Entry Number: 1
Level of Study: Graduate
Individual or Team Entry: Team Entry (Sarah Crowther + Stephanie Snow)
Project Title: Fresh AIR (Alleys in Repair)
Project Location: Maryvale, Arizona
Project Type: Community

Project Statement: This project is about creating an expansion to the current street network in Maryvale that is geared towards safe child movement and play containing education on healthy eating and opportunities to do so. It is also about taking that existing infrastructure, currently viewed by the community as a negative which is about to be outdated, and returning it to community members as a positive amenity.

Project Narrative: This project is located in Maryvale, in west Phoenix, Arizona. It roughly spreads from 35th Avenue west to 83rd Avenue and from I-10 north to Camelback Road. It is a combination of desert neighborhoods originally designed in the 50’s and 60’s by John F. Long. It is now a predominantly Hispanic and Latino area containing low-cost housing.

The design program is geared towards children’s movement throughout the area safely and getting them involved in the landscape. The elements used to achieve this are:

Garden Plots - Plots used near existing schools placed near the low-traffic intersection of Campbell Road and 55th Avenue. Plots spaced further away from the intersection are for the general community to use. The school plots will be used as activity based learning spaces regarding both botany and healthy eating. They will aid teachers in explaining how food is grown, where it comes from, what healthy eating means and how to do it.

Gathering Circles - These spaces were designed in circles to show unity through community. They will be spaces for people to use on Second Saturday’s (market days) to set out sale items. They can also be used as informal teaching spaces, gathering spaces, stages for music or plays, and art sales.

Flights for Fitness - Motivational fitness toys engineered to engage children through self-propelled creative “flights” on various insects and birds. The child’s movement will literally propel the wings to move - where their journey leads them will be based on their imagination!

Crosswalks - Patterns within crosswalks are to create a visual and physical connection, as well as build community identity. The patterns will be duplicated throughout trail markers, in the backyard trails and abstracted in planting designs.

Fresh AIR Trails - Fresh A.I.R. (Alleys in Repair) is the transformation of the alleyways into an extensive community backyard spanning from one neighborhood to the next. These redesigned spaces will have community gardens, flower beds, citrus tree snacks, children’s scavenger hunts (designed for day and night play), and be fitted with solar powered lanterns.

During Second Saturdays these spaces can be used for a long line of yard sales and a community farmer’s market.

In order to ascertain what would be most desirable for the community, design charrette’s and walking audits were carried out with three community centers. This information was directly imbedded in the design strategies used. All work would be done in phasing which shows the community their needs are being met so as to not have them discouraged that their time and efforts have been for naught. Change of this proportion would need to be done over an expanse of time for funding purposes which is why close attention was paid to the phasing.
The study area is surrounded by the three community centers - Amigo Center, Golden Gate, and Rehoboth.

It was determined the starting place would be a central location between all three centers bound by Camelback Road on the north, Indian School Road on the south, 59th Avenue on the west, and 51st Avenue on the east.
The five elements added and/or modified in the site area chosen are garden plots, gathering circles, Flights for Fitness, crosswalks and Fresh A.I.R. Trails. Another reason this site was chosen is because of its proximity to many schools and parks.
Each of the trails has a different total length that helps to keep the lengths clearly defined. For example - Younger children can take shorter trails or can combine different ones to walk from home to school.
To implement the Fresh A.I.R. Trails, a phasing system must be used, starting with clearing trash from the alleys.

Phasing shorter alleys will be the start.

Followed by extending those alleys and connecting them if possible.

Finally, integrating all the alleys together.
Modifications to the alleys include cleaning out trash as well as adding elements to allow for shade trees, flower boxes and vegetable gardens, solar lighting, and access gates for residents to be able to utilize the alleys at their convenience.
North-South section through the linear park shows Flights for Fitness and community garden elements.

North-South section through alley and residences shows a typical Second Saturday Bazaar Day.

East-West section through alley shows access from residential road as well as view fences, gates, and Second Saturday happenings.
In addition to updating the alleys, the existing linear park will be modified to allow for pedestrian access, integration of community garden plots, spaces for future farmers markets, and Flights for Fitness exercise machines.
Ladybug trail markers on shade structures and sidewalk

Family enjoys a walk on the Ladybug Trail

Walking school bus picks up and drops off children in alley by gates

Linear park planting design allows children to use their imagination

Community gardens teach children how to grow their own food as well as how to harvest it

Flights for Fitness gets children involved in exercising by making it interactive
Maryvale on the Move

Growing Healthy Cities:

Bringing Food Back to the Urban Core

Lora Martens
Masters of Landscape Architecture Student
Arizona State University
Spring Studio
Professor Kim Steele
## Maryvale on the Move
Growing Healthy Cities: Bringing Food Back to the Urban Core

### Comments from Charrettes

<table>
<thead>
<tr>
<th>Issues</th>
<th>Solutions</th>
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<tbody>
<tr>
<td><strong>Golden Gate</strong></td>
<td><strong>Golden Gate</strong></td>
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<tr>
<td>Lack of Access and price of veggies</td>
<td>Gardens at home</td>
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<tr>
<td>People are not eating healthy at home or at school</td>
<td>Community Gardens at Golden Gate</td>
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<tr>
<td>Lack of education for kids and parents</td>
<td>Build kitchen</td>
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<tr>
<td>Lots of fast food and cheap candy and snacks available</td>
<td>Community Garden</td>
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<tr>
<td>Big problem, nowhere to buy food</td>
<td>Optimize water</td>
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<td>Super mini market is unsafe, there a few fights there</td>
<td>Recycle water</td>
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<tr>
<td>No access to healthy food near the school</td>
<td>Prohibit, limit and regulate the sale of junk (chatarra) food</td>
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<td>Lots of vacant lots</td>
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<tr>
<td>Lack of space for gardening at home</td>
<td>Need more food options</td>
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<tr>
<td>Lack of healthy food in walk area</td>
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<td><strong>Amigo</strong></td>
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<td>Vacant Land</td>
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<td>Under utilized Open space</td>
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<td>Children in middle school or younger eat a diet heavily influenced by parents</td>
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<tr>
<td>Sporting events do not provide healthy food options</td>
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<tr>
<td>Little choice of food in school and there are food conflicts (ie. no vegetarian options and there is meat served in Fridays) so kids don’t eat lunch at school</td>
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<td>Food at food bank is confusing and hard to cook</td>
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<tr>
<td>Children in high school make their own decisions about healthy eating</td>
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<tr>
<td>Food donations at Food Bank and at a church, both locations are far away from this community</td>
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<tr>
<td>Fast food is cheap and quick</td>
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<tr>
<td><strong>Rehoboth</strong></td>
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<td>Grocery stores are far (must drive by car)</td>
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<tr>
<td>Food massed in certain areas, less than others (Indian School and 27th no food!)</td>
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<tr>
<td>Lack of healthy food option</td>
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<tr>
<td>Lots of fast food</td>
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<tr>
<td>Issues with street vendors (some have been arrested)</td>
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<td>schools don’t have healthy food</td>
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<tr>
<td>No grocery store for healthy food</td>
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<tr>
<td>No pharmacy of 27th and Camelback</td>
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<tr>
<td>No community hall nearby 27th and Camelback</td>
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**Additional Education for Parents of middle school or younger children**, visual simulated/advertisements encouraging better choices, circulation of healthy recipes, health fair rather than just nachos, hot dogs and candy, provide healthier snacks, fruits and vegetables teach kids about gardening Have food donation site closer to Starlight Match food to cultural and nutritional needs Increase choice, increase equality Make healthy food more exciting, Make food more fun.

**Open more healthy food stores**, less fast food, farmers market empty lots to grow healthy food calorie counts at restaurants alternative food, more choices (salad bar, veggie bar, veggie burgers) CSA at schools closer grocery stories community gardens healthy food street vendors small business restaurants Stores for grocery between 19th and 35th Ave. on Camelback Rd Need Community hall between 27th - 35th Ave. Metro Light rail from 19th to 39th Ave on Camelback
Four Themes

**FOOD ACCESS**
- Decrease fast food availability
- Add more healthy food markets in areas of community where they do not exist
- Identify spaces within the community for farmers markets that are accessible to neighborhoods and public transportation
- Build Community Gardens in partnership with schools and organizations that can commit to their long term viability
- Create partnerships between the community and local farmers through a Community Supported Agriculture Program (CSA).
- Identify a number of accessible pick up spots in the community.

**FOOD ECONOMY**
- Create Community Gardens to facilitate food security for low income community members
- Identify more food donation stations around the Maryvale Community
- Create a program that allows food stamps to be used at farmer’s markets
- Encourage and support local, healthy food related businesses
- Create a program to support healthy food cart vendors
- Build a community kitchen to help community members start food related businesses such as specialty food sales and catering companies
- Identify barriers to healthy, affordable food sales in small, community markets and work with community members to overcome those barriers

**FOOD EDUCATION**
- Build a community kitchen for healthy cooking classes
- Require fast food restaurants to post calorie count on menu
- Identify and create a festival space for healthy and whole food related festivals
- Work with food banks to provide preparation instructions with unfamiliar foods
- Create a community garden that also has a gardening classroom
- Have an educational farm where community members can go to learn about food production and healthy food

**KID FRIENDLY DESIGN**
- Use bright colors in design of healthy food spaces and pamphlets
- Create spaces with changes in topography which encourages active play in children
- Provide drinking fountains in public spaces to keep kids active and healthy in our dry climate
- Create spaces for parents as well as children so families will participate in healthy activities
- Increase programed active spaces in community
**Research**

**Health benefits and gardening**

“Gardening is considered comparable to moderate walking, bicycling at <10mph and water aerobics”

(Relf, 1996)

“In an observational study of inner-city children playing outdoors, researchers found that children in highly vegetated spaces played more (by a factor of two) than children in non-vegetated areas, and that they played more creatively and interacted more with adults”

(Taylor et al., 1998)

**New Urban Land Ethic**

Community Gardens heighten people’s appreciation for living things and fosters ecological stewardship. Some theologians say that we are developing a new land ethic involving nature in our urban cores. This generation of stewards are more accustomed to a community garden than the wilderness.

**Maslow’s hierarchy of needs**

“Waliczek et al. conducted a national survey of community gardeners using a set of quality of life questions based on maslow’s hierarchy of human needs model: physiological safety, social, esteem and self-actualization. The majority of gardeners reported that gardens meet all of these needs, with African-American and Hispanic gardeners reporting statistically significant higher responses than Whites and Asians on most of the questions.”

(Waliczek et al., 1996)
The social benefits of Urban Agriculture focus mostly on small scale community gardens and backyard plots. Gardens integrated within the fabric of a urban community have benefits to the participants working the garden and eating the produce. The mere act of having more vegetation in the neighborhood has been shown to reduce crime and increase mental health of the entire community, whether they participate in the daily activity of the garden or not. Community Gardens increase tax revenue for municipalities and provide business and training opportunities for community members.

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.

Provided Tax Benefit to Community
In Milwaukee the average garden was estimated to add approximately $9,000 a year to the city tax revenue.
Research

Using Markets as Community Development Tool

Markets are being used as a tool of community development around the country to revitalize the core of our cities. Historically cities used markets to distribute food and were the centers of communities. These market areas were also places were recent immigrants to America could sell goods and make a living. The need for a place to buy and sell local food and encourage small business economies still exists today, but there are less of these public market spaces left.

“Planners should be interested in public markets and merchants for four main reasons.
   First, markets are places, amenities attractive to neighborhood residents because they contribute to quality of life and sociability (many citations)
   Second, public markets are in a tight reciprocal relationship with urban land markets and community design.
   Third, markets play a role in addressing healthy, ecological, and environmental concerns. Reduce vehicle miles traveled, enhance local sustainability, and help ensure food security.
   Fourth, markets and street vendors contribute to economic and community development, providing a variety of benefits.”

Quote from article by Alfonso Morales, Professor of Urban and Regional Planning at University of Wisconsin, Madison

Street Vending

Another study Morales cites in his paper is conducted by Professor Raijman who studied the link between street vending and business formation.

She found that vending was important in “determining entrepreneurial intentions among Mexican Americans in Chicago. Those with experience in street vending, among other income-earning activities, displayed more intentions to form businesses and experienced higher rates of business formation”
Research

ecological benefits of gardening

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
Maryvale and Food Issues

Access
Grocery stores with fresh produce are spread out along the main grid of the city and relatively accessible to residents. However, in some sites it is a mile or more to a grocery store which would make it difficult for those without cars to shop for fresh food. Filling in the gaps are dozens of other food stores with non-perishable or unhealthy food choices, such as QT, AM/PM and drug stores such as CVS and Walgreens. Virtually all of Maryvale residents are in a half mile from more than one fast food restaurant, such as Taco Bell or McDonalds.
Analysis

Maryvale and Food Issues

Food Sources and Schools
About 75% of the fast food in Maryvale is within walking distance from a high school or middle school. These are children who have the ability to make their own choices about food. During the charrettes, we spoke to many high school students who reported students in their schools who chose to wait until after school to eat fast food instead of eating the prepared lunches that the school provided for a variety of reasons. Taste and cultural issues (such as no vegetarian choices on Fridays) were the main complaints. Many children also reported that fast food restaurants became local hang out spots for students after school.
Project Site Walkability Inventory

Estrella Middle School
Trevor Brown High School
9 Fast Food Restaurants
1 Grocery Stores (El Super)
5 Convenience Stores
1 Drug Store
Every day school children walk from Estrella Middle School to the corner of 75th and Indian School to catch the public bus. The sidewalks are small and next to a very busy street.

This large commercial space is currently occupied by half a dozen small businesses and a Goodwill. The largest space (approx. 15,000 sq. ft) is vacant.

Three fast food restaurants occupy the corner of 75th and Indian School.

Almost the entire site is an asphalt parking lot. Asphalt can get above 150 degrees in the summer in Phoenix.

There is an abandoned lot at the east end of the site. Vacant lots present an opportunity for new open space projects such as gardens or parks. Soil testing should take place before planting food crops on these often polluted lands.
Phasing - Phase One

- Box Trees
  Install Trees in Boxes around building. These trees will be planted in the ground in the next phase.

- Sidewalk Trees
  Plant trees along road to increase comfort of pedestrians.

- Install Temporary Shade Structure at bus stop

- Expand Promenade
  Create a 25 foot walking area around the buildings.

- Tree Lined Walking Path
  Plant trees along the existing informal east/west walking path connecting 75th Ave. to 73rd Ave.

- Farmers Market
  Farmers Market area set aside twice a week. The market is located on the street for high visibility.
Cafe
Transform Burger King to cafe located on main foot path. Cafe has outdoor seating facing the interior of the park.

Community Gardens
Install garden pods two feet below grade so water flows into them. Gabion walls are made with concrete removed during installation.

Repurpose Building
Divide building in two to create a throughway and create more small space for specialty businesses.

Expand walking path
Circular path connects E/W Traverse path with main elements of site.

Lawm
Picnic area on main path to be used during farmer's market or anytime.

Farmers Market Structure
Permanent shade structure built to hold farmer's market.
Shade Structure which provides shade for students and community members waiting for the bus. Many students walk from Estrella Middle School and Trevor Brown High School to catch the 41 East at the corner of 75th and Indian School Rd. Currently there is a small shade structure and no open space around the bus stop.

Community Teen Center
The site is located walking distance from Estrella Middle School and Trevor Brown High School. Teens at the charrettes and their parents requested more spaces in their community for teen activities. This community center is the attempt to meet that need. The building has spaces for active classes, such as dance or yoga as well as communal spaces for studying. The building frames a back space meant to encourage outdoor activities.

Community Garden
The circular shaped pods for individual or group gardening are lowered below grade to facilitate water catchment. Groups and individuals can participate in classes in gardening or cooking at the adjacent community kitchen.

Widened walking area to a 50 foot open area with a ten foot wide tree-lined path.

Festival Area
One way for communities raise revenue is to hold festivals involving a unique resource, such as a pumpkin patch or a migrating bird. The Harvest Festival Area could celebrate the double harvest we enjoy in Arizona.

Central source Irrigation in fountain
Canals used to route water to agriculture
Tree lined canals prevent evaporation and provide shade for paths
Three paths from Middle School north through site

Shaded space for over 60 stalls for farmers and local artisans to sell goods to community members.

Citrus grove parking
Integrating farmer’s market parking in the citrus grove will allow multiple uses for the vast amount of temporary space needed for cars twice a week for the market.

Farmer’s Market
Shaded space for over 60 stalls for farmers and local artisans to sell goods to community members.

Cafe
Old Burker King Structure
Maryvale Food Coop
Garden Store and nursery
Central source Irrigation in fountain
Canals used to route water to agriculture
Tree lined canals prevent evaporation and provide shade for paths
Three paths from Middle School north through site

New Community Teen Center
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Maryvale on the Move
Growing Healthy Cities: Bringing Food Back to the Urban Core

Section - Cafe at Night
Section - Farmer’s Market
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Section - Community Garden
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Perspective - Community Garden