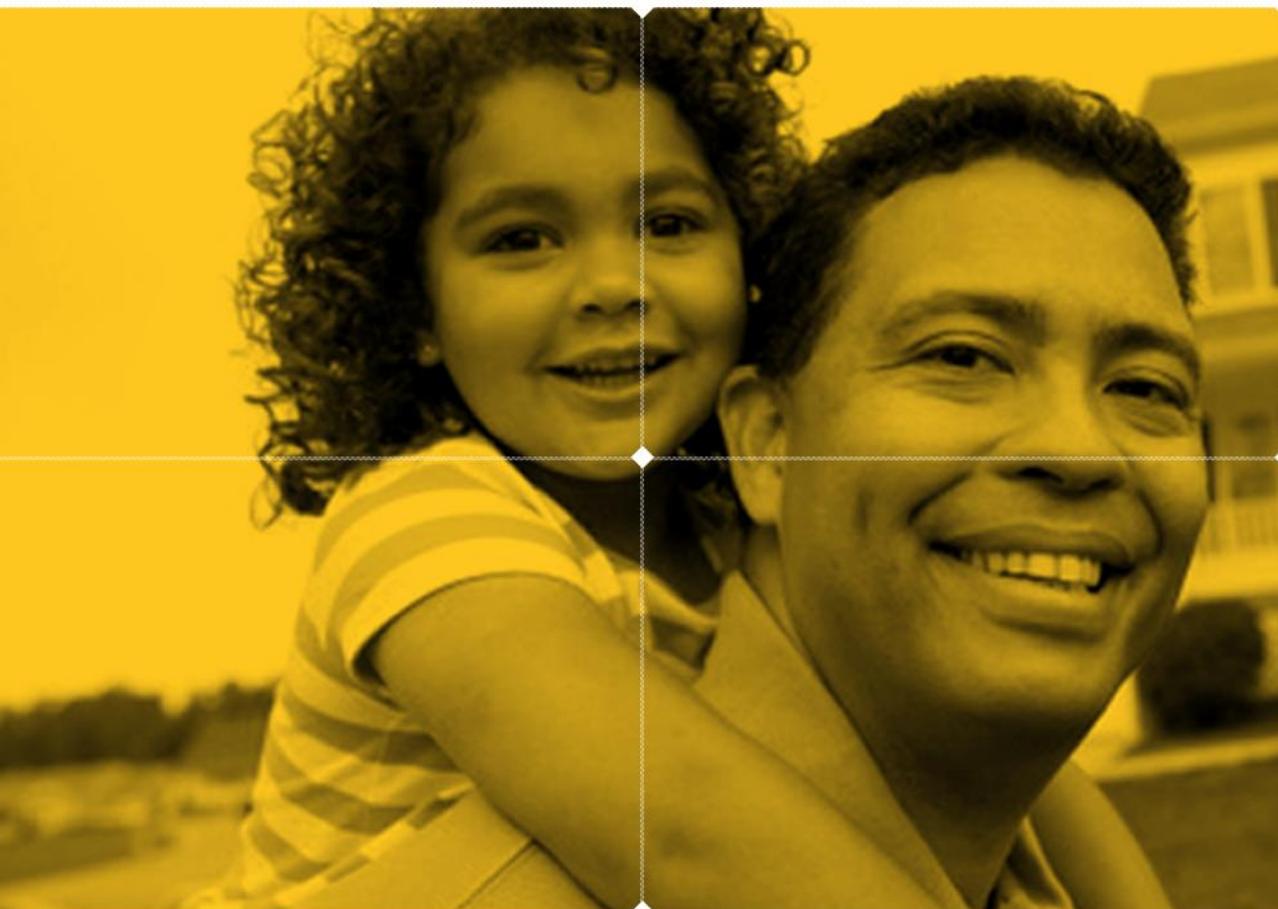




# Introduction to Weatherization Plus Health

Bob Scott  
Energy Services Director  
NASCS



*Making connections  
for healthier, more  
energy efficient homes*



NASCSP is a professional membership organization for the state and territorial administrators of the U.S. Department of Energy's Weatherization Assistance Program (WAP) and the Department of Health and Human Services Community Services Block Grant (CSBG)



## For CSBG and WAP, NASCSP:

- Provides updates, best practices, and technical assistance
- Advocates on behalf of members and programs on Capitol Hill
- Hosts two annual conferences and orientation training for new WAP & CSBG Directors
- Develops and disseminates Public Information Campaign materials
- Maintains T&TA websites, including WAPTAC (Weatherization Assistance Program Technical Assistance Center) and CSBG Clearinghouse (in conjunction with CAP).
- Produces Annual Reports detailing funding sources and outcomes for both programs, such as National Funding Survey for WAP, and conditions of poverty eliminated for CSBG.

NASCSP is now administering Weatherization Plus Health, a voluntary initiative sponsored by DOE to enable the comprehensive, strategic coordination of resources for energy, health, and safety in low-income homes

**Outcome:** enhanced collaboration among public agencies and private organizations, yielding safer and more energy efficient homes, lower home energy costs, and healthier families



## **Weatherization Plus Health is:**

- a DOE initiative to help stimulate a new focus on a comprehensive approach to coordinate resources for energy, health, and safety in low-income homes

## **Weatherization Plus Health is not:**

- a new funding source for agencies / communities
- a strategy to replace ARRA funds

## **Weatherization Plus Health may become:**

- an opportunity for WAP providers
- a means to reduce WAP deferrals
- a more holistic approach to better serve our clients

## Why Weatherization Plus Health?

- Better, enhanced services to recipients
- Part of WAP evolution to remain relevant in tough budget times
- Funding is tight → Programs must go above and beyond → Weatherization Plus Health enters the picture
- WxPH collaborations give organizations a leg up in applying for future funding due to increased service providing capacity.
- Puts creativity of WAP and CAAs on full display



- Initiatives often begin with smaller scale efforts to combine weatherization with one or two additional aspects of home health and safety.
- These projects often grow as partner coordination becomes seamless and capacity to address healthy homes issues grows.
- **This is an opportunity.** With strategic coordination we can:
  - Reinforce the value of WAP & HH programs
  - Develop strong working relationships with community partners for future projects
  - Increase skillsets of WAP & CAA workforce
  - Increase the economic stability of clients



- Community Action Agencies have a host of programs internally to partner with for Weatherization Plus Health approaches:
  - Referral Opportunities (Home Repair, In Home Visiting, etc.)
  - Intake Purposes (Head Start, Energy Assistance, etc.)
  - Client Education
- CSBG dollars can be used to convene stakeholder meetings with community partners to strategize for and develop a Weatherization Plus Health initiative
- Your organization may already be doing this, just not talking about it!

# What is Healthy Homes?



**“The connection between health and the dwelling of the population is one of the most important that exists.”**  
***Florence Nightingale***

- Basic premise - Housing conditions can significantly affect the health of the residents
- Many of healthy homes issues are based on substandard housing, prevalent in low-income communities
- These are the homes that WAP providers and CAAs serve!



Photo: Kim MacDonald



- 90% of our time is spent indoors – 2/3 of that in the home
- Poor housing conditions are associated with a wide range of (***often preventable***) health conditions
- Much of the focus of the HH network is on children



- Traditionally a more categorical approach has been taken
  - One issue focus, even in presence of multiple issues
- A more holistic approach is being promoted to address the broad range of housing deficiencies and home health hazards.
- **WAP is now in the midst of the conversation!**



## Major HH Focus Areas include:

- Lead
- Asthma
- Radon

## Also:

- Household chemicals
- Moisture and mold
- Tobacco smoke
- Pests, Insects, Rodents
- CO
- Drinking water
- Waste water
- Fall and/or Injury Prevention
- **Energy Efficiency**



## Healthy Housing Makes Economic Sense

- Every dollar spent to reduce lead hazards cuts healthcare costs by an average of \$119
- Every dollar spent reducing indoor asthma triggers cuts healthcare costs by an average of \$10
- HUGE potential savings for low-income clients, fulfilling CAAs mission to provide a hand up to achieve client self-sufficiency.



- Keep it dry
- Keep it pest free
- Keep it safe
- Keep it maintained
- Keep it clean
- Keep it ventilated
- Keep it contaminant free
- **Thermally controlled**

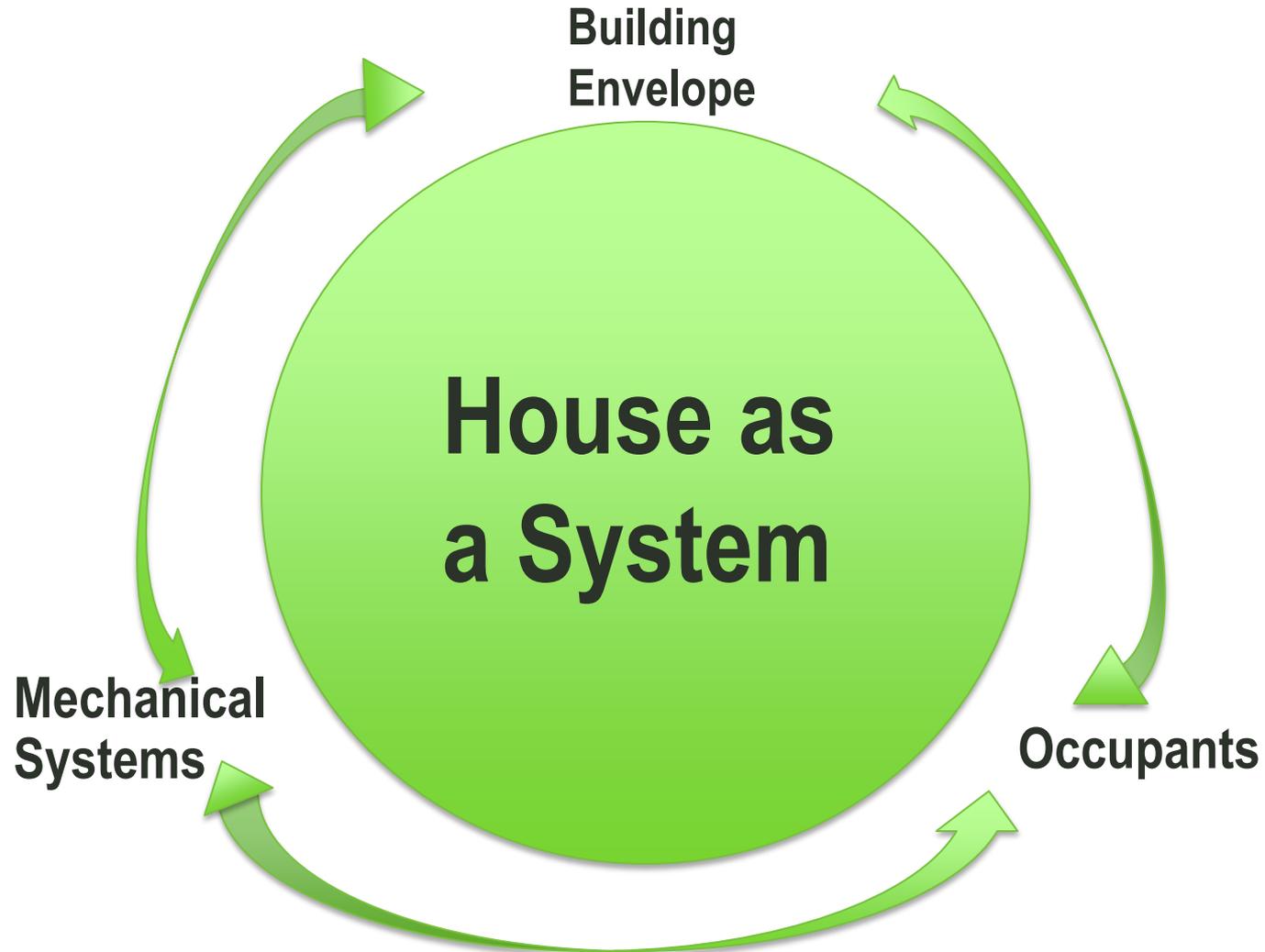


## Healthy Homes taking more holistic approach

*Integrated approach that considers:*

- People living in the home
- The structure
- Potential health hazards

*(Sound kind of familiar?)*



## Whole House Weatherization/House as a System

**A house is a system of interdependent parts.**

- The operation of one part affects many others
- When they all work together, the house is comfortable, safe, efficient, and durable

***but***

**A house will experience problems when the system's components are not in sync**

- Many are invisible and develop slowly
- Altering a building or its mechanicals can have unexpected consequences
- More airtight homes = More potential for IAQ problems

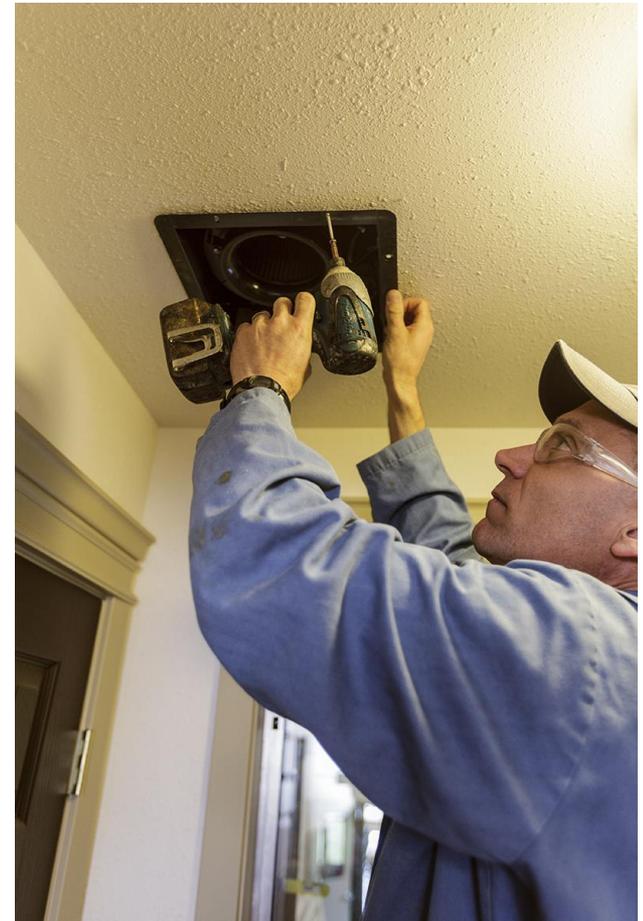
## Whole House Weatherization/House as a System

### Conclusions

- Poorly performed weatherization can exacerbate existing problems or even create new ones
- Properly performed weatherization can solve some of the problems and create a healthier indoor environment

## WAP H&S Measures are Often Effective:

- Lead
  - Required to work lead safe
- Asthma Triggers
  - Address source of moisture problems
  - Add/Repair Ventilation
  - Exclude pests during air sealing
- Injury Prevention
  - Can address some electrical issues
  - Adds smoke detectors
- Carbon Monoxide
  - Usually can address health and safety issues related to heating systems
  - Adds CO detectors



## Why Doesn't WAP Repair all H&S Problems?

- Primary focus of DOE WAP is energy efficiency
  - H&S measures should either enable an EE measure to be performed or ensure that an EE measure does not create a new or compound an existing H&S issue
- Many H&S measures cost money but provide no energy savings:
  - Electrical & Plumbing Issues
  - Lead Paint & remediation
  - Structural and Non-Energy related H&S Issues
- Hard to justify limited funds being diverted away from EE focus

## When there are unresolved H&S issues:

- The agency has to defer work until problems are resolved
- The agency does the best they can but household does not get full advantage of WAP
- Household does not get WAP services nor its H&S problems resolved



**No WAP crew wants to leave conditions like these:**



## Isn't the connection obvious?

- WAP goes into thousands of low-income houses each year
- WAP already has a component for assessing health and safety problems, with a desire to increase the H&S focus
- WAP is partner of CSBG with basis and groundwork for mobilizing additional resources & community partners
- WAP can help pay for some HH measures, while completion of additional HH measures will allow client to receive full benefit of WAP's energy efficiency.



- Opportunity Council – Bellingham, WA
- Penquis – Bangor, Maine
- Social Development Commission – Milwaukee, WI

- Home of the original Weatherization Plus Health
- Integrated Healthy Homes and WX since 1993

## Focus Areas include:

- Cross training Weatherization and Healthy Homes practitioners
- Client Education woven throughout Healthy Homes and Weatherization measures
- Partnering with other community organizations and internal OC departments to maximize client services



# Case Study: The Opportunity Council

- Indoor Air Coalition includes programs within Opportunity Council, Asthma and Allergy Clinics, Universities, Health Dept., City of Bellingham, Clean Air Agencies, etc.
- Used programs at Opportunity Council to determine clients most in need of healthy homes measures
- Engaged Community stakeholders through the coalition to develop an evaluation tool to continuously improve



## Two Level Approach

### Level One

- Do No Harm weatherization that includes energy and health audit, health and safety measures within WAP, extensive client education and low or no cost HH measures

### Level Two

- Coordinate funding with community partners to provide additional HH measures and build on initial weatherization and client education components





- Partnered with four small towns to secure \$300,000 CDBG grant for healthy homes measures
- Using Penquis' WAP to makes homes energy efficient and to pay for some WAP-related H&S measures
- Creating an integrated assessment tool to account for housing health hazards & energy needs
- Partnered with local hospital for in home asthma education



**sdic**

**Social Development Commission**

Empowering Milwaukee County residents  
with the resources to move beyond poverty

- Started with foundation funding to create WRAP (Weatherization, Rehabilitation, & Asset Preservation) program
  - Step One: Integrate their Home Repair and WAP programs
  - Step Two: Integrate Credit Counseling and Budgeting Counseling to those receiving services
- New Efforts include partnerships with:
  - City of Milwaukee's Healthy Homes program for additional dollars for healthy homes measures
  - Center for Dominican Women for lead and asthma education
  - Rebuilding Together for cost-sharing strategy on home repairs

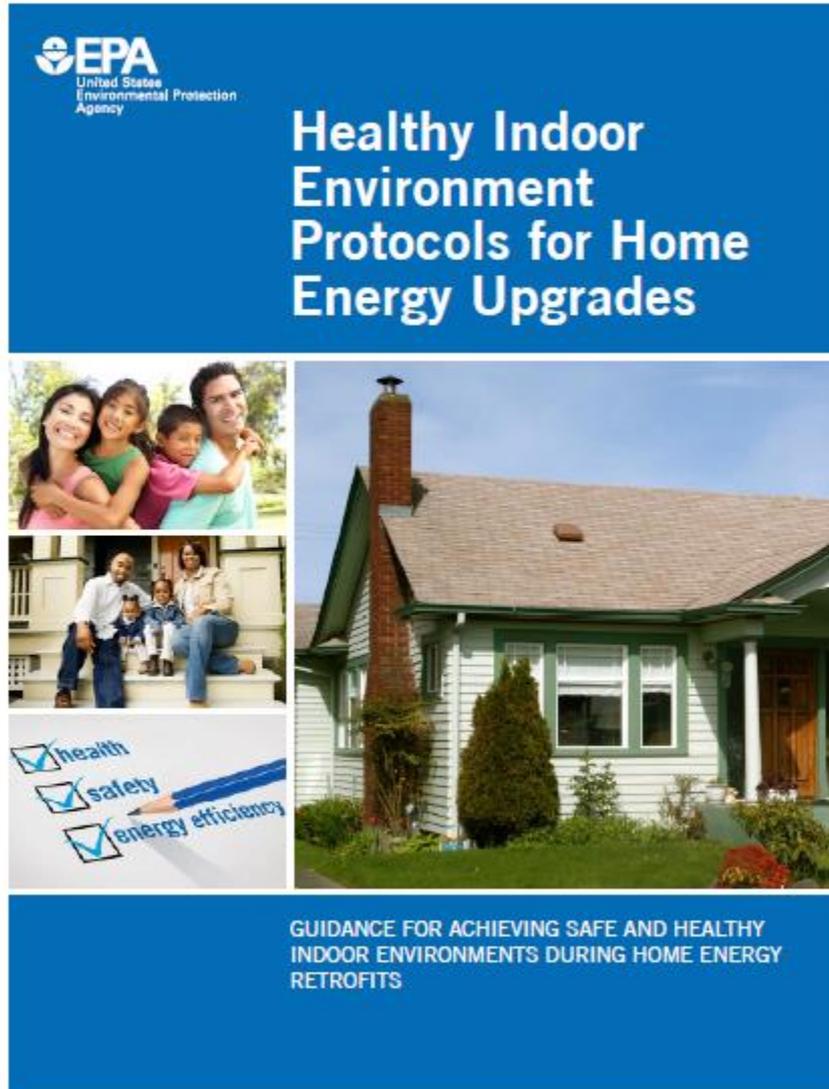
National nonprofits (NCHH, Coalition to End Childhood Lead Poisoning/GHHI)

National Safe and Healthy Housing Coalition

(<http://www.nchh.org/Policy/National-Safe-and-Healthy-Housing-Coalition.aspx>)

- Broad-based membership group, open to all, with elected steering committee and topical working groups
- NASCSP sits on 15 member Steering Committee
- Members include health departments, community action agencies, utilities, non-governmental organizations, trade associations, consultants
- Focus on networking, education, advocacy

# Environmental Health Guidance that Does Include Weatherization: EPA Protocols



## EPA Booklet

Similar to WAP Health  
and Safety Guidance  
WPN 11-6

## Five Goals

- Establish Healthy Homes Recommendations
- Encourage Adoption of HH Recommendations
- Create & Support Training & Workforce Development to Address Health Hazards in Housing
- Educate the Public about Healthy Homes
- Support Research that Informs & Advances Healthy Housing in a Cost-Effective Manner

# Advancing Healthy Housing

## A STRATEGY FOR ACTION



2013

A Report from the Federal  
Healthy Homes Work Group

[www.wxplushealth.org](http://www.wxplushealth.org)

- **Profiles** of state and national activities
- **Regional & State conferences** to connect organizations, cross-train at introductory level (Intro to WAP for HH, Intro to HH for WAP), identify best practices, and facilitate strategic planning at state and local level
- **Public website** that will map WAP, CAA and healthy homes programs nationwide, including inventory of healthy homes projects funded by HUD, EPA, and CDC
- **Best practices** for referral systems between healthy homes and Weatherization programs
- **Training and technical assistance** for providers of healthy homes and weatherization services



The screenshot shows the homepage layout. At the top left is the logo. To its right are links for 'Get Email Updates' and 'Contact Us', followed by a search bar. A navigation bar below contains links for 'About', 'Training', 'Resources', 'Find a Provider', 'GeoExplorer', and 'Media'. The main content area features a large photo of a family and a text box titled 'About WX Plus Health' with a 'More About WX Plus Health' link. Below the photo is a secondary navigation bar with links for 'About Weatherization', 'Find a Provider', 'Training Request', 'Email Updates', and 'EPA Protocols'. The 'Find a Provider' section includes a search description, a 'Need Healthy Homes Services?' heading, and a search form. To the right is a 'Stay Connected' section with social media icons for Facebook, Twitter, Google+, Contact Us, YouTube, Blog, RSS, and Get Email Updates. A map with a red pushpin is also visible in the 'Find a Provider' section.



Get Email Updates

Contact Us

Search

About

Training

Resources

Find a Provider

GeoExplorer

Media

## About WX Plus Health

Weatherization Plus Health (WxPlusHealth) initiative is a national effort to enable the comprehensive, strategic coordination of resources for energy, health, and safety in low-income homes.

[More About WX Plus Health](#)



About Weatherization

Find a Provider

Training Request

Email Updates

EPA Protocols

## Find a Provider

Search for community action agencies, weatherization and healthy homes providers in your area. Search by address, city, state or zip code.

### Need Healthy Homes Services?

Find a provider in your area for help.



Find a Provider

Enter your City, State or Zip



### Stay Connected

Facebook

YouTube

Twitter

Blog

Google+

RSS

Contact Us

Get Email Updates

Provider Types

Find a Provider:

Go

Select State/County

Clear Selection

Locate

**Provider List**

Wx Agencies

[+] Currently showing: 984

CAA Agencies

[+] Currently showing: 1053

Healthy Homes Grantees

[+] Currently showing: 356

Asthma Grantees

[+] Currently showing: 51

Lead Grantees

[+] Currently showing: 194

Radon Grantees

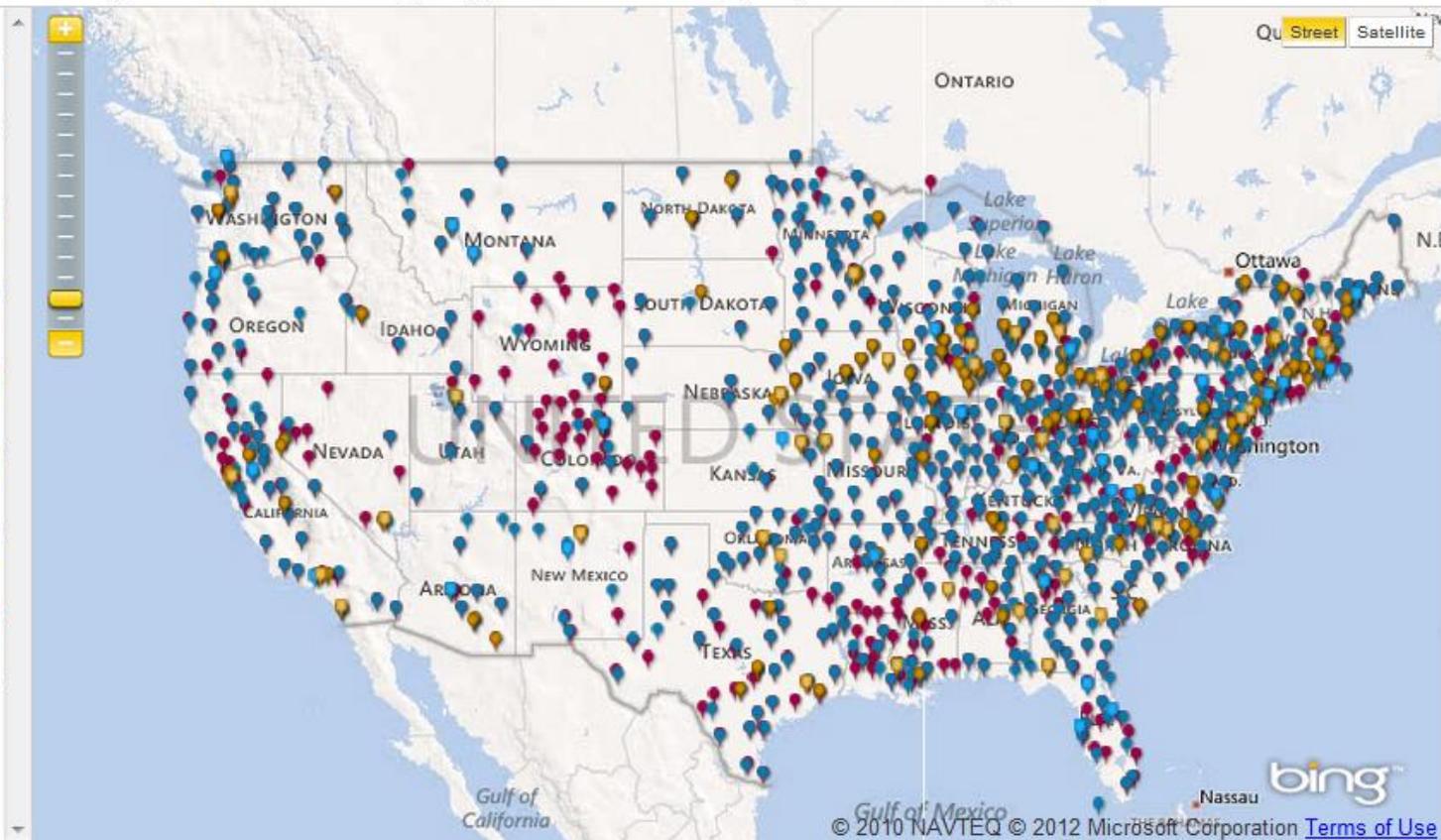
[+] Currently showing: 47

HH Training Providers

[+] Currently showing: 47

Wx Training Providers

[+] Currently showing: 48





The screenshot shows the website's navigation bar with links for About, Training, Resources, Find a Provider, GeoExplorer, and Media. A search bar is located in the top right. The main content area features a large banner for 'Sign Up for Email Updates' with a yellow mailbox graphic. Below the banner is a navigation menu with 'Email Updates' highlighted. The 'FIND a Provider' section includes a search form and a map with a red pushpin. The 'Search Resources' section has a search form with options for keyword, state, and topic. The 'Stay Connected' sidebar lists social media links for Facebook, YouTube, Twitter, Blog, Google+, RSS, Contact Us, and Get Email Updates. The 'GeoExplorer' section features a magnifying glass over a map.

**WEATHERIZATION PLUS HEALTH** | [Get Email Updates](#) | [Contact Us](#) |  [Search](#)

[About](#) | [Training](#) | [Resources](#) | [Find a Provider](#) | [GeoExplorer](#) | [Media](#)

**Sign Up for Email Updates**  
Sign-up for Weatherization Plus Health updates

[Sign Up for Email Updates](#)

[About Weatherization](#) | [Find a Provider](#) | [Training Request](#) | **[Email Updates](#)** | [EPA Protocols](#)

## FIND a Provider

Search for community action agencies, weatherization and healthy homes providers in your area. Search by address, city, state or zip code.

**Need Healthy Homes Services?**  
Find a provider in your area for help.

[Find a Provider](#)  
Enter your City, State or Zip [submit](#)

**Stay Connected**

- [Facebook](#)
- [Twitter](#)
- [Google+](#)
- [Contact Us](#)
- [YouTube](#)
- [Blog](#)
- [RSS](#)
- [Get Email Updates](#)

## Search Resources

Search By Keyword  [🔍](#)

Select By State [▼](#)

Search By Topic [▼](#)

**GeoExplorer**

[Home](#) » [Training](#) » Calendar

🖨 Print this page

## Calendar

Event Type

- Any -

Event Category

- Any -

Apply Reset

August 2012

« Prev Next »

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
Community Action Partnership				2012 NM Housing Summit: Dwelling in the Future		
26	27	28	29	30	31	1

### Training Links

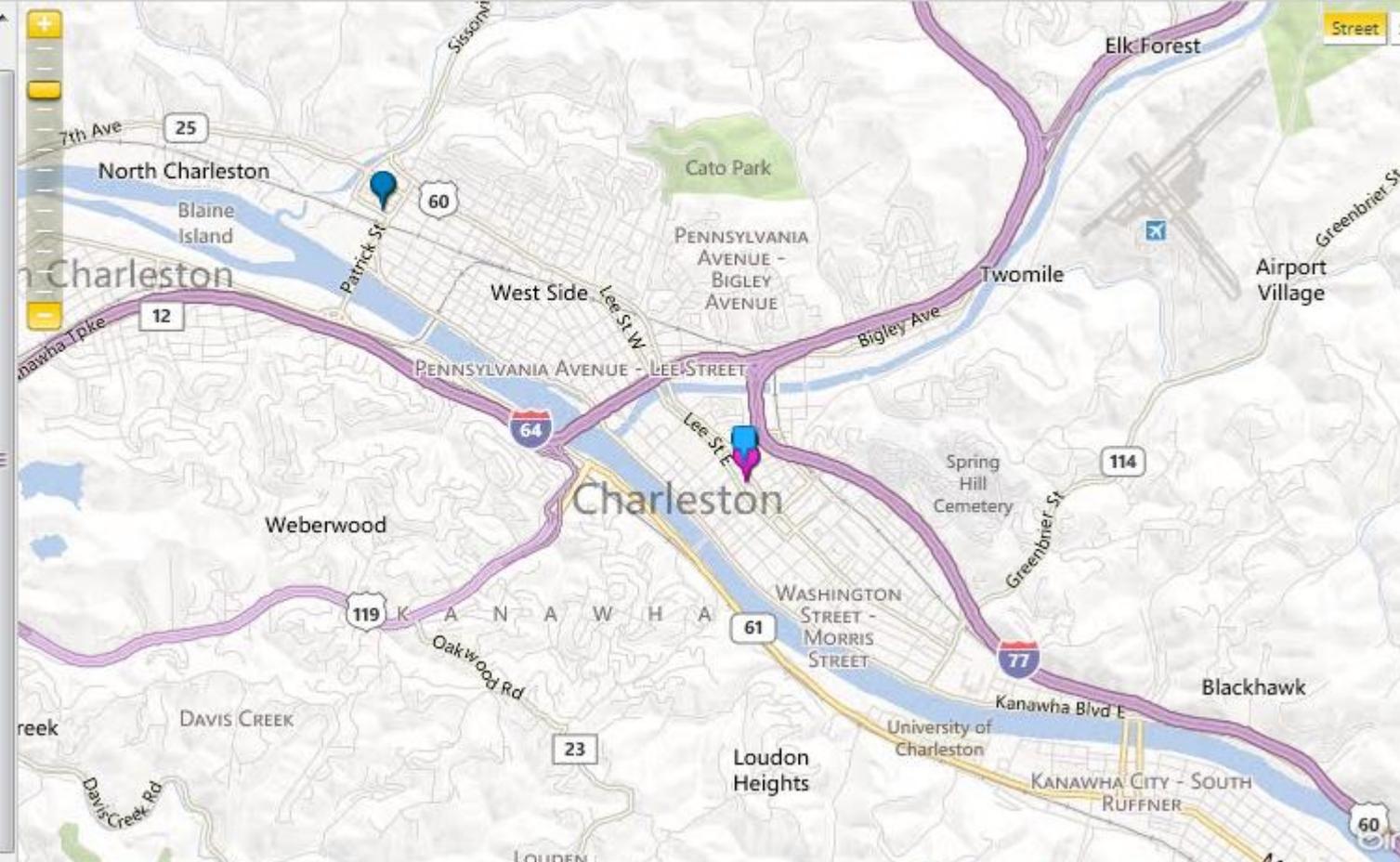
- [Full List of Events](#)
- [Submit Your Event](#)
- [Request a Training](#)

### Legend

Event Category	Key
NASCSP Training	<span style="background-color: yellow; border: 1px solid black;"> </span>
State-wide Training	<span style="background-color: pink; border: 1px solid black;"> </span>
Regional Training	<span style="background-color: blue; border: 1px solid black;"> </span>
National Training	<span style="background-color: orange; border: 1px solid black;"> </span>
Weatherization Training Center Event	<span style="background-color: lightblue; border: 1px solid black;"> </span>
Healthy Homes Training Center Event	<span style="background-color: red; border: 1px solid black;"> </span>

Provider Types ▼ Find a Provider:  Go West Virginia ▼ Reset Map Locate Me

- Wx Agencies 📍  
 [+/-] Currently showing: 1
- CAA Agencies 📍  
 [+/-] Currently showing: 1
- CSBG State Contacts 📍  
 [+/-] Currently showing: 2
- Wx State Contacts 📍  
 [+/-] Currently showing: 1
- Asthma Grantees 📍  
 [+/-] Currently showing: 1
- Lead Grantees 📍  
 [+/-] None found on map
- Radon Grantees 📍  
 [+/-] Currently showing: 1
- HH Grantees 📍  
 [+/-] Currently showing: 3
- Health and Housing Funders' Forum 📍  
 [+/-] None found on map
- HH Training Providers 📍  
 [+/-] None found on map
- Wx Training Providers 📍  
 [+/-] Currently showing: 1



Map showing Charleston, West Virginia. Key locations include North Charleston, West Side, Weberwood, Loudon Heights, and Airport Village. Major roads like I-64, I-77, and US-60 are visible. A red location pin is placed in the center of Charleston.

© 2010 NAVTEQ © AND © 2013 Microsoft Corporation [Terms of Use](#)

Provider Types ▼

Find a Provider: *Enter a Location*

Go

West Virginia ▼

Reset Map

Locate Me

- Wx Agencies 

[+] Currently showing: 13
- CAA Agencies 

[+] Currently showing: 16
- CSBG State Contacts 

[+] Currently showing: 2
- Wx State Contacts 

[+] Currently showing: 1
- Asthma Grantees 

[+] Currently showing: 1
- Lead Grantees 

[+] None found on map
- Radon Grantees 

[+] Currently showing: 1
- HH Grantees 

[+] Currently showing: 3
- Health and Housing Funders Forum 

[+] None found on map
- HH Training Providers 

[+] None found on map
- Wx Training Providers 

[+] Currently showing: 2



Provider Types ▾

Find a Provider: *Enter a Location*

Go

Kanawha County, WV ▾

Reset Map

Locate Me

- Wx Agencies 

[+] Currently showing: 1
- CAA Agencies 

[+] Currently showing: 1
- CSBG State Contacts 

[+] Currently showing: 2
- Wx State Contacts 

[+] Currently showing: 1
- Asthma Grantees 

[+] Currently showing: 1
- Lead Grantees 

[+] None found on map
- Radon Grantees 

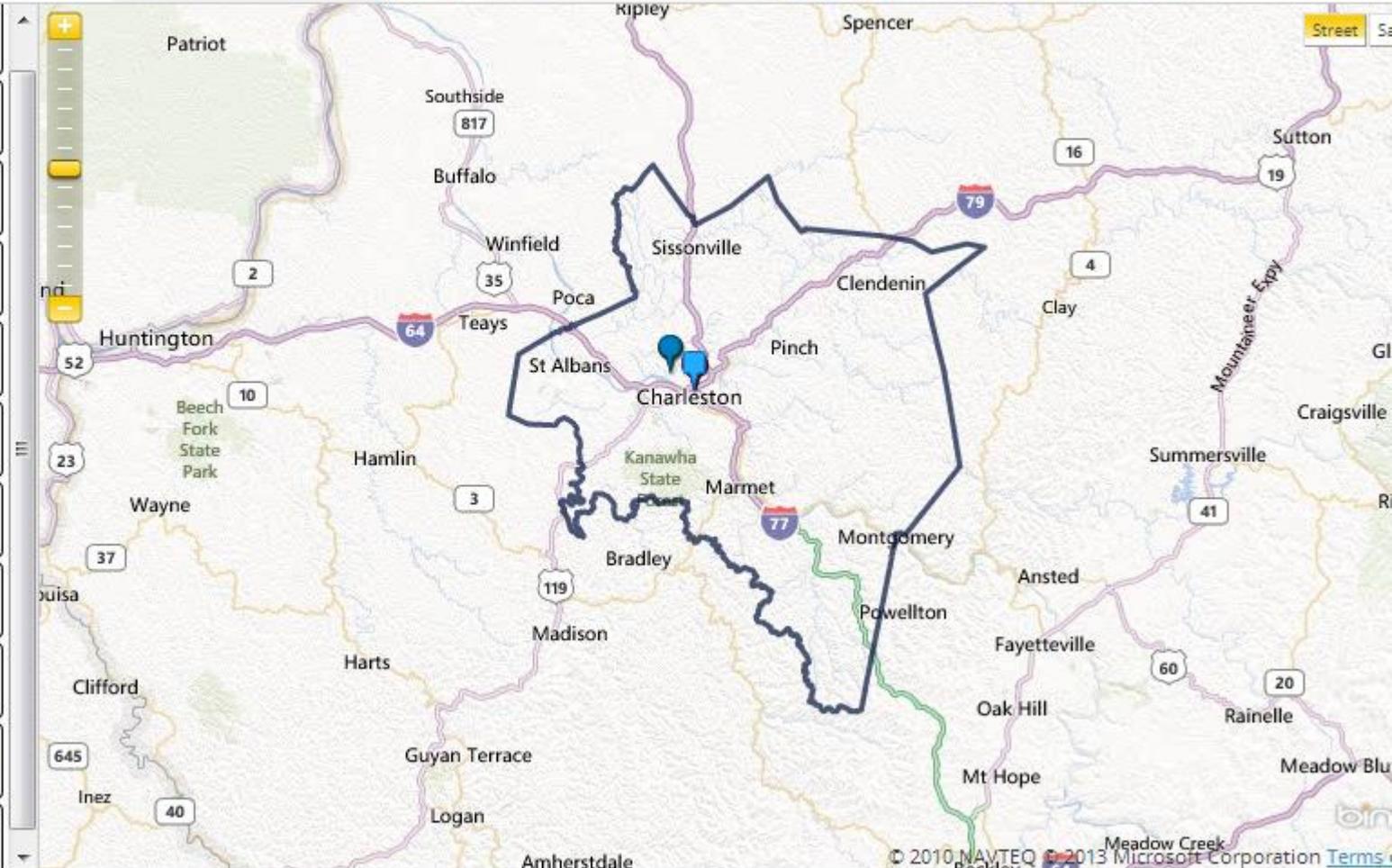
[+] Currently showing: 1
- HH Grantees 

[+] Currently showing: 3
- Health and Housing Funders' Forum 

[+] None found on map
- HH Training Providers 

[+] None found on map
- Wx Training Providers 

[+] Currently showing: 1



Provider Types ▼

Find a Provider: *Enter a Location*

Go

Kanawha County, WV ▼

Reset Map

Locate Me

Wx Agencies 📍  
[+] Currently showing: 1

CAA Agencies 📍  
[+] Currently showing: 1

CSBG State Contacts 📍  
[+] Currently showing: 2

Wx State Contacts 📍  
[+] Currently showing: 1

Asthma Grantees 📍  
[+] Currently showing: 1

Lead Grantees 📍  
[+] None found on map

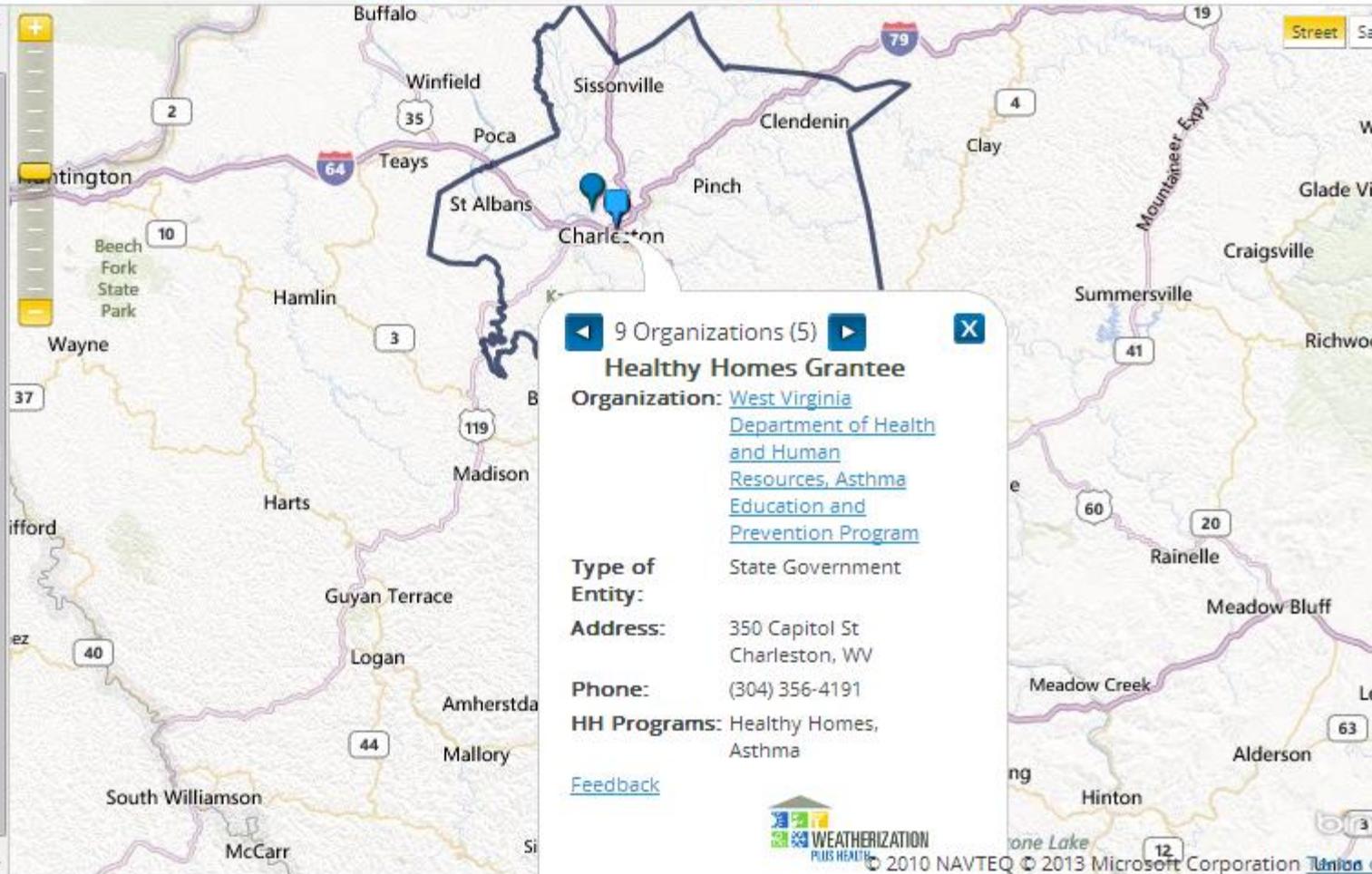
Radon Grantees 📍  
[+] Currently showing: 1

HH Grantees 📍  
[+] Currently showing: 3

Health and Housing 📍  
Funders' Forum [None found on map]

HH Training Providers 📍  
[+] None found on map

Wx Training Providers 📍  
[+] Currently showing: 1



SEARCH:

  
Go

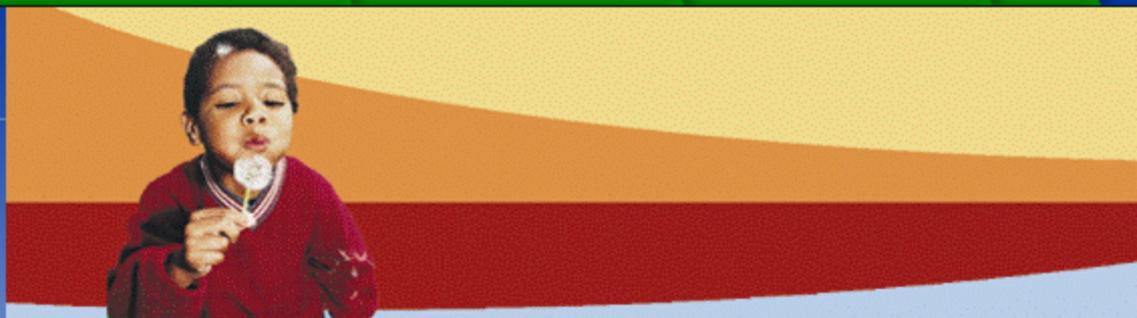
## quick facts

### Quick Fact #12

Ask your health care provider if your prescribed treatment is based on the clinical practice guidelines for the care of patients with asthma, published by the National Heart Lung and Blood Institute.

## mission

The West Virginia Asthma Education and Prevention Program aspires to raise awareness of asthma as a priority health concern in the state and to reduce suffering, disability, death, and economic costs related to the disease.

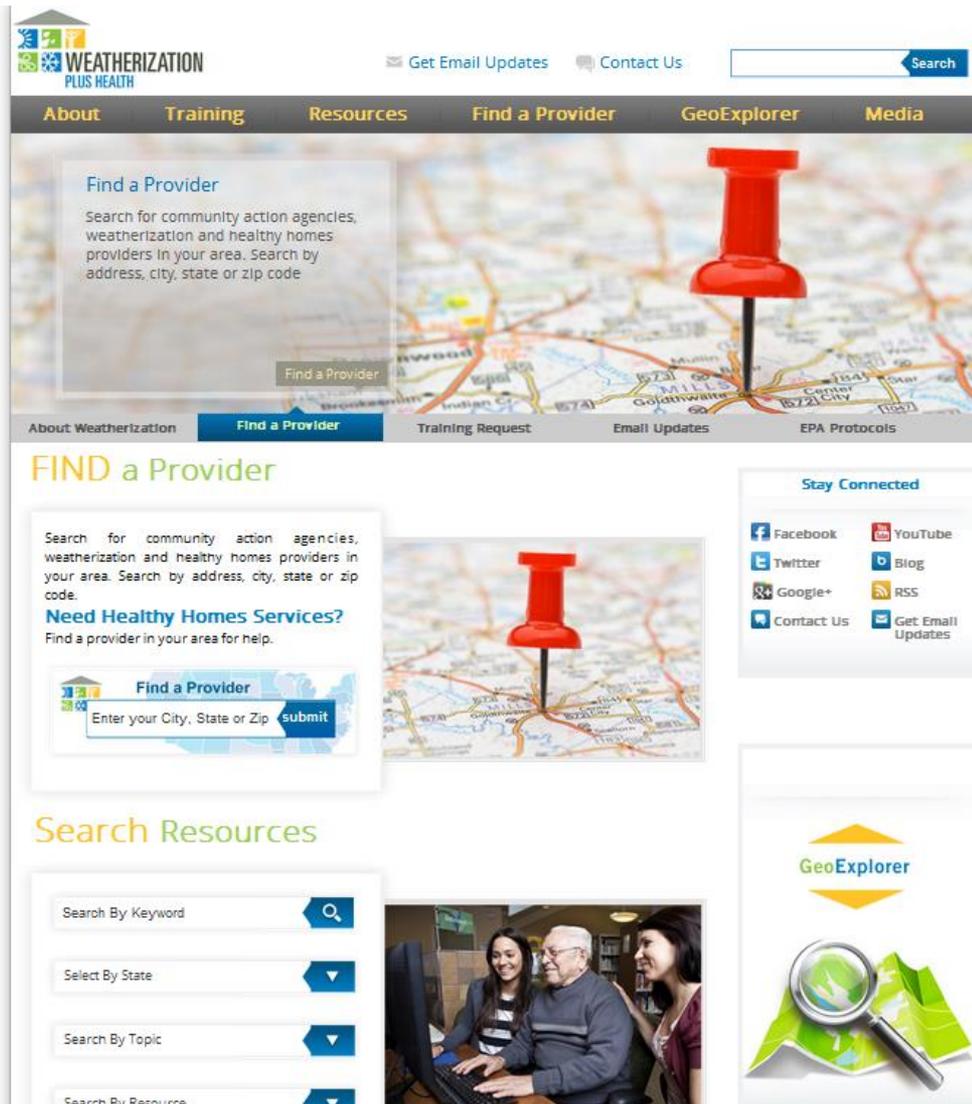


**The WV Asthma Education and Prevention Program (WVAEPP)** is a coalition of prevention organizations - from state government programs to non-profits - all working to promote early diagnosis, treatment per national clinical guidelines, improved instruction on recognizing and avoiding asthma triggers, and improving the quality of life for those with asthma.

WVAEPP is working to increase cooperation between asthma health-related partners. To this end, our focus, our goal is to improve access to reliable information and resources while promoting adherence to guidelines from the National Heart, Lung, and Blood Institute ([NHLBI](#)) and the American Lung Association.

### How can I learn more about Asthma efforts in West Virginia?

- **Contact the WVAEPP** to learn more and to see how you can help.
- **Join the West Virginia Asthma Coalition (WVAC)**. Participate with thousands of others - it's free and we encourage the public and all healthcare providers to join us in the fight against asthma. If you are a member click [here](#).
- View the [event calendar](#) to find activities and training events in your area.
- [WV Asthma Updates](#) - for a quick list of upcoming health screenings, trainings, and events.
- View **NEW\*** items listed on this site to keep informed of recent asthma news.



The screenshot shows the website's navigation menu with 'GeoExplorer' selected. The main content area features a 'Find a Provider' section with a map and a red pushpin. Below this is a 'FIND a Provider' section with a search form and a 'Need Healthy Homes Services?' link. To the right is a 'Stay Connected' section with social media links. At the bottom, there is a 'Search Resources' section with filters and a photo of people at a computer. A large blue arrow points to the right side of the page.

**WEATHERIZATION PLUS HEALTH** | Get Email Updates | Contact Us | Search

**About Training Resources Find a Provider GeoExplorer Media**

**Find a Provider**  
Search for community action agencies, weatherization and healthy homes providers in your area. Search by address, city, state or zip code

**FIND a Provider**  
Search for community action agencies, weatherization and healthy homes providers in your area. Search by address, city, state or zip code.

**Need Healthy Homes Services?**  
Find a provider in your area for help.

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- YouTube
- Blog
- RSS
- Get Email Updates

**Search Resources**

Search By Keyword

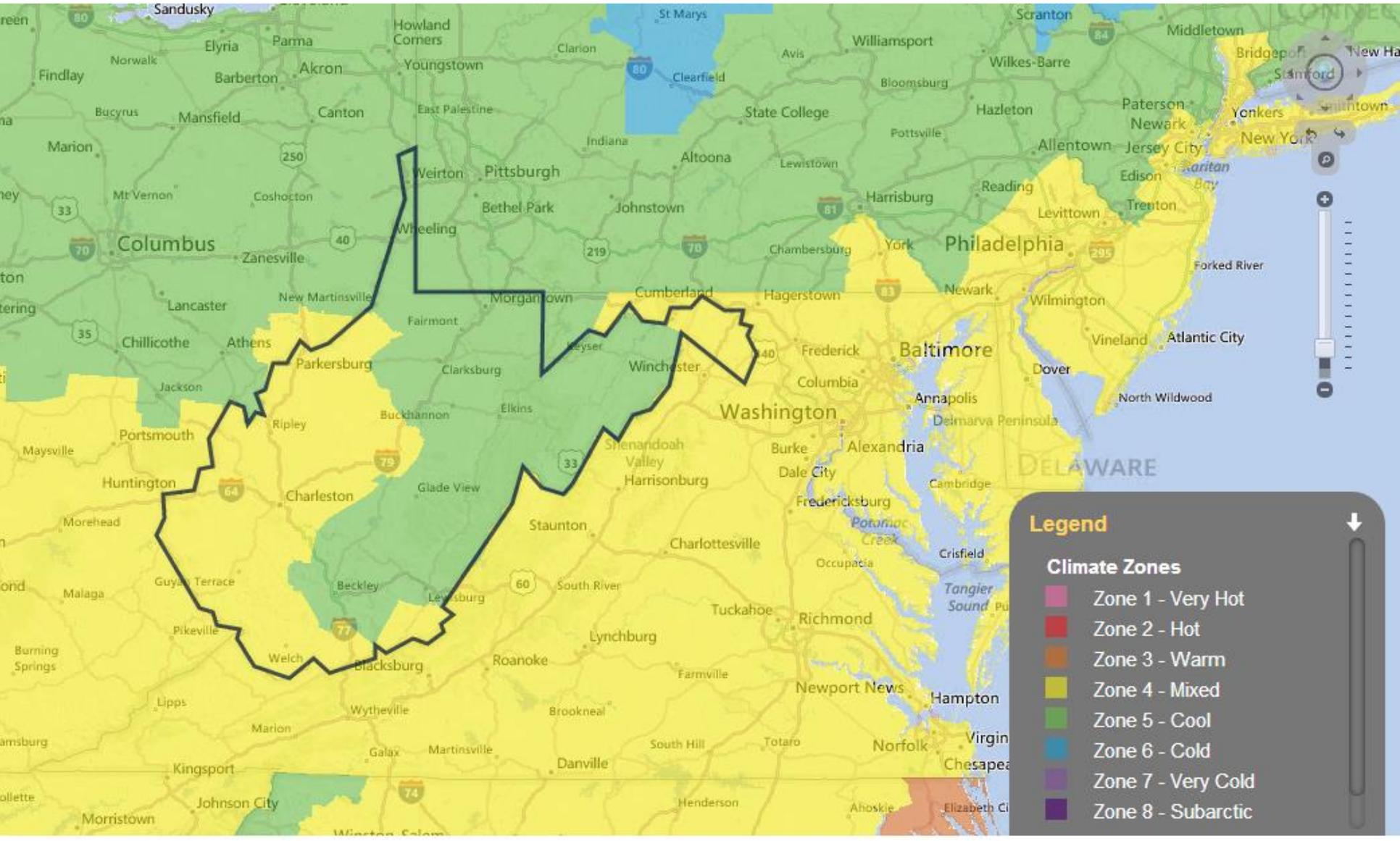
Select By State

Search By Topic

Search By Resource

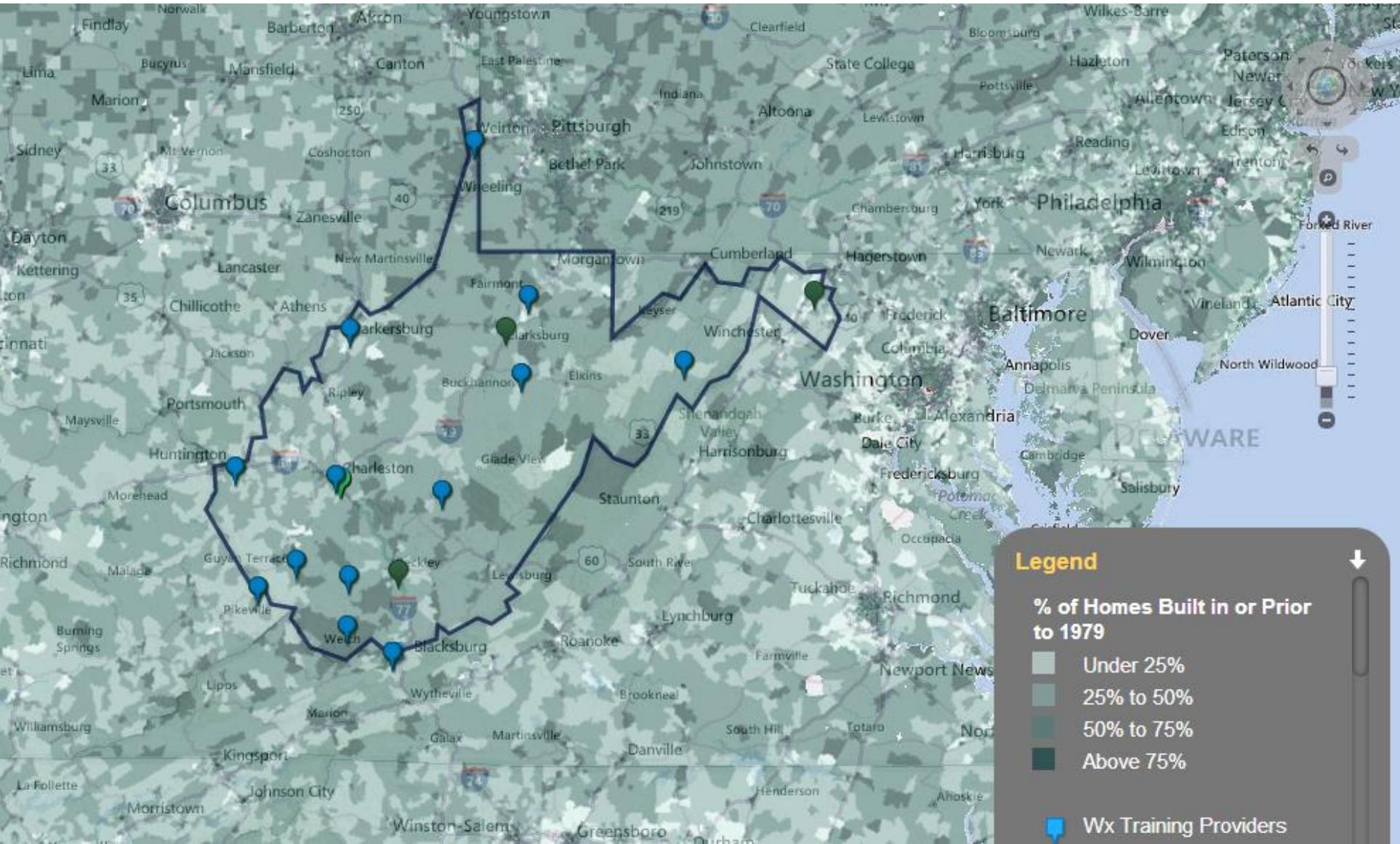
**GeoExplorer**



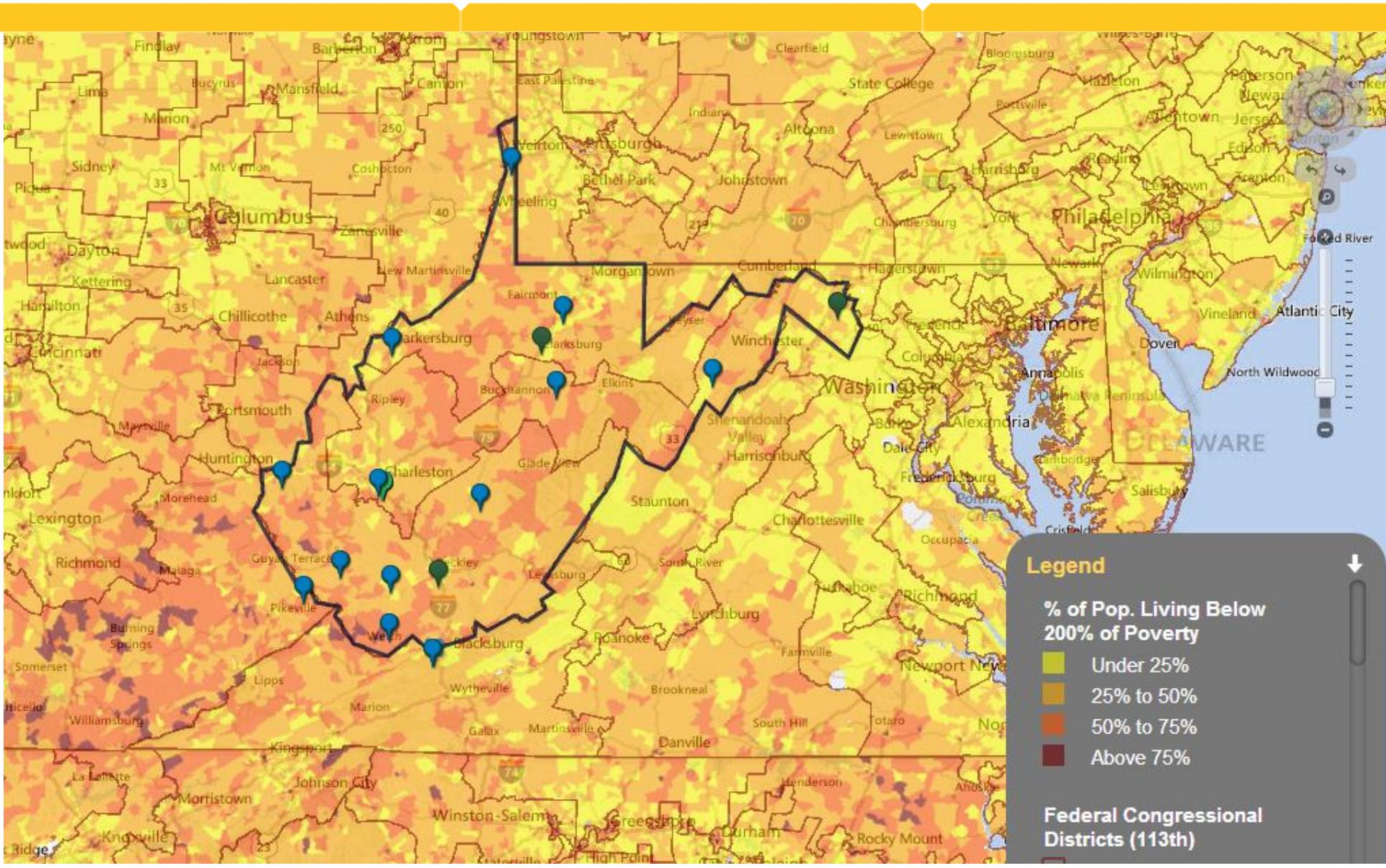




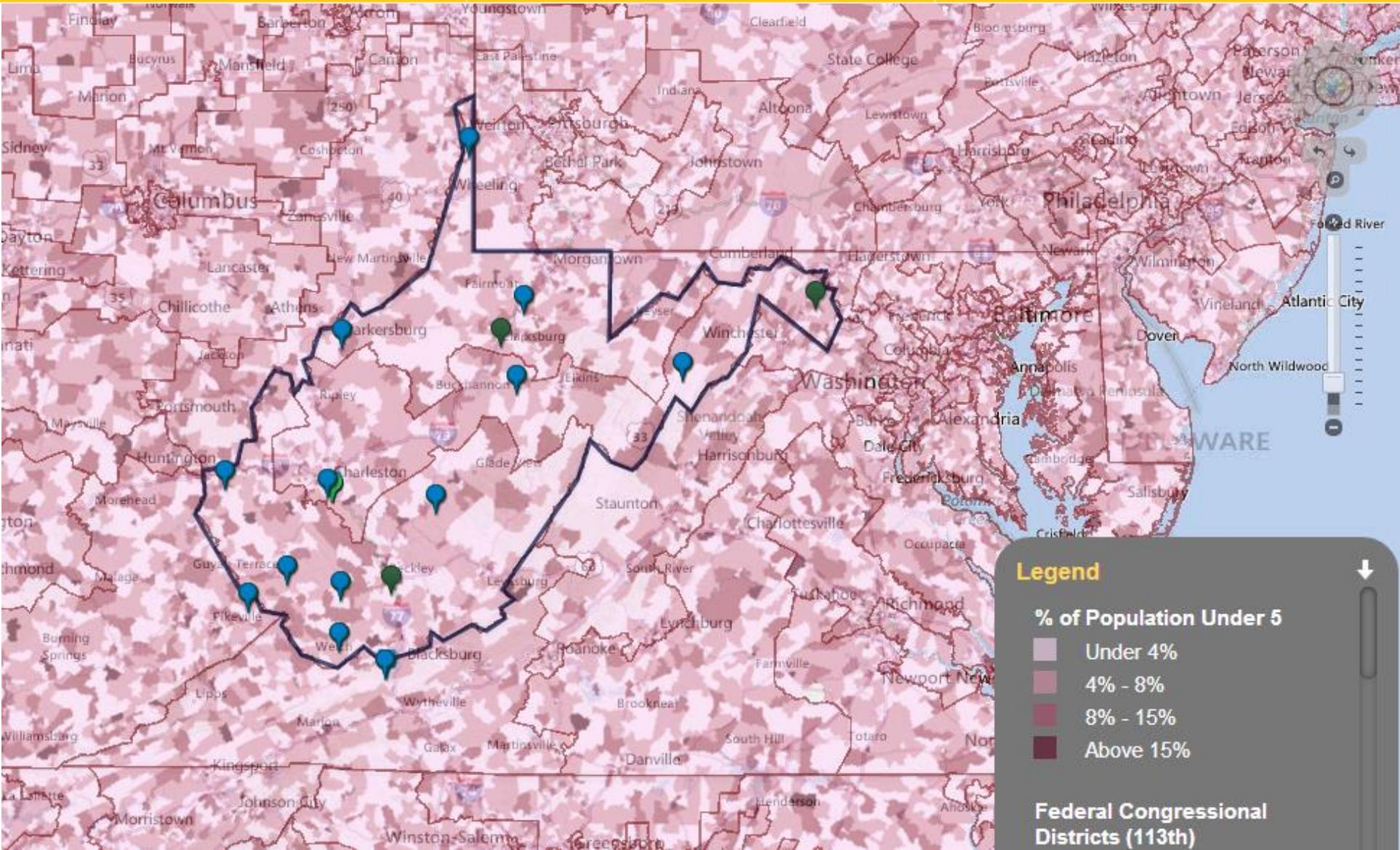
# % Homes built before 1979



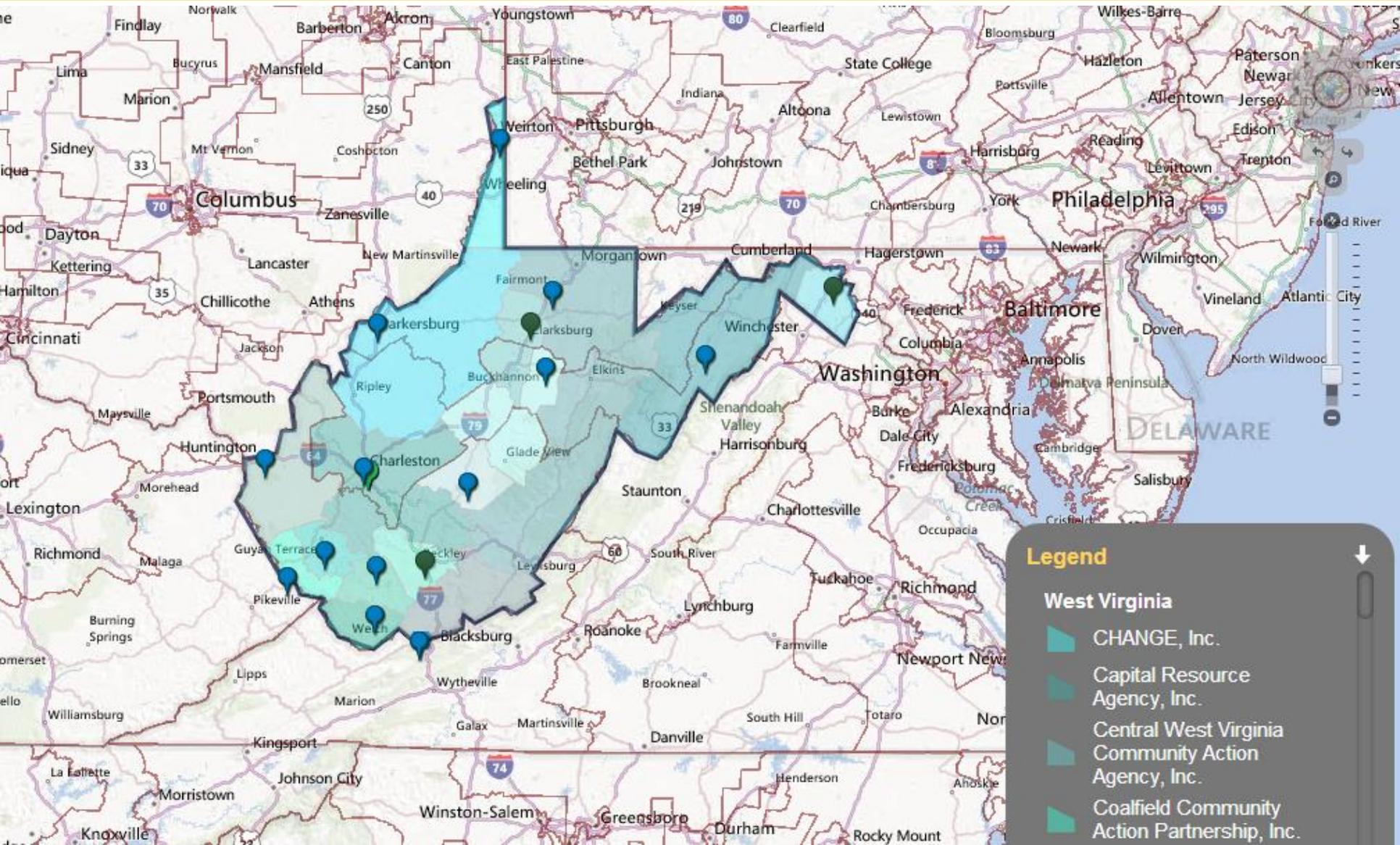
# Poverty Ratio (<200%) & Congressional Districts



# % Children Under 5 years old & Congressional Districts



# CAA Service Area with Congressional Districts



**Legend**

-  CHANGE, Inc.
-  Capital Resource Agency, Inc.
-  Central West Virginia Community Action Agency, Inc.
-  Coalfield Community Action Partnership, Inc.

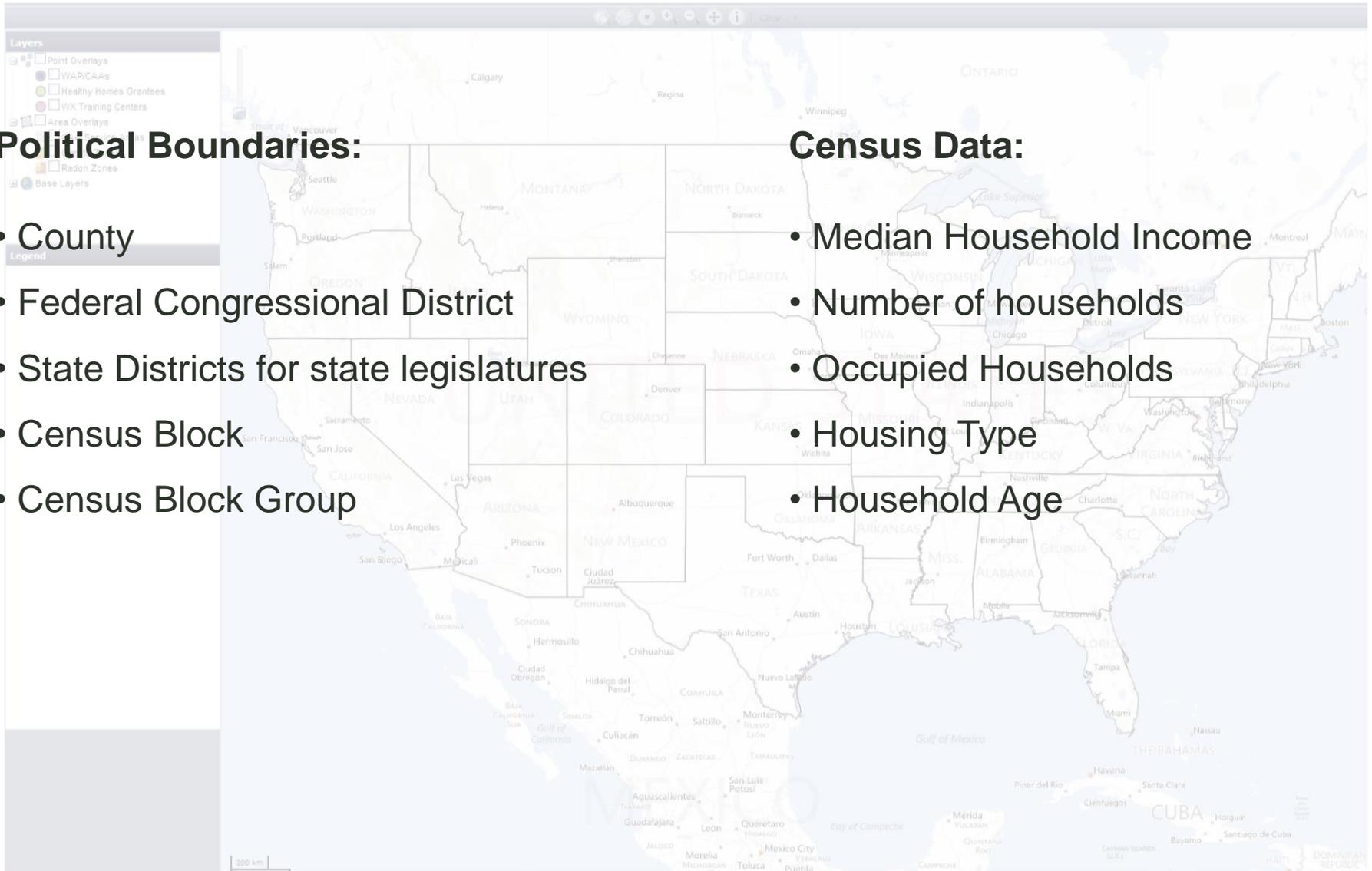


## Political Boundaries:

- County
- Federal Congressional District
- State Districts for state legislatures
- Census Block
- Census Block Group

## Census Data:

- Median Household Income
- Number of households
- Occupied Households
- Housing Type
- Household Age



## Points:

- Habitat for Humanity, Rebuilding Together, foundations, etc
- Public Housing Authorities, Community Development Corps, Regional & State Associations

## Data:

- Fuel Type
- County Health Rankings
- Lead Poisoning Statistics



- Training tool for health and safety issues found in a home
- Available on iPhone, Android, Desktop
- Decision Trees guide technician through steps to determine appropriate course of action
- How To's walk technician through processes

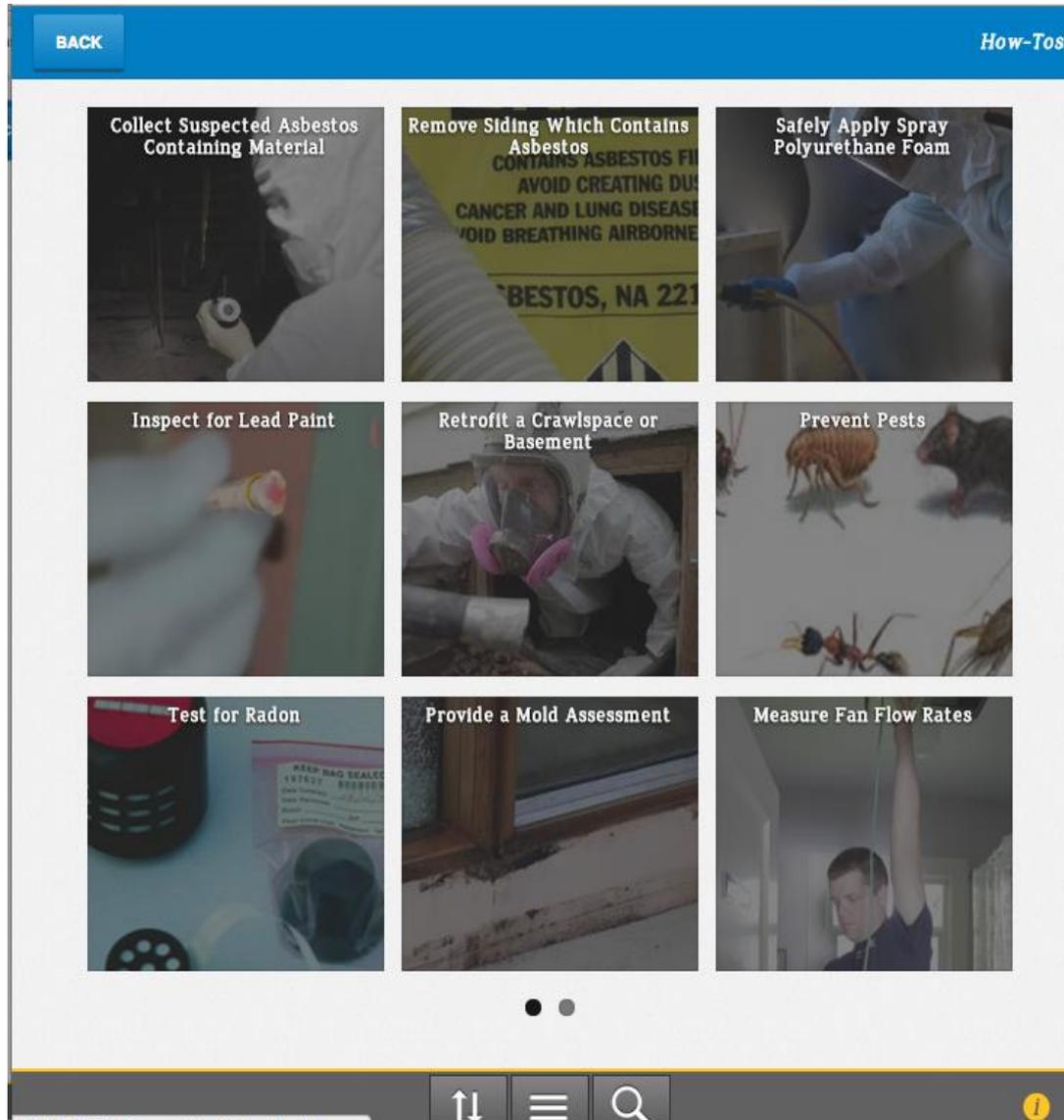
# Weatherization Plus Health App – Decision Trees

**BACK** *Decision Trees*

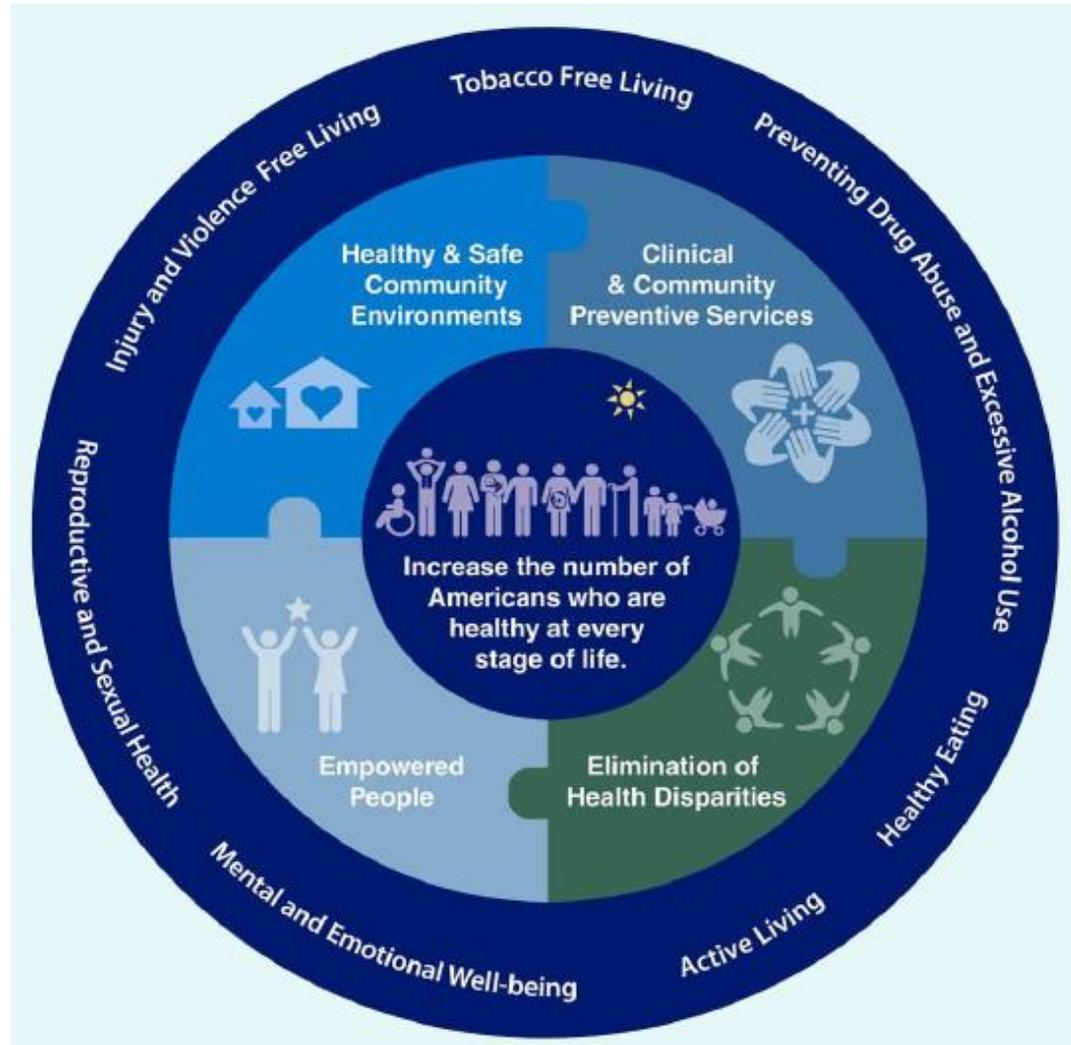
<b>Carbon Monoxide</b> 	<b>Radon</b> 	<b>Unvented Space Heater</b> 
<b>Asbestos</b> 	<b>Lead Based Paint</b> 	<b>Ventilation</b> 
<b>Pests</b> 	<b>Mold &amp; Moisture</b> 	

0.56.75.247/masterthat/index.html#

↑↓ ☰ 🔍 ⓘ



# Affordable Care Act: Healthy & Safe Community Environments



Enacted 2010, upheld by U.S. Supreme Court (2012)

Key provisions include:

- **Changes to health insurance:** Private Insurance and Public (Medicaid) Coverage for Greater % of Population, Subsidized Coverage, standard package of covered benefits, purchase through Health Insurance Exchanges operated by states or federal govt
- **Changes to health care system:** focus on upstream influences (determinants) of health and on public health

**Essential Health Benefit.** Medicaid/Private Coverage Reimbursement.

**Accountable Care Organization/Accountable Care Community.**

Partner w/health care institutions, target health care savings for population, coordination to lower health care costs and improve outcomes.

Expansion of approach via **Medicaid waiver**. Example of Oregon paying for air conditioner to prevent COPD in at-risk elder.

Role for WAP sub-grantee as part of Accountable Care Community

Possible funding for Weatherization Plus Health projects = All nonprofit hospitals & health plans must to be more explicit in identifying how they deliver benefit to surrounding community

- Hospitals required to conduct a Community Health Needs Assessment and develop implementation plans to use community benefit funds to address priority community health needs
- Community needs assessment every 3 years; WAP sub-grantee possible participation
- Hospitals must report community benefits spending on IRS Form 990, Schedule H Part 1