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Students’ Design Proposals
With funding from the Healthy Kids, Healthy Communities Program of the Robert Woods Johnson Foundation, Maryvale on the Move (MTM) serves as a pilot endeavor for policies and environmental changes to prevent childhood obesity. Maryvale has more than 190,000 residents—36 percent of whom are less than 18 years of age—and the challenges to their active living and healthy eating are a microcosm of Phoenix’s concerns. The community’s 37 square miles, for example, include only a few parks with limited safe access for children traveling on foot or by bicycle. The 13 playgrounds and tot lots are typically small, and hours for public pools recently were cut to save money. Through a broad partnership facilitated by St. Luke’s Health Initiative, MTM will develop and implement initiatives to increase Maryvale residents’ access to healthy foods and physical activity.

In planning and prioritizing initiatives for this four-year program, faculty, staff and students from ASU’s Stardust Center for Affordable Homes and the Family and the Herberger Institute School of Architecture + Landscape Architecture worked with MTM’s strategic community partners in a dynamic assessment and planning process. The students first gathered local planning and land use documents and sources targeting Maryvale. They also identified programs and initiatives that focused on built environment strategies for enhancing active living and healthy eating, in metro Phoenix, other cities in Arizona, and other communities outside the state. With this background research in mind, they undertook windshield surveys and walking audits with community members in three areas of Maryvale, as designated by Amigo Center, Golden Gate Community Center and Rehobeth CDC.

This planning material provided a foundation for the design and planning charrettes. Three charrettes were held February 27, March 6 and 27, 2010. Between thirty and ninety youth and adults from the community, city departments and other interested organizations participated in these 5-hour sessions. A core group of volunteer bilingual planners and architects assisted in all charrettes. Small groups sat around tables that held large-scale maps detailing a one-square mile section of different areas of Maryvale. A facilitator displayed a series of slides depicting how small sections of a community—a block, an intersection, a parkway—could incorporate incremental physical changes to enhance healthier places. After discussing and identifying major concerns and assets of their community, these groups used various icons, representing different physical and social elements (e.g. bicycle lane, farmers’ market, crossing guard), to envision ways to strengthen active living and healthy food availability among children in the area. These charrettes had an intensive, collaborative, playful and highly visible nature, focused on feasible solutions and shared vision.

Using these materials and ideas, and stimulated by residents’ enthusiasm for their community, the ASU landscape architecture students developed several design proposals. While these proposals focused on specific sites in Maryvale, the strategies and ideas are applicable to other areas of Maryvale and metro Phoenix. A final presentation of the students’ work was held on April 27 at Phoenix Urban Research Laboratory (PURL) on the ASU Downtown Campus, with a large number of community members from Maryvale attending.

Sherry Ahrentzen
Kim Steele
Causes of Child Obesity

**Facts About Obesity**

Obesity is one of the most pressing health threats to families and children nationwide.

Today, one-third of American children and adolescents are either obese or at risk of becoming obese.

Recent research shows that 16% of US children could be considered obese.

30% of adult obesity begins in childhood.

Obesity accounts for more than 300,000 deaths per year.

The US Surgeon General recommends that children engage in at least 60 minutes of moderate physical activity most days of the week. Yet, nearly 2/3 of adolescents do not meet this goal.

Less than 10% of younger children have daily physical education in school.

Only 8% of elementary schools, 6.4% of junior high schools, 5.8% of senior high schools provide a PE class.

Only 49% of all school levels provide intramural sports or physical activity clubs/teams.

**Media**

In 2006, advertisers spent $577 million on food, beverage and restaurant advertising.

One extra hour of television is associated with consumption of 167 extra calories daily.

**Environmental Factors**

Conditions involving transportaion, infrastructure and safety limit children’s options for physical activity.

Acculturation to the American way of life leads to less physical activity, poor eating habits and excess weight.

Limited access to affordable, healthy foods; greater reliance on fast food and cutbacks in physical education by schools.

**Policy**

Land-use decisions discourage physical activity.

Lack of “eyes on the street” discourages perception of neighborhood safety.

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**Prevalence (%) of Obese Children**

Source: CDC, National Center for Health Statistics
Healthy Kids | Healthy Communities:
Maryvale on the Move Research Overview

Consequences of Child Obesity

Physical Consequences
Approximately 60% of overweight children ages 5-10 have physiological risk factors for heart disease and stroke.
- Elevated total cholesterol
- Elevated triglycerides
- Elevated insulin or high blood pressure
- Hypertension
- Increased risk of asthma
- Type 2 diabetes
- Cardiovascular disease
- Sleep apnea
- Orthopedic complications

Mental Consequences
- Defiance
- Absence of logical thinking
- Depression
- Low self-esteem
- Social discrimination

Children who are overweight are far more likely to become overweight adults than are children who maintain normal weight through adolescence.
Children treated for obesity are 3 times more expensive for the healthcare system to insure than the average child. Children diagnosed with obesity are 2-3 times more likely to be hospitalized.
Facts About Arizona Obesity
31% Percent of Children (10-17) who are Overweight or Obese, 2007

Aborigines and the Pima Indians of Arizona developed obesity, type 2 diabetes, and hypertension after transitioning to a Western lifestyle.

The 2007 Arizona Youth Risk Behavior Survey indicates that among high school students:

Obesity
• 12% were obese.

Unhealthy Dietary Behaviors
• 83% ate fruits and vegetables less than five times per day during the 7 days before the survey.
• 30% drank a can, bottle, or glass of soda or pop (not including diet soda or diet pop) at least one time per day during the 7 days before the survey.

Physical Inactivity
• 68% did not meet recommended levels of physical activity.
• 59% did not attend physical education classes.
• 73% did not attend physical education classes daily.
• 28% watched television 3 or more hours per day on an average school day.
• 21% played video or computer games or used a computer for something that was not school work for 3 or more hours per day on an average school day.

The 2008 Arizona School Health Profiles indicates that among middle schools and high schools:

Health Education
• 17% required students to take two or more health education courses.
• 42% taught 14 key nutrition and dietary behavior topics in a required course.
• 43% taught 12 key physical activity topics in a required course.

Physical Education and Physical Activity
• 52% taught a required physical education course in all grades in the school.
• 56% did not allow students to be exempted from taking a required physical education course for certain reasons.
• 71% offered opportunities for all students to participate in intramural activities or physical activity clubs.
Defining “Active Living”

“Active living” is a way of life that integrates physical activity into the daily routine, and is an important aspect of preventing obesity among children and families. The goal of active living is for youth to accumulate at least 60 minutes of physical activity each day, and for adults to get at least 30 minutes. People can do this in a variety of ways, such as walking or bicycling for transportation, exercise or pleasure; playing in the park; engaging in physical education classes or recess during school; working in the yard; taking the stairs; and using recreation facilities.

In order to facilitate and support opportunities for active living, a focus on the built environment—including neighborhoods, transportation systems, buildings, parks and open space—is essential. Policies to make these changes are important and can be implemented at all levels of government to create activity-friendly environments. School policies can improve physical education, recess, after school programs and active transportation to school.

Potential Ways to Incorporate Active Living in Maryvale, Arizona

- Improve pedestrian accessibility throughout the city
  - Widen sidewalks
  - Add bicycle lanes
  - Improve streetscapes and add shade to walking areas
  - Create networks of trails and pedestrian corridors

- Add and improve community programs that encourage activity
  - Senior walking groups
  - Dance classes
  - Aerobics
  - Soccer leagues
  - Tai Chi and Yoga classes
  - Swimming classes and all ages
  - Bicycle kitchen and repair classes

- Encourage Alternative forms of transportation
Isanti County, MN

Isanti County has a population of approximately 34,000 residents and is growing rapidly. Its rural setting and northern climate are perceived barriers to physical activity. Currently, over 55% of the county’s adult population are overweight, and there is a lack of safe walking or biking routes in and between the surrounding cities.

The partnership is focused on assisting Isanti County with a comprehensive planning process that will create a Master Plan for Active Living, including strategies for trails, parks, and greenway development. In addition, the partnership will continue to develop the Isanti County Bike/Walk Trail by securing the trail corridor, fundraising, conducting preliminary design activities, and garnering support from local officials and the communities.

**ACCOMPLISHMENTS**
- Isanti county partnered with a local church and the Cambridge Medical Center to create a senior walking program called “Faithfully Fit.” Residents created “Walk the Town” maps and distributed them in the waiting rooms of the medical center.
- Completed an Activity Survey of 2,950 residents in Isanti County, funded by the Minnesota Department of Health and the Isanti County Public Health Department
- Organized and sponsored the Rum River Bike Classic, an event with hundreds of participants that raised $11,000 for trail development.
- Conducted three Walkable Communities workshops with Braham, Cambridge, and Isanti residents and the National Center for Bicycling and Walking.

Chicago, Illinois

Logan Square is a dense, predominantly Latino neighborhood in north central Chicago. Over 80% of the population is under 45 years of age. The community has one of the ten highest crime rates in Chicago, which represents a significant barrier to physical activity in the Logan Square neighborhood. Parents often report that they do not let their children play outside because they fear crime.

This partnership represents a community-organizing model for active living that emphasizes resident leadership and decision making and a partnership with the Logan Square Neighborhood Association, a grassroots organization in a predominantly Latino urban community.

Active Living Logan Square’s vision is that residents will implement a strategic plan that emphasizes the community's priorities, such as working with a local school to reinstate recess, increasing walking and cycling, creating an environment where neighbors know each other, and sharing skills that promote physical activity.

**ACCOMPLISHMENTS**
- Completed a door-to-door asset-based survey in Spanish of over 400 residents focused on barriers and opportunities for physical activity.
- Received $89,000 from the state health department and corporate funding for programs.
- Graduated 110 families from the Salsa, Sabor y Salud program in 2004-2005, designed to promote healthy diets and physically active lifestyles among Latino families.
- Sponsored two Safety Summits with representatives of seven schools, two police districts, ten community organizations, and four Aldermen to address school safety issues.
- Worked with City of Chicago Commissioner of Public Health to champion Sunday Parkways.
- Partnered with Ames Middle School to create a permanent bike space in the school building, and partnered with the Chicagoland Bicycle Federation and After School Matters to hold bike repair/safety classes for local youth.
Healthy Kids | Healthy Communities:
Maryvale on the Move Research Overview

Active Living Case Studies

Honolulu, HI

Kalihi Valley is a mixed urban and residential area in Honolulu that includes Hawaii’s two largest public housing developments. Over 75% of Kalihi Valley’s residents are Asian or Pacific Islanders, 23% have incomes below the federal poverty level, and 35% are foreign born. The community consists of densely-populated, multi-family dwellings and the state’s largest concentration of residential care homes for elders. The population is at risk for health problems such as diabetes, high blood pressure, heart disease, obesity, substance abuse, and high cholesterol, as well as high rates of domestic violence and youth delinquency.

ACCOMPLISHMENTS

- The partnership is transforming a once-overgrown 100-acre parcel of land into a nature park that will offer hiking trails, community gardens, and opportunities to learn about active living, environmental restoration, and traditional Hawaiian culture. This effort, which has involved over 50 diverse organizational partners, including the National Park Service, the University of Hawaii School of Urban and Regional Planning, the Office of Hawaiian Affairs, Honolulu Community College, Kaiser Permanente, the Kalihi Valley Homes Tenants Association, the Kalihi Neighborhood Board, Halau Lokahi (Native Hawaiian Charter School) and the Pig Hunters Association, is a testimony to the power of community will and support.
- Refurbished and distributed more than 350 used bicyclists to local residents in K-VIBE’s 1st year of operations.

Buffalo, New York

The Healthy Communities Initiative focuses on developing and improving the neglected infrastructure in the Allentown and Fruitbelt neighborhoods and reconnecting them to the Buffalo Niagara Medical Campus (BNMC). The results, an enhanced open space network for pedestrians and cyclists and targeted communications, will increase physical activity and promote wellness for both neighbors and employees.

The partnership also helped to create a BNMC campuswide wellness team to promote activities that target its 8,000 employees. The partnership organizes and promotes regional events, such as National Employee Health and Fitness Day, created a campuswide walking activity, Walking on Wednesdays (WOW), and developed and launched a community bike share program, Buffalo Blue Bicycles.

The results, an enhanced open space network for pedestrians and cyclists and targeted communications, will increase physical activity and promote wellness for both neighbors and employees.

Approximately 7,000 residents and 8,000 employees live and work in the project area. The area boasts a diverse population who share a common challenge: City of Buffalo residents are overweight. The city’s overweight rate is three times the national average and two times higher than that of the state.

ACCOMPLISHMENTS

- Sponsored the Active Living Road Show, walkability audits, and community workshops in Allentown and Fruitbelt neighborhoods. Also, crosswalk striping and pedestrian signals were installed, and streets and sidewalks were repaved in Fruitbelt and Allentown.
- Completed an inventory of key policy makers and an assessment of institutional policies, and completed a physical infrastructure and assessment report.
- Incorporated active living into the mission and vision of Buffalo Niagara Medical Campus.
- Received $13 million in funding through federal transportation programs for physical infrastructure improvements.
- Launched Buffalo Blue Bicycles community bike share program and implemented Walking on Wednesdays (WOW), a BNMC walking group.
- Drafted legislation, which was adopted by the city council, for the creation of a bicycle and pedestrian advisory committee. Drafted bicycle parking ordinances, which were passed by the city council.
Healthy Kids | Healthy Communities: Maryvale on the Move Research Overview

Active Living Case Studies

Chapel Hill, North Carolina

The GO! Chapel Hill partnership promotes physical activity among children and the community. The Town of Chapel Hill was selected as lead agency because of its support for alternative transportation, such as public transportation and biking. Organizers envision that GO! Chapel Hill will help catalyze a healthy and active community in which children routinely walk and bicycle to school, employees are active during the work day, and the environment supports safe, convenient and active choices.

For each school, the partnership formed parent action teams, conducted parent/teacher surveys of their children’s walking/bicycling behaviors and barriers to active travel to school, assessed the street environment around schools, and mapped appropriate walking routes to school.

ACCOMPLISHMENTS
• Worked with the Town of Chapel Hill to implement various street improvements around Ephesus, Estes Hills, and Phillips schools, including crosswalks at street crossings and school entrances, stop signs, a sidewalk connection, an ADA ramp, resurfacing an asphalt path, and removal of a damaged power pole obstruction.
• Completed an assessment and summary reports of a major commuting corridor for physical activity, and presented an active transportation options report to the town council on behalf of the partnership to prioritize capital improvements. The council approved funding for a study to guide implementation of the recommended pedestrian and safety improvements.
• Secured $250,000 to fund the recommended improvements.

Santa Ana, CA

Santa Ana is one of the nation’s most densely-populated cities, with 75% of its population comprised of Latinos – immigrants, U.S.-born citizens, and undocumented Mexican-Americans. The relatively young population is eager to be active in the existing green space in the city, but parks and fields are often overused and difficult to maintain.

ACCOMPLISHMENTS
• Conducted focus groups on physical activity options in low-income apartments, which led to a new women’s walking club, aerobics club, and family active days.
• Advocated with the Santa Ana mayor and council to establish two official advisory groups focusing on different aspects of active living. As a result, the Santa Ana River Task Force is working to improve the Santa Ana River banks for physical activity and the Health and Fitness Task Force will provide awards and encouragement for people to live active and healthy lifestyles.
• Generated nearly $1.8 million for active living in Santa Ana through federal grants (Carol E. White Physical Education Program - PEP grant), congressional appropriations, and local foundations (Kaiser Permanente and Orange County HealthCare Foundation).
Healthy Kids | Healthy Communities: Maryvale on the Move

Research Overview

Potential Funding Sources

Infrastructure:
- 1991 Intermodal Surface Transportation Efficiency Act (ISTEA)
- 1996 Transportation Equity Act for the 21st Century (TEA-21) = successor to ISTEA; equity refers to more even distribution of federal gas tax receipts among the 50 states. TEA-21 provides federal money for various transportation projects. Most programs authorized fund bicycle and pedestrian projects. Currently TEA-21 has not been reauthorized (money may be sub-allocated directly to metropolitan planning organizations).
  - Bridge replacement and rehabilitation
  - National Highway System
  - State Department of Transportation (used in Seattle project)
  - City transportation management agency (used in Denver project)

Other Potential Sources of Funds:
- Community Development Block Grant (CDBG) from Department of Housing and Urban Development (particularly useful for low-income neighborhoods).
- Sales Taxes are commonly used mechanism for funding infrastructure.
- State and local gasoline taxes.
- ACTIVE LIVING BY DESIGN (ALbD) (used in Isanti)
- PedNet (Isanti)
- Kaiser Permanente’s Thriving Communities program (used in Denver)
- Johnson & Wales University College of culinary arts (used in Denver)
- YMCA (Santa Ana)
- American Heart Association (used in Portland)
- AARP (used in Portland)
- feet first (Washington non-profit)
- Dept of Health (used in Seattle)
- SAFE ROUTES TO SCHOOL
- Centers for Disease Control and Prevention (working with

Resources


Local Policy

1. Integrate strategic land-use and transportation planning
2. Protect the traditional design of older cities and control the further development of dispersed, segregated, suburban land uses, such as businesses, retail and leisure parks, isolated educational or hospital development, and sporadic residential developments, which inherently rely on car access
3. Reduce urban sprawl by improving public transport, restricting car use in the city and embedding workplaces, shops, schools, and health care facilities within integrated neighborhoods that facilitate walking and cycling.
4. Ensure that residential settings for income groups have full opportunities for health-promoting transport and equal access to green spaces.
5. Reorient community design to favor people over the care and other technologies.
6. Provide easy access to seashores, rivers, lakes, and forests on the periphery of the city.
7. Conserve and develop green spaces.
8. Make city streets active leisure zones suitable for children’s play and socialization by older people. Plant trees and flowers to make city squares attractive and provide shade.
9. Change car parking.
10. Plan and design for active living. Ensure that community planning documents and guidelines address the impact on residents’ ability to engage in physical activity.
11. Provide recreation and sport facilities, parks, paths, and trails.
12. Create a comprehensive plan for cycling and walking in existing and future development and integrate the plan into broader transport planning.
13. Support cycling with appropriate traffic policies and legislation, expanded networks for cycling, access to city bicycles for short trips, and bicycle statorate in areas in public places. Build separate lanes and tracks for pedestrians, cyclists, and cars on busy streets.
14. Implement traffic control measures such as severe restrictions on speed, 15 mph zones, adequately timed lights, clearly marked crossing, traffic-calming devices, and crossing guards at crucial intersections. Provide clear signage about road traffic patterns.
15. Ensure that children have safe places to play. Design streets and neighborhoods to include safe areas for children to play.
16. Provide a clean and attractive environment that invites people to be active in their neighborhoods.
17. Support walkable neighborhoods with greenery, places to rest and attention to historical and cultural landmarks.
18. Encourage downtown revitalization and discourage large parking and industrial lots.
19. Provide people with clear information about the availability of safe and enjoyable opportunities to be active. Design and promote a community-wide active living map of parks, paths, cycle and pedestrian routes and facilities that offer physiological activity programs.
20. Provide convenient and visible stairs and signs for public spaces that encourage people to take the stairs.
21. Increase the budget for creating and maintaining spaces that support healthy active living.
22. Give priority to funding for public transport and projects such as sidewalks, traffic calming, and cycle lanes, tracks, and paths.

Funding and Resources:

1.
Healthy Kids | Healthy Communities: Maryvale on the Move Research Overview

Institute of Medicine: Local Government Actions to Prevent Childhood Obesity

6 PHYSICAL ACTIVITY STRATEGIES

Strategy 1: Built Environment
Encourage walking and bicycling for transportation and recreation through improvements in the built environment.

Action Steps

• Adopt a pedestrian and bicycle master plan to develop a long-term vision for walking and bicycling in the community and guide implementation.

• Plan, build, and maintain a network of sidewalks and street crossings that creates a safe and comfortable walking environment and that connects to schools, parks, and other destinations.

• Plan, build, and retrofit streets so as to reduce vehicle speeds, accommodate bicyclists, and improve the walking environment.

• Plan, build, and maintain a well-connected network of off-street trails and paths for pedestrians and bicyclists.

• Increase destinations within walking and bicycling distance.

• Collaborate with school districts and developers to build new schools in locations central to residential areas and away from heavily trafficked roads.

Strategy 2: Programs for Walking and Biking
Promote programs that support walking and bicycling for transportation and recreation.

Action Steps

• Adopt community policing strategies that improve safety and security of streets, especially in higher crime neighborhoods.

• Collaborate with schools to develop and implement a Safe Routes to School program to increase the number of children safely walking and bicycling to schools.

• Improve access to bicycles, helmets, and related equipment for lower-income families, for example, through subsidies or repair programs.

• Promote increased transit use through reduced fares for children, families, and students, and improved service to schools, parks, recreation centers, and other family destinations.

• Implement a traffic enforcement program to improve safety for pedestrians and bicyclists.
Strategy 3: Recreational Physical Activity
Promote other forms of recreational physical activity.

Action Steps

- Build and maintain parks and playgrounds that are safe and attractive for playing and in close proximity to residential areas.
- Adopt community policing strategies that improve safety and security for park use, especially in higher crime neighborhoods.*
- Improve access to public and private recreational facilities in communities with limited recreational options through reduced costs, increased operating hours, and development of culturally appropriate activities.
- Create after-school activity programs, e.g., dance classes, city-sponsored sports, supervised play, and other publicly or privately supported active recreation.
- Collaborate with school districts and other organizations to establish joint use of facilities agreements allowing playing fields, playgrounds, and recreation centers to be used by community residents when schools are closed; if necessary, adopt regulatory and legislative policies to address liability issues that might block implementation.
- Create and promote youth athletic leagues and increase access to fields, with special emphasis on income and gender equity.
- Build and provide incentives to build recreation centers in neighborhoods.

Strategy 4: Routine Physical Activity
Promote policies that build physical activity into daily routines.

Action Steps

- Institute regulatory policies mandating minimum play space, physical equipment, and duration of play in preschool, after-school, and child-care programs.
- Develop worksite policies and practices that build physical activity into routines (for example, exercise breaks at a certain time of day and in meetings, or walking meetings). Target worksites with high percentages of youth employees and government-run and -regulated worksites.
- Create incentives for remote parking and drop-off zones and/or disincentives for nearby parking and drop-off zones at schools, public facilities, shopping malls, and other destinations.
- Improve stairway access and appeal, especially in places frequented by children.
Healthy Kids | Healthy Communities:  
Maryvale on the Move Research Overview
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**Strategy 5: Screen Time**  
Promote policies that reduce sedentary screen time.

Action Steps
- Adopt regulatory policies limiting screen time in preschool and after-school programs.

**Strategy 6: Media and Social Marketing**  
Develop a social marketing program that emphasizes the multiple benefits for children and families of sustained physical activity.

Action Steps
- Develop media campaigns, utilizing multiple channels (print, radio, internet, television, other promotional materials) to promote physical activity using consistent messages.
- Design a media campaign that establishes physical activity as a health equity issue and reframes obesity as a consequence of environmental inequities and not just the result of poor personal choices.
- Develop counter-advertising media approaches against sedentary activity to reach youth as has been done in the tobacco and alcohol prevention fields.

**Associated Goals:**  
Encourage Physical Activity
- Decrease sedentary behavior
- Raise awareness of the importance of increasing physical activity
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Maryvale on the Move Research Overview

The Built Environment: Designing Communities to Promote Physical Activity in Children

BUILT ENVIRONMENT

This policy statement highlights how the built environment of a community affects children’s opportunities for physical activity.

Neighborhoods and communities can provide opportunities for recreational physical activity with parks and open spaces, and policies must support this capacity.

“Children can engage in physical activity as a part of their daily lives, such as on their travel to school.”

Factors that decrease rates of walking to school
• School location
• Changes in policy
• Automobile traffic
• Parental perception and fear of crime

As cities have expanded into rural areas, large tracts of land have been frequently transformed into low-density developments in a “leapfrog” manner. The resultant urban sprawl can increase automobile travel, which increases air pollution as well as passenger and pedestrian traffic fatalities. Some urban areas may have few supermarkets, produce stands, or community gardens, thereby limiting access to fresh fruits and vegetables. The physical environment of a community can support opportunities for play, an essential component of child development, and for physical activity, a health behavior that not only reduces risk of excess weight gain but also has many other benefits for overall well-being.

Physical activity has many health benefits. As an important component of play, physical activity contributes to children’s organization and social skills and promotes self-esteem and higher grade achievement among adolescents. The American Academy of Pediatrics recommends that children be physically active for at least 60 minutes/day.

“The physical layout of communities can promote or limit opportunities for physical activity.”

There is growing research and policy interest in active living, defined as “away of life that integrates physical activity into daily routines.

PARKS AND RECS

Although parks do not guarantee physical activity among nearby residents, they offer the opportunity. In an experimental study in which children were made to decrease their time spent being sedentary, they increased the time spent engaged in physical activity, and the extent of increase was associated with proximity to a park.

“Local communities have created parks and playgrounds in previously unused areas.”

Nonprofit organizations, such as the Trust for Public Land, have helped communities by assisting them in tasks ranging from park siting to development of funding strategies.

Legislative efforts are also an important mechanism to fund park development and maintenance. Proposition K, enacted in 1996 in Los Angeles, generates funds to provide $25 million annually to the improvement, construction, and maintenance of city parks. In the November 2002 elections, voters in 93 communities in 22 states approved ballot measures that committed $2.9 billion to acquire and restore land for parks and open space. In addition to parks, community gardens are also being created. (Community gardens provide a space for generation of food and the opportunity for gardening, a beneficial physical activity in its own right.)
An important component of a healthy lifestyle is participation in activities for which exercise is not the primary goal. This might be a “purposeful walk”—an errand to buy groceries or a trip to school. Such incidental physical activities (also known as “utilitarian trips”) play an important role in energy balance and can be influenced by neighborhood design.

Neighborhood Design

The positioning of homes, schools, businesses, parks, and sidewalks within a neighborhood can influence physical activity. Neighborhood design typically considers 4 land uses: residential, industrial, green space, and institutional (eg, schools). Sprawling urban design has less mixing of these types (or less “land-use mix”).

- Traditional neighborhoods are closer to other types of destinations such as the school or the mall
- Suburban sprawl is more isolated with land uses
- Connectivity, or ease of moving between origins like home and work is limited with Suburban sprawl neighborhoods
- Street grids with many intersections provide more options for navigating to a destination in the traditional neighborhood
- Suburban sprawl neighborhoods make getting to school difficult by requiring winding out of the enclave of houses to a busy main road. Thus, a child who lives close to school may still find walking to school prohibitive.

“Building new communities that are less car dependent and making existing communities more dense are 2 strategies that can make it easier for people to walk to their destinations of daily life.”

Higher land-use mix encourages more utilitarian trips among residents and increases their ability to reach their destinations on foot rather than by automobile.

A street block plan can have “shared outdoor space,”49 set aside within the heart of a cluster of residences. In this plan, front entrances of homes face the street and the back entrances face the shared outdoor spaces, which are accessible only to the residents. This design promotes a separation of outdoor recreational areas from traffic and an increased sense of ability to supervise children while preserving the community’s ability to fit well onto a traditional grid of streets, which promotes walking to nearby destinations.

Walking to School

The most universal opportunity for incidental physical activity among children is in getting to and from school.

Closer proximity to school also provides the opportunity for use of school grounds for physical activity in afterschool hours, and researchers have shown that provision of an open (supervised) school yard led to increased levels of physical activity and less television and video game use.

Two national telephone surveys, HealthStyles in 1999 and ConsumerStyles in 2004, queried parents about what barriers prevented their children from walking to school.

“The most commonly cited reason from those surveys and from the National Personal Transportation Survey from 1969–2001 was that the school was too far away.”
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Maryvale on the Move Research Overview

The Built Environment: Designing Communities to Promote Physical Activity in Children

“INCIDENTAL” PHYSICAL ACTIVITY

School Sprawl

Suburbanization and decisions about school siting are important determinants of why children now live so far from school. Historically, small neighborhood schools served as “anchors” within the community and places for after-school programs, for social and recreational gathering, and as disaster shelters. However, after the 1950s, many states established policies on the size and location of school buildings that influenced school siting.

Influence on school siting:

* For Schools to receive state funding they would have to have a minimum acreage (for example an elementary school may have to have a minimum acreage of 10 acres)

• More students required larger school grounds

• Untapped acreages sufficient to meet these standards is most often on the edge of an urban area

• Neighborhood schools were frequently demolished or closed in favor of “big-box schools” at the outskirts of cities

“There is increasing interest in supporting smaller schools, but change to policies on school land size occurs slowly.”

There is some research suggesting that larger school campuses, buildings, and play areas may promote youth physical activity during the school day.

Distance is, of course, not the only barrier preventing children from walking or biking to school.

The ConsumerStyles survey determined that parents’ foremost concern was distance from school, followed by concerns about danger from traffic and crime, weather, and other miscellaneous factors.

To address these concerns about children’s commutes to school, schools and parents in many US cities have organized a “walking school bus.”

Roads and Traffic

“Traffic calming” refers to a variety of modifications and engineering techniques that can be applied to roads to slow driver speed. For example, road-design interventions can force cars to slow as they pass through undulations of the road surface.

Streetscapes, Esthetics, and Crime

Safety concerns play an important role in how people respond to the built environment, with perception and fear of crime an important contributor to inactivity.

Urban design strategies may be able to foster “eyes on the street” to reduce fears by achieving natural surveillance with storefronts that face the street or transit facilities (such as bus stops) that can be seen by shop owners or residents.

In 1999, California passed Safe Routes to School legislation, which funded improvements such as pedestrian crossings, sidewalks, and bicycle routes.

Because of the proven success of the California program, legislation established the Federal Safe Routes to School (SRTS) program in 2005, permitting communities to compete for funds administered by state departments of transportation.
Healthy Kids | Healthy Communities:
Maryvale on the Move Research Overview

Safe Routes to School Program

Elements of SRTS

Communities use many different approaches to make it safer for children to walk and bicycle to school and to increase the number of children doing so. Programs use a combination of education, encouragement, enforcement and engineering activities to help achieve their goals. Another important element is evaluation, which is incorporated into each of these areas and also will be discussed separately at www.saferoutesinfo.org. Because the needs of every community will be unique, each community or individual school may choose to emphasize different components to make its program work. Some schools have built sidewalks or painted crosswalks to enhance safety, while others have started Frequent Walker Clubs to motivate children to be active. Regardless of the focus, safety is the first concern. The following information explains the basic elements of a Safe Routes to School (SRTS) program.

Education

Education activities target parents, neighbors and other drivers in the community to remind them to yield to pedestrians, to drive safely and to take other actions to make it safer for pedestrians and bicyclists. Parents serve as role models for their children and play an important part in teaching them pedestrian and bicycle safety. Education activities also teach students how to walk and bicycle safely and the benefits of doing so.

Encouragement

Encouragement strategies generate excitement about walking and bicycling safely to school. Children, parents, teachers, school administrators and others can all be involved in special events like International Walk to School Day and ongoing activities like walking school buses. Encouragement strategies can often be started relatively easily with little cost and a focus on fun.

Enforcement

Enforcement activities can help to change unsafe behaviors of drivers, bicyclists and pedestrians. They can increase driver awareness of laws, and they also can improve driver behavior by reducing speeds and increasing yielding to pedestrians. In addition, enforcement activities teach pedestrians and bicyclists to walk and bicycle safely and to pay attention to their environment. Enforcement doesn’t just involve law enforcement. Many different community members take part in making sure everyone follows the rules, including students, parents, school personnel and adult school crossing guards. In addition, the role of the law enforcement officers often goes beyond enforcement and can be included in all strategies of the SRTS program.

Engineering

Engineering addresses the built environment with tools that can be used to create safe places to walk or bicycle and can also influence the way people behave. Transportation engineers, city planners and architects use methods to create safer settings for walking and bicycling while recognizing that a roadway needs to safely accommodate all modes of transportation. Such improvements can include maintenance and operational measures as well as construction projects with a range of costs. When such programs are properly implemented, they may not only improve safety for children, but they also may encourage more walking and bicycling by the general public.

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Safe Routes to School, saferoutesinfo.org
Case Study: Yuma, Arizona
Parades Encourage Walking to School

Background
During the summer months, Yuma, Arizona, is a mid-sized city with approximately 85,000 residents. In the winter months, however, the population increases as people migrate to the city to escape the colder climates. This migration leads to increased traffic congestion and pedestrian safety concerns when students are walking to school. In 2007, the Yuma Elementary School District #1 organized a parade to school at Desert Mesa Elementary School and O.C. Johnson Elementary School to promote safe and healthy places for the children to walk and bicycle to school.

Details
The parades form part of the school district’s comprehensive strategy to create safer schools and healthier learning environments for the students. This program, called Safe Schools/Healthy Students has more than 70 staff members, who provide services in the home, to school and in school to support student success. The parades begin at a designated location approximately one-quarter mile from the school. A police car leads the parade and guides the participants along the parade route. The police car is followed by the local high school marching band, students, parents, school staff, local sports teams, law enforcement partners and public officials. The caboose of the parade is an empty school bus decorated with poster and streamers symbolizing how 40 students walking or bicycling to school equals one empty school bus.

The school district has held two parades. The first parade took place at Desert Mesa Elementary in November 2007. More than 200 students and family members participated in the event, and each student participant receiving a sticker and pencil for completing the parade route. In January 2008, the second parade was held at O.C. Johnson Elementary School. This parade had more than 350 student and family member participants. Students participating in these parades earned stickers saying “I am a Safe Route Star” and received school supplies as incentives for their participation. At the conclusion of the parades, school staff, students and the families listened to a brief performance by the high school bands.

Results
Due to the success of the two parades, District #1 plans to hold a third parade at James B. Rolle Elementary in March 2008. This parade will differ from the other parades because it will be a parent pick-up parade. Parents will be encouraged to park their cars away from the school, walk to the school to pick up their children at the end of the day and then walk back together to their cars.
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Safe Routes to School Program

Case Study: Pima County, Arizona

Safe Kids Tucson Trains Teachers and Encourages Students

Background
Safe Kids Tucson, through the Tucson Medical Center in Pima County, AZ, recently was awarded $40,790 in federal Safe Routes to School (SRTS) funds to set up SRTS pedestrian and bicycle safety education and encouragement programs at seven schools in the county. These schools are Bloom Elementary School, Johnson Primary School, Lawrence Intermediate School, Rattlesnake Ridge Elementary School, Whitmore Elementary School, Keeling Elementary School and Davis Primary Magnet School.

Details
Since 2004, there has been a SRTS pilot program in place at eight local elementary schools in Pima County. The Pima County Bicycle and Pedestrian Program and the City of Tucson were awarded a Federal Transportation Enhancement grant to form the Pima County-Tucson SRTS program. The success of this pilot program led to Safe Kids Tucson applying for and receiving funds to bring the SRTS program to seven additional schools. In September 2007, Safe Kids Tucson was awarded $38,200 from the Arizona Department of Transportation’s SRTS program and an additional $2,590 from in-kind donations. The Safe Kids Tucson SRTS program has a twofold goal: to train teachers to integrate pedestrian and bicycle safety lessons into the existing curriculum and to expand the pilot program to schools outside the initial eight schools.

To choose the seven schools to implement SRTS programs, Safe Kids Tucson identified the schools within the area that they had a relationship with and would be amenable to organizing SRTS programs at their school. The seven schools chosen will participate in a uniform set of activities outlined by Safe Kids Tucson. Each of the seven elementary schools will participate in Walk and Roll to School Day in March 2008 and plans to participate in the October 2008 International Walk to School Day. Also, the Safe Kids Tucson program will implement a six weeklong Walking School Bus Challenge to kick off the same day as International Walk to School Day. For this challenge, the students will receive punch cards, and once the card has been punched five times, they are entered into a raffle and receive a new card. The punch card encourages children to walk to school regularly because the students do not know the days on which the punch cards will be marked. To let bus riders participate, they can walk around the school once or twice after the bus drops them off to qualify for a punch. And for those students who cannot walk or bicycle to school because of disabilities or because of before and after school care arrangements, they can participate by creating a poster or writing an essay to encourage bicycling and walking to school. At the end of the challenge, the students who have walked to school at least five times will be entered into a raffle to win prizes, such as a bicycle or a scooter. All participating students will receive an Olympic-style medal as well. The school staff also will teach pedestrian and bicycle safety lessons to the students. Second grade teachers will be trained to teach pedestrian safety lessons and the fourth grade teachers will learn how to teach bicycle safety lessons. Another SRTS program activity will be a walkabout conducted by the Pima County SRTS coordinator and the Pima County Bicycle and Pedestrian program engineer. Using information from the walkabout, they will compile a report on the problems and proposed solutions needed to ensure that the children of Pima County have the safest routes for walking to school.

Results
Currently, Safe Kids Tucson is conducting parent surveys at the seven schools to determine the barriers to walking and bicycling to school, and what improvements need to be made for parents to allow their children to walk or bicycle to school. The data gained by the walkabout will be used in a SRTS application that Safe Kids Tucson and Pima County plan to submit for infrastructure funding by the 2009 funding cycle.
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Safe Routes to School Program

Case Study: Prescott, Arizona

Transportation mural encourages new thinking

Maybe it’s not feasible to travel by jet pack, but that didn’t stop students from including the idea on a middle school mural that highlights creative, non-car ways to arrive at school.

The alternative transportation mural, painted on the corner of Mile High Middle School in Prescott, AZ, just behind the bicycle rack, was part of an encouragement effort, according to Lisa Barnes, Executive Director of Prescott Alternative Transportation (PAT), a non-profit pedestrian and bicycling advocacy organization.

“They see it every single day when they get to school — right behind the bike rack,” Barnes said. Parents dropping their students at school also see the mural each morning.

The mural was one facet of a non-infrastructure program funded by a $34,000 cycle one grant that PAT received in 2007-2008 from Arizona Department of Transportation (AZDOT), Barnes said. PAT worked with four schools in Prescott: Taylor Hicks Elementary School, which has 500 students; Mile High Middle School with 700 students; as well as Mountain Oak Charter School with grades kindergarten through eighth and Miller Valley Elementary.

These schools responded to PAT’s open offer of SRTS assistance, which explained not only the opportunities of the program, but also the commitment it requires from the schools, Barnes said.

“It is work on their part as well,” said Barnes, who coordinates the SRTS program for Yavapai County.

A colorful mural on the side of Mild High Middle School reminds everyone that there are many ways to arrive at school — even without a motor vehicle.

Students were encouraged to brainstorm ways in which they could arrive at school, as long as it was not by car. They suggested traveling by skateboards and in-line skates, hot air balloons and jet packs — even by dinosaur, and the mural incorporates their ideas. Two local artists, R. Wall and Maggie Dewar — also known as the Mural Mice around town — worked with students, and all the school’s art classes participated in the painting. Even students who were not enrolled in art class could participate by signing up to paint with the artists after school.

Student painters stood on scaffolding to help complete the mural, which is at least two stories tall.

Mile High Middle School Principal Joe Howard is an avid mountain bicyclist and wanted to help develop creative ways to encourage safe routes to school, Barnes said. As a result, the two came up with the idea for the mural. During Bike Month, which lasts from mid-April to mid-May, the mural was dedicated amid a celebration complete with the superintendent, city council, artists and the school’s jazz band.

The grant also enabled PAT to hire a part-time coordinator to promote encouragement activities, such as Walk to School Day and bicycle rodeos. Each of the four schools participated in International Walk to School Day, and students who walked received T-shirts. In addition, volunteers, staff and parents conducted a walk-about to create a map of pedestrian and bicycle routes within one mile of each school and to identify problem areas, which then were prioritized for inclusion in an infrastructure grant application. The schools have conducted quarterly hand count tallies to gauge participation in walking and bicycling to school.

Taylor Hicks and Mile High have been the most active in the SRTS activities, Barnes said, and the combined totals of those two schools indicate that about 3 percent bicycle and 8 percent walk to school.

One challenge to increasing participation in pedestrian and bicycle activities in the Prescott school system is that it offers parents and students a choice in where they attend schools, so the students do not necessarily attend their “neighborhood schools.” In fact, only 20 percent of the families at Taylor Hicks and Mile High schools live within the two-mile radius targeted by SRTS, Barnes said.

“We can only hope that students participating in the Safe Routes educational workshops are doing this at home,” Barnes said.

“The message is still getting out there.” Less visible benefits might be that parents learn how to share the road with bicyclists and pedestrians.

During the 2008 to 2009 grant cycle, PAT applied for grants to support both non-infrastructure and infrastructure projects, but only received funding for the non-infrastructure projects, Barnes said. The organization received $44,000, which will enable PAT to incorporate two more schools into its encouragement and education activities in 2008 to 2009. PAT will reapply for infrastructure funds in the next grant cycle, Barnes said.

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Safe Routes to School Program

Case Study: Flagstaff, Arizona
Walk. Bike. Get fit in Flagstaff, Arizona

Introduction
In September 2007, the Coconino County Health Department received $39,000 in Federal funding awarded through the Arizona Department of Transportation to jumpstart its Safe Routes to School (SRTS) program. The program, titled “Walk. Bike. Get Fit.” began at Kinsey Elementary School, considered one of the most challenging to access by walking or bicycling. Arizona has an open enrollment policy, allowing students to attend any school regardless of school boundary. Some students live 20 miles from the school. The city of Flagstaff, Ariz., in Coconino County, is located at 7,000 feet above sea level, so weather can add to the challenge when implementing a Safe Routes to School program. Despite challenges, enormous community support has helped the SRTS program at Kinsey Elementary School thrive and also begin to extend to other schools in the area. Out of around 480 students at Kinsey, 120 are now walking or bicycling to school as opposed to the 30 students that walked or bicycled when the program first began in spring 2008. Kim Austin, the SRTS coordinator at the Coconino County Health Department, thinks that if the program can encourage Kinsey Elementary School students to walk or bike to school, then it will be easy to encourage other, more easily accessible schools to implement the program as well. With the help of federal funding and numerous partnerships with organizations including Safe Kids Worldwide, Flagstaff Biking Organization and Northern Arizona University College of Health Promotion, the SRTS program at Kinsey has garnered much support from the surrounding community, in turn, helping its success. The program enforces two important goals:

• to educate the students on the benefits of alternative transportation.

Activities
The SRTS program at Kinsey has an incentive program with prizes donated by the surrounding community. Every month students in grades 3-6 receive a different colored punch card with punchable icons in the shape of either a shoe or a bike. Every time a student walks/bicycles to school, his/her card is punched. A punchable icons in the shape of either a shoe or a bike. Every month students in grades 3-6 receive a different colored punch card with

• to encourage more students to walk or bike to school, conquering childhood obesity and diabetes;

• to educate the students on the benefits of alternative transportation.

Activities
The SRTS program at Kinsey has an incentive program with prizes donated by the surrounding community. Every month students in grades 3-6 receive a different colored punch card with punchable icons in the shape of either a shoe or a bike. Every time a student walks/bicycles to school, his/her card is punched. If students need to ride the bus either because they live too far away or bad weather will not permit them to walk or bike, they can walk four times around the playground and get credit. When the student’s punch card is filled, he or she then drops it into a box where it is entered into a monthly drawing. All the donated prizes are related to physical activity and include passes for ice skating, snow skiing, bowling and a climbing gym. All prizes are donated by local businesses. The incentive program has helped to accomplish the program’s first goal of encouraging more students to walk or bicycle to school. To help accomplish the second goal, educating the students on the benefits of alternative transportation, a SRTS curriculum was developed at Kinsey. The Coconino County Health Department conducts two 45-minute lessons in all classes in 3rd through 6th grades. Information that is taught ranges from pollution awareness to pedestrian and bicycle safety. One important activity that is implemented in the curriculum is an “eco footprint” questionnaire that is given to the students. The questionnaire asks questions such as “Do you leave the water running when you brush your teeth?” and “Does your mom or dad use a plastic bag when packing your lunch?” Bonus questions are used in the upper grades; the lower the score, the better. The answers to the questions and ways to help the environment are discussed with the students.

Other activities like bicycle rodeos are implemented at six schools in Coconino County and target 3rd, 4th and 5th graders. A bicycle course is marked out with pedestrians and crosswalks. Students are allowed to go through two times using hand signals and road rules. The rodeos are done in conjunction with the Flagstaff Bicycle Organization, one of the program’s supporting partners. In 2008, the top students in the 5th and 6th grade at Kinsey created a photojournalism project in partnership with Safe Kids Worldwide (SKWW). First, two lessons were completed that focused on pedestrian safety and photography. Then the students went on a walking field trip in which they took pictures of the “walking environment.” The students then wrote summaries of their top three pictures ranging in topic from how to improve Flagstaff’s “walkability” to general pedestrian safety. These pictures were used as a part of SKWW’s International Walk to School Day 2008 on reminder postcards and banners announcing the event.

Another important partnership is with Northern Arizona University College of Health Promotion. A SRTS curriculum is currently being developed and is scheduled to begin fall 2009. College students enrolled in the curriculum create and implement a SRTS project focused on helping children become healthier. Teachers and employees from the Coconino County Health Department will evaluate each project.

Milestones
Funding has allowed the program to hire a half-time coordinator to create and implement SRTS activities. Another milestone has been the tremendous amount of community support for the program. “Last year the whole ROTC program helped out with International Walk to School Day,” said Heather Taylor, Injury Prevention Senior Coordinator at the Coconino County Health Department. Her colleague, Kim Austin, is also starting to notice a change in attitude in teachers and administrators. She says that it was difficult making them realize how important healthy lifestyles are for children. “Many districts and schools across the country are cutting recess from the school day. They need to understand that in order to improve test scores, children need to exercise,” said Austin.
Chances for Children - Phoenix, AZ

Project Overview
The First Step Fit Kids program is a running/walking program designed to get children moving and their families moving in the fight against childhood obesity. In the program children are challenged to run or walk 25 miles during the fall semester at school. Children are assisted through the program by tracking their completed miles on mileage charts. Participants are also provided all of the necessary “materials” to get active including Nike running shoes, team shirts, nutrition clinics, running incentives, and race entries into the following races:

• Nike Regional Cross Country Championships Kids 1 mile Fun Run, Tempe, AZ
• Ford Arizona Ironman Kids 1 mile run, Tempe, AZ
• Chances for Children-Arizona Kids Rock Race/RNR Marathon, Tempe, AZ

Program Objective
The objectives of First Step Fit Kids are to:

• Teach kids a mindset and methodology to get in shape now and remain in shape throughout their lives;
• Teach kids the link between goal-setting, effort, and achievement;
• Engage kids in a program structure that enhances their self-esteem, self-discipline, perseverance, focus and sportsmanship;
• Utilize program structure to increase kid’s understanding of health, nutrition, and academics by incorporating program experiences as teaching opportunities.
• Assist families in becoming healthier through educational seminars and training.

Participating Schools 2007-2008:
Tempe Thomas J Pappas Elementary* 50 Participants
Frank Elementary School* 200 Participants
Our Lady of Mt Carmel 65 Participants
Cerritos Elementary 100 Participants
South Valley Academy* 100 Participants

Participating Schools 2008-2009:
Frank Elementary School* 800 Participants
Our Lady of Mt Carmel 65 Participants
Cerritos Elementary 100 Participants
South Valley Academy* 150 Participants
Thew Elementary School* 50 Participants
TBD* 50 Participants

*indicates fully funded programs

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Case Study: Nike SPARK

Research-based SPARK(R) program has been identified as a successful model for combating childhood obesity by The HSC Foundation. The Washington, DC-based health care organization issued a report entitled, “Fighting Obesity: What Works, What’s Promising,” and the SPARK program was one of the models identified as having produced tangible success in addressing what Foundation President and CEO Thomas Chapman referred to as “the obesity epidemic.”

SPARK provides evidence-based physical education, after school, early childhood, and coordinated school health programs to teachers and recreation leaders serving Pre-K through 12th grade students. Each SPARK program is a coordinated package of curriculum, teacher training and content-matched equipment. The SPARK pedagogy is focused on highly active games, dances and sports that maximize physical activity, while also incorporating nutrition and health instruction. "We are honored that The HSC Foundation has recognized SPARK as an effective program to help reverse the childhood obesity trend and promote lifelong wellness among our youth," said Paul Rosengard, School Specialty SPARK Executive Director. “The foundation’s validation of SPARK joins those of many other organizations, such as the National Institute of Health and the U.S. Surgeon General, in recognizing the positive impact our program can have as a school-based solution for the nation’s health care crisis.”

The program can be implemented for a one time cost of $5,000 for the program and the learning tools for the school. This amounts to a very small budget for the number of children this is provided to within an entire school.

SPARK’s Positive Effects:
Tested and Proven
Today, over 45 publications have documented the positive effects of SPARK PE -- such as:

- Academic Achievement
- Increased moderate to vigorous physical activity in students (to over 50% of class time)
- Fitness achievement (as measured by the Fitnessgram test)
- Sport skills development (throw, catch, kick)
- Enjoyment of PE
- Improved teacher instruction (quantity and quality)
- SPARK effects are lasting (sustainability)

The sustainability of a health-related PE program (SPARK) was independently evaluated in 111 elementary schools in 7 states. Surveys were mailed to schools that had received SPARK curriculum books, training, and follow-up (response rate = 47%). Up to 80% of schools that adopted SPARK PE reported sustained use up to 4 years later. Schools using SPARK had more frequent PE classes. Sustained use was related to support from the principal, not previously having a standard PE program, having adequate equipment, and teachers being physically active. Program sustainability was similar in advantaged and disadvantaged schools. Evidence-based PE programs can be sustained up to 4 years.

http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails

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Additional Case Studies

Bronx, New York, United States of America:
• Conducted three community charrettes and completed the South Bronx Greenway feasibility study.
• Helped partners establish funding commitments totaling $35,487,689 to support active living infrastructure consistent with the Hunts Point Vision Plan.
• Worked with the community to secure commitments for bike lane striping and other landscaping/traffic calming commitments along Lafayette Avenue and Hunts Point Avenue.
• Initiated, advocated for, and began construction of the new Hunts Point Riverside Park on the waterfront.
• Secured resources and a consultant to plan and create a social marketing eﬀort to encourage use of the new greenway network and parks.
• Incorporated activity prescriptions and a physical activity resource guide into Bronx-wide outreach materials of the NYC Department of Health.
• Secured a commitment from NYDOT for improved signal crossing times at an intersection with a six-lane expressway in the center of the community.
• Started a walking/exercise club for mothers and a monthly History of Hunts Point walk.

Charleston, South Carolina, United States of America:
• Conducted municipal zoning survey in three-county area to evaluate land use and accessibility.
• Completed an inventory of all regional bicycle and pedestrian facilities, park and recreation centers, and updated bicycle/pedestrian accident data.
• Received $75,000 in grant awards for smart growth and land use changes.
• Completed a Bicycle/Pedestrian Action Plan that provided a framework for improving access. Steps included targeting specific schools as pilot programs, locating funding for Safe Routes to Schools programs, promoting Complete Streets, and increasing involvement with healthcare providers.
• Organized and funded Walk and Bike to School Day events at schools throughout the region that included over 200 participants and encouraged more schools to join the next year.
• Identified priority road and bridge improvement projects and cost estimates with the South Carolina Department of Transportation.

Cleveland Ohio, United States of America:
• Organized seasonal, biweekly community safety walk in response to fear of crime.
• Completed seven planning, design, fundraising and construction projects to support an integrated trail and open space network for the neighborhood. Completed facilities include a nine-hole golf course and perimeter trail at Washington Park and the reconstruction of the Fleet Avenue bridge with ten-foot sidewalks.
• Launched four Safe Routes to School initiatives, secured mayoral support for a district-wide Safe Routes effort, and published an International Walk-to-School Day toolkit for the city.
• Produced and distributed a comprehensive bike/ped/active living map for the neighborhood. This project received the Dominion East Ohio Community Impact Award.
• Conducted a large, community-wide survey and five population-specific focus groups to inform programming and a neighborhood-specific social marketing campaign.

Jackson, Michigan, United States of America:
• Sponsored Jackson’s first Smart Commute Day, with 165 participants traveling 550 miles by foot, bike or transit. More than 85% were first-time smart commuters.
• Conducted a highly successful, comprehensive Safe Routes to School pilot at Frost Elementary and expanded it to two new schools; installed 12 new zebra crosswalks and two ‘No Turn on Red’ signs around Frost school; and redesigned the school parking lot to reduce parking, increase access, and improve safety for children who walk or bicycle.
• Installed bike lanes on four roads and four key crosswalks in the downtown area, signed bike routes throughout the city, and realigned and signed all of the bike trail’s intersections with streets.
• Conducted Foot Energy, a comprehensive Safe Routes to Work program at Lifeways, a mental health provider with 50 employees; installed lockers and bike racks and provided bikes and helmets for the company’s biking program.
• Provided web-based, personalized active transportation plans for citizens throughout Jackson.
• Raised more than $80,000 to support active living initiatives, and helped the City of Jackson raise $1.3 million from the state for the Riverwalk plan and land acquisition downtown.
• With the Student Coalition for Walkable Communities, designed the Project U-Turn logo, completed a bike rack assessment, conducted a letter-writing campaign to businesses to encourage rack installation, and partnered with the Jackson.
• Transit Authority to assess a potential ‘Cool Bus’ route and bus renovation for youth.
• Completed destination-based bike routes map for the city; planning an advocacy and awareness campaign to support bike lanes along these routes.

Louisville, Kentucky, United States of America:
• Developed and implemented a bicycle recycling and education program for low-income youth within the project area.
• Played a critical role in designing the Smoketown ‘neighborhood campus,’ a planning effort that will incorporate active living principles into a nine-block area.
• Provided ongoing input and significantly influenced the design of the Liberty Green HOPE VI redevelopment in the project area. Future elements for the six block housing project will include walkable streets, pocket parks, and an ‘Active Living Center.’
• Received $180,000 as a part of the Community Development Block grant for streetscape improvements, outdoor gardening and pocket parks. Refurbished and upgraded two outdoor basketball courts in the Smoketown neighborhood.
• Developed, implemented, and expanded a series of multi-generational fitness and dance classes with 200+ participants, formed in response to low-income resident focus groups.
• Received a $10,000 grant from Nickelodeon and a $20,000 grant from the Metro Health Department for physical activity programming.
• Successfully advocated authorization from the US Department of Housing and Urban Development for Louisville Metro Housing Authority (LMHA) to redevelop the Liberty Green HOPE VI project at a higher density to enhance neighborhood walkability.
Additional Case Studies

**Nashville, Tennessee, United States of America:**
- Established Tour de Nash as an annual event that raises money, and sponsored Walk Bike Nashville Week.
- Conducted a stairwell improvement and promotion program at Matthew Walker Health Center.
- Established the MCM Kids Safe Routes to School program and completed a comprehensive pilot at Eakin Elementary School.
- Conducted a walk-to-shop program at Green Hills Apartments for retired teachers that led to crosswalk, sidewalk, and store improvements.
- Created and institutionalized the use of an active living neighborhood audit tool to inform the planning department’s development of detailed design plans and to prioritize physical improvements for all Nashville neighborhoods.
- Reviewed, rewrote, and approved new subdivision regulations for metro Nashville to support routine physical activity.

**Somerville, Massachusetts, United States of America:**
- Secured critical right-of-way from the regional rail company that will allow for the extension of the community path.
- Conducted Healthy Mind, Healthy Body physical activity classes for Portuguese-speaking residents.
- Completed thermoplastic striping on the majority of city crosswalks, ensuring longer-lasting visibility of pedestrian safety zones.
- Installed new bicycle parking amenities at two elementary schools and advocated for bike parking amendments, which were approved by city zoning board.
- Distributed copies of Safe Routes to School maps and information in English, Spanish, Haitian, and Portuguese to children in three elementary schools.
- Received $900,000 in federal transportation money for the Somerville Community Path extension.

**Upper Valley, New Hampshire, United States of America:**
- Implemented a nationally-recognized physician prescription program in conjunction with Dartmouth-Hitchcock Medical Center.
- Produced and distributed prescription brochures, waiting room posters, and walking resource guides to local trails.
- Conducted lunch-hour outings for Dartmouth College students in collaboration with the college’s Health Awareness Program.
- Received $50,000 in grants to support programs and events.
- Provided resources to open, maintain, and hold events on the half-mile ice skating loop on Dewey’s Pond and a two-mile skating trail on Lake Morey.
- Coordinated Upper Valley Trails Day to get people out on trails; planning 17 events to construct and maintain trails.

**York, United Kingdom:**
- Developed integrated transportation network that does not rely on cars.
- Focuses on sustainable active alternatives – walking and cycling.
- Modified land-use to implement new transportation system.

**Liverpoul, United Kingdom:**
- Neighborhood regeneration and development of sports facility from brownfields.
- Development of grass “mini patches”
- Involved local school children in charrettes.
- Sited major park in proximity of local police station for added security.

**Barcelona, Spain:**
- City Planning movement to promote active living and work environments.
- Planners took holistic approach to reverse urban decay and promote open spaces.
- Policies focused on reducing crime and improving social capital.

**Stoke-on-Trent, United Kingdom:**
- Developed several strategies for increasing physical activity in groups of lower socioeconomic status.
- Developed program to allow primary health care professionals to refer clients to a 10-week program promoting active living.
- Promoted youth services, sport and leisure opportunities, and crime prevention.

**Jerusalem, Israel:**
- Developed opportunities for active living in elderly communities.
- Created Elderly Sports Day at the Givat Ram stadium.

**Sandnes, Norway:**
- Systematic efforts to identify and promote the interests of children and young people in local planning work.
- Developed a Children’s Trail program that enabled children to identify play areas, short cuts, and schools.
- Developed digital maps and on aerial photography which were used in planning.

**Rome, Italy:**
- Developed a successful walking school bus program.
- More than 50 schools along with local police, safety personnel, families, and district representatives were involved.
- Car traffic was limited where walking school bus programs occurred.

**Brno, Czech Republic:**
- Established programs for overweight children and their parents.
- Developed family-oriented exercise sessions, nutrition discussions, and explored other reasons for increased weight in children.
- Provided funding for summer camp for obese children complete with healthy meals and lots of physical activities.

**Stirling, Scotland:**
- Unique partnership between city departments and community groups.
- Provided a range of activities for children and young people including free swimming, midnight football, twilight basketball, music, and dance.

**Copenhagen, Denmark:**
- Developed a multifaceted long-term program designed to increase citizen participation in physical activity.
- Created a three-pronged strategy revolving around education, opportunities, and action.

**Turku, Finland:**
- Demonstrated a comprehensive approach to increasing active living among citizens of all ages.
- Includes a range of communication activities, services, counseling, and involvement of city planners.
- Encouraged a range of active activities coordinated by volunteers.
Tempe in Motion (TIM) provides bus, bicycle, pedestrian and light rail facilities and encourages getting around Tempe in anything but a car. The goal of Tempe in Motion is to provide a balanced transportation system that is environmentally sustainable, accessible, preserves neighborhoods, promotes transit-oriented development and involves citizens in the process.

Highlights:
- Received an award from the Clean Air Campaign to develop an advanced alternative transportation program in Maricopa County
- Encouraged commuters to use bicycles by improving facilities, educational programs and events (like the Tour de Tempe, Bike to Work and School Day and Bike-a-Palooza.
- Opened the "Bicycle Cellar, first of its kind in Arizona, to offer secure bicycle parking, equipment, repairs, bicycle advice, rentals, education, and changing rooms (See Previous)
The Arizona Statewide Bicycle | Pedestrian Plan (SBPP) describes state policies and codes that affect pedestrian planning and provides a matrix of creative ordinances from around the nation, encouraging localities to implement and follow them. It contains an informative table on potential funding opportunities and resources that consist of project type, required matching funds, deadlines, etc. The plan is well-organized and presents a great example of citizen participation and stakeholder involvement. Development of the plan involved a comprehensive steering committee of representatives from pedestrian activist organizations, municipalities, State engineering agencies, a review committee, and engineering input.

Highlights:
- Prescott Alternative Transportation (PAT) utilizes grants and donations for their Safe Routes to School Program
- Bikes Belong Coalition awards $10,000 grants to local organizations, agencies, and citizens for bicycle projects that will be funded by TEA-21. Ex: Greenways Trail System (SR 89/SR69) interchange shared-use path, and Rails-to-Trails Phase II.
- REI employees can nominate local trail projects for REI’s conservation or outdoor recreation grants.
- Arizona Bicycle Club utilized grant money from the Frank Kush Youth Foundation, which presents grants to programs that encourage youth health and physical fitness.
- The Phoenix Children’s Hospital recently completed an instructional video for beginning drivers that focuses on how to drive safely around bicyclists.
- http://www.azbikeped.org/
Diamondback Bridge was developed by the Tucson Department of Transportation primarily to create a pedestrian and bike connection across a busy thoroughfare. The bridge also became a public arts project that met with some resistance due to the snake subject matter and cost. The bridge that was ultimately built was severely value engineered over the original design.

Highlights:
• Brings functional public art to the bicycle & pedestrian structure
• Establishes a safe way for residents and visitors to cross six lanes of traffic handling more than 34,500 vehicles per day
• ADA-accessible bridge is a viable link in the regional system of pedestrian pathways that connects metropolitan Tucson
• Developed by Simon Dononvan, the bridge was built with the help of extensive community education and outreach, value engineering and redesign, built with the funding from local groups and Tucson Department of Transportation
• http://www.activeliving.org/node/339
With funds derived from a tax increment district known as Rio Nuevo, the City of Tucson is making a series of strategic investments to stimulate the marketplace and support new private sector development. Those tax increment dollars are invested in ways that augment a shared vision for a vibrant city center by leveraging downtown Tucson’s unique competitive advantage as the region’s urban and cultural center.

Highlights:
- Government Policy approved by voters for revitalizing downtown Tucson (Congress Street, a primary area of focus)
- Reversed the trend for Congress Street to be solely a vehicular thoroughfare
- City contracted Project for Public Spaces, a local landscape architect, and other private firms to develop a plan
- Developed a plan for a vibrant, pedestrian-friendly urban destination
- Removed two lanes and added on-street parking, decreased lane width, and improved sidewalks and crosswalks in terms of both safety and aesthetics
- Created a more attractive place to live, work, and shop and is a springboard for more major construction projects.
- [http://www.activeliving.org/node/327?tab=summary](http://www.activeliving.org/node/327?tab=summary)
- [http://cms3.tucsonaz.gov/rionuevo](http://cms3.tucsonaz.gov/rionuevo)
Local Case Studies: Handlebar Helpers- Scottsdale

HISTORY OF HANDLEBAR HELPERS

Our five focus areas:

* encourage volunteerism
* provide job and life skills for community youth
* provide positive adult role models for at-risk youth
* provide reconditioned bicycles to employees who bike to work
* promote safe bicycling and environmental stewardship

The Handlebar Helper Program “rolled” into action in October of 1994 when local citizens collaborated with City of Scottsdale Staff to initiate the program.

Jack Harris, along with Rosemary Mossbarger, community activist, and Doug Banfielder (aka, the “bike” guy) had come to the City with their idea to start a bike program, over 14 years ago. Jack had a business “Bikes by Jack,” and he donated all the bike parts, bikes and assorted equipment to begin the Handlebar Helper program. After much encouragement from these tenacious volunteers, the Parks & Recreation Division agreed to start the Handlebar Helper program.

EARN A BIKE PROGRAM:

What to do to Earn-a-Bike

Contact Handlebar Helpers at (480) 312-2771 to find out about volunteer opportunities in the City and to sign up for this program. You will earn a “bike buck” for each hour of volunteer work. These “bike bucks” can be redeemed for a reconditioned bicycle from the Handlebar Helpers Bike Shop. About 20 hours is needed to earn a reconditioned bike.

The organization where the participant completes volunteer service, fills out “bike bucks” and submits this information to the program administration to monitor the number of hours the participant completes.

How the Bikes are priced

The Bike Shop Supervisor and Volunteer Bike Technicians establish the price. Bike prices are stated as the number of hours of volunteer work required to own the bike.

How to Select Your Bike

Once the participant has completed approximately half of the volunteer hours they contact the Bike Shop to set a time to look at available bikes. At the shop, an appropriate bike is selected from the available inventory with the help of a volunteer bike tech who then reconditions the selection.

Bike Award Ceremony

When the participant has satisfied the volunteer commitment, the bike, a helmet and a lock are awarded at a special ceremony. Each recipient receives a folder which contains a written description and picture of their bike, and a safety brochure, available in English and Spanish. The Scottsdale Police Department Bike Patrol staff supports the program and participates in this presentation. They emphasize the safety information and are good role models, as they always wear helmets and ride safely. Kids receiving bicycles are encouraged to bring their parents. Written releases are required of all recipients or their parents. Event bulletins are distributed to the local media naming each recipient.

Sponsors:

COMMUNITY SPONSORS
* Arizona Community Foundation
* Arizona Federal C.U.-Community Partners
* Bell Helicopters
* Bob’s Bike Shop
* Circle K
* Concerned Citizens for Community Health
* Cycle Ranch
* Defusco Industrial Supply
* J Im Winter Auto Care
* Landis Cyclery
* Motorola
* North Scottsdale Lions Club
* Partners for Paiute
* Pinnacle Peak Cyclery
* Schuff Steel
* Scottsdale Charros
* Soroptimist of Scottsdale
* Stardust Foundation
* Sun Pontiac
* Verizon Wireless
* J ack Harris
* J ohn Gebo
* T ony & Debra Phillips

Local Case Studies: 6
Local Case Studies: The Bicycle Cellar - Tempe

The Bicycle Cellar exists to assist and encourage individuals who commute by bike or have the desire to do so. Bike commuting can change many things about one's life. From the health benefits to the environmental contribution, bike commuting will change the outlook of the commuter on many levels... Bike theft across the nation has skyrocketed and the Bicycle Cellar would like to be a part of the solution by providing secure bike parking to those that use their bike to commute to school or work.

Services offered:
- 20hrs a day 7 days a week secure access to bicycle parking with key card
- access to self service bicycle repair
- use of showers, lockers, and towel service
- bicycle repair services
- bicycle part sales
- bicycle rentals

MEMBERSHIP RATES

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<tr>
<td>Daily Towel Service</td>
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</table>

OTHER SERVICES OFFERED

TEMPE TRAFFIC SKILLS 101 EXPRESS
Join Tempe Bicycle Action Group (TBAG) at THE BICYCLE CELLAR on Saturday, February 20th, for a comprehensive traffic skills class. This 5 hour comprehensive course is taught by a League of American Bicyclists certified League Cycling Instructor.

Gain the confidence you need to ride safely and legally in traffic or on the trail. The course covers vehicular cycling concepts, equipment safety checks, on-bike skills and crash avoidance techniques and includes a student manual. Recommended for adults and children above age 14, this fast-paced course prepares cyclists for a full understanding of vehicular cycling. A bicycle in working order & a helmet are required. Please come prepared to ride at least 5 miles, part of the hands on portion is parking lot drills and a road test.

If you cannot afford to purchase a helmet, don’t worry, we will have free helmets the day of the course.

THE BICYCLE CELLAR

The Bicycle Cellar, empowering the green minded... Don’t just talk the talk, ride the ride!

BIKE. PARK. SHOWER. GO!

The carbon neutral movement is here, it’s now, it’s at the BC in Tempe!

The first of it’s kind in Arizona: the Bicycle Cellar is a bicycle commuter facility providing secure bike parking commuter services, sales, and the added convenience of restrooms, showers, lockers and dressing areas.

The Bicycle Cellar. Safe, Green & Clean.
Local Case Studies: Jane’s Walk - Phoenix

"No one can find what will work for our cities by looking at... suburban garden cities, manipulating scale models, or inventing dream cities... you've got to get out and walk.”

- Jane Jacobs

Jane Jacobs’ vision for a vibrant city is one that includes safe and efficient modes of transportation that bring people together in the spirit of community. The goal of all Jane’s Walk & Roll activities are to bring people together, raise social awareness, have fun, and to be safe.

1. Jane Jacobs, with no college degree, and never formally educated or professionally trained in urban planning, came to be the most famous urban planning critic and commentator of the 20th century.
2. At a time when women were not involved in urban planning or government, as a young upstart journalist, Jacobs faced down legendary titan Robert Moses and successfully blocked his plans to destroy entire sections of Manhattan with massive highways.
3. Her 1961 seminal work Death and Life of Great American Cities proposed radically new principles for rebuilding cities. At a time when common wisdom called for bulldozing slums and opening up city space, Jacobs’s prescription was ever more diversity, density and dynamism. Her book has been credited with reaching beyond planning issues to influence the spirit of the times.
4. Critics used adjectives like “triumphant” and “seminal” to describe Death and Life of Great American Cities. Wolf Von Eckardt, writing in The Washington Post, observed that it has “proved more important than all the statistical studies of all our myriad urban centers.”
5. Jacobs was a community organization pioneer: she organized massive grass-roots efforts to block urban-renewal projects that would have destroyed local neighborhoods. She inspired countless individuals and established the importance of citizen participation in community design.

In 1968, Jacobs was arrested on charges of second-degree riot and criminal mischief for disrupting a public meeting about the construction of a 10-lane elevated expressway, which would have sliced across Lower Manhattan and displaced thousands of families and businesses. The charges were dropped, and the.

Jane’s Roll - Bicycles
Ideas for hosting a Jane’s Ride include:
- Riding through your downtown area
- Promoting your community’s bicycle master plan
- Highlighting areas of existing bicycle transit use
- Connecting your urban core with an existing trail system
- Bicycle safety awareness and advocacy

Jane’s Roll - Wheelchairs
There are many diverse uses for wheelchairs in our communities. One thing that ties these uses together is the need for direct access in both public and private areas of life. For many wheelchair users the experience of basic social exclusion is a reality that is faced everyday. Issues ranging from transportation and mobility to access into and within buildings and homes are challenges that demand greater awareness.

The concept of universal design (providing accessibility to everyone regardless of ability) is becoming the accepted standard in architecture, construction, engineering and city planning. By hosting a Jane’s Roll for wheelchairs you will have the opportunity to highlight some of your favorite areas of your community and hopefully introduce others to the ideas surrounding direct access and universal design.
Healthy Kids | Healthy Communities:
Maryvale on the Move Research Overview

Healthy Living for Kids

Glendale, Arizona: Events promote safe routes to school

- International Walk to School Movement
- Worked in cooperation with NHL Phoenix Coyotes and NFL Arizona Cardinals
- Mascots Howler and Big Red became honorary crossing guards to get the kids excited and motivated
- Primary goal was safety but second was to get kids moving. Research showed that kids who walk and bike to school do better in morning classes
- Handed out little feet, made posters, and introduced celebrities
- First parents were doing a lot of work, then student councils began to participate
- http://www.activeliving.org/node/696

W. K. Kellogg Foundation

- One of nine nationwide projects that promotes embracing active living and healthy eating
- Each community group received a two-year $500,000.00 grant to create a community action plan that maps out ways the community can support healthy living, help youth, and families
- Promotes access to local healthy food
- Provides safe spaces and structures for physical activity and play
- http://www.activeliving.org/node/639

Safe Kids Tucson Trains Teachers and Encourages Students
Pima County, Arizona

- Awarded 40,790 in Federal Safe Routes to School (SRTS) funds
- Funds used to set up pedestrian and bicycle safety education and encouragement programs at seven schools in the county
- Two goals:
  - Train teachers to integrate pedestrian and bicycle safety lessons in to the existing curriculum and to expand the pilot program to schools outside the initial 8 schools
  - Participate in International Walk to School Day
- Implement 6 week long walking school bus challenge with punch cards, five punches enters kids into a raffle for prizes
- Parent surveys to determine barriers to walking and bicycling to school, this data will be used to submit for infrastructure funding.
Healthy Kids | Healthy Communities:
Maryvale on the Move Research Overview

Healthy Living for Kids

Transportation Mural Encourages new thinking
Prescott, Arizona

- Alternative trasportation mural painted on corner of Mile High Middle School
- Non-infrastructure program funded by $34,000 cycle one grant from the Arizona Department of Transportation (AZDOT)
- Students brainstormed alternative transportation methods: skateboards, in-line skates, hot air balloons, jet packs, and even dinosaurs
- Two local artists known as Mural Mice worked with students and all school's art classes participated in the painting
- Prescott Alternative Trasportation (PAT) hired part-time coordinator to promote encouragement activities such as walk to school day and bicycle rodeo
- International Walk to School Day participants received shirts.
- Parents, staff and volunteers conducted walk-abouts to map pedestrian and bicycle routes within one mile of each school and identify problem areas to include in an infrastructure grant application

Parades Encourage Walking to School
Yuma, Arizona

- Yuma Elementary School district organized a parade to school at Desert Mesa Elementary School and O.C. J ohnson Elementary School to promote safe and healthy places for the children to walk and bicycle to school
- Police car leads the parade, followed by school marching band, and empty school bus decorated with posters and streamers symbolizing how 40 students walking or bicycling to school equals one empty school bus.
- Students received sticker and pencil for completing the parade route

Walk bike and get Fit in Flagstaff
Flagstaff, Arizona

- Coconino County Health Department received $39,000 in federal funding awarded through the Arizona Department of Transportation to jumpstart its Safe Routes to School (SRTS) program
- Two Goals:
  - encourage more students to walk or bike to school, conquering childhood obesity and diabetes
  - to educate the students on the benefits of alternative transportation
- Kinsey program is an incentive program with prizes donated by surrounding community
- All donated prizes are related to healthy activity such as passes for ice skating, bowling, and climbing gyms
- Punch card with punchable icons in the shape of shoe or bike
- Coconino County Health Department conducts two 45-minute lessons in classes in 3rd through 6th grades
- Classes include information on pollution awareness
- Bicycle rodeos are marked out with pedestrians and crosswalks
Healthy Kids | Healthy Communities:
Maryvale on the Move Research Overview

9 HEALTHY EATING STRATEGIES

Strategy 1: Retail Outlets
Increase community access to healthy foods through supermarkets, grocery stores, and convenience/corner stores.

Action Steps

• Create incentive programs to attract supermarkets and grocery stores to underserved neighborhoods (e.g., tax credits, grant and loan programs, small business/economic development programs, and other economic incentives).

• Realign bus routes or provide other transportation, such as mobile community vans or shuttles to ensure that residents can access supermarkets or grocery stores easily and affordably through public transportation.

• Create incentive programs to enable current small food store owners in underserved areas to carry healthier, affordable food items (e.g., grants or loans to purchase refrigeration equipment to store fruits, vegetables, and fat-free/low-fat dairy; free publicity; a city awards program; or linkages to wholesale distributors).

• Use zoning regulations to enable healthy food providers to locate in underserved neighborhoods (e.g., “as of right” and “conditional use permits”).

• Enhance accessibility to grocery stores through public safety efforts, such as better outdoor lighting and police patrolling.

Strategy 2: Restaurants
Improve the availability and identification of healthful foods in restaurants.

Action Steps

• Require menu labeling in chain restaurants to provide consumers with calorie information on in-store menus and menu boards.

• Encourage non-chain restaurants to provide consumers with calorie information on in-store menus and menu boards.

• Offer incentives (e.g., recognition or endorsement) for restaurants that promote healthier options (for example, by increasing the offerings of healthier foods, serving age-appropriate portion sizes, or making the default standard options healthy – i.e., apples or carrots instead of French fries, and non-fat milk instead of soda in “kids’ meals”).

Institute of Medicine: Local Government Actions to Prevent Childhood Obesity

National Academy of Sciences, Institute of Medicine September 2009
Strategy 3: Community Food Access
Promote efforts to provide fruits and vegetables in a variety of settings, such as farmers’ markets, farm stands, mobile markets, community gardens, and youth-focused gardens.

Action Steps
• Encourage farmers markets to accept Special Supplemental Nutrition Program for Women, Infants and Children (WIC) food package vouchers and WIC Farmers Market Nutrition Program coupons; and encourage and make it possible for farmers markets to accept Supplemental Nutrition Assistance Program (or SNAP, formerly the Food Stamp Program) and WIC Program Electronic Benefit Transfer (EBT) cards by allocating funding for equipment that uses electronic methods of payment.
• Improve funding for outreach, education, and transportation to encourage use of farmers markets and farm stands by residents of lower-income neighborhoods, and by WIC and SNAP recipients.
• Introduce or modify land use policies/zoning regulations to promote, expand, and protect potential sites for community gardens and farmers’ markets, such as vacant city-owned land or unused parking lots.
• Develop community-based group activities (e.g., community kitchens) that link procurement of affordable, healthy food with improving skills in purchasing and preparing food.

Strategy 4: Public Programs and Worksites
Ensure that publicly-run entities such as after-school programs, child-care facilities, recreation centers, and local government worksites implement policies and practices to promote healthy foods and beverages and reduce or eliminate the availability of calorie-dense, nutrient-poor foods.

Action Steps
• Mandate and implement strong nutrition standards for foods and beverages available in government-run or regulated after-school programs, recreation centers, parks, and child care facilities (which includes limiting access to calorie-dense, nutrient-poor foods).
• Ensure that local government agencies that operate cafeterias and vending options have strong nutrition standards in place wherever foods and beverages are sold or available.
• Provide incentives or subsidies to government run or regulated programs and localities that provide healthy foods at competitive prices and limit calorie-dense, nutrient poor foods (e.g., after-school programs that provide fruits or vegetables every day, and eliminate calorie-dense, nutrient poor foods in vending machines or as part of the program).
Strategy 5: Government Nutrition Programs
Increase participation in federal, state, and local government nutrition assistance programs (e.g., WIC, school breakfast and lunch, the Child and Adult Care Food Program [CACFP], the Afterschool Snacks Program, the Summer Food Service Program, SNAP).

Action Steps
• Put policies in place that require government-run and -regulated agencies responsible for administering nutrition assistance programs to collaborate across agencies and programs to increase enrollment and participation in these programs (i.e., WIC agencies should ensure that those who are eligible are also participating in SNAP, etc.)
• Ensure that child care and after-school program licensing agencies encourage utilization of the nutrition assistance programs and increase nutrition program enrollment (CACFP Afterschool Snack Program, and the Summer Food Service Program).

Strategy 6: Breastfeeding
Encourage breastfeeding and promote breastfeeding-friendly communities.

Action Steps
• Adopt practices in city and county hospitals that are consistent with the Baby-Friendly Hospital Initiative USA (United Nations Children’s Fund/World Health Organization). This initiative promotes, protects, and supports breastfeeding through ten steps to successful breastfeeding for hospitals.
• Permit breastfeeding in public places and rescind any laws or regulations that discourage or do not allow breastfeeding in public places and encourage the creation of lactation rooms in public places.
• Develop incentive programs to encourage government agencies to ensure breastfeeding-friendly worksites, including providing lactation rooms.
• Allocate funding to WIC clinics to acquire breast pumps to loan to participants.
Strategy 7: Drinking Water Access
Increase access to free, safe drinking water in public places to encourage water consumption instead of sugar-sweetened beverages.

Action Steps
- Require that plain water be available in local government-operated and administered outdoor areas and other public places and facilities.
- Adopt building codes to require access to and maintenance of fresh drinking water fountains (e.g., public restroom codes).

Strategy 8: Policies and Ordinances
Implement fiscal policies and local ordinances to discourage the consumption of calorie-dense, nutrient-poor foods and beverages (e.g., taxes, incentives, land use and zoning regulations).

Action Steps
- Implement a tax strategy to discourage consumption of foods and beverages that have minimal nutritional value, such as sugar-sweetened beverages.
- Adopt land use and zoning policies that restrict fast food establishments near school grounds and public playgrounds.
- Implement local ordinances to restrict mobile vending of calorie-dense, nutrient-poor foods near schools and public playgrounds.
- Implement zoning designed to limit the density of fast food establishments in residential communities.
- Eliminate advertising and marketing of calorie-dense, nutrient-poor foods and beverages near school grounds and public places frequently visited by youths.
- Create incentive and recognition programs to encourage grocery stores and convenience stores to reduce point-of-sale marketing of calorie-dense, nutrient-poor foods (i.e., promote “candy-free” check out aisles and spaces).
Strategy 9: Media and Social Marketing
Promote media and social marketing campaigns on healthy eating and childhood obesity prevention.

Action Steps

• Develop media campaigns, utilizing multiple channels (print, radio, internet, television, social networking, and other promotional materials) to promote healthy eating (and active living) using consistent messages.

• Design a media campaign that establishes community access to healthy foods as a health equity issue and reframes obesity as a consequence of environmental inequities and not just the result of poor personal choices.

• Develop counter-advertising media approaches against unhealthy products to reach youth as has been used in the tobacco and alcohol prevention fields.

Associated Goals:
Improve Access to and Consumption of Healthy, Safe, and Affordable Foods

Reduce Access to and consumption of calorie-dense, nutrient-poor foods

Raise awareness about the importance of Healthy eating to prevent childhood obesity
Healthy Kids | Healthy Communities: Maryvale on the Move Research Overview

Politics, Zoning and Legislation of Community Gardens and Urban Agriculture [incomplete]

What is involved, politically in setting up community garden/urban agriculture?

At one time, setting up a community garden literally meant throwing a sack of seeds and soil into a vacant lot and seeing what took. Now, there is a bit more involved in setting up and organizing these entities within a municipality.

According to the University of California Davis, perhaps the most critical element to begin this process with the city is local organization. Making sure that the community that is going to be running the garden is involved and excited about the process is the biggest step. Without local support for these initiatives, the idea is likely to fall apart.

Meetings should be arranged between the organizing entity, such as the Stardust Center, and the community in order to determine what the neighborhood is able and willing to commit to. Is this going to be a local playground or a small garden to sit and relax in? Or is this more of an urban agriculture project that will involve a larger commitment and organization to run with the possibility of an income from the produce? Determining the scale and scope is critical to having a clear idea of where to locate the site as well as provide a good argument for the local government. Additionally, it is frequently helpful for the community to form a Garden Club or other community run organization to interface with the city after the project has been completed. But most importantly, the community needs to be able to demonstrate the need and desire for changes.

Once there is a general idea of what the community is aiming for begin research into the city and contact the local planning department and see if there is any land available to begin working on this endeavor. From this point onward problems that occur will usually regard local zoning and ordinances. Projects that occur in the backyard may not have the same zoning restrictions applied to them than a garden located in the front.

When there is an idea of the scale of the project, looking for sites and finding out who owns them is the next step. Should the site be privately owned, contacting the owner and seeing if he/she is amenable for a community garden to be established. If the answer is a yes, then discussions on a lease for the land should be done and a clear understanding on how long the community has to inhabit the property. Here again, zoning is important to understand exactly what can be done with the site. If the goal is an urban farm and the code does not allow money to be made off of the property, then conversations with both the owner and the city need to be started if the project is to move forward on that site.

Should the site be city owned, then it follows that the community organizations might have to petition the city for the use of a property for the community garden or urban farm. A similar lease contract with the city should be set up in order to defend the right of the community to work the property should the city want to reclaim it before the lease is up and should the community let the land go untended. Once again organization within the community or with a non-profit organization is key to maintain a working relationship with the city.

Around this point it would be advantageous to see if local elected officials can lend their support for the project. This would be beneficial not only to the community but the official as well in that it would forge a stronger tie with the community.

Once a site has been vetted through the city or the owner, the next political step is to obtain some liability insurance if the property is not owned in trust by the community.
Community Gardens in New York City really began during the early 1970s when Liz Christy, an artist living in the Lower East Side, organized her community members to clean out and plant a garden in a local vacant lot. This sparked a movement which became known as the Green Guerilla. This group of people would go around to various vacant lots and launch seed “green-aids” or “seed bombs” into the abandoned lots in order to start a small garden. Currently this group has become a vital 501c3 nonprofit organization with 600 community gardens throughout the city.

Since this group’s foundation, many more organizations, such as Green Thumb and East New York Farms! have been launched with the aim of maintaining and creating more of these small gardens in order to preserve open space within the concrete world of New York.

East New York Farms! And the Introduction of Urban Agriculture in East New York:

While the community garden movement took up momentum and eventually became a recognized asset to the city, the plots of land that are occupied are usually small, ranging from tree-pit gardens to lots the size of one small lot. And while these are good for small gardens, this is not an adequate size for urban agriculture. At the other end of the scale are the city parks that are managed by the Parks Department of New York which usually start at around one acre. In the middle of these two systems are areas that are around 20,000 to 30,000 square feet which has become the size for urban agriculture in New York City. From this emerged several not-for-profit organizations to help coordinate and run these lots for both the community and the city.

In 2005 East New York Farms! grew over 10,000 pounds of fresh produce which is sold weekly at a local farmer’s market. This community organization has been very successful in introducing urban agriculture to New York City and has inspired similar organizations throughout the boroughs of New York.

But the most important aspect of this group is the level of community involvement that allows multi-generational interaction and cooperation. As of 2008 the majority of the population living in East New York was under the age of 18. The introduction of community gardens has keep this younger population involved and engaged with their surroundings. Through the United Community Center, local teens can gain leadership experience and urban agricultural experience by running their own farm and assisting other neighborhood gardeners. By and large the response from the community has been great, with these urban agriculture fields greatly adding to the value of the community.
A **Food Desert** applies to a broad swath of health outcomes, ranging from ‘premature mortality,’ to cardiovascular disease, diabetes, and cancer deaths to obesity and hypertension. Are there aspects of places that can make us sick or keep us well? The answer is most assuredly ‘yes!’

-George Kaplan [the Gallagher food desert report]

### Defining the term ‘Food Desert’

**A [Food Desert]** is a district with little or no access to foods needed to maintain a healthy diet, but often served by plenty of fast food restaurants.  
-en.wikipedia.org

**A [Food Desert]** is an area or region in which people experience geographical and/or financial problems in acquiring healthy food.  
-en.wiktionary.org

**A [Food Desert]** is an area where food is non-existent, not healthy (Fringe Food) or too expensive. It is an issue of access and can be defined by distance and/or transportation.  
-worldhungeryear.org

**A [Food Desert]** is densely populated area, largely black and Latino communities, that has been abandoned by major supermarket chains. Many of these communities are, quite literally, starving for broader and healthier food options beyond the seemingly ubiquitous fast-food chains and corner stores selling barely a handful of fruits and vegetables — at relatively high prices.  
-Gray, 09

### Morphology of the term ‘Food Desert’

**From the United Kingdom to the United States**

[In the United Kingdom] The term ‘Food Desert’ made its appearance over a decade ago in the UK, where it was first used to describe occurrences where supermarkets were forced from the inner city to the periphery; this was due to increasing rent prices. Eventually the term was used “to describe areas with limited access to healthy food ... It’s not just a matter of there being no shops ... Often there are shops. But these tend to be meager, run-down shops which sell little or no fresh food.” (word spy)

Here [In the United States] the term “Food Desert” has been recently adopted to replace the term ‘Food Insecurity’ and is being used to describe, “A densely populated area, largely black and Latino communities, that has been abandoned by major supermarket chains. Many of these communities are, quite literally, starving for broader and healthier food options beyond the seemingly ubiquitous fast-food chains (fringe food) and corner stores selling barely a handful of fruits and vegetables — at relatively high prices.” (Gray, 09)

Originally a UK Term ‘UK Food Deserts’  
In the US (1980’s) we called it ‘Food Insularity’  
In the US (2000) the concept was re-named ‘Food Desert’

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*Chicago’s Food Deserts - WEHUNT, JENNIFER*  
Major swaths of Chicago lack access to healthy food.

*Food Auctions- Matt Rouke, Ny Times*
Types of ‘Food Deserts’ and the Distance
- defined by the USDA
* based off a time based measurement

TYPE 1: Walking food deserts
A distances for which it is feasible to walk to a supermarket
[High food availability]
if a supermarket is within a half mile
[Medium food availability]
if a supermarket is between ½ and 1 mile
[Low food availability]
if the nearest supermarket is more than a mile away.

TYPE 2: Drivable food deserts
A distances for which it is feasible to drive to a supermarket.
[High food availability]
if a supermarket is within 10 miles
[Medium food availability]
if a supermarket is between 10 and 20 miles
[Low food availability]
if a supermarket is greater than 20 miles away.

The 2 prong problem that causes the food Deserts

Prong 1: Supermarkets on a budget
"The supermarket industry suffers from especially tight profit margins and is thus particularly risk-averse, so supermarkets' entry into low-income neighborhoods has been slow. Furthermore, many low-end chains are hardly bastions of fresh, healthy produce and meat" (Gray 09)

Prong 2: People on a budget
"Spooked by the economic crisis in decades, Americans are curtailing their spending. They're making fewer trips to super markets and migrating from grocers like Albertson's and Whole Foods to deep-discounters like Aldi and Save-a-Lot " (Gray 08)

"These stores, which define themselves as ‘deep-discounter’ stores concentrate on selling core, high-volume grocery products, like ketchup, cereal and coffee. Want a choice? Forget it! By offering a single brand, usually a private label in a single size, Aldi executives say they can substantially undercut conventional retailers on 90% of the products the store sells.” (Gray 08)

Groups of people who are affected by food deserts?

“Minorities those individuals who identify their race as something other than “White” or their ethnicity as Hispanic (regardless of race)” (USDA, 17) (Gallagher 06).

"Rural and urban low-income individuals, where anyone living in a household with income less than or equal to 200 percent of the Federal poverty thresholds for family size is considered low-income." (USDA, 17)

Poor counties not always poor people “Not everyone who resides in a food desert is poor, for example, nearly 13,000 food desert households have income over $100,000. (Gallagher 09)

Non-vehicle households - "households that do not have access to an automobile, van, or truck of 1-ton-load capacity or less are considered separately from those households who do have access. “(USDA 17) (Gallagher 09)

Elderly - where individuals over age of 65.

- Food Deserts: DC Urban Area- USDA study
- Food Deserts: Iowa Urban Area- USDA study
- Americans do without: Food Deserts in Iowa - Blanchard study
The Gallagher Study:

The Gallagher study measures the distance and impact of food deserts. Food balance and sought to understand how they related to health outcomes, education, income, and race.

“This study addressed that food deserts, in an urban setting, are a block-by-block phenomenon, and measured the distance from every City of Chicago block to the nearest grocery store and fast food restaurant. From this measurement the study developed an empirical score to quantify the balance of food choice available to residents in each block community.”

Results were:

1) Residents of food deserts face nutritional challenges, these are evident in diet-related community health outcomes. Those outcomes worsen when the food desert has high concentrations of nearby fast food alternatives.” (Gallagher 06)

2) Residents of food deserts are more likely to die prematurely and are at greater risk from “diabetes, cancer, and cardiovascular diseases, as well as suffer from obesity and hypertension.” In addition, the more out of balance the food choices, the higher the life lost to diabetes.” (Gallagher 06)

3) Residents of food deserts were minorities. “In Chicago, African-Americans are the most disadvantaged when it comes to balanced food choices, although other racial groups do suffer as well.” (Gallagher 06)

4) Food desert communities “cluster strikingly” by race and or income.

5) "In Chicago food deserts, the nearest grocery store is roughly twice as distant as the nearest fast food restaurant. Meaning it is much easier to access fast food than other types of food.” (Gallagher 06)
Healthy Kids | Healthy Communities:
Maryvale on the Move Research Overview

Food Deserts: Prevalence

“Direct questions from a nationally representative sample of U.S. households in 2001 show that 5.7 percent of all U.S. households did not always have the food they wanted or needed because of access-related problems.
- USDA ‘food desert’ study

The United States Department of Agriculture 2009 study:
The study sought to understand and measure how widespread the problem of Food Deserts was in the United States.

Found that:
2.2 Percent of the United States, (2.3 million people) live in a Low food availability or walking food desert (live more than 1 mile from a supermarket) and do not have access to a vehicle.

3.2 Percent of the United States (3.4 million people) live in a Medium food availability or walking food deserts (live between one-half to 1 mile) and do not have access to a vehicle.

8.4 percent of the United States (23.5 million people) live in a low-income area, Low food availability or walking food deserts and (live more than 1 mile from a supermarket) and do have access to a vehicle. (only 4.1 Percent of these people are themselves low-income households.)

Within urban areas,
* 20.2 Percent (10.1 million low-income individuals) live in a live in a Low food availability or walking food desert (live more than 1 mile from a supermarket) of these, 3.6 million live in low-income areas.

Within Rural low income area areas:
* 85.7 Percent (16.1 million persons) live in High food availability - Driving Food Desert (a supermarket is within 10 miles)

* 11.7 Percent (1.9 million persons) live in a Medium food availability - Driving Food Desert (a supermarket is within 10 to 20 miles)

* 2.6 Percent live in a low food availability - Driving Food Desert (a supermarket is more than 20 miles)

Outcome of the Study:
The study established the importance of owning a vehicle or having access to affordable transportation in rural areas.

Data showed:
Person of low-income, low food availability spend more time (36 minutes) traveling to grocery stores than the national average of (15 minutes). In addition, 93 percent of these peoples travel to the grocery store in a vehicle they or another household member drove.

Food Desert locations in the United States
"Using Census and other federal data, Blanchard charted supermarket access nationally. He found it was worst in the West, where 44 percent of the average county’s population has poor access to grocers” (AP 2004).

West - 44 percent
Midwest - 34 percent
South - 24 percent
Northeast - 10 percent

Common Study Locations:
* Chicago: “More than a half million live in Food Deserts and roughly 400,000 Chicagans live in areas with an imbalance of food choices. (Gallagher 06)

* Detroit: “Experts have declared roughly half of Detroit (pop. 916,000) lives in a food desert” (Gray 09)

* Los Angeles
* Memphis
* Newark, N.J
* Lower Mississippi Delta
* South LA
* Oakland CA
* Richmond City, Va

Figure 1. Percent Lacking Convenient Access to Supermarket or Supercenter in U.S. Counties, 2000

-Food Deserts Counties in the United States- Blanchard study
Food Deserts: Community and Municipal Response

Common response from the community:

* Driving the distance to a grocery store
* Buying food stuffs from the Circle K/corner stores
* Buying food stuffs from Walgreens
* Getting meals from Fastfood places
* Skipping meals
* Shopping for processed and canned food stuffs
* Shopping at Walmart

Problem Solving responses:

Specialized and ethnic food stores
“Specialized food stores, such as produce markets, meat and seafood markets, and retail bakeries, can serve as a source for affordable and nutritious food; however, they typically do not provide the full range of foods that supermarkets and supercenters do.” (USDA, 16)

WALGREENS - expanding food items!
“Responding to and referencing the food desert findings of Mari Gallagher Research & Consulting Group, announced plans to expand food products in food desert communities. Aiming to meet customer and community needs [walgreens] is offering more than 200 new food items. From fresh fruits and vegetables, salads and pantry items to the basics like bread, eggs and milk – this bold merchandising move will help create easier access to healthier food options. Walgreens will roll out a total of 11 stores with expanded food centers, all in designated food deserts identified to have struggling fresh food options.” (Gallagher 09)

Grants and Loans to markets
“Governor Quinn signed a bill last month that includes $10 million to start the Illinois Fresh Food Fund, which, along with private matching money, would be distributed in loans and grants to grocers to build and expand in Chicago’s food deserts.” (Gallagher 09)

Personal Gardens
Programs that use neighborhood gardens, personal backyard gardens/ “War gardens” and rooftop gardens.

Discount food chains like Aldi, Family Dollar and Wal-Mart to fill the void created by supermarket chains who have moved out of the city.

Full service restaurants: from gardens to local restaurants
“Since there is far more profit in processing food than in simply growing it (and since farming is only a seasonal occupation), the initiative should focus on supporting food businesses that add value year-round, such as neighborhood food processing/freezing/canning plants; businesses that turn raw produce into ready-to-eat salads, salad dressings, sandwiches, and other products; healthy vending-machine companies; and affordable and nutritious restaurants and catering businesses” (Berg 08)

Case study: New York’s Green Food Carts

“The Green food cart’s debut was the centerpiece of the first public celebration of a new citywide effort to encourage street vendors to bring fresh vegetables and fruit to low-income neighborhoods that have been called “food deserts” because of the predominance of fast-food outlets offering high-fat, high-sugar fare and the dearth of healthful culinary fare.

The city has approved 1,000 of these mobile food carts for neighborhoods in the five boroughs that have long been isolated from traditional supermarkets, grocery stores and farmers’ markets. These carts offer fresh produce at reasonable prices.” (Collins 09)

Implementation: ‘The Green Carts’ a part of the New York City’s FRESH program (Food Retail Expansion to Support Health), which was signed into law by New York’s mayor in 2008, is “part of a public-private effort to make healthier food available to the poor while also providing 1,000 new jobs” (Collins 09). The FRESH program uses incentives such as: zoning, financial incentives and tax benefits; these “encourage property owners, developers and store operators to open new locations or renovate current locations in designated food deserts. The City estimates the FRESH program will help to create 15 new grocery stores, renovate 10 existing stores and provide 1,100 new jobs.” (Gallagher 09)

Reception: According to the people of New York the program has been extremely successful. “Already, people are telling us they’re glad we’re here,” said Michael Bracho, the 42-year-old proprietor of the Decatur Avenue cart, who describes his new occupation as “lucrative if you do it right.” Although the carts have brought much needed produce to the local citizens, many corner store shop owners see these carts as competition and they worry about losing business (Collins 09)

Efficiency: The Green Food Carts have proved to be extremely effective; for raising awareness on the problem of food deserts and helping to mitigate the problem of Food Deserts. These carts were also proof that little things can be done right now that will make a big difference. “we know that it takes more time to build supermarkets,” said Benjamin Thomases, the food-policy coordinator for the Bloomberg administration, “but we can get carts on the streets right now.”
Food Deserts: Case study

**Downtown Phoenix Public market:**

**Who:** Community Food connections

**What:** The Phoenix Public Market, a 501 c 3 non-profit organization. The Market marks the spot where community revitalization, economic development and a showcase for local small-scale agriculture and local artists and crafters intersect in the heart of the city.

* Helping low-income families to buy fresh locally grown fruits and vegetables;

* Providing a resource guide promoting nutrition services at farmers’ markets;

* Sustaining Arizona’s agricultural bounty and heritage; Supporting the local economy;

* Growing the Phoenix Public Market, adding to revitalization efforts and providing opportunity for neighborhood businesses; Showcasing local farmers;

* Connecting school cafeterias with farmers and providing children with access to healthy, nutritious and delicious local food.

**How:** Community food connection works through:

* Donations: (private and companies)

* Application fees by vendors

* Active citizens who jump start the program

* Media

* Government grants

  * The Arizona Farmers’ Market Nutrition Program (AZ FMNP) - (wic vouchers allowed)

  * Food Stamps/ EBT Farmers market

**GRANTS:**

The Arizona Farmers’ Market Nutrition Program AZ FMNP)

“A Governor signed a state budget plan ($600,000) goes to the Arizona Department of Health Services (AZ DHS) budget for Senior Nutrition Programs. $160,000 of this will go to restore the senior component of the Arizona Farmers Market Nutrition Program”

The program “that helps low-income women and children enrolled in WIC, and now vulnerable seniors, to eat better, while supporting our state’s farmers markets and market farmers.”

“Arizona growers and Farmers’ Markets will be selected to participate in the fourth year of the program that begins in March 2006 and continues through September 2006. The program will provide opportunities for Authorized Growers to sell their fresh locally-grown fruits and vegetables at approved farmers’ markets throughout the state during these months.

Participants in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) may receive a $30 booklet of checks (10 checks in $3 allotments) to use to buy locally-grown produce at Approved Markets around the state. Approximately 8,000 WIC clients will receive AZ FMNP checks during the 2006-07 season.

**To become an Authorized Grower or an Approved Farmers’ Market:** you must submit an application, sign a program agreement, participate in training and follow program guidelines.

AZ FMNP is administered by the Arizona Department of Health Services, Office of Nutrition Services, in collaboration with the Association of Arizona Food Banks, Community Food Connections, and Inter Tribal Council of Arizona, Inc. Funding for the program is provided by the Arizona State Legislature, the Nina Mason Pulliam Charitable Trust and the U.S. Department of Agriculture. Supporting partners for the program include the Arizona Department of Agriculture, the Arizona Department of Economic Security, the University of Arizona Cooperative Extension and Arizona’s farmers’ markets and growers. “

(Community food connections 06)

For more information to be considered as an Authorized Grower or an Approved Farmers’ Market in the AZ FMNP program, please contact:

Allison Armenta: ‘Farmers Market Nutrition Program Manager’
Arizona Department of Health Services
150 N. 18th Ave.
Phoenix, AZ 85007
Telephone: (602) 542-0389
FAX - (602) 542-1890
email: armenta@azdhs.gov

Cindy Gentry: ‘Community Food Connections’
Phone: 602.493.5231
Fax: 602.236.4255
e-mail: cgentry@foodconnect.org
**Food Deserts: Case study**

**GRANTS:**

**Food Stamps/EBT at Farmers’ Market project**

The program allows Farmers markets in Arizona to accept electronic food stamps (EBT), Quest cards, and Debit cards. It is “funded in part through a Community Food and Nutrition grant from the U.S. Department of Health and Human Services/Office of Children and Family Services.” (Community food connections 08)

“Community Food Connections will provide Point of Sale (POS) terminals and pay for monthly service fees and wireless charges to approved markets. With this terminal, credit and debit cards can also be accepted; however service fees (18 cents a piece) for credit and debit transactions must be covered by the market. The EBT customer can use their QUEST card to access their benefits through the Market’s centrally located POS terminal. The customer will shop for the (eligible) items they want, have the vendor write up the amount on a piece of paper, the customer can swipe it through the terminal, bring in their receipt, and give it to the vendor and collect their purchases. The funds from the purchase go directly into the market’s bank account. At the end of the market day, the market manager will tally up individual vendor sales in order to pay them - by check, credit or debit them to any stall or market fees.” (Community food connections 08)

An EBT Approved Farmers’ Market must

*Submit an application to and receive approval from USDA to become a food stamp vendor.

*Submit a second application to and receive approval from CardService International, a company that contracts to do the banking transactions.

*Have a bank account.

*Be located in an area where the wireless POS device can operate: i.e., receive a clear transmission signal from the Motient transmitter, or be able to plug into a phone line, and/or electricity.

*Be located near where EBT customers live.

*Provide space for a booth from which to operate the wireless equipment and to promote nutrition education and food stamp outreach.

* Provide an on-site manager during Market hours.

To receive an FNS packet to become eligible to take Food Stamps. Contact:

FNS office at the USDA, Phone: 1.877.823.4369

Cindy Gentry: ‘Community Food Connections’
PO. Box 22216
Phoenix, AZ 85028;
Telephone (602) 493-5231
FAX (602) 296-4255
e-mail cgentry@foodconnect.org

Phoenix Public Market Urban Grocery and Wine Bar

Who: Cindy Gentry

What: A permanent location (store) for the farmers market to function, on days and nights when the market’s vendors are not available. “The store functions as a more permanent extension of the Farmer’s Market held in the parking lot on the corner of North Central Avenue and East McKinley Street every Wednesday night and Saturday morning and now offers loyal customers the option to shop on their own time.” (DiSanti 09) The market allows local vendors to sell produce and fresh foods on their shelves. In addition “The Market Café sells grab-and-go items such as sandwiches, salads, and soups. A portion of Urban Grocery includes a commercial kitchen and meeting area.”

How “The brains and determination behind this operation is Cindy Gentry, who Gentry quickly realized that vendors working from tents have limitations, and thought of a solution. The vendors needed an indoor store where they could sell their products five days a week, rather than just Wednesday nights and Saturday mornings.” (Parkins 09)

The Phoenix Urban Grocery is a collaboration of the Industrial Development Authority of the City of Phoenix, the Arizona Community Foundation, the Local Initiatives Support Corporation, Bank of America, the Gila River Indian Community, and Wells Fargo Bank. The red brick warehouse building, adjacent to the current public market and facing Pierce, has been re-designed to become the new Downtown Phoenix Public Market Urban Grocery and Wine Bar. (Parkins 09)
Healthy Kids | Healthy Communities:
Maryvale on the Move Research Overview

Food Deserts: Case study

**Tucson Youth Mapping and Gleaning Project:**

Glean (v) -
1: to gather grain or other produce left by reapers
2: to gather information or material bit by bit

**The Jefferson Park Project:**

Who: high school students from around the Jefferson Park Neighborhood and was supervised by Barbara Eiswerth and Rainy Warf.

What: “A group of teens [From the Jefferson Park area] came together with a common goal: to work on a gleaning-focused community project. The purpose of this project was to redistribute the excess of locally grown food, much of which was going to waste, to the community and to those who would not otherwise have access to it.” (TUG 03)

How: The students mapped out all of the local fruit producing trees in the Jefferson Park Neighborhood through interviews and surveying walks and collected the information into a GIS Archview Databas. Then they organized a neighborhood farmers market and residents were able to ‘give away’ extra foodstuffs.

“We [the students] walked through the entire neighborhood, taking GPS coordinates and recording addresses with citrus trees, gardens and various food producing plants. The information from the interviews and neighborhood walk was organized in a database, developed by Kelly Hutton and maintained by us. By the end of the project it contained 162 houses with 296 food producing trees and or gardens. Using the database, we set out to find individuals who had an excess of food and would be willing to donate to our free food exchange. We received welcoming responses from the residents and had generous donations of grapefruits, oranges, dates and various herbs including rosemary, thyme and mint.

The gleaning was done a week before the food exchange that took place on March 29th. We collected around 1000 lbs in addition to a variety of fresh herbs and even fresh eggs. Despite the wind, the market was a great success. Throughout the day there were visitors from both the Jefferson Park Neighborhood and other parts of the city. Many were amazed at our accomplishments. Some people wondered, “Is it really free?” At the same time, many donators of extra fruits were so happy to get rid of them.

By the end of the market, most of the food was taken. Over a hundred people visited our free food exchange. The leftover food was donated to the Southern Arizona AIDS Foundation, St. Vincent de Paul, K.A.R.E. Family Center and Casa Maria. The database has been given to the Ward III Office in hope that the community will continue our undertaking” (TUG 03)

**Contact**

Tucson Urban Gardens
Bureau of Applied Research in Anthropology
Emil W. Haury Bldg.
P.O. Box 210030
Tucson, AZ 85721-0030
TUG@listserv.Arizona.edu
Ecological Benefits of Urban Agriculture

There are a variety of primary and secondary ecological benefits of Urban Agriculture. Increasing greenspace in our most urban spaces has benefits to wildlife and to the natural systems interrupted by concrete streets and parking lots. Individuals and families who produce their own food reduce the amount of food purchased from unsustainable far-away farms, reducing the myriad of ecological problems associated with large scale commercial farming and production. Finally there is a hard to quantify social-ecological benefit to urban farming and gardening. In spaces where wilderness is inaccessible, gardens and parks may be the only semi-natural spaces. Gardens increase appreciation for living things which some theorists think is leading to a new type of land ethic, one that places value on the urban natural environment first and spills over to heighten awareness of natural environments everywhere.

Primary Benefits

Increase water quality
- Increased Greenspace in the city reduces stormwater runoff
- reduces flooding
- charges groundwater
- reduces need for irrigation

Biodiversity
- Increase pollinator habitat (nectering and larvae)
- Increase greenspace for bird and insect life in city
- Opportunity for gardens to increase urban wildlife corridor

Closing the Loop on Waste Cycles
- Compost can keep organic matter out of the landfill
- Opportunity to close greywater loop by using filtered greywater for irrigation

Secondary Benefits

Reduce Greenhouse Gas Emissions
- Less transportation
- Less storage and refrigeration
- Less processing and packaging
- Urban Heat Island mitigation

Social-Ecological
- Community Gardens heighten people’s appreciation for living things and fosters ecological stewardship
- New land ethic

Large scale agricultural practices have a myriad of ecological problems, such as production and use of fossil fuel based fertilizers, loss of top soil due to overfarming and high carbon emissions due to transportation to non-local stores.
Increased Property Values
One study in New York showed a statistically significantly positive increase in residential property values within 1,000 feet of a community garden, and that the value of these properties increased over time.
Another study in Milwaukee showed similar increases in residential property values near community gardens.

Places of Community Power
Gardens provide space for community members to gather which can lead to community empowerment over shared social and political issues.
Community gardens increase a sense of community identity, ownership, and stewardship.

Reduced Crime
There are numerous documented cases of neighborhood clean-up projects that also include the creation of a community garden significantly reducing crime in that area.
Community gardens increase “eyes on the street” a proven method to reduce urban crime.
Another study reported 52% less crimes in buildings with vegetation compared to without.

Improved nutrition
“A population-based study of 144 community gardeners and 67 non-gardening controls...in Philadelphia showed that gardeners ate vegetables significantly more than comparable non-gardeners and consumed significantly fewer sweet foods and drinks.” (Blair et al)

Improved Mental Health
Gardeners identified recreation and mental health as the two most important reasons they garden.
There are many results from multiple people-plant interaction studies that show that positive mental health increases with access and visibility to plant life.

Improved Physical Health
Inner city children in highly vegetated spaces played more (by a factor of two) than children in non-vegetated areas, and those children played more creatively and interacted more with adults.
Exercise from gardening is comparable to moderate walking, bicycling a 10 miles per hour or less and water aerobics.

Provided Tax Benefit to Community
In Milwaukee the average garden was estimated to add approximately $9,000 a year to the city tax revenue.
South Central Farms was a 14 acre farm located in an industrial area of South Los Angeles between 1994 and 2006. At the time of its existence it was one of the largest urban farms in the United States. 350 families from the neighboring communities worked the farm and called themselves the South Central Farmers. They grew 100-150 species of plants, many of them traditional food and medicine crops of Mexico. For a time there was a Sunday farmer’s market at the South Central Farm.

Farmers of South Central Farms were evicted in 2006, the crops were bulldozed into the ground and the land lays fallow to this day. The final landowner, a private developer who bought the land from the city in a closed door session with the City of Los Angeles in 2004, made the decision to close the farm even after the farmers raised six million dollars to buy the farm back from him. When the land belonged to the City of Los Angeles, the farm existed under a “temporary and revokable permit” between the City and the South Central Foodbank.

The 2008 Academy Award nominated documentary, “The Garden” highlights the bitter struggle between these urban farmers, the City of Los Angeles and the private developer who finally succeeded in erasing South Central Farms from the map.

This high profile example of a working and successful community garden raised for private interests has raised concerns in many cities about using community gardens on lands which are only temporarily undeveloped.

What to learn from South Central Farms?

Community Gardens can be places of community empowerment. Farms are weaker in isolation. Land ownership is power.

Bibliography
South Central Farmers website: southcentralfarmers.com/
Indybay Media: indybay.org/newsitems/2006/05/24/18251311.php
Wikipedia: en.wikipedia.org/wiki/South_Central_Farms
Urban Agriculture in Phoenix seems to happen in pockets all around the city. The current trends in backyard gardening and individual food production seems to be catching on here with a new Community Garden planned for Tempe and small gardens going up at churches.

<table>
<thead>
<tr>
<th>NAME</th>
<th>LOCATION</th>
<th>ACRES</th>
<th>MISSION</th>
<th>LAND OWNER-SHIP</th>
<th>LEADERSHIP</th>
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<tr>
<td>Urban Garden Project</td>
<td>Tempe - behind City Hall</td>
<td>.25 acres</td>
<td>community garden for local gardens and restaurants</td>
<td>??</td>
<td>Spearheaded by owner (Jay Wisniewski) and chef (Paton Curry) of Cafe Boa as well as other downtown Tempe businesses.</td>
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<td>New Roots Farm Project</td>
<td>2746 W. Georgia (north of Camelback, off 27th Avenue) Garden contact: Tim Culison 602-963-9744</td>
<td>2.3 acres (somewhere)</td>
<td>economic opportunity for refugees</td>
<td>International Rescue Committee</td>
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<td>&quot;couple of acres&quot;</td>
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<td>? church ?</td>
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<td>Garden for congregation - many refugees from Africa</td>
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