, and New Partners in Smart Growth conferences.
- Trailnet published an article on the *HAVC Initiative* in the *Community Development* journal.⁴²

National Recognition of the *HAVC* Model

Trailnet has become a national leader in the field of capacity-building for obesity prevention.

- In 2008, the *HAVC Initiative* was selected by a committee of national public health organizations as a local program that demonstrated success towards preventing childhood obesity.^{viii}
- In 2009, the *HAVC Initiative* became the first "Emerging Intervention" disseminated through the University of North Carolina's Center of Excellence for Training and Research Translation's website.^{ix}

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viii The Early Assessment of Programs and Policies to Prevent Childhood Obesity was a two-year project lead by a team from the Robert Wood Johnson Foundation, the Centers for Disease Control and Prevention (CDC) and the CDC Foundation.

ix <http://www.center-trt.org/>

References

1. Levi, J., Segal, L. M., St. Laurent, R., & Kohn, D. (2011). *F as in fat: How obesity threatens America's future*. Washington, D.C.: Trust for America's Health.
2. Missouri Department of Health and Senior Services. (2007). *2007 Missouri county-level study*. Jefferson City, MO: Office of Epidemiology.
3. Kahn, E. B., Ramsey, L. T., Brownson, R. C., Heath, G. W., Howze, E. H., Powell, K. E., et al. (2002). The effectiveness of interventions to increase physical activity: A systematic review. *American Journal of Preventive Medicine*, 22(4S), 73-107.
4. Washington University in St. Louis, Center for Public Health Systems Science. (2012). *Program sustainability assessment tool*. Retrieved from <http://cphss.wustl.edu/Projects/Pages/Sustainability-Framework-and-Assessment-Tool.aspx>
5. Kahn, L. K., Sobush, K., Keener, D., Goodman, K., Lowry, J., Kakietek, J., & Zaro, S. (2009). Recommended community strategies and measurements to prevent obesity in the United States. *Morbidity and Mortality Weekly Report*, 58(RR07), 1-26.
6. Brownson, R. C., Haire-Joshu, D., & Luke, D. A. (2006). Shaping the context of health: A review of environmental and policy approaches in the prevention of chronic diseases. *Annual Review of Public Health*, 27, 341-370.
7. Matson-Koffman, D. M., Brownstein, J. N., Neiner, J. A., & Greaney, M. L. (2005). A site-specific literature review of policy and environmental interventions that promote physical activity and nutrition for cardiovascular health: What works? *American Journal of Health Promotion*, 19(3), 167-193.
8. Heath, G. W., Brownson, R. C., Kruger, J., Miles, R., Powell, K.E., Ramsey, L. T., & Task Force on Community Preventive Services. (2006). The effectiveness of urban design and land use and transport policies and practices to increase physical activity: A systematic review. *Journal of Physical Activity and Health*, 3(Suppl 1), S55-S76.
9. Missouri Department of Health and Senior Services. (2005). *Community tobacco, physical activity and nutrition policy and environment assessment and resource guide*. Jefferson City, MO: Missouri Department of Health and Senior Services.
10. Heelan, K. A., Abbey, B. M., Donnelly, J. E., Mayo, M. S., & Welk, G. J. (2009). Evaluation of a Walking School Bus for promoting physical activity in youth. *Journal of Physical Activity and Health*, 6, 560-567.
11. Mendoza, J. A., Watson, K., Baranowski, T., Nicklas, T. A., Uscanga, D. K., & Hanfling, M. J. (2011). The Walking School Bus and children's physical activity: A pilot cluster randomized controlled trial. *Pediatrics*, 128(3), e537-e544.
12. Weil, E., Wachterman, M., McCarthy, E. P., Davis, R. B., O'Day, B., Iezzoni, L. I., & Wee, C. C. (2002). Obesity among adults with disabling conditions. *Journal of American Medical Association*, 288, 1265-1268.
13. Bailey, L. (2004). *Aging Americans: Stranded without options*. Washington, D.C.: Surface Transportation Policy Project.
14. Besser, L. M., & Dannenberg, A. L. (2005). Walking to public transit: Steps to help meet physical activity recommendations. *American Journal of Preventive Medicine*, 29(4), 273-280.
15. City of Portland Bureau of Transportation. (2012). *Getting around Portland: Ten Toe Express walking campaign*. Retrieved from <http://www.portlandonline.com/transportation/index.cfm?c=41533>
16. U.S. Census Bureau. (2012, January 31). State & county quick facts. Retrieved from <http://quickfacts.census.gov/qfd/index.html>

17. Institute of Medicine (U.S.). Committee on Prevention of Obesity in Children and Youth. (2005). *Preventing childhood obesity: Health in the balance*. (J. Koplan, C. T. Liverman, & V. I. Kraak, Eds.). Washington, D.C.: National Academies Press.
18. Park, S., Sappenfield, W. M., Huang, Y., Sherry, B., & Bensyl, D. M. (2010). The Impact of the availability of school vending machines on eating behavior during lunch: The Youth Physical Activity and Nutrition Survey. *Journal of the American Dietetic Association*, 110(10), 1532–1536.
19. Active Living Research. (2009, Summer). *Active transportation: Making the link from transportation to physical activity and obesity*. San Diego: Active Living Research. Retrieved from http://www.activelivingresearch.org/files/ALR_Brief_ActiveTransportation.pdf
20. Active Living Research. (2011, January). *The power of trails for promoting physical activity in communities*. San Diego: Active Living Research. Retrieved from http://www.activelivingresearch.org/files/ALR_Brief_PowerofTrails.pdf
21. Scott, M. M., Cohen, D. A., Evenson, K. R., Elder, J., Catellier, D., Ashwood, J. S., & Overton, A. (2007). Weekend schoolyard accessibility, physical activity, and obesity: The Trial of Activity in Adolescent Girls (TAAG) study. *Preventive Medicine*, 44(5), 398–403.
22. Jaime, P. C. & Lock, K. (2009). Do school based food and nutrition policies improve diet and reduce obesity? *Preventive Medicine*, 48, 45-53.
23. Butterfoss, F. D. (2007). *Coalitions and partnerships in community health*. San Francisco: Jossey-Bass.
24. Chavis, D. M. (1995). Building community capacity to prevent violence through coalitions and partnerships. *Journal of Health Care for the Poor and Underserved*, 6(2), 234–245.
25. Kaiser Family Foundation. (2007). *Missouri - Kaiser state health facts*. Retrieved from <http://www.statehealthfacts.org/>
26. Heelan, K., Abbey, B., Cook-Wiens, G. (2009). Impact of a Walking School Bus on the prevalence of active commuting over three years. *Medicine & Science in Sports & Exercise*, 41(5), 102.
27. Mendoza, J. A., Watson, K., Baranowski, T., Nicklas, T. A., Uscanga, D. K., & Hanfling, M. J. (2011). The Walking School Bus and children's physical activity: A pilot cluster randomized controlled trial. *Pediatrics*, 128(3), e537-e544.
28. Mendoza, J. A., Watson, K., Nguyen, N., Cerin, E., Baranowski, T., & Nicklas, T. A. (2011). Active commuting to school and association with physical activity and adiposity among US youth. *Journal of Physical Activity & Health*, 8(4), 488–495.
29. US Department of Health and Human Services. (2000). *Healthy People 2010: Understanding and improving health*. Washington, D.C.: US Government Printing Office.
30. Institute of Medicine. (2009). *Local government actions to prevent childhood obesity*. Washington, D.C.: National Academies Press.
31. Independence Center. (2011). *2011 report to the community: 30 years of excellence*. St. Louis, MO: Independence Center. Retrieved from <http://www.independencecenter.org/files/AnnualReport2011.pdf>
32. Independence Center. (2012). Colleague Training. Retrieved from <http://www.independencecenter.org/page.asp?page=1340>
33. International Center for Clubhouse Development. (2011). About ICCD. Retrieved from <http://www.iccd.org/about.html>
34. Cassidy, R. (2005). *Ten toes can make a big difference: Ten Toe Express*. Presented at the Rail~Volution Conference, Salt Lake City, UT. Retrieved from http://www.railvolution.org/rv2005_pdfs/rv2005_201c.pdf

35. Behlmann, T., Brennan, L., Hower, M., Krieg, A., Wadhwa, G., & Elliott, M. (2011). *Evaluation of Ten Toe Express: 2007-2010 final report*. St. Louis, MO: Transtria LLC.
36. Trailnet. (2011). Old North, St. Louis. Retrieved from <http://www.trailnet.org/our-work/old-north-st-louis>
37. Centers for Disease Control and Prevention. (2012). The guide to community preventive services: The community guide. Retrieved from <http://www.thecommunityguide.org/index.html>
38. Prevention Institute, Strategic Alliance for Healthy Food and Activity Environments. (n.d.). Environmental Nutrition and Activity Community Tool (ENACT). Retrieved from <http://eatbettermovemore.org/sa/enact/members/index.php>
39. Tufts University, Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy. (2010). Shape Up Somerville. Retrieved from: <http://www.nutrition.tufts.edu/index.php?q=research/shapeup-somerville>
40. Sallis, J. F., & Glanz, K. (2006). The role of built environments in physical activity, eating, and obesity in childhood. *The Future of Children*, 16(1), 89-108.
41. National Complete Streets Coalition. (2011). Complete Streets FAQ. Retrieved from <http://www.completestreets.org/complete-streets-fundamentals/complete-streets-faq/>
42. Valko, P., Allen, J., Mense, C., Worthington, S., Sommers, J., Brownson, R., & Dreisinger, M. (2011). Community-wide obesity prevention: Reconnecting public health, urban planning, and public policy in three Missouri communities. *Community Development*, 42(2), 152-166.



Funding for this project was provided in whole by the Missouri Foundation for Health. The Missouri Foundation for Health is a philanthropic organization whose vision is to improve the health of the people in the communities it serves.