

# Land Recycling & New Tools For Creating Healthier Communities & Economic Growth

Dave Laney ATC Group Services

# Workshop Objectives

- **Community Development Challenges**
  - Food Deserts/Low Supermarket Access/Food Insecurity
  - Medically Underserved Areas
  - Zero Car Households
  - Health Disparities (Zip Code vs. Genetic Code)
- **Discuss New and Evolving Tools and Opportunities**
  - Healthfields
  - Healthcentric Development & Mobil Health Clinics
  - Safe & Reliable Housing
  - School and Community Gardens/Farmers Markets
  - Transit Oriented Development/Complete Streets
  - Health In All Policies
- **Importance of Healthier Communities**
- **Connection Between Community Health and Economic Vitality**



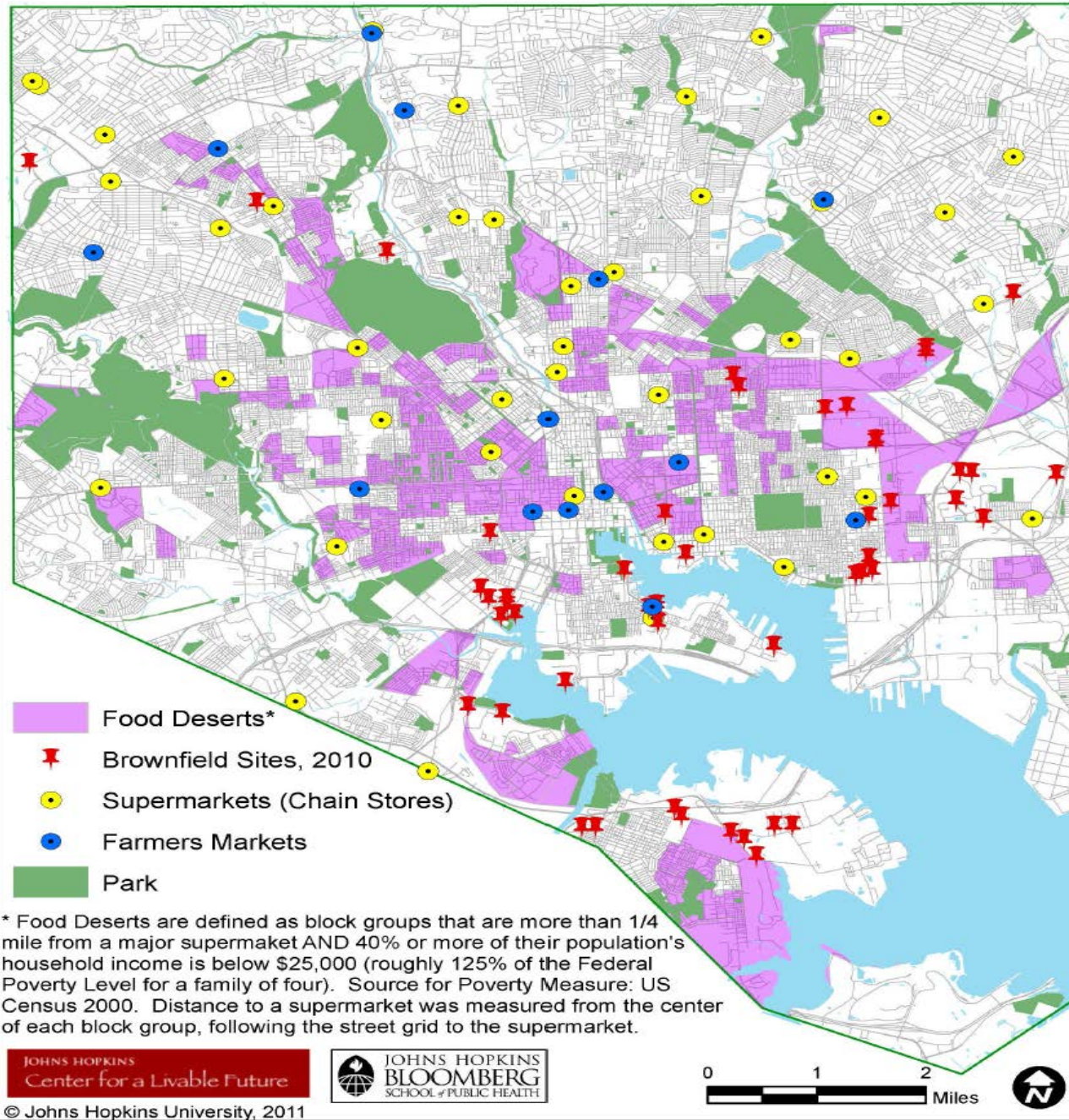
# Land Recycling, Redevelopment and Reuse

- What's Old Is New Again!
- Vacant/abandoned, underutilized, and/or potentially contaminated properties
- Correlation between location of properties (brownfields) and communities in need
- Smarter Land Use and Design Principles
  - Infill development
  - Restoration and more efficient use of brownfields
  - Adaptive reuse of buildings
  - Supporting the character and vision of the surrounding area

**“Vacant Lot = Property Full of Opportunity”**



## Baltimore City: Food Deserts, Brownfields, Supermarkets and Farmers Markets



A group of diverse children, including a girl in a blue shirt at the top, a girl in a dark shirt on the left, a girl in a blue shirt in the center, a girl in a pink headscarf, a girl in a blue plaid shirt, and a girl in a striped shirt on the right, are smiling and holding fresh carrots. They are gathered around a blue bucket filled with more carrots. The background is a lush green garden.

# **Brownfields to Healthfields: Transforming Community Health**



Land Recycling & New Tools For Creating  
Communities & Economic Growth  
August 19, 2016

# OPPORTUNITY

*“a good chance for advancement or progress”*



Prosperity



Environment



Health

- Sustainable development
- Increase economic growth
- Eliminate environmental exposure
- Improve access to healthy food and health care

# OPPORTUNITY

*“a good chance for advancement or progress”*

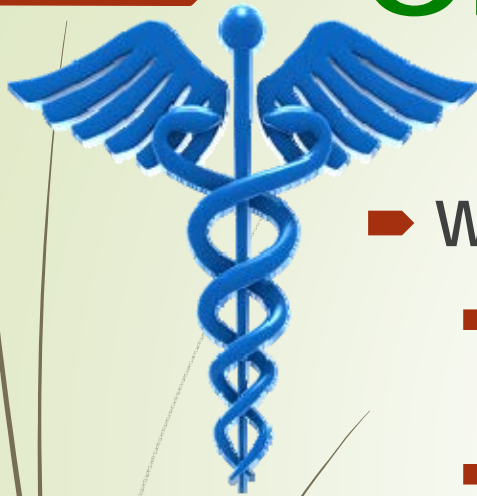


- 450,000 brownfields sites in U.S.
- 512 brownfield sites along Route 66 in Coconino County
- 645 brownfields sites in Flagstaff
- Potential Brownfields to Healthfields sites

***\$1 of public investment results in \$9 private investment***

# OPPORTUNITY

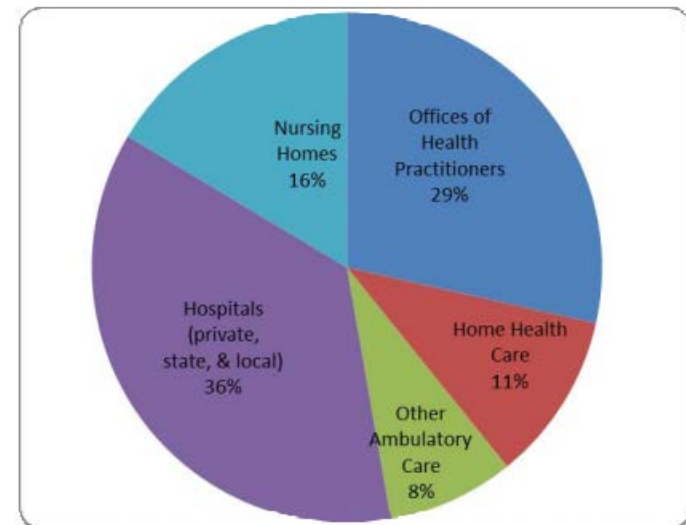
*“a good chance for advancement or progress”*



## ➤ Within next 10 years:

- 10 of the 20 fastest growing occupations will be healthcare-related
- 16.3% Healthcare job growth
- 20.5 million jobs

**Projected Percent of Jobs by Setting in the U.S. Health Sector, 2020**



Phoenix ranked No. 1 in U.S. for healthcare jobs.

Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2010 and projected 2020.





# OPPORTUNITY

*“a good chance for advancement or progress”*



- Aging population increases healthcare demand
- 78 million post WWII baby boomers are turning 65, the youngest will be 65 in 2029
- Age 65+ visit doctor 3 times more often



# OPPORTUNITY

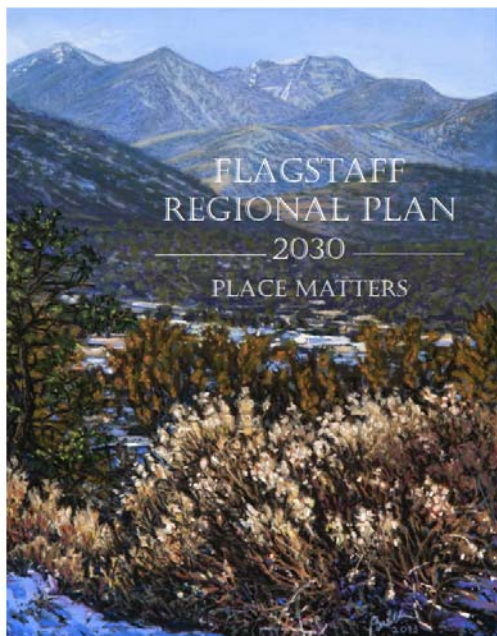
“a good chance for advancement or progress”



## Sustainability and Resiliency

**Redevelopment:** ADAPTIVE REUSE and BROWNFIELDS represent an opportunity to utilize previously developed lands.

**Food Security:** As the climate changes, assuring access to food and water will be important to the health and well-being of residents.



## REDEVELOPMENT AND INFILL GOALS AND POLICIES

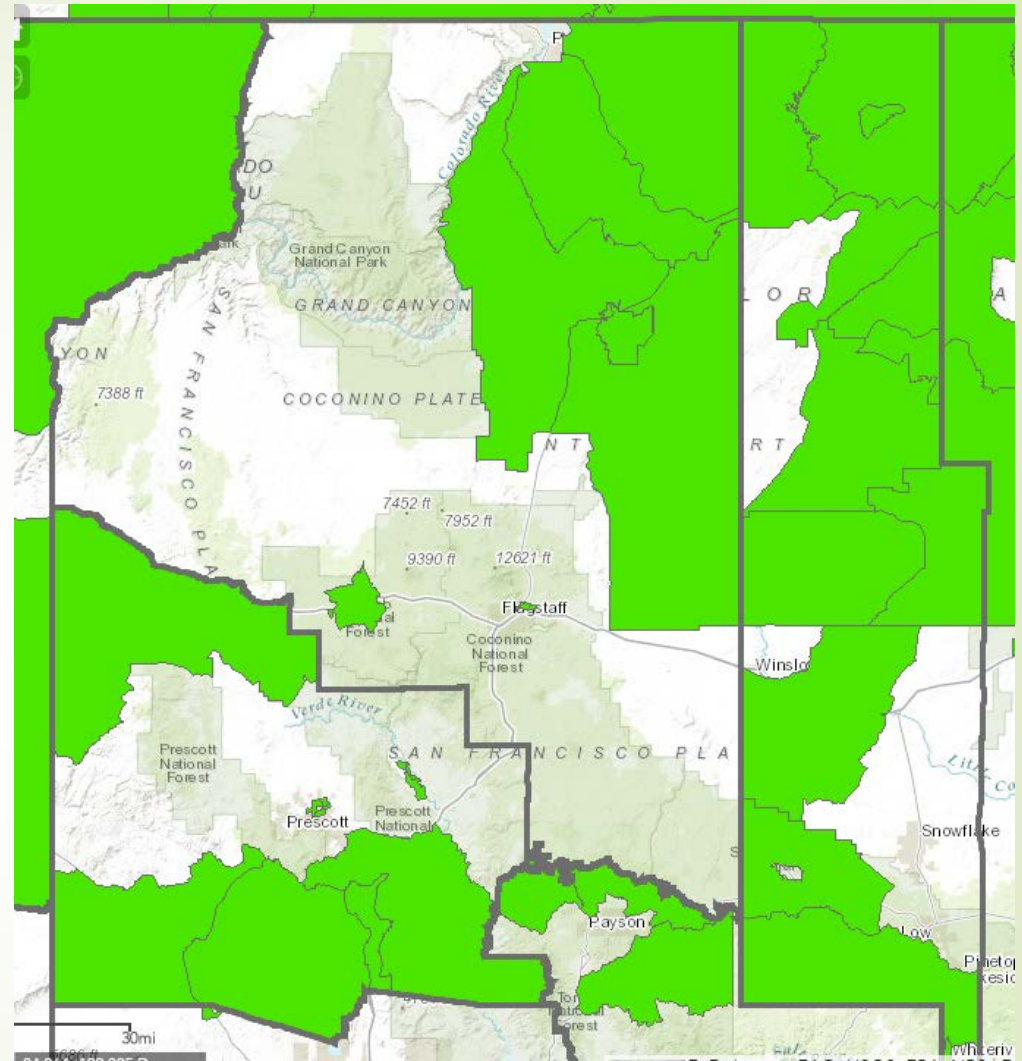
**Goal ED.9.** Promote redevelopment and infill as a well-established means to accomplish a variety of community economic, planning, and environmental goals.

*Refer to Chapter IX - Growth Areas & Land Use, pp. IX-18 through IX-25 for reinvestment goals, policies, and tools.*



## CHALLENGES

**Food Desert:**  
low income census tract  
where residents live more than  
10 miles from the nearest  
supermarket or healthy  
affordable food retail outlet.



Food Deserts in Coconino County and Navajo County

## CHALLENGES



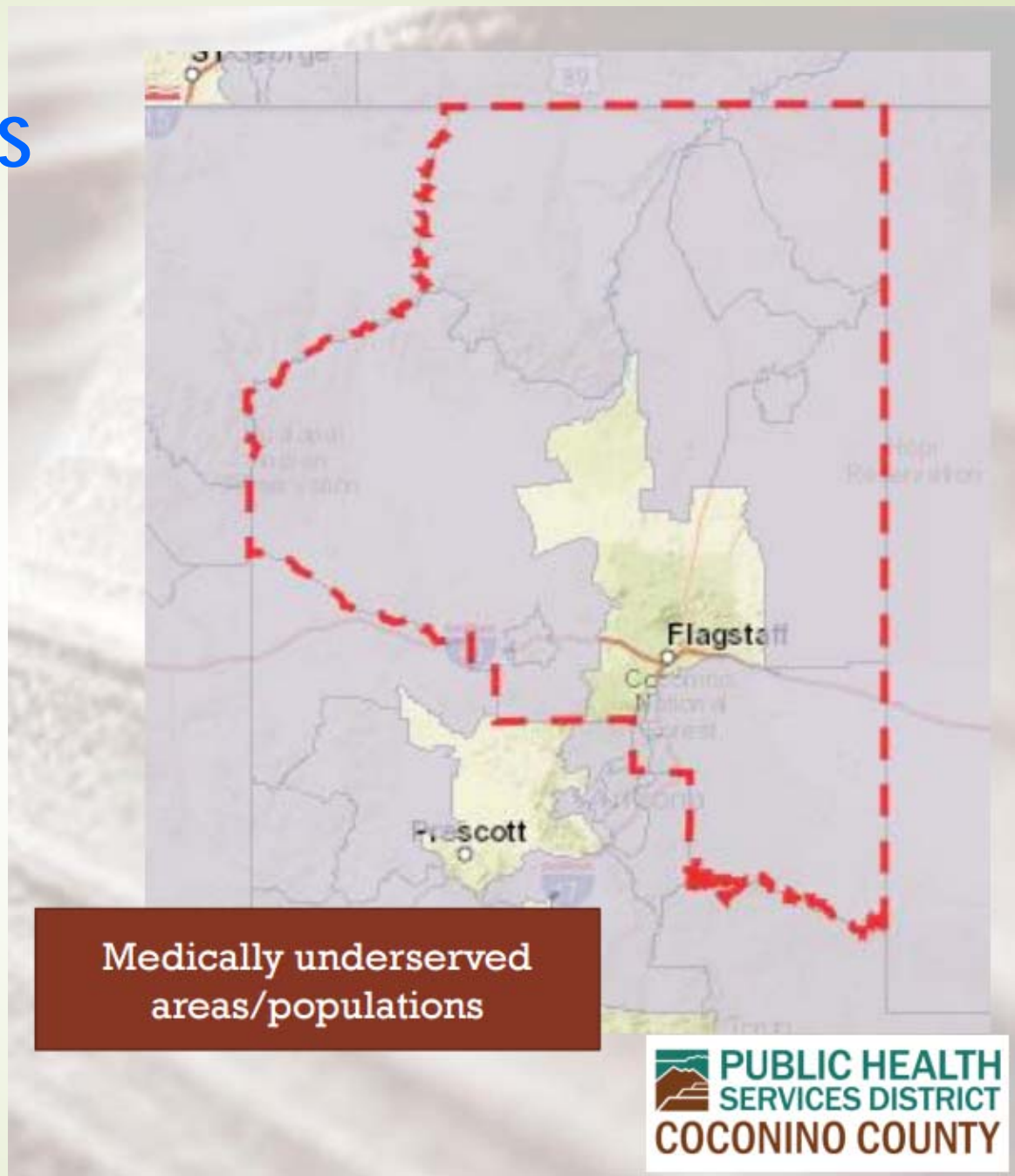
Lack of access, at times, to enough food for an active, healthy life for all household members.

Indicator	Coconino County	United States
Adult Food Insecurity Rate	<b>19.9%</b>	15.8%
Child Food Insecurity Rate	<b>29.5%</b>	9.4%

# CHALLENGES

## Medically-Underserved Areas:

areas having too few primary care providers, high infant mortality, high poverty or a high elderly population.



Medically underserved areas/populations

# COCONINO COUNTY COMMUNITY HEALTH ASSESSMENT UPDATE 2016

Coconino County Public Health Services District  
May 2016



## RESULTS

Stakeholders in both regions identified six public health priority areas as shown below (white type). Stakeholders in the Southern Region identified the same issues and added three additional priority areas (salmon type).

### NORTHERN REGION

Access to health care  
Chronic disease  
Employment/poverty  
Mental health issues  
Risk factors/risk behaviors  
Violence/crime

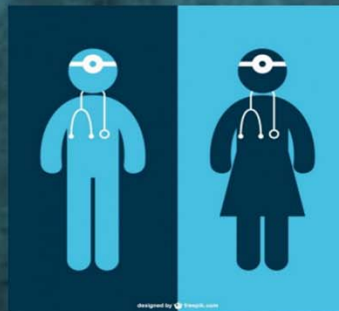
### SOUTHERN REGION

Access to health care  
Chronic disease  
Employment/poverty  
Mental health issues  
Risk factors/risk behaviors  
Violence/crime  
Health disparities  
Infectious diseases  
Injuries  
Oral health

## PRIORITY AREA: ACCESS TO HEALTH CARE

The Health Resources Services Administration has designated areas of Coconino County as

**Health Professional Shortage and Medically Underserved**



COCONINO COUNTY  
COMMUNITY HEALTH  
ASSESSMENT UPDATE 2016

Coconino County

**CHILDREN (under 18)**  
without health insurance in 2014:

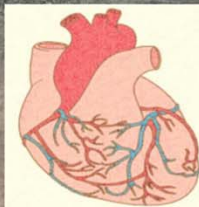
**1 in 6**

Coconino County **ADULTS** without  
health insurance in 2014:

**1 in 5**

## PRIORITY AREA: CHRONIC DISEASE

**Cancer** and **cardiovascular disease** are the leading causes of death in Coconino County and make up **43%** of all deaths.



**1 in 4** Coconino County adults is **obese**

2015 Coconino County emergency and inpatient hospital visits:  
**2,774** for heart disease  
**515** for diabetes  
**558** for cancer



Brownfields + Opportunity + Challenges  
= Healthfields

# Funding

- ▶ Funds for brownfields redevelopment from EPA & ADEQ
  - ▶ Environmental Assessments
  - ▶ Cleanup/Remediation
- ▶ Technical Assistance from ATSDR
  - ▶ Arizona Healthfields Initiative
- ▶ Funds for healthcare or food assets
  - ▶ USDA
  - ▶ USHHS
  - ▶ Philanthropic funders





**Brownfields + Opportunity + Challenges  
= Healthfields**

# Community Initiatives

- ▶ **Vitalyst Health Foundation**
  - ▶ 2017: The Year of Healthy Communities
  - ▶ Growing the Healthcare Workforce
  - ▶ Built environment initiatives (complete streets)
  - ▶ Empowering the community
- ▶ **Flagstaff Community Supported Agriculture (CSA) & Local Market**
- ▶ **Northern Arizona University**
  - ▶ Food Recovery Network – **Regional EPA Award Winner for the Food Recovery Challenge!**

# Willa Carson Health Resource Center Clearwater, FL

*Brownfields Transformation (Abandoned Gas Station to Health Clinic)*

## Challenges

- Abandoned contaminated gas station
- Out-of-state property owner
- Environmental issues:
  - 4 USTs
  - Hydraulic lift
  - 450 tons of contaminated soil



## Results

- Environmental justice
- Trust and credibility with local community
- National brownfields to public health model
- Location for health care provider for underserved/uninsured community
- Serves over 3,500 uninsured per year

# Central Florida Healthcare Mulberry, FL

*Community Searching for Healthcare Solutions on Brownfields Sites*

## Challenges

- > Medically Underserved Community in Polk County, Florida to healthcare on Brownfields sites
- > Numerous Abandoned Petroleum sites and Mined Lands within the City
- > Funding for Assessment Remediation and Redevelopment
- > Nearest Hospitals or clinics 9.8 miles and 12.01 miles

## Tools

- > HRSA Planning Grant
- > Brownfields Assessment Grant
- > HRSA School-Based Grant
- > HRSA New Access Point (Pending)

## Results

- > Community Based Healthcare in Rural Underserved Community



CFRPC - Dundee, Florida  
Health Center



Former brownfields site in Philadelphia





# PHOENIX B2H PROJECT

*Brownfields to Healthfields*

**Goal:** To match the need for food & health care assets with brownfields redevelopment

Metro North Corporate Park



## Success to Date:

- ❖ \$304 million in private investment
- ❖ 285 acres of previously contaminated land restored
- ❖ 3,300 jobs created or maintained



# Quincea Working Group Food Hub 5025 S. Central Avenue

- ▶ Centrally-located Food Hub easily accessible by the community
- ▶ Access to remotely located growers/producers for food delivery
- ▶ Harvesting and basic food processing services
- ▶ One-acre plot for food production
- ▶ Future Farmer's Market with plans for permanent grocery
- ▶ Goal of zero food waste
- ▶ Recruiting, training, and employee local community members to staff

*Quincea, Inc. – social enterprise working with developmentally disabled adults and veterans of the U.S. military.*

green  
on  
**PURPOSE**



putting **food** to work



# Brownfields to Healthfields

“Opportunity Realized”

[rosanne.albright@phoenix.gov](mailto:rosanne.albright@phoenix.gov)

602-256-3452

[phoenix.gov/oep](http://phoenix.gov/oep)



# **Brownfields to Healthfields: The Effects of Health Disparities**

**Julie A. Baldwin, Ph.D.  
Director, Health Equity Research  
Group  
Northern Arizona University**





# Health Disparity

*A particular type of health difference that is closely linked with social, economic, or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.*

*~Healthy People 2020*

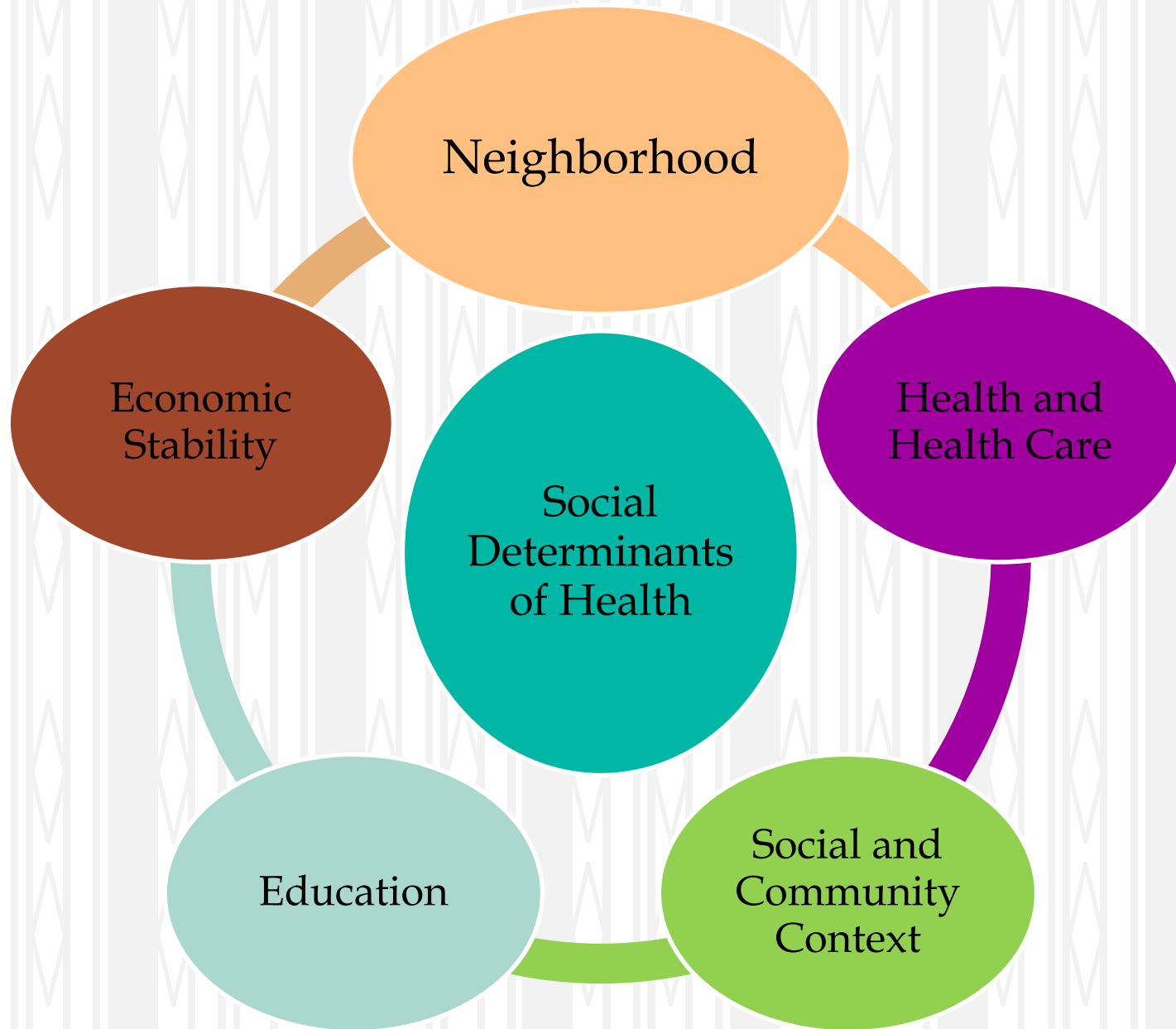


# Health Equity

*The attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical & contemporary injustices, and the elimination of health disparities.*

*~Healthy People 2020*

# Social Determinants of Health



# Brownfields and Determinants of Health

## 4<sup>th</sup> Level

Economic, Cultural, & Environmental Conditions

- Socioeconomic disparities
- Water/ Air quality
- Land quality
- Governmental health policy

## 3<sup>rd</sup> Level

Living and Working Conditions

- Food Production
- Education
- Housing
- Healthcare
- Transportation
- Water and Sanitation
- Work Environment
- Access to Resources

## 2<sup>nd</sup> Level

Social and Community Networks

- Friendships
- Community Safety
- Social Cohesion
- Social Capital

## 1<sup>st</sup> Level

Individual Lifestyle Factors

- Smoking Habits
- Sexual Behavior
- Diet and Exercise



# Brownfields Communities Suffer Disproportionate Numbers of Health Disparities

- ◆ Infant mortality
- ◆ Heart disease mortality
- ◆ Asthma-related emergency room visits
- ◆ Emergency room visits related to uncontrolled diabetes



## Disparities in Health Care Access are also Common

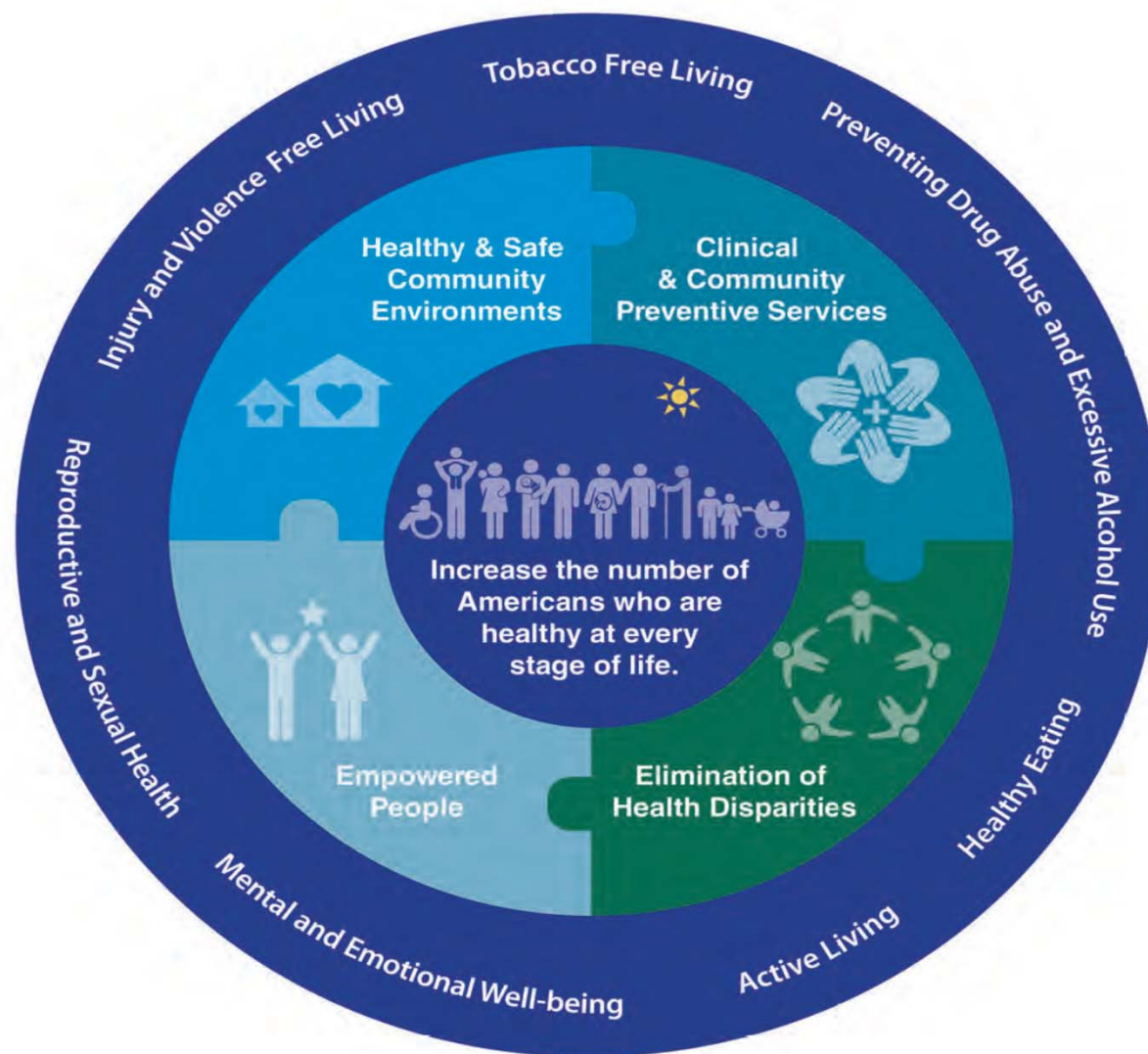
- ◆ Adults age 65 and over have worse access to care than adults 18-44
- ◆ Blacks and Hispanics have worse access to care than non-Hispanic whites
- ◆ People living in poverty have worse access to care than high-income people
- ◆ High number of food deserts



# Healthfields Redevelopment Provides a Range of Redevelopment Opportunities

- ◆ Health care
  - ❖ Community-based clinics, FQHCs
  - ❖ Hospitals
  - ❖ Vision, Dental, and Urgent care
- ◆ Open-Space/Green space
- ◆ Access to Healthy Food Choices
- ◆ Address Food Desert Issues

# Brownfields Opportunities to Implement the National Prevention Strategy







# **Methods for Partnering with the Community to Address Health Disparities**



# Key Characteristics of Community

- ◆ Shared sense of belonging and connectedness
- ◆ Seen in common symbols, language & connections
- ◆ Best Definition: a group of people sharing a sense of collective identity, common values, goals, and institutions



# CBPR

*A collaborative process that equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health and eliminate health disparities.*



# Steps for Health Impact Assessments

- ◆ Community Assessment
  - ❖ Identify Affected Populations
  - ❖ Health Concerns in Affected Populations
- ◆ Exposure Assessment
  - ❖ Exposures that cause health concerns
  - ❖ Exposures affected by the redevelopment
- ◆ Predict Mechanisms
- ◆ Project Quantitative Health Impacts
  - ❖ Change in number exposed & health outcomes



# Goals of Community Assessment

- ◆ Gain clarity on the problem and study it in greater detail
- ◆ Identify the structural, social, cultural, and other resources
- ◆ Identify a direction for action

# Core Principles

- ◆ “Start Where the People Are” & Hidden Transcripts



- ◆ Begin with strengths & assets, not problems
- ◆ Identification – communities engage in the collection of information

# Listening to Local People



## Interviews

local educators,  
elders,  
health service  
providers, and  
community people

- ❖ leaders
- ❖ youth
- ❖ parents

# Inventory

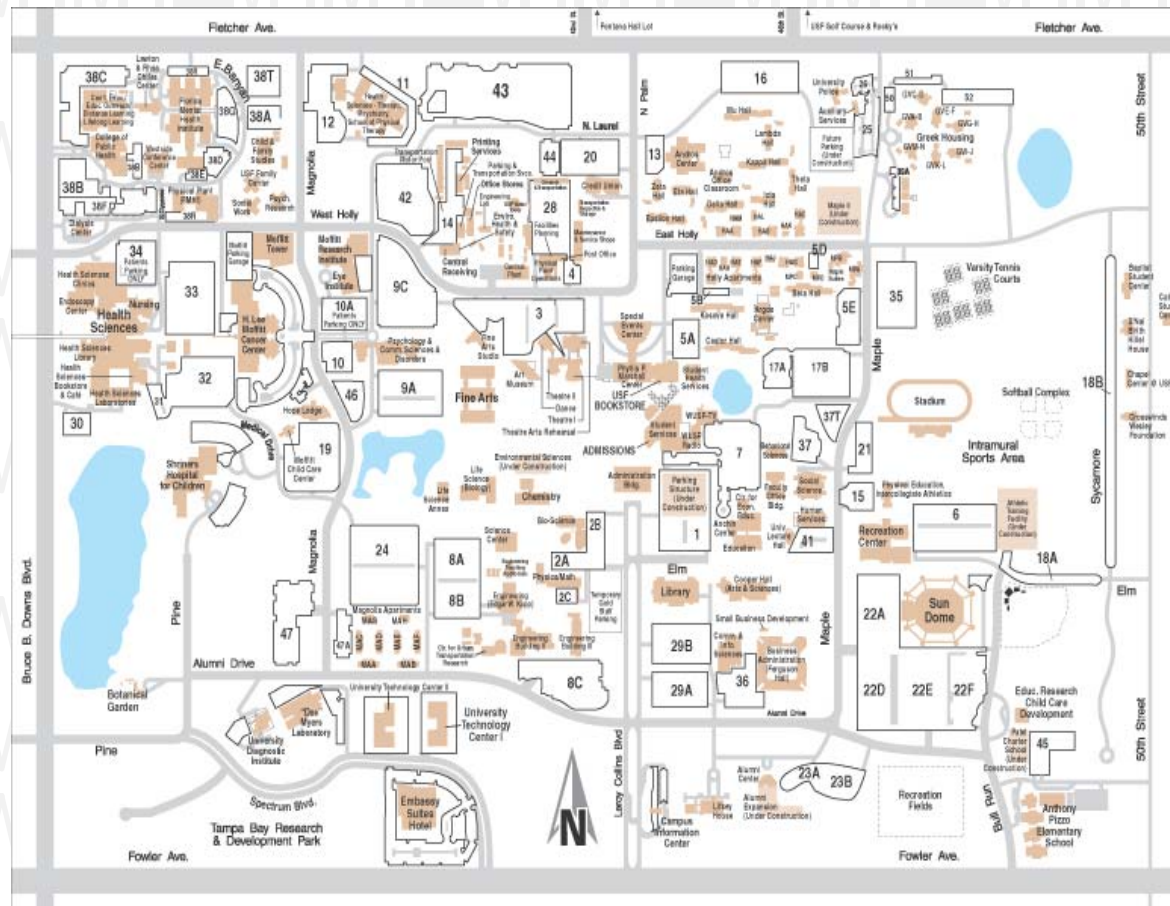
- ◆ Community Capacity Inventory –  
Healthy Neighborhoods





# Mapping

## ◆ Community Asset Maps



# Methods of Issue Selection Around



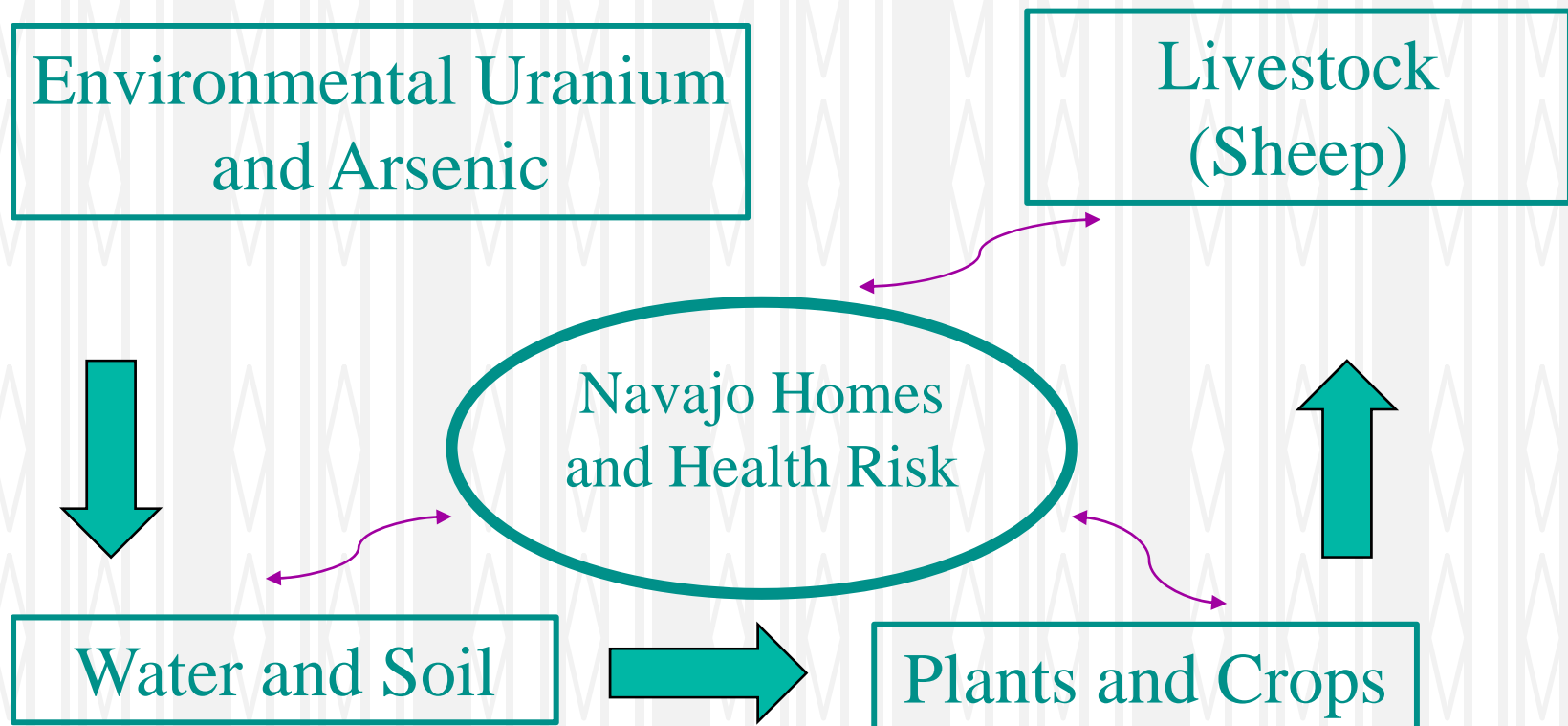
# Health and Wellbeing Impact of Contamination on Traditional Food on Navajo



**Jani C. Ingram, Ph.D.,  
Department of Chemistry &  
Biochemistry, Northern  
Arizona University**

# Research Overview

- Characterize the extent of metal contamination in culturally significant food and water systems
- Model dietary metal exposure and assess health impact
- Develop community participatory multi-level policy intervention model



# Implications for Sustainability

## 4<sup>th</sup> Level

### Social, Economic, & Political Factors

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- Livelihood
- Inequality
- Social Inclusion and Cohesion
- Political Participation

## 3<sup>rd</sup> Level

### Environmental Conditions

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- Housing
- Air, soil, water quality
- Disease Vectors

## 2<sup>nd</sup> Level

### Neighborhood Services and Infrastructure

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- Education
- Public Transportation
- Parks
- Healthcare
- Community centers
- Water and Waste

## 1<sup>st</sup> Level

### Individual Health Behaviors

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- Diet
- Exercise
- Smoking
- Coping

The background features a series of vertical stripes. On the far left, there is a narrow, colorful border with a repeating diamond pattern in green, yellow, and red. This is followed by a wide section of light gray stripes, each containing a faint, repeating diamond pattern. The text 'Future Directions' is centered in a dark red, serif font.

# Future Directions



# Center for Health Equity Research

- ◆ **Mission:** To reduce and eliminate health disparities among diverse populations in Arizona, regionally, nationally, and internationally through a program of community-engaged research, health systems research, effective communication of research results, and research training and workforce development.



# Health Equity Research Group

*Our strategy to end health disparities in Arizona:*

- ❖ Diversify and strengthen the health workforce in key areas
- ❖ Build strong partnerships and community engagement around health
- ❖ Strengthen NAU's infrastructure and ability to engage in meaningful research in health equities
- ❖ Provide methodological and statistical support to health researchers
- ❖ Translate the results of research back to communities, in a way that is meaningful to them, so that research provides direct benefits to our citizens





# Advancing Wellbeing in Northern Arizona

Center for Health Equity Research  
Northern Arizona University

Supported by the NARBHA Institute and the NAH  
Foundation

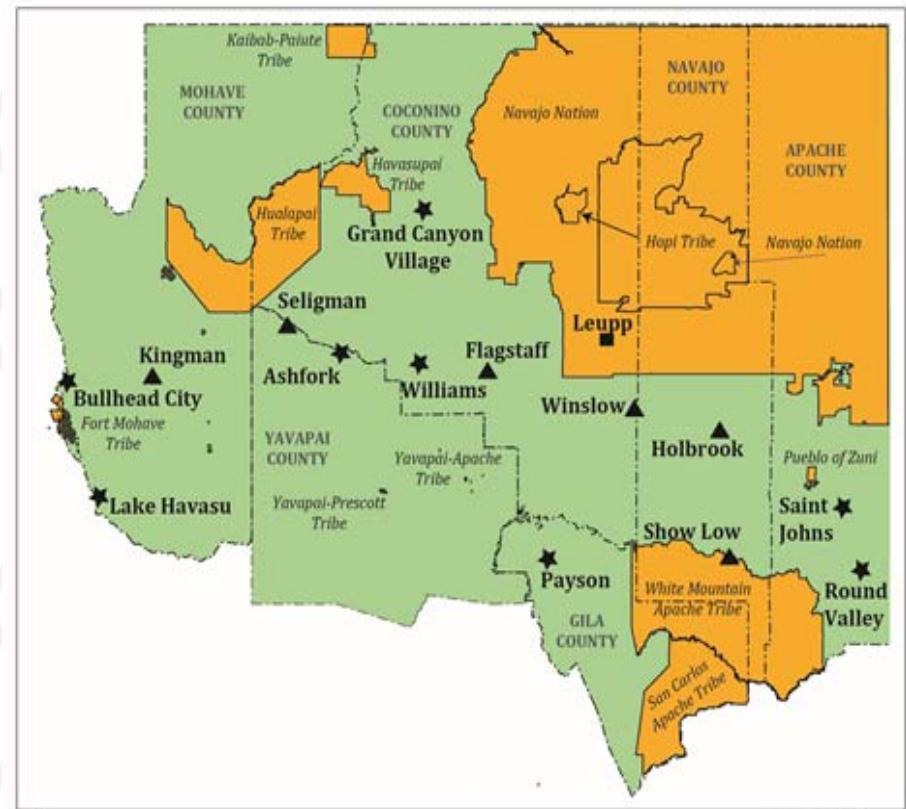


**Goal 1: To conduct an assessment of health equity needs and intervention opportunities**

Action Area 1: Identify local community and institutional needs, barriers, and resources addressing health disparities in northern Arizona

Action Area 2: Provide an overall strategic plan for the development of evidence-based health equity prevention programs in northern Arizona

Comprehensive  
Needs  
Assessment



**LEGEND**

- ▲ Study site and North Country HealthCare clinic location
- ★ North Country HealthCare clinic location
- Study site
- Tribal Lands within the study area
- Study Area



# Health Equity Research Group Northern Arizona University

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**Thank You**



**Questions?**



# **ATSDR\* Action Model:**

## ***Finding Ways to Make Health Part of Community Renewal Process***



**U.S. Department of  
Health and Human Services**  
Agency for Toxic Substances  
and Disease Registry

\*Agency for Toxic Substances Disease Registry

# What is the Action Model?

A tool to help people make changes where they live — like fixing up old buildings or cleaning up empty lots.

By teaming up with other people in the Development Community — like neighbors, officials, developers, and community supporters — lasting improvements can be made in communities.



# What is the Action Model?

The Action Model was developed in 2007 as part of a Pilot Project in Baraboo Wisconsin.

Since that time the Action Model has been used with more than 25 communities throughout the U.S. including:

- Milwaukee, WI
- East Cleveland, OH
- Detroit, MI
- Blue Island, IL
- St. Paul, MN
- KI Sawyer, MI
- Cully Park, Portland, OR
- Linnton Neighborhood, Portland, OR
- Janesville, WI
- Kenosha, WI
- Graniteville, SC
- Joplin, MO
- Duluth, MN
- Pleasantville, NJ
- Niagara Falls Highland Community
- Utica, NY
- Howardville, MO
- 5 different neighborhoods in San Antonio, TX
- Navajo Nation, AZ/NM



# What are the problems in our community?

What's having a negative impact on the health, safety, or happiness of people in their neighborhood, town, or city? Here are some examples:



**“We don’t have a park, so there’s no place for kids to play.”**



**“The sidewalks are all broken up, so older people can’t walk anywhere.”**



**“We have 3 abandoned buildings on my block, and I don’t feel safe anymore.”**



# Make a difference

The Action Model was developed for those in the Development Community who want to **do something** about problems like these.

The Action Model is a grassroots tool that can be used to form a plan to improve health and quality of life, reduce risks, and boost pride in the community.



# Improve your community



**“We turned an abandoned lot into a community center and a park.”**

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**“We were in a food desert, so we started our first community garden.”**

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**“We rebuilt some crumbling buildings and brought in new businesses and jobs.”**

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# The Action Model is simple

**It has 4 steps.** They're questions that we will have you ask yourselves as part of an exercise that is scheduled during today's workshop.



Step 1: What are the issues in the community?



Step 2: How can development address these issues?



Step 3: What are the corresponding community health benefits?



Step 4: What data are needed to measure change?



# How will the Action Model help?

## Health

Improving physical health (like forming walking clubs or building trails to boost physical activity) and mental health (like offering services to lower stress).

## Environment

Getting rid of harmful substances and cleaning up the air, water, and land in the community.



# How will the Action Model help?

## **Education and economy**

Bringing in new businesses and building health clinics, grocery stores, schools .

## **Safety and security**

Preventing accidents, raising confidence, and lowering crime.



# How will the Action Model help?

A completed Action Model can also be a powerful tool to get funding for a project.

With the results of the action model it is possible to show groups that offer grants exactly what the community wants to accomplish and how.



# Take control of redevelopment

Sometimes, redevelopment can have a bad effect on a neighborhood if the people who live there don't get a say in the process.

**Using the Action Model will give the community a voice in redevelopment.**  
This will ensure that any changes from redevelopment really benefits the community.





# Recommendations: Getting Started

- Build a Development Community Team
- Finding Members and Support
- Finalizing Your Team
- Meet In Person



# Build A Development Community

- Create a team from the Development Community.
- These are people who also want to help. Your Development Community might include:
  - Other concerned citizens
  - Business owners
  - Developers
  - Planners
  - Government agencies
  - Local or state health departments
  - Nonprofit groups



# Finding Members and Support

## Where can I find members for my Development Community?

Some good places to start are local resources and organizations like:

- Chamber of Commerce
- Community centers
- Organizations (like the 4-H Club, Boys and Girls Clubs, and Salvation Army)
- Local hospitals and health clinics
- City Council



# Finding Members and Support

## Ask questions.

When you contact possible members of your Development Community, tell them about your ideas and ask a few questions.

- **What are the problems that *you* want to fix?** These may be the same or different from your own goals.

- **What would help solve them?** See what their ideas are for improvements.

- **Do you know anyone else who might be interested in our project?**

This is key. You'll get more names of people who might want to join the Development Community.



# Finalizing Your Team

## How big should the Development Community be?

There's no right number. Development Communities can range from 10 to 30 people.

How do you know you have your complete team? Whenever you talk to a new possible member, ask if they have recommendations for other potential members. **When those recommendations tend to be people you've already contacted, that's a sign you have formed your Development Community.**



# Hold An Action Model Workshop

- This is a larger, more formal meeting with your Development Community.
- Usually takes 2 to 4 hours.
- A facilitators guide is available on the ATSDR website:  
<http://www.atsdr.cdc.gov/sites/brownfields/actionmodeltoolkit/>



# Running the Workshop

## Ask questions.

To get the group on the same page at the start of your meeting, ask some key questions.

•**How do you define your community?** Is it everyone who lives in the same neighborhood? Or is it a looser group of people, based on a shared outlook, ethnicity, or economic status? How people define their community will affect their view of the project.

•**What are your expectations for this project?** Make sure everyone has a realistic sense of what you can achieve.

•**Will you need funding for this project?**



# Running the Workshop (cont.)

## Engage the group.

One way to do this is to ask participants:

### •Can you stay involved for the long-term?

Even if they're excited at first, people may get busy and lose interest in a project over time. Stress that this is a long-term project and will take months or years to complete. Team members need to understand the commitment.



### •Do you think your community is ready for these changes?

Will the larger community support the changes you're considering? If not, you may want to change your approach.



# Agreeing On Goals

## Start small.

Don't take on a project that's too big. Start with something small and doable. If it succeeds, it will naturally lead to bigger changes. For example:

- Instead of redeveloping a whole block, start with a single building
- Instead of cleaning up a whole river, focus on one part of the waterfront
- Instead of large-scale food access projects, begin with one community garden



# Agreeing On Goals (cont.)

## Create your Action Model.

Remember, the steps of the Action Model are all questions that your Development Community will answer. At your workshop, go through each question and come up with answers:

1. What are the issues in the community?
2. How can development address these issues?
3. What are the corresponding community health benefits?
4. What data are needed to measure change?



**Get your answers down on paper** (using a spreadsheet can keep things organized). When everyone's had a chance to speak, vote on your approach to finalize your answers. Once you're done, your answers are a draft of your Action Model.



# Agreeing On Goals (cont.)

## Head off disagreement.

Another challenge is that the members of your Development Community may come in with very different goals.

To prevent misunderstandings — both now and later — it's important to **use your workshop to find goals you agree on**. You can always vote on the issues you want to address now and the ones you will save for later.



# Keep The Project Moving

- Hold a second workshop
- Create stewardship. Identify people (stewards) who will supervise the project, keep an eye on it, and move it forward.
- Assign roles. Give people clear responsibilities. As long as each person knows what she should be doing, your project is more likely to succeed. Creating smaller groups (sub-committees) can help divide up the work.



# Find Community Support

- Contact those outside your Development Community:
  - Local high schools, colleges, or universities.
  - Churches, synagogues, mosques, and other houses of worship.
  - Local government.
- Share your Action Model with the community by getting it posted on a website. The Development Community can do this itself but it is better if the city or local health department will do it.



# Look Into Funding

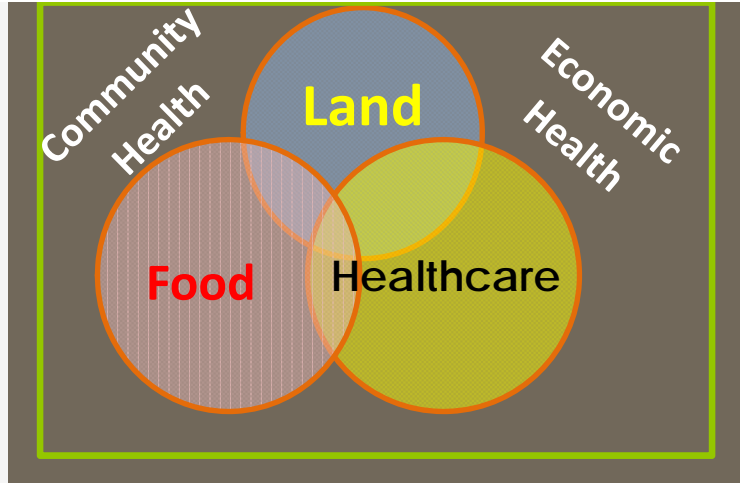
- Evaluate Your Needs
- Know Your Options
- Research Grants
- Look into Federal Resources
- Check out state and local resources



- **Health departments**, both in your local area and the state, improve public health by offering services, inspecting homes and businesses, and keeping track of community wellness.
- **State environmental protection agencies** focus on the environment and its effect on people's health.
- **Local health agencies** focus on the health needs of people in local communities and work to improve their health and quality of life.

# Action Model Small Group Exercise

PROCEED ACCORDING TO DIRECTIONS  
PROVIDED TO EACH TABLE



# Essential Activities For Land & Building Redevelopment & Reuse

Dave Laney ATC Group Services



# Property Transactions and Redevelopment/Reuse

- **Property Assessments**
- **Property Remediation**
- **Liability Considerations**
- **Financing Consideration**



# Property Assessments



- **What kind of issues (environmental, legal, etc.) are associated with the property**
- **What is the severity (i.e., the nature and extent) of the issues**
- **What long-term obligations will be assumed by new owner**



# Phase I Environmental Site Assessment (ESA)



- **Typically performed before property purchase**
- **Standard practice ASTM E1527-13 and EPA “all appropriate inquiry” standard**
- **Includes a site reconnaissance, interviews of property owner and occupant, review of historical records**
- **Primary goal: to identify recognized environmental conditions (RECs)**
- **Good for 6 months (180 days)**





# Phase II Environmental Site Assessment (ESA)

- **Performed after Phase I ESA**
- **Performed in accordance with ASTM E1903-11**
- **Collection and analysis of samples of environmental media**
- **Evaluate the nature and extent of contamination associated with the REC**
- **Outline need for additional investigation or remediation**



# Adaptive Reuse of Buildings

- **Structural integrity, mold, etc.**
- **Plumbing, electrical wiring, etc. up to code**
- **Buildings older than 1978 may have lead-based paint (LBP)**
- **Majority of homes & buildings older than 1959 have LBP**
- **Buildings older than 1989 may have asbestos**
- **LBP can cause brain and nervous system damage in children; one asbestos fiber can cause death (there is no cure)**



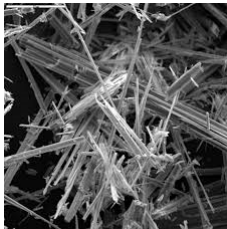
# Building Inspections for LBP

- **Lead content of paint is usually determined utilizing an X-Ray Fluorescence (XRF) Spectrometer**
- **This work is generally performed in general accordance with HUD 1997 guidelines**
- **Paint with  $\geq 1.0$  milligram per centimeter lead is considered LBP**
- **LBP survey reports will identify which surfaces in the building have LBP and its condition**
- **Can strip or remove LBP, enclose it, or encapsulate it**



# Asbestos Building Inspections

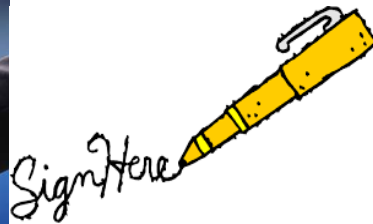
- **Collection and analysis of suspected building material is required**
- **The number of samples collected depends on the type of material and the size of the homogenous area (HA) that is sampled**
- **At least three samples of material are collected from each homogenous area**
- **Survey should provide the asbestos content, location, condition, and amount of each material that has been sampled in a building**
- **Any building material that contains more than 1 percent asbestos is considered to asbestos containing material (ACM)**
- **ACM should be removed prior to building renovation/demolition**





# How To Use ESA, and LBP and/or Asbestos Survey Results

- **Use results in purchase agreements**
- **Require current landowner to clean up property prior to sale**
- **Reduce cost of property to amount equal to the cost of required cleanup**
- **Pursue acquisition and cleanup alternatives that limit your environmental liability (PPA)**



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# ENVIRONMENTAL LIABILITY CONSIDERATIONS

August 19, 2016

Presented by Jerry D. Worsham II

# Environmental Liability Considerations

- Caveats:

- You must investigate to understand environmental issues
- What you don't know can and probably will be a problem
- "Caveat Emptor" "Caveat Venditor" "Let the buyer and seller beware!"

## Risk Profile

- What is your entities risk tolerance or goal?
  - Avoid any risk of environmental liability (statutory or third party)
  - Manage risks that are properly assessed and understood by starting with a Phase I Environmental Site Assessment

# Basis of Liability

- Common Law

- Nuisance, trespass, strict liability

- Statutory

- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 USC § 9601 et. seq.) commonly known as “Superfund”
- State equivalent - Water Quality Assurance Revolving Fund (WQARF) (A.R.S. § 49-281 et. seq.)

# CERCLA and WQARF

- CERCLA
  - Liability is:
    - Strict
    - Joint and several/Divisibility possible in some cases
    - Runs with the land
  - Potentially Responsible Parties (PRPs)
    - Current and former owners and operators
    - Persons who arranged for disposal (generators)
    - Transporters/Haulers
- WQARF
  - Key difference - liability is several only

# CERCLA Defenses

- Environmental due diligence is required to be eligible for certain statutory defenses
- Due diligence required to obtain Brownfields funding
- “All appropriate inquiry”
  - Phase I Environmental Site Assessment (ASTM E1527-13)
  - “Recognized Environmental Conditions” (RECs)
  - “Historical Recognized Environmental Conditions” (HREC)

## CERCLA Defenses, cont.

- **Innocent Purchaser**
  - All appropriate inquiry performed
  - No reason to know contamination exists
  - Contamination caused by third party with whom purchaser has no contractual relationship
  - Also governmental entities that acquire property by eminent domain, escheat or other involuntary transfer
- **Bona Fide Prospective Purchaser**
  - All appropriate inquiry performed
  - Contamination caused prior to purchase
  - Appropriate care exercised with respect to any discovered contamination
    - Reasonable steps to:
      - ☐ Stop any continuing release
      - ☐ Prevent future release
      - ☐ Prevent or limit exposure
      - ☐ Cooperate with authorities
- **Contiguous Property Owner**
  - No Liability for neighboring contamination which flows without your knowledge



# Tools for Managing Environmental Liability

- Carefully drafted Lease Agreements
- Contractual protections
  - Indemnification
  - Representations and warranties
- Prospective Purchaser Agreements (WQARF)
- Voluntary Remediation Program
- Institutional Controls
- Declaration of Environmental Use Restriction (DEUR)
- Insurance

Land Use	Common Contaminants
Agriculture, green space	Nitrate, pesticides/herbicides
Car wash, parking lots, road and maintenance depot, vehicle services	Metals, PAHs, petroleum products, sodium, solvents, surfactants
Dry cleaning	Solvents
Existing commercial or industrial building structures	Asbestos, petroleum products, lead paint, PCB caulks, solvents
Junkyards	Metals, petroleum products, solvents, sulfate
Machine shops and metal works	Metals, petroleum products, solvents, surfactants
Residential areas, buildings with lead-based paint, where coal, oil, gas or garbage was burned	Metals, including lead, PAHs, petroleum products creosote
Stormwater drains and retention basins	Metals, pathogens, pesticides/herbicides, petroleum products, sodium, solvents
Underground and aboveground storage tanks	Pesticides/herbicides, petroleum products, solvents
Wood preserving	Metals, petroleum products, phenols, solvents, sulfate
Chemical manufacture, clandestine dumping, hazardous material storage and transfer, industrial lagoons and pits, railroad tracks and yards, research labs	Fluoride, metals, nitrate, pathogens, petroleum products, phenols, radioactivity, sodium, solvents, sulfate

# BROWNFIELDS PROGRAM

Arizona Department of Environmental Quality

AZDHS

Flagstaff, AZ

August 18, 2016

Presented by

Jennie E. Curé, Brownfields Coordinator



## Brownfield Definition

Brownfields are real properties, where the expansion, redevelopment or reuse may be complicated by the actual **or perceived** presence of a hazardous substance, pollutant or contaminant.

# EPA Brownfields Program

Empowers states, communities, and other stakeholders to work together to prevent, assess, safely cleanup, and sustainably reuse brownfields

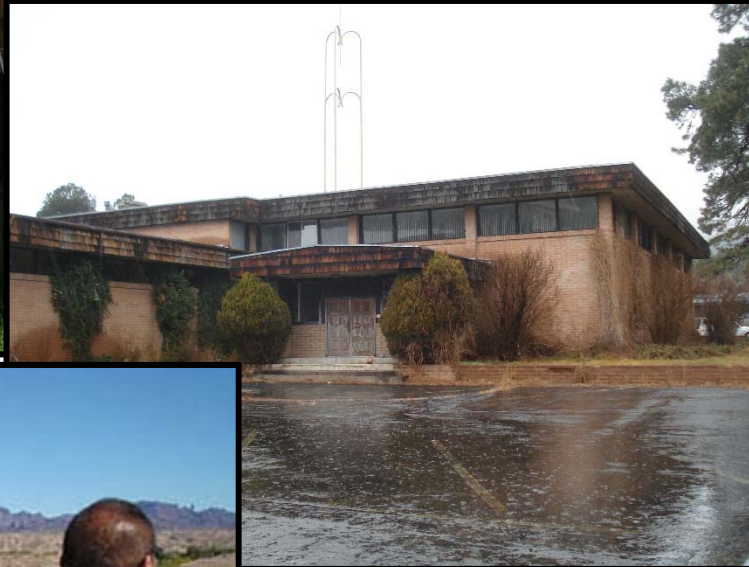
# Who Qualifies for Brownfields Funding?

- Local Governments
- Non-Profit Organizations
- Hospital, Fire, Police and School Districts
- Native American Tribes who do not have their own State Response Grant-Brownfields Funds

## What sites are Brownfields?

- Underutilized commercial or industrial sites
- Sites with suspected or known contamination with redevelopment potential
- Redevelopment is complicated by known or perceived contamination from a hazardous substance as defined by U.S. EPA CERCLA

# Site Opportunities





# Brownfield Site Eligibility Requirements

- Site must meet the definition of a Brownfields
- Property cannot be located in a Superfund or WQARF area
- Applicant cannot be the responsible party for any contamination
- There cannot be any formal enforcement actions against the property
- Some kind of redevelopment plan should be under consideration for the property
- Applicant must own the property for a cleanup grant

# State Response Grant Funding

- Focuses on Arizona's small and rural communities' brownfield needs
- Available to Non-profits, governmental entities and Tribes without their own Brownfields Grants
- Typically awards from \$5,000 - \$60,000 for Phase I and II ESAs
- Does not require any cost share or matching funds
- Awards are made according to available funds on a first-come, first serve basis
- Non-competitive

# Direct EPA Grants

- Community-Wide Assessment Grants
- Clean-up Grants
- Targeted Site Assessments



# Additional Brownfields Resources

- Brownfields Redevelopment Toolbox
- Brownfields Assistance Program Brochure
- Voluntary Remediation Program(VRP)
- Statewide Brownfields grant Site Locations
- Arizona Department of Health Services: Brownfields/Land Redevelopment
- City of Flagstaff: Brownfields Land Recycling Program
- City of Phoenix: Brownfields Lands Recycling Program
- City of Tucson: Brownfields Program
- U.S. EPA: Brownfields and Land Revitalization
- U.S. EPA: Region 9: Brownfields Cleanup & Redevelopment in the Pacific Southwest
- U.S. EPA: Brownfields and Land Revitalization: Grants & Funding

# FY2017 Applications

Soft Deadline August 15

ASSISTANCE WITH  
APPLICATIONS IS  
AVAILABLE

# Contact Information

**Jennie E. Curé, Brownfields Coordinator**

**Voluntary Remediation Program Unit**

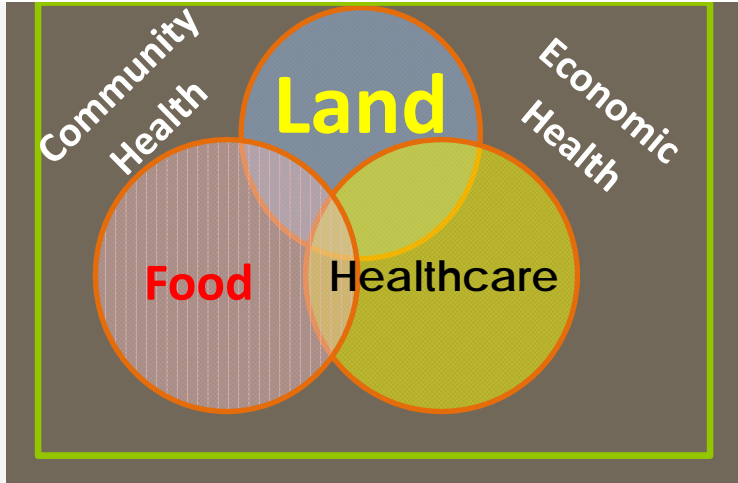
**Arizona Department of Environmental Quality**

**Phoenix, AZ 85007**

**(602) 771-2296**

**[jec@azdeq.gov](mailto:jec@azdeq.gov)**

**[www.azdeq.gov](http://www.azdeq.gov)**



# Financing Considerations: Part 2

Dave Laney ATC Group Services

# Other Sources of Funding

- **EPA Brownfield Grants**
- **Centers for Disease Control, Agency for Toxic Substances Disease Registry (ATSDR)**
- **Health Resources Services Administration (HRSA)**
- **Healthy Food Financing Initiative (HFFI)**
- **New Market Tax Credits**
- **Banks**
- **Non-Profit Hospitals**
- **USDA Rural Development**



# EPA Brownfields Grants

- **Office of Environmental Justice, Superfund Remediation and Technology Innovation, Office of Underground Storage Tanks.**
- **Assessment Grants** – identify environmental risk, perform planning for cleanup and redevelopment.
- **Cleanup Grants** – cleanup up to three sites per grant recipient.
- **Area Wide Planning Grants** - can be used by community leaders from public and private non-profit to develop an overall Healthfields redevelopment strategy.

Feature	Assessment	Cleanup	Area Wide Planning
Time	3 years	3 years	2 years
Value	\$400,000 - \$600,000	\$600,000 (\$200 k per site)	\$200,000

# Agency for Toxic Substances Disease Registry (ATSDR)

- **Award up to six \$150,000 grants each year**
- **State/local governments, colleges and universities, tribal government and public housing authorities**
- **Increase capacity to identify, address, and improve public health in redeveloping Brownfield/Land Reuse sites**
- **Emphasis on identifying and addressing health issues prior to redevelopment**
- **Grant cycle open 5/3/16 – 7/5/16**

# Health Resources Services Administration (HRSA)

- **Model is for Federally Qualified Health Centers (FQHC) to be located in medically underserved areas**
- **Provide up to 75 new access point (NAP) grants per year with max amount of \$650,000 per grant**
- **A new service delivery site for the provision of comprehensive health care services**
- **Public or nonprofit private entities, including tribal, faith-based, and community-based organizations**
- **Two phases for FY 2017; deadline for submittals June 17 and July 15, 2016**

# Healthy Food Financing Authority (HFFI)

- **Federal governments first coordinated effort to increase access to healthy food in underserved areas**
- **Includes USDA, HHS, Treasury Department and EPA**
- **Department of Treasury Community Development Financial Institution provides low interest loans to underserved, economically distressed communities working to attract healthy food retail and food system development**
- **USDA Farmer's Market Promotion Program awards 3 year grants from \$50,000 to \$500,000 for projects that establish, expand, and promote direct producer-to-consumer marketing**
- **USDA Local Food Promotion Program offers (1) planning, and (2) implementation grants with a 25% match for local and regional food businesses working to increase domestic consumption of locally and regionally produced agricultural products**

# New Market Tax Credits

- **Administered by the Treasury**
- **Attracts capital to operating businesses and real estate projects in low-income communities**
- **Provides investors with a credit against their federal income tax in exchange for equity investments in a certified Community Development Entity (CDE)**
- **A CDE is the intermediary through which loans, investments or financial counseling can be made to low income, underserved communities for fresh food and health care projects**

# Banks & Non-Profit Hospitals

- **The Federal Interagency Working Group on Environmental Justice**
- **Goal is to “guide, support, and enhance federal environmental justice and community based activities”**
- **Federal Reserve Bank may have member banks that are required to service debt as part of their Community Reinvestment Act programs**
- **Private non-profit hospitals may also be able to help out since they are required by the IRS to demonstrate a community benefit**

# USDA Rural Development

- **For communities 35,000 to 50,000 in size or smaller**
- **USDA can provide loans and grants for single family, farm labor and rental housing**
- **Rural Community Development Initiative can provide technical assistance grants of \$50,000 to \$300,000 to private non-profit or public organizations, philanthropic foundations, low-income**
- **Community Facilities loans and grants can be used to finance schools, libraries, hospitals, other health care facilities**
- **Loan period is 40 years and interest rate is 3%**
- **Grant is up to 75% of project cost**

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## What are Brownfields?





# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Brownfields are:

1. Sites with Real or Perceived Contamination
  - a. A hazardous substance (asbestos, lead, perc, etc.)
  - b. A petroleum product (Oil, Fuel, MTBE, etc.)
  - c. A controlled substance (Drugs)
2. Abandoned or Under-utilized Property



Grant = Redevelopment Incentive

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## USEPA Brownfields and Land Revitalization

### Assessment Pilots/Grants

1. Cities and Counties: \$200K Hazardous + \$200K Petroleum
2. Coalition of 3+: \$1M



United States Environmental Protection Agency

[http://www.epa.gov/brownfields/assessment\\_grants.htm](http://www.epa.gov/brownfields/assessment_grants.htm)

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Coalition Partners:

1. All Route 66 communities invited
2. Participating:
  - a. City of Flagstaff
  - b. City of Holbrook
  - c. City of Winslow
  - d. Coconino County
  - e. Navajo County



Location, linkage, and interest  
(>150 potential sites)

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Sources of Funds:

1. USEPA	\$ 700,000
2. Coalition Partners	\$ 0
3. City of Flagstaff	\$ 0
4. Clients	\$ 0



# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Uses of Funds:

1. Grant Administration
2. Community Involvement
3. Clean-up Preparation Activities
  - a. Identify Clients
  - b. Environmental Site Assessments
    - i. Phase I and Phase II
    - ii. Lead, asbestos, etc.
    - iii. Private or Public

Uses are split into two parts:

1. Hazardous Substances (60%)
2. Petroleum Products (40%)



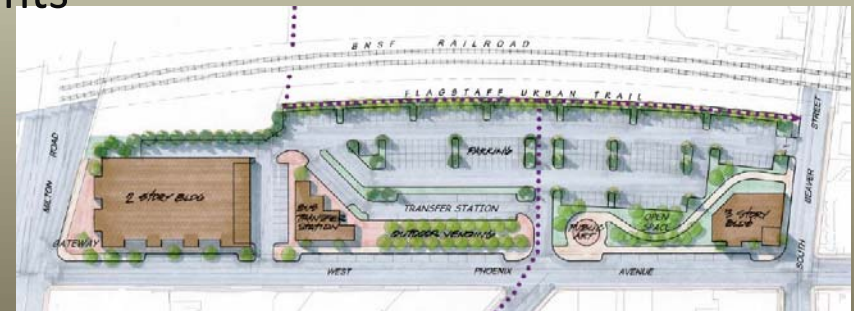
# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Uses of Funds:

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2. Community Involvement
3. Clean-up Preparation Activities
  - a. Identify Clients
  - b. Environmental Site Assessments
    - i. Phase I and Phase II
    - ii. Lead, asbestos, etc.
    - iii. Private or Public
  - c. Redevelopment Planning
    - i. Individual Site Planning
    - ii. General Planning



# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Clean-up: Not Covered



ADEQ Grant

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Grant Term:

1. Initially Three Years
  - a. Ends October 2015
2. Two Year Extension
  - a. Ends October 2017



# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Process:

1. Application
2. Coalition Partners Vote
3. USEPA Approves

---

4. Agency Procurement
  - a. Per Agency Rules
5. City of Flagstaff Reimburses Agency
6. City of Flagstaff bills USEPA

4-5 Weeks

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Flagstaff Examples and Successes:



Municipal Courts



Airport



USGS Campus

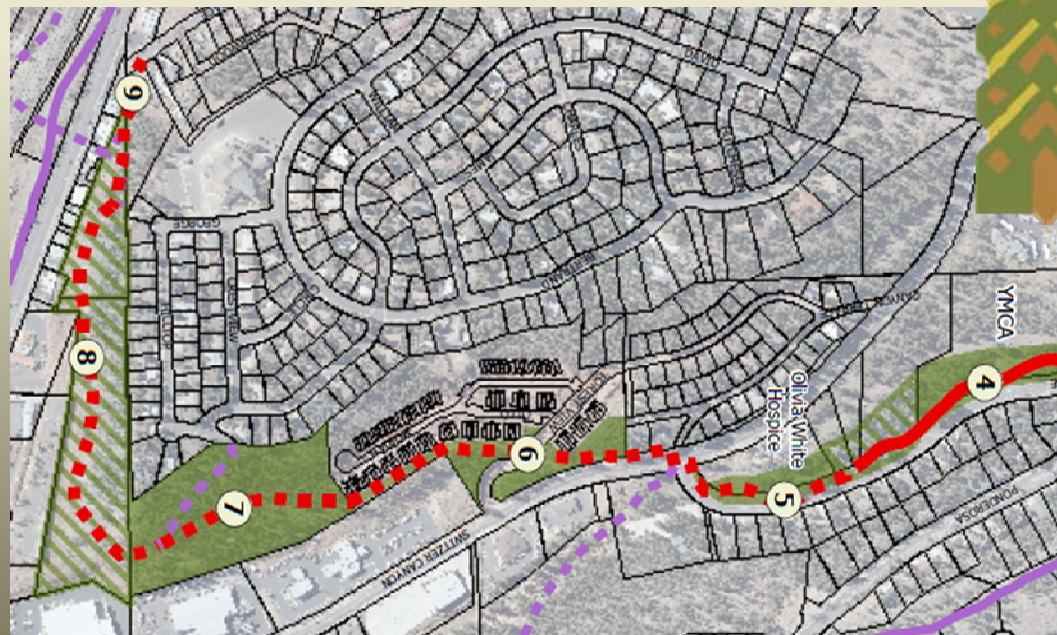
Environmental Site Assessments  
City of Flagstaff Real Estate

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Flagstaff Examples and Successes:



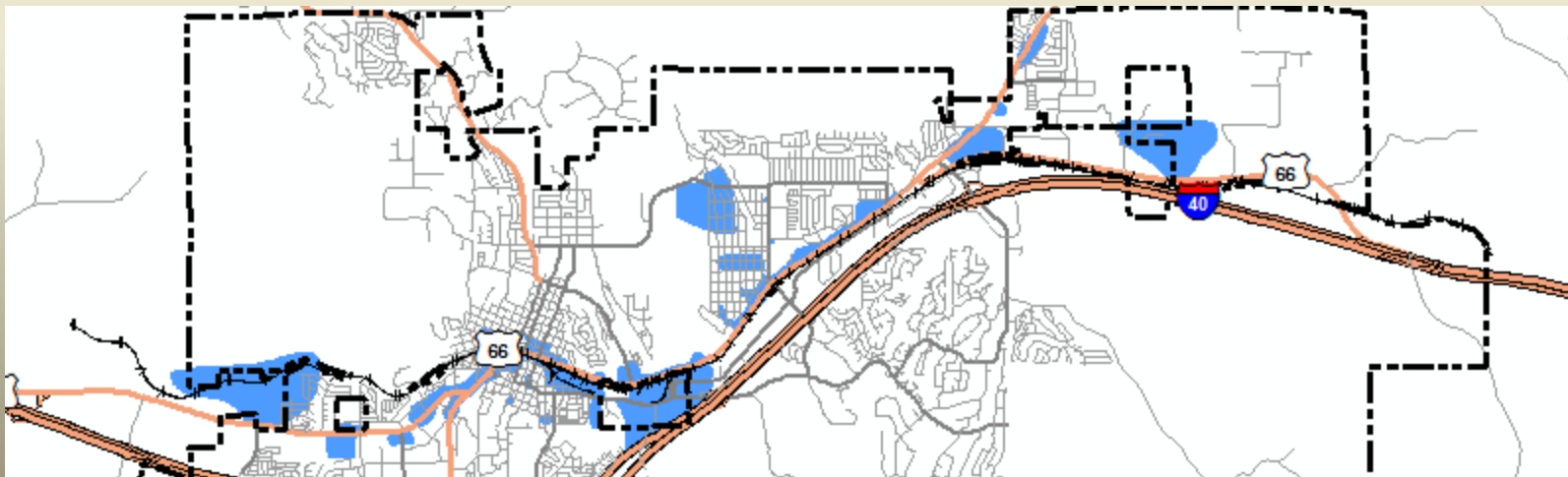
Environmental Site Assessments  
Property and ROW Acquisitions

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Flagstaff Examples and Successes:



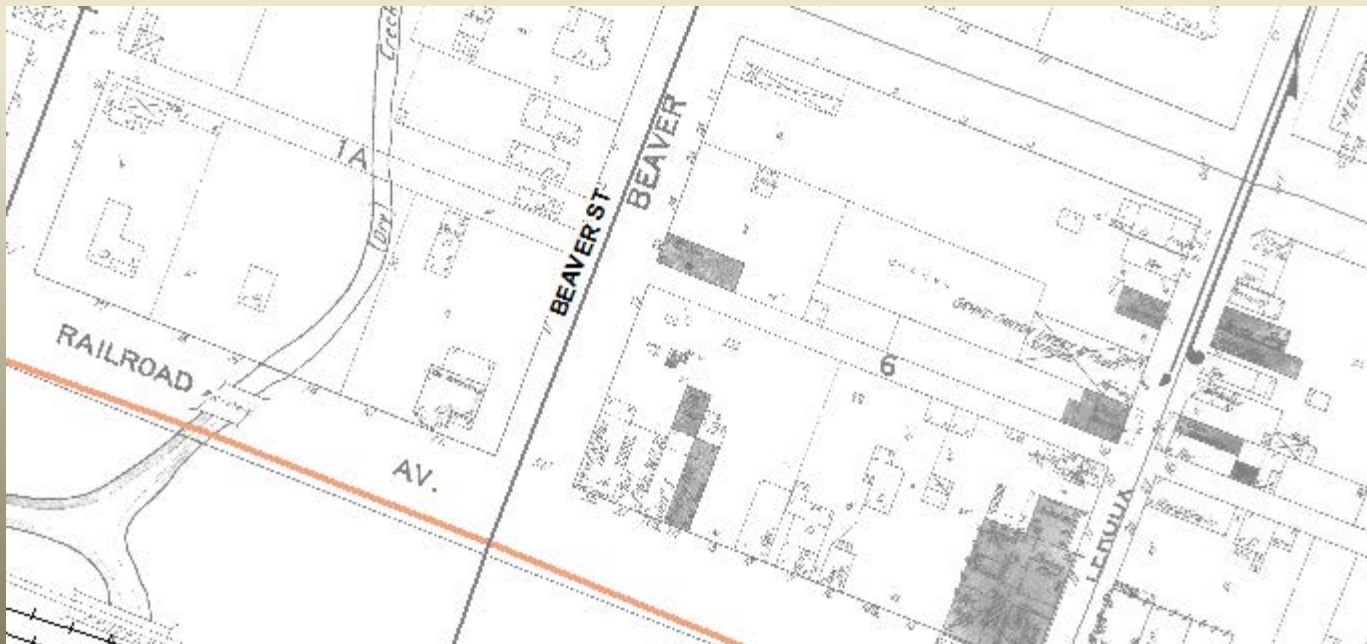
Inventory  
Documented Sources

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Flagstaff Examples and Successes:



Sanborn Maps in City GIS

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Flagstaff Examples and Successes:



Redevelopment



Affordable Housing



Infill Development

Environmental Site Assessments  
Private Property and Redevelopment

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Total/Pending to Date:

	ESA I	ESA II	Planning
Flagstaff	14	1	2
Holbrook	3	0	0
Winslow	8	2	0
Coconino	5	2	0
Navajo	2	0	0
<hr/> Total	32	5	2

# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



## Lessons Learned:

1. Coalition – Strengthened Our Relationships
2. Grant Manager
  - a. Private Contractor
3. Property Owner Fear
4. Most ESAs
  - a. Phase I only
  - b. Most “Not Contaminated”
5. Redevelopment Planning Aspect Under-utilized
6. Clean-up Funding Remains a Challenge



# Arizona Route 66 Coalition

EPA 2012 Brownfields Community-wide Assessment Grant



Questions?

Karl Eberhard, AIA  
Community Design and Redevelopment Manager

[keberhard@flagstaffaz.gov](mailto:keberhard@flagstaffaz.gov)

(928) 213-2969



NORTH COUNTRY

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HealthCare

Land Use Considerations  
for New Access Points

# The Community Health Center Movement

- There is an, “incredibly important, and largely unnoticed, role that health centers play in improving the health of not just their individual patients, but their communities.”
  - David Fukuzawa, Kresge Foundation Program Director for Health



# Access to Healthcare in Rural Northern Arizona

Health Centers are Characterized by Five Unique

Requirements:

1. Located in High-Need Areas
2. Able to provide Comprehensive Health and Enabling Services
3. Open to ALL Residents, Regardless of Income
4. Governed by Community Boards
5. Follow Rigorous Performance and Accountability Requirements

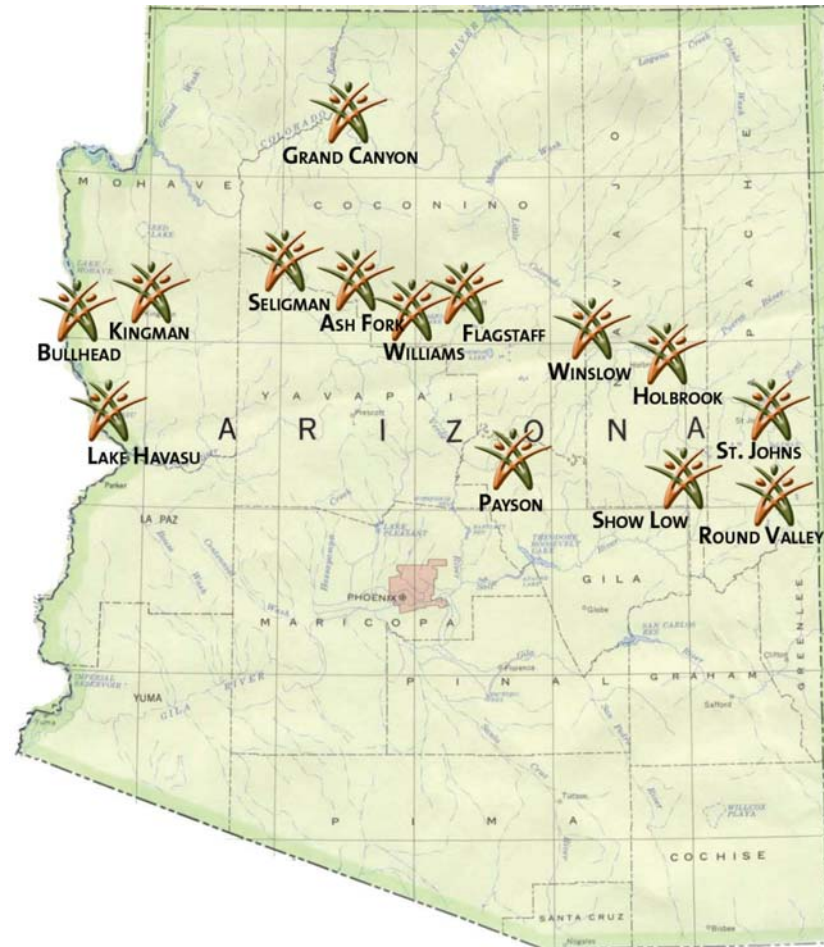
North Country has historically prioritized developing new access points in high need areas (those with little health center penetration)



# North Country Comprehensive Primary Care Service Sites

## 22 Existing Clinics (14 communities)

- Ash Fork
- Bullhead City
- Change Point Integrated Care
- Flagstaff
- Flagstaff University Avenue
- The Guidance Center
- Flagstaff Shelter Services (MMU)
- School Based Health Services
- Grand Canyon
- Holbrook
- Kingman
- Mohave Mental Health
- Lake Havasu City
- Payson
- Round Valley
- Seligman
- Show Low
- St. Johns
- Little Colorado Behavioral Health
- Williams
- Winslow
- Virtual Clinic (Telemedicine)



# Establishing and Improving Access Points in a Community

Funding New Clinics	Facility Improvements	Collaborations
New Access Point Grant Opportunities	Redevelop existing properties (NAP awards, NC operating)	Health or Hospital District
North Country funded	Capital Grants - renovation/alteration (established clinics)	Town/City partnerships
	Capital Grants - New clinics	Existing practices/Contracts



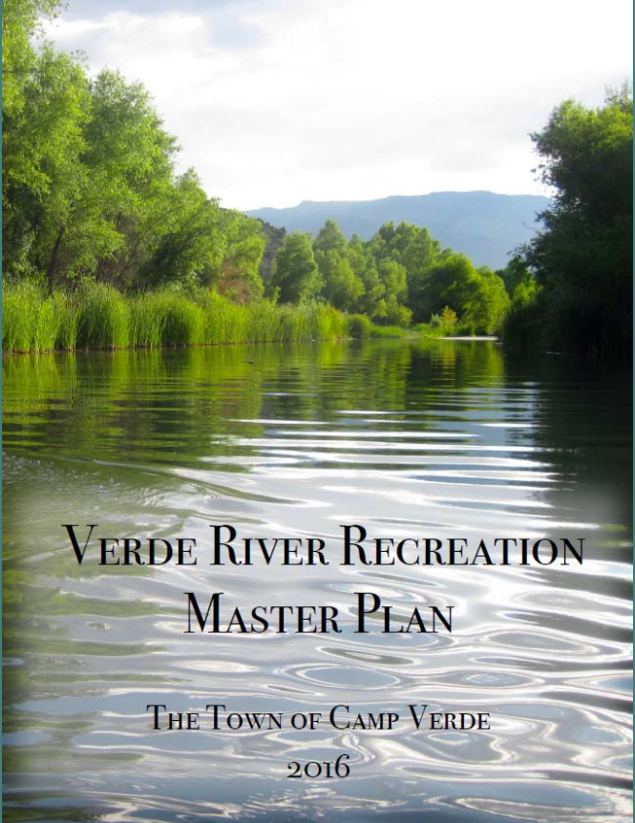


# North Country as an Economic Engine

- Approximately 485 employees across the system (most are recruited and trained locally)
- Approximately \$23.4 million payroll per fiscal year
- Average salaries of \$48,247.42 per year
- Living wage of \$11.75/HR in rural areas for inexperienced employees in entry level positions
- Living wage of \$13.00/HR in higher cost of living areas for inexperienced employees in entry level positions
- Annual Advanced Education Reimbursement (\$20,000/FY)
- Continuing Medical Education, Paid Time and Reimbursements (\$2,000 per professional)
- Employee donations in 2015 - \$21,722







# The River Recreation Master Plan was designed to accomplish two things:

Develop a plan that will significantly reduce the negative impacts of unmanaged river recreation currently impacting public and private property owners along the river corridor



Given the idea that we can mitigate those impacts, develop a plan for realizing the many opportunities for river recreation that exist along the 17 miles of Verde River that pass through Camp Verde's corporate boundaries

Identified three stakeholder groups and set about identifying their priorities and goals

1) Public Land Managers: ASP, USFS, NPS, TNC, USFWS, AGF, SRP

2) Property owners along the riverfront corridor

3) General Public



# What we have discovered from landowners



1. On a 1-10 scale with 10 being very important, over 75 percent rate the Verde River a 10.
2. Scenic Beauty, peace and quite, wildlife habitat and water supply were the most valuable things the corridor provides.
3. Trespass, trash, noise, fires, and overcrowding were some of the most important issues with riverfront property owners.
4. Enforcement (law enforcement presence), signs, restricted access for motor vehicles, respect for private property rights were among the things considered most lacking.
5. River recreation belongs on public lands and restricted from private property.

# Stakeholders have ID'd several opportunities

- 30 acres at I-17 and the Verde River suitable for day use area and boat launch
- 80 acres jointly owned by ASP and PNF between I-17 bridge and Black Bridge
- 10 acres at Rezzonico Park
- White Bridge RAP
- 205 acre Rockin' River Ranch State Park
- Hiking, fishing, picnicking, swimming, canoeing



# Goals

- 1) Connect the residents of Camp Verde with the Verde River and increase awareness and appreciation of the river as a natural treasure
- 2) Respond to concerns of riverfront property owners, since those land owners are currently experiencing the highest impacts due to unmanaged recreation
- 3) Provide safe, healthy, quality river recreation experiences for residents and visitors
- 4) Provide for family friendly outdoor activities along the river corridor
- 5) Manage recreational use appropriately to ensure that sensitive riparian habitat is protected
- 6) Support economic development through tourism amenities



# Priorities/Strategies



- Implement strategies to better manage recreational use
- Development of Homestead Park and I-17 properties as a day-use watchable wildlife amenity, with a viewing deck, nature trails, light development, and fishing access.
- Designation of an Important Bird Area (IBA)
- Explore the potential for developing riverside trails, as well as upland trails
- Work with Arizona State Parks and Prescott National Forest to develop Homestead Park and Rockin' River Ranch.
- Development of the riverfront amenities for Rezzonico Park just below Black Bridge.



**Kat Londen**

**Office of Environmental Health**

**Arizona Department of Health Services**



# ATSDR Brownfields Grant

## Recreational Trail Expansion and Use

Before (ATSDR, 2008)



After (ATSDR, 2010)



# Grant Projects



Workshops



Resource Guide



Website

# Access to Healthy Food



# Healthy School Food



# Certification Process

1. Application
2. Food Safety Plan
3. Garden Map
4. Site Visit

The graphic is a vertical poster for the 'Garden to Cafeteria' program. At the top, it features the Arizona Department of Health Services logo and the title 'Garden to Cafeteria' in yellow and white text, with the tagline 'Take your garden produce into your school cafeteria' below it. A teal banner across the middle reads 'Complete Four Easy Steps\*'. Below the banner are three stylized vegetable icons: a pink tomato labeled 'Application 1', an orange carrot labeled 'Food Safety Plan 2', and a green leafy vegetable labeled 'Garden Map 3'. A grey arrow points from the right towards the fourth step, 'Site Visit', which is highlighted in a yellow box. At the bottom, the text 'Complete your Site Visit to get Certified!' is written in green. The footer contains the text: '\*Garden to Cafeteria steps available [azhealth.gov/school-garden](http://azhealth.gov/school-garden) ADHS School Garden Program, (602) 364-3952 or [SchoolGarden@azdhs.gov](mailto:SchoolGarden@azdhs.gov)'.

Arizona Department of Health Services

## Garden to Cafeteria

Take your garden produce into your school cafeteria

Complete Four Easy Steps\*

Application  
1

Food Safety Plan  
2

Garden Map  
3

4 Site Visit

Complete your Site Visit to get Certified!

\*Garden to Cafeteria steps available [azhealth.gov/school-garden](http://azhealth.gov/school-garden)  
ADHS School Garden Program, (602) 364-3952 or [SchoolGarden@azdhs.gov](mailto:SchoolGarden@azdhs.gov)



**Kat Londen**

**[katherine.londen@azdhs.gov](mailto:katherine.londen@azdhs.gov)**

**(602) 364-3952**

# Improving Community Health

## Vitalyst Health Foundation

### Priorities & Roles



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# Vitalyst Health Foundation

Improving well-being in Arizona by addressing root causes and broader issues that affect health.

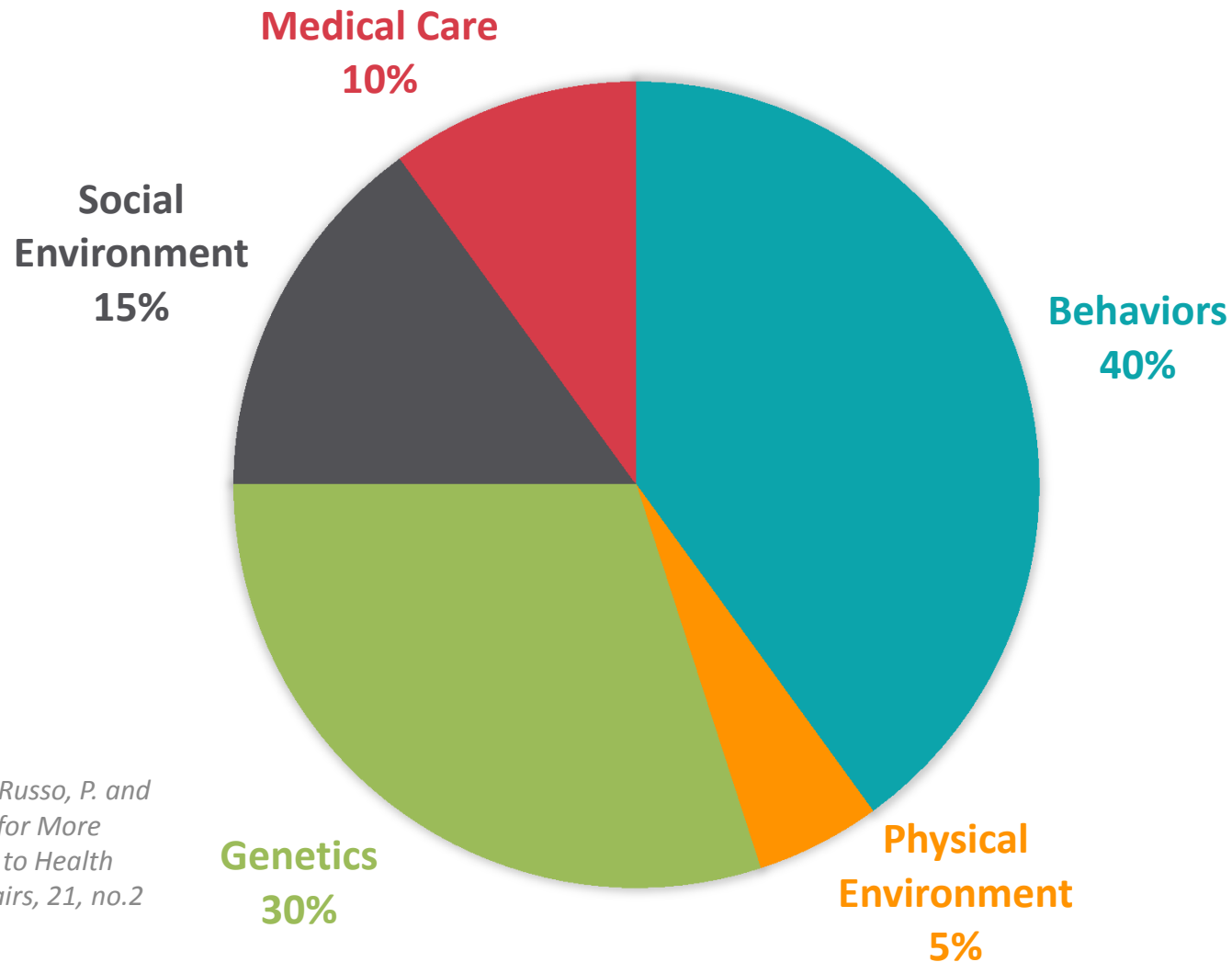
**HEALTHY  
LIFESTYLE  
AHEAD**



# Health ≠ Healthcare

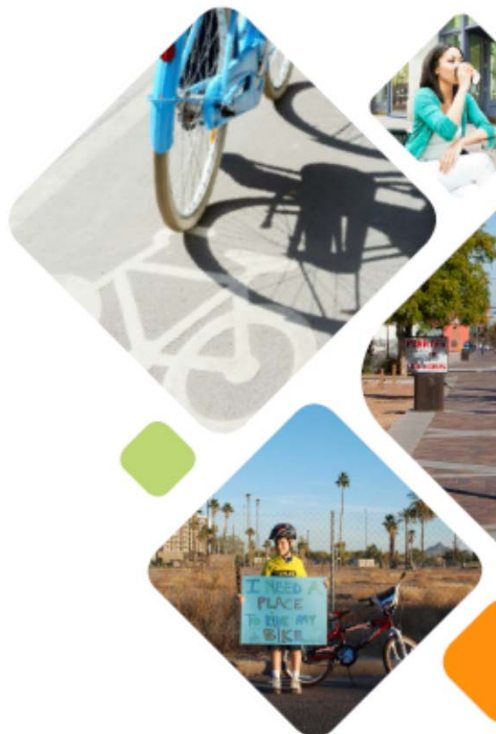


# What influences our health?

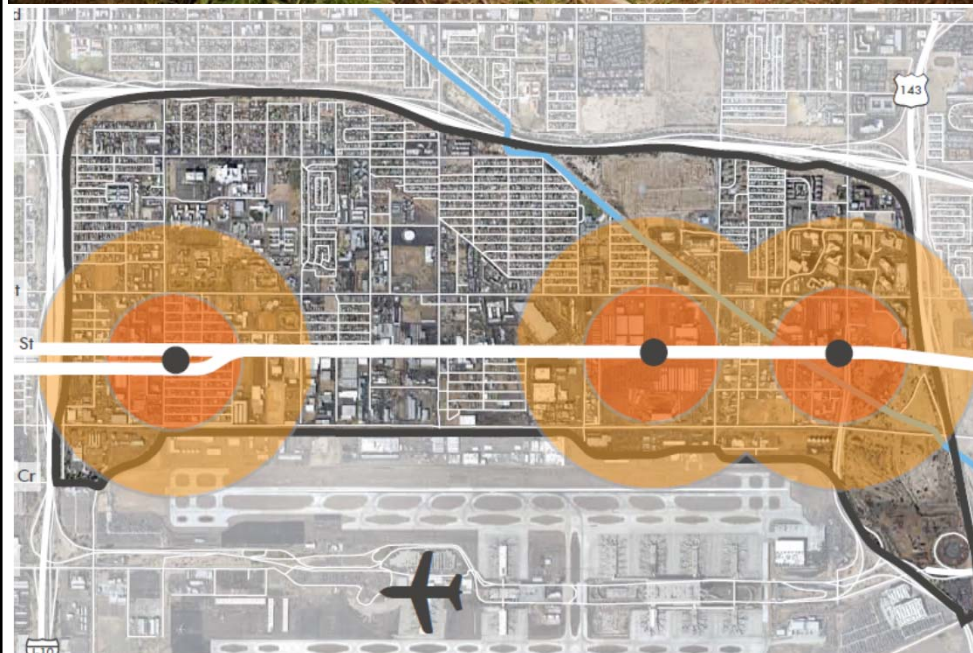


McGinnis, J., Williams-Russo, P. and Knickman, J. *The Case for More Active Policy Attention to Health Promotion. Health Affairs, 21, no.2 (2002):78-93*

# COMPLETE STREETS



PUBLIC DESIGN FOR PHOENIX  
CONVENIENT. ACCESSIBLE. COMFORTABLE. SAFE.





C.J. Eisenbarth Hager  
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A CATALYST FOR COMMUNITY HEALTH

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# Land Recycling and New Tools for Creating Healthy Communities and Economic Growth

August 19, 2016

Dean Brennan, FAICP

Arizona Alliance for Livable Communities





## Goal: Health in All Policies (HiAP)

AALC's mission is to educate, engage, and encourage communities and decision makers to transform cities and towns in ways that improve health, livability, and well being.

FOCUS AREAS – Health Impact Assessment; Policy Advocacy



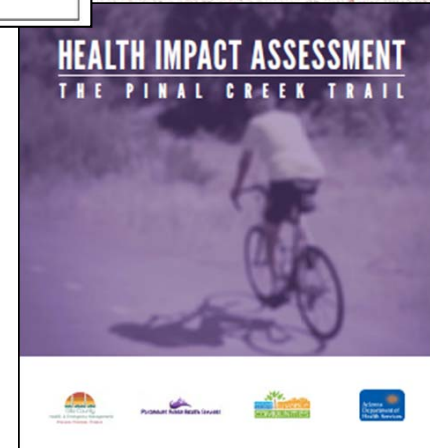
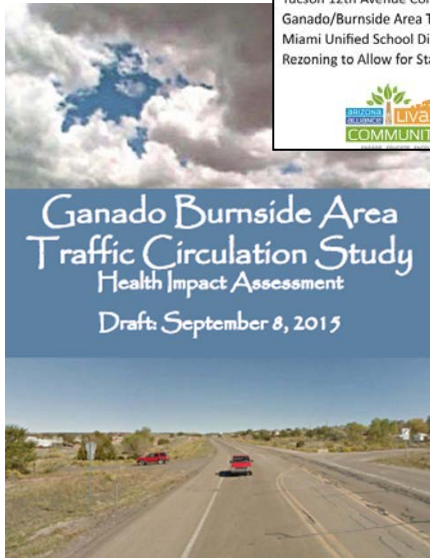
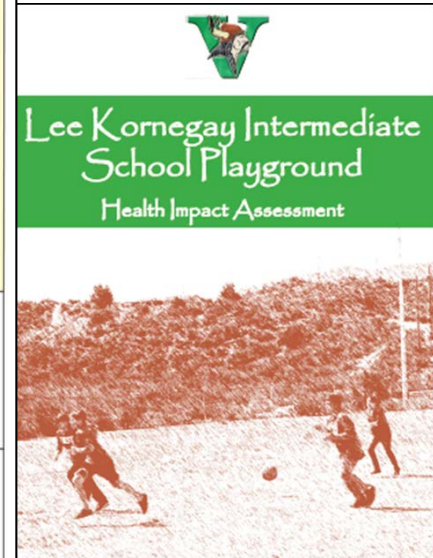
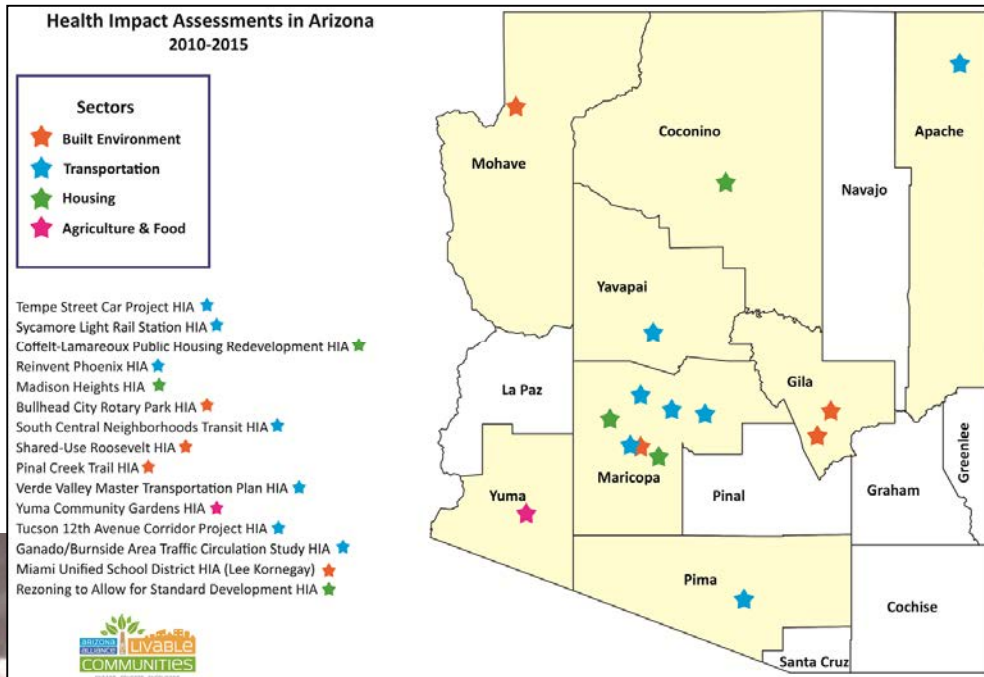


# Health Impact Assessment

## Definition

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- "A **systematic process** that uses an array of data sources and analytic methods and considers input from stakeholders to determine the **potential effects of a proposed policy, plan, program, or project** on the **health of a population** and the **distribution of those effects** within the population."
- HIA provides **recommendations** on monitoring and managing those effects.



# HIA in Arizona

Addressing Community Health Issues by Identifying Positive Community Health Outcomes





## ADVOCACY – THE POWER OF POLICY!

Focus on Public Policy that Impacts the Design of the Physical Environment

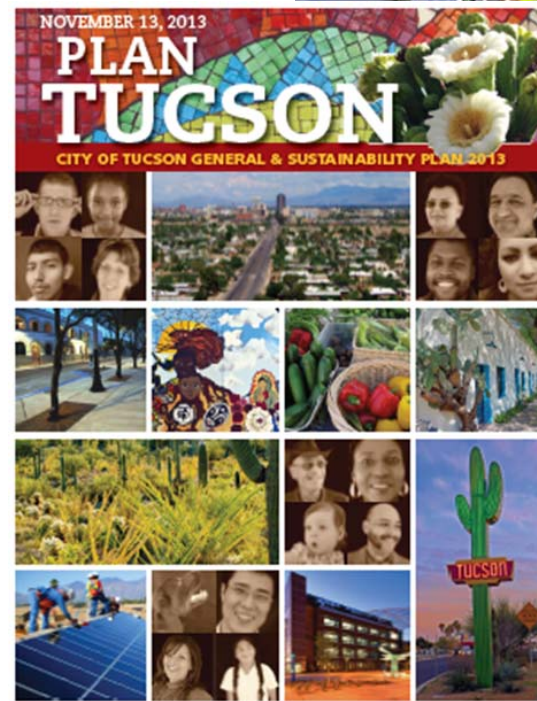
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- General Plans
- Comprehensive Plans
- Complete Streets
- Urban Agriculture
- Parks, Recreation, Open Space & Trails

# Advocacy for Healthy General Plans

## Healthy Community Policies

- AG1 Reduce barriers to food production and to food distribution, including home and community gardens, and facilitate access to new markets for small-scale farmers and gardeners.
- AG2 Adopt zoning and land use regulations that promote and facilitate the safe, equitable growth and distribution of locally produced food.
- AG3 Facilitate community food security by fostering an equitable, healthy local and regional food system that is environmentally and economically sustainable and accessible to all.
- AG4 Collaborate with key partners to facilitate new opportunities for urban-scale gardens, farms, gleaning, and distribution systems.



# Advocacy for Healthy Comprehensive Plans

## Examples of Healthy Community Goals – Pima County

### 5.3 Parks and Recreation Element

- Goal 1: Support healthy lifestyles through the provision of parks and recreation

### 5.8 Food Access Element

- Goal 1: Enhance the local production, processing, and affordable distribution of healthy foods
- Goal 2: Measure the health impacts of policies, programs and projects to ensure affordable access to healthy foods



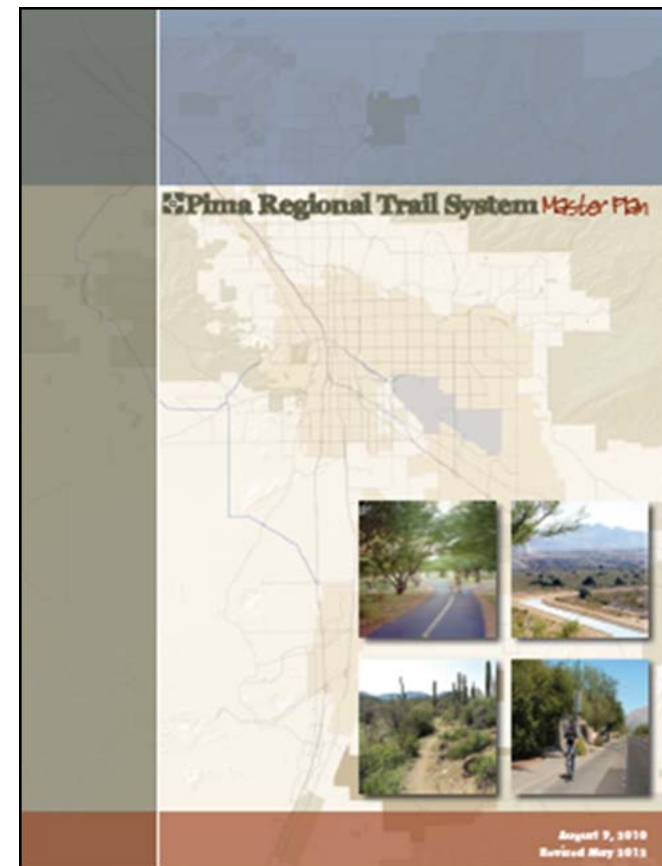
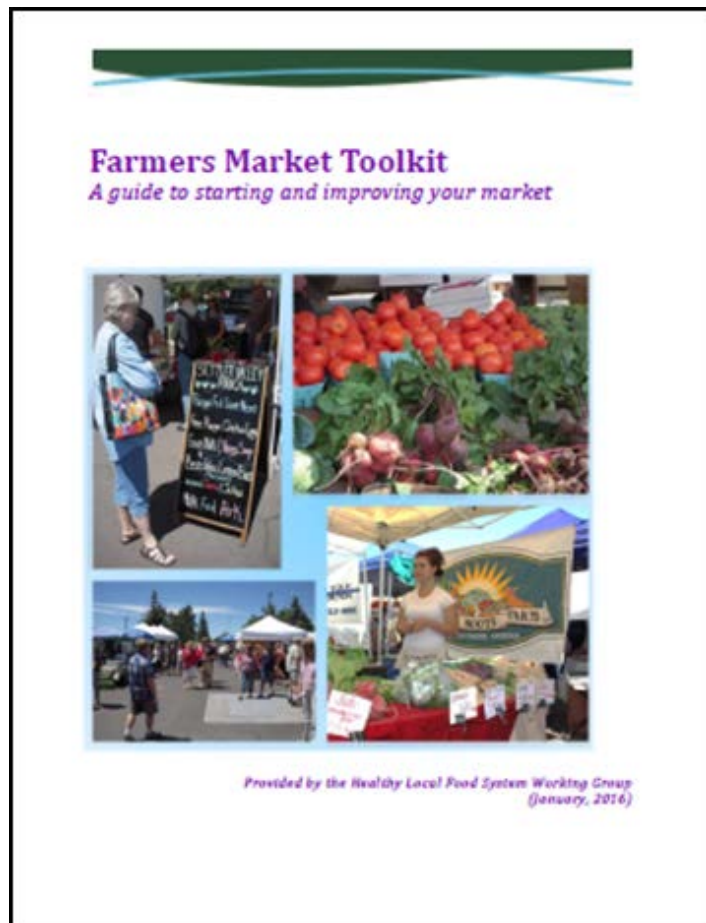
# Advocacy for Complete Streets



**DOWNTOWN CHANDLER**

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# Advocacy for Urban Agriculture



# Advocacy for Parks, Recreation, Open Space & Trails



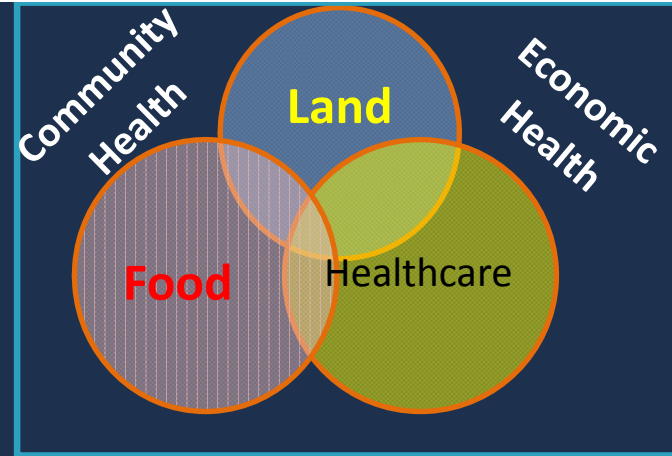
Thank You!

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Arizona Alliance for Livable Communities, [www.livableaz.org](http://www.livableaz.org)





# Land Recycling & New Tools For Creating Healthier Communities & Economic Growth

## ADDITIONAL RESOURCES

Dave Laney ATC Group Services

# NUGGETS OF WISDOM



- Workshop Evaluation Forms
  - Speakers & Supporting Organizations
  - Other Organizations of Importance
  - Additional Information & Useful Resources
  - Final Thoughts
- 



# SPEAKERS & WORKSHOP SUPPORTERS



# SPEAKERS & WORKSHOP SUPPORTERS



- Arizona Department of Health Services

<http://www.azdhs.gov/index.php>

(look for Environmental Health/Brownfields and Land Reuse)

- Arizona Department of Environmental Quality  
Brownfields Program

<http://www.azdeq.gov/environ/waste/cleanup/brownfields.html>

- City of Flagstaff Economic Vitality Department

<http://www.flagstaff.az.gov/index.aspx?nid=1348>

- Town of Camp Verde Economic Development Dept

<http://www.campverde.az.gov/government/economic-development-2-2/>



# OTHER ORGANIZATIONS



- Vitalyst Health Foundation  
<http://vitalysthealth.org/>
  - Coconino County Department of Public Health  
<http://www.coconino.az.gov/health>
  - Arizona Partnership for Healthy Communities  
<http://arizonahealthycommunities.org/>
  - Arizona Healthfields Initiative  
[dave.laney@atcassociates.com](mailto:dave.laney@atcassociates.com)
  - Arizona Alliance for Livable Communities  
<http://livableaz.org/>
- 

# ADDITIONAL INFORMATION & USEFUL RESOURCES



- ATSDR Action Model, Site Tool, Dose Calculator

<http://www.atsdr.cdc.gov/sites/brownfields/>

- EPA Brownfields Program

<https://www.epa.gov/brownfields/brownfields-and-land-revitalization-california-arizona-nevada-and-hawaii>



# FINAL THOUGHTS



- Community Development Issues Can Be Challenging
  - Organizations Are Often Ineffective When Working Alone
  - Considering Community Health Needs Can Change The Equation & Increase Economic Value Of Projects
  - Greater Strength In Collaboration and Coalition Building
  - Public-Private-Community Partnerships Increase Chances For Success
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# ADDITIONAL WORKSHOPS

- Tucson – October 28th



Land Recycling & New Tools For Creating  
Healthier Communities & Economic Growth

THANK YOU FOR COMING!

