

A Field Experience Report

# CONTRASTING RURAL AND URBAN KANSAS CHRONIC DISEASE RISK REDUCTION PHYSICAL ACTIVITY AND NUTRITION GRANTEE BARRIERS

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Justin Hall 167  
Kansas State University  
November 14, 2014 1:30 p.m.



# Presentation Overview

- Introduction/Background
- Field Experience Overview
- Kansas Department of Health & Environment
- Field Experience Project: Rural and Urban Chronic Disease Risk Reduction (CDRR) Qualitative Assessment
- Acknowledgments
- Questions

BS in Health Services  
Management &  
Community  
Development



MPH Physical Activity  
Candidate



# Field Experience

- 240 Field Experience hours completed May 2014 – August 2014
- Kansas Department of Health and Environment (KDHE) – Topeka, Kansas
  - Division of Public Health
    - Bureau of Health Promotion (BHP)
      - Physical Activity and Nutrition Program (PAN)
- Preceptor: Anthony Randles PhD, MPH
  - PAN Program Manager



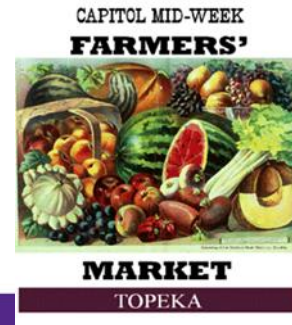
# Products Developed

- Chronic Disease Risk Reduction (CDRR) Physical Activity & Nutrition (PAN) Grantee Report
- Micro-Markets & Healthy Vending Strategies Literature Review



# Hands-On Experience

- Technical Assistance in Wyandotte County
- Weekly Farmer's Market Assistance
- BHP meetings and conference calls



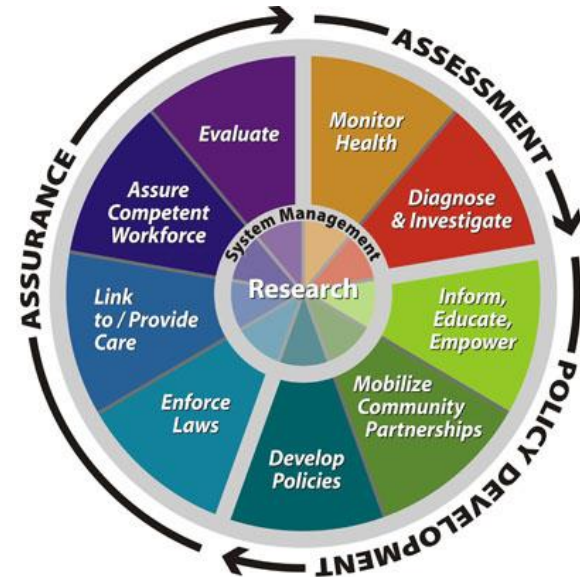
# Kansas Department of Health and Environment (KDHE)

- Mission to protect and improve the health and environment for all of Kansas (Kansas Department of Health and Environment, 2014)
- Four sections:
  1. Administration– Office of the Secretary
  2. Division of Public Health
  3. Division of Health Care Finance
  4. Division of Environment



# Division of Public Health

1. Community Health Systems
2. Disease Control and Prevention
3. Environmental Health
4. Epidemiology and Public Health Informatics
5. Health Promotion
6. Family Health
7. Oral Health
8. Center for Performance Management





# Bureau of Health Promotion

## (BHP)


*“Through partner behaviors, pol of life and pre*  
Department of Health

*the people of Kansas, promote healthy vironmental changes that improve the quality c disease, injury and premature death.”* (Kansas t, 2014)

### BHP Sectors:

1. Arthritis
2. Cancer
3. Diabetes
4. Heart Disease &
5. Health Risk Stuc

Don't sit still for arthritis pain



Arthritis hurts. Physical activity can help. Studies show that 30 minutes of moderate physical activity three or more days a week can reduce pain and help you move more easily. If 30 minutes is too much, try 10 or 15 minutes at a time. Take a 15-minute walk. Then later, go for a 15-minute bike ride or swim. Or go dancing, wash the car, or rake some leaves. Make it more fun by asking friends or family members to join you. Keep it up, and in four to six weeks you could be hurting less and enjoying life more.

**Physical Activity.  
The Arthritis Pain  
Reliever.**

A MESSAGE FROM THE CENTERS FOR  
DISEASE PREVENTION AND CONTROL  
THE ARTHRITIS FOUNDATION  
THE DEPARTMENT OF HEALTH &  
HUMAN SERVICES  
KANSAS ARTHRITIS PROGRAM

6. Injury Prevention & Disability Programs
7. Physical Activity & Nutrition (PAN)
8. Safe Kids Kansas
9. Tobacco Use Prevention

# Physical Activity & Nutrition (PAN) Program

- Direct focus on PAN initiatives within the state
- Chronic Disease Risk Reduction (CDRR) grant process

## Mission



1. To promote increased consumption of fruits and vegetables for optimal health.
2. To promote active living among adults in the workplace by providing walkable access to fresh produce.
3. To promote direct marketing of Kansas foods.

- Currently, only 1 in 5 Kansas adults consume 5 or more servings of fruits and vegetables per day (KS BRFSS, 2004).
- 51.3% of Kansas Adults do not take part in the recommended levels of physical activity (30 minutes or more per day, 5 days per week, KS BRFSS 2005).
- The benefits of consuming more fruits and vegetables include: reduced risk for chronic disease and many cancers (Division of Nutrition and Physical Activity, Centers for Disease Control, 2006).

More information about the benefits of fruits and vegetables can be found at: <http://www.cdc.gov/nccdphp/dnpa/>



# Rural and Urban Chronic Disease Risk Reduction (CDRR) Qualitative Assessment

# Rural and Urban CDRR

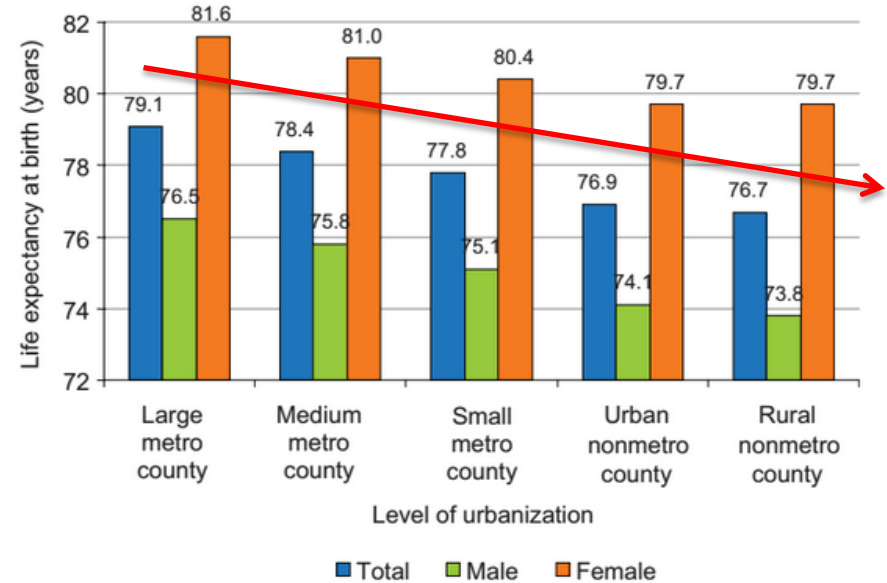
## Qualitative Assessment

Primary Aim: Contrast the needs between rural and urban county health departments and to develop guidelines to improve state technical assistance efforts to CDRR grantees

- 1) Review of Literature
- 2) Qualitative Interviews

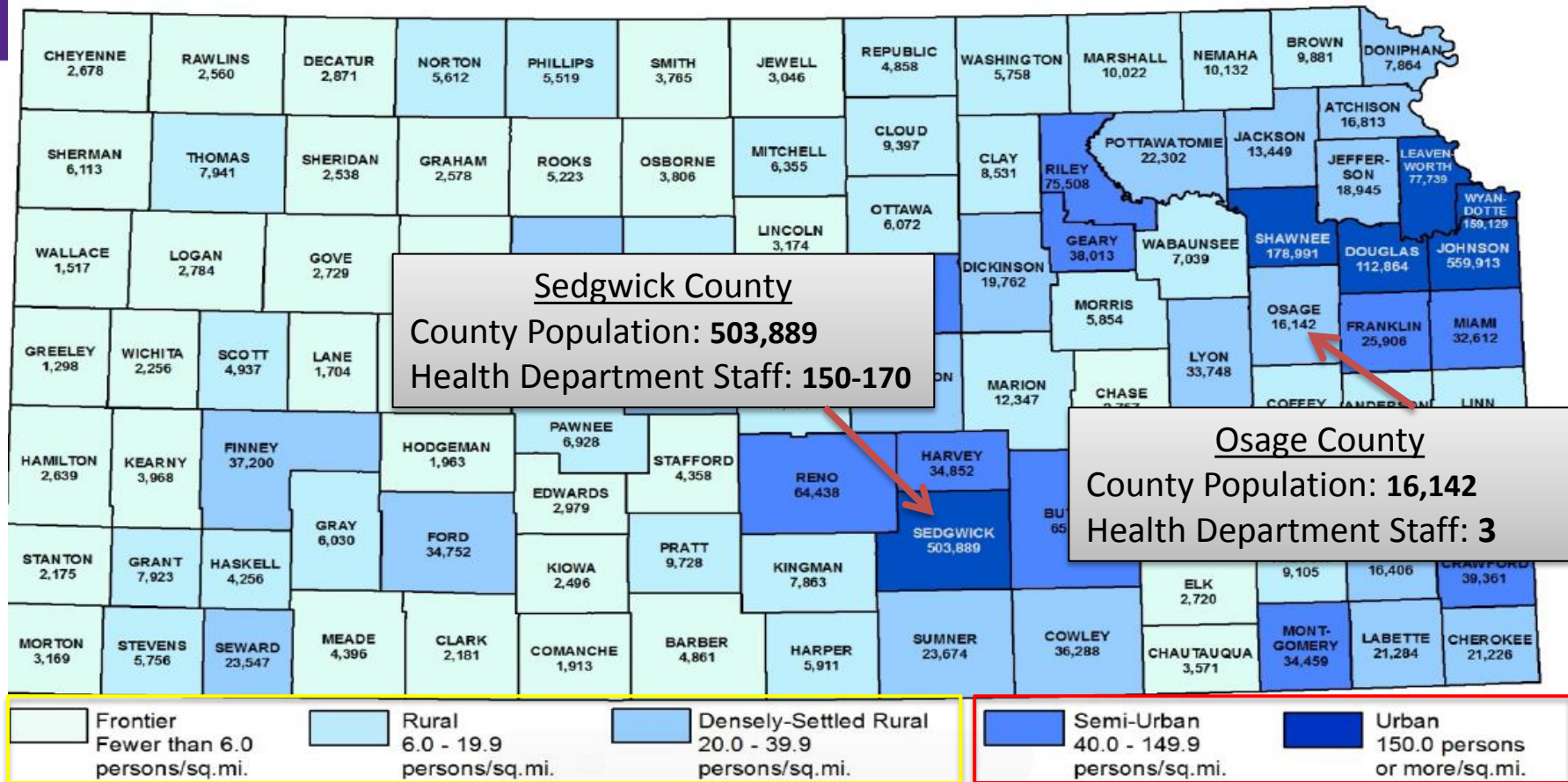
# Background

- Low population density → poor health
- Existing research on community public health interventions is based largely over urban and higher-income populations
- (Barnidge, et al., 2013; Frost, Goins, Hooker, et al Pluto, 2010).



**Figure 1.** Life expectancy at birth (years) by levels of urbanization, U.S., 2005–2009

(Singh, 2014)



# Background

- 89 of 105 Kansas counties have fewer than 40 persons per square mile

(Kansas Department of Health and Environment: Bureau of Epidemiology and Public Health Informatics, 2012)

- Overweight or obese Kansans in 2011:
  - Rural: 67.4% (95% CI: 64.8% to 70.0%)
  - Urban: 62.2% (95% CI: 60.9% to 63.5%)

(Kansas Department of Health and Environment, 2013)

**Overweight:** BMI 25.0-29.9

**Obese:** BMI 30+

**BMI** = weight (kg)/height (m)<sup>2</sup>



# Review of Literature



# Rural Barriers to Community Health

- **Human Capital**
  - Lack of funders (Barnidge, et al 2013)
  - Limited staff
    - Less training (Crawford, et al 2008)
- **Culture** (Barnidge, et al 2013)
- **Environmental Factors** (Barnidge, et al 2013, Edwards, et al 2014)

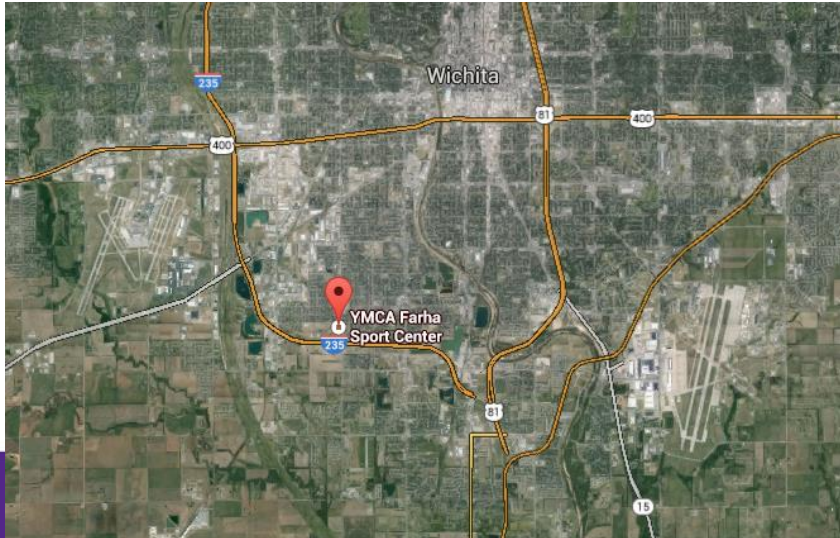
# Rural Barriers to Community Health Continued

- Lack of evidence-based programs specific to rural challenges (Barnidge, et al 2013, Frost, et al 2010)



# Urban Barriers to Community Health

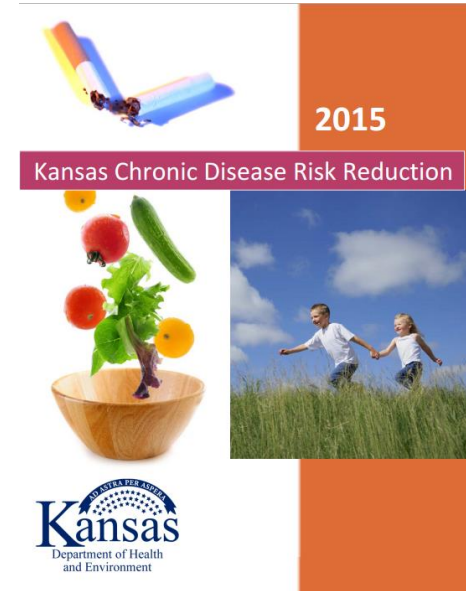
- **Safety** (Frost, et al., 2010)
- **Environmental Factors**  
(Moore, et al., 2010)

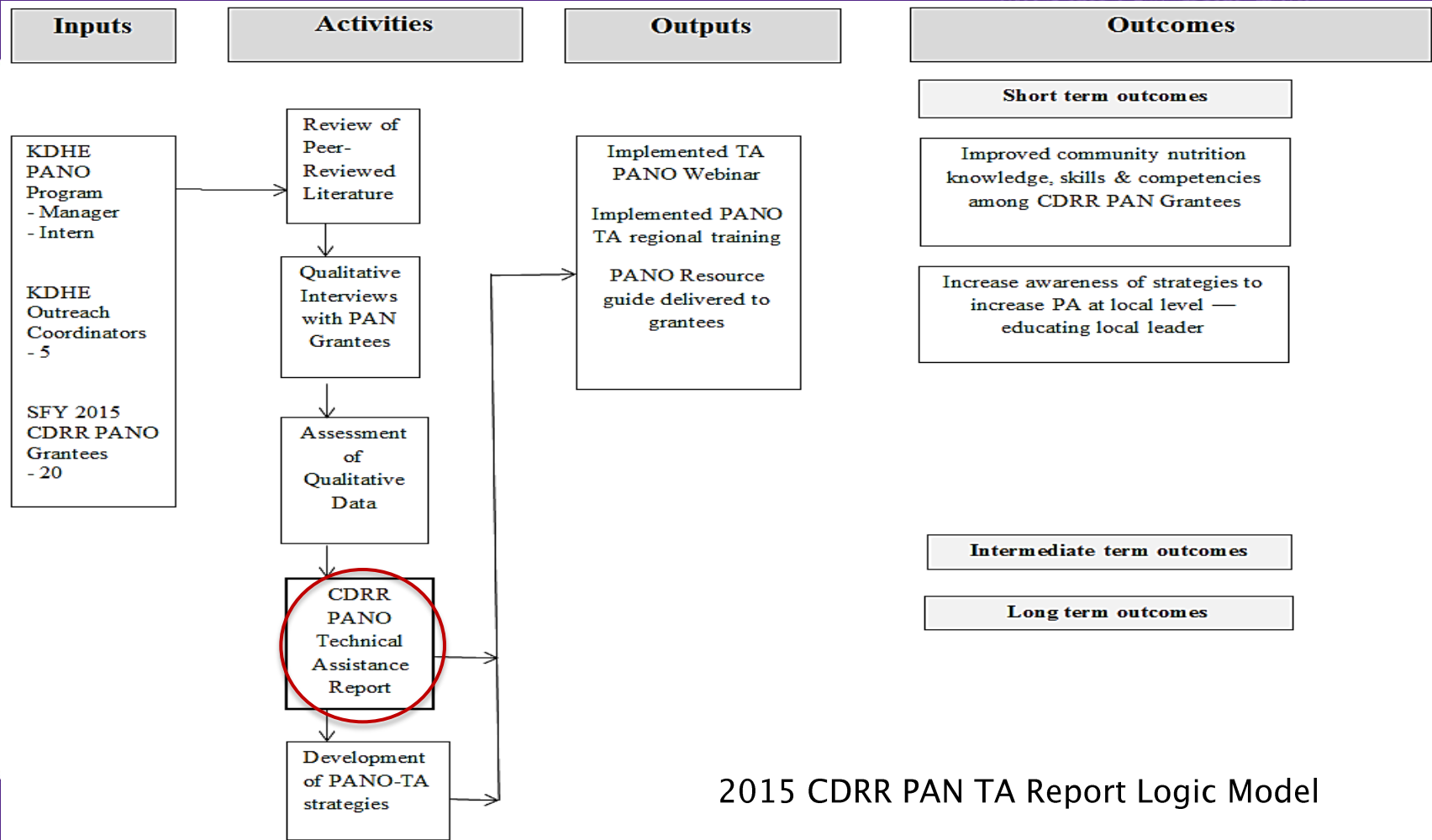


# Chronic Disease Risk Reduction (CDRR) Grant Program

- Provides funding & technical assistance (TA) to assist in decreasing the risk of chronic disease
  - Decreasing the use of tobacco
  - Improving nutrition access & behaviors
  - Improving physical activity behaviors

(Kansas Department of Health & Environment, 2014)





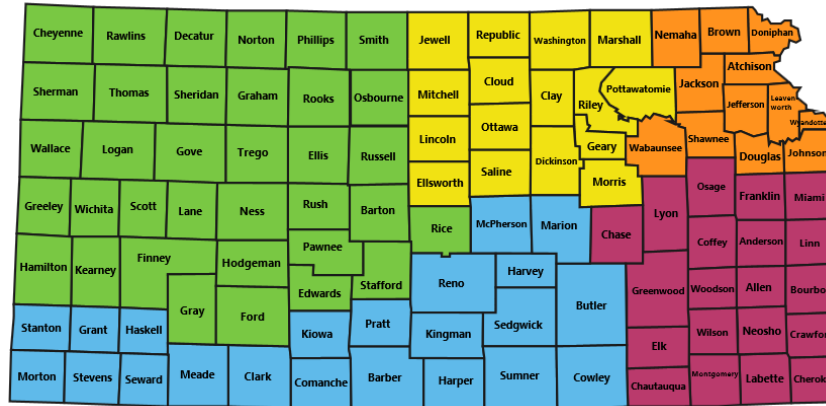
2015 CDRR PAN TA Report Logic Model



# Qualitative Interviews

# Methods

- Meetings with each KDHE CDRR Community Health Specialist (n=5)



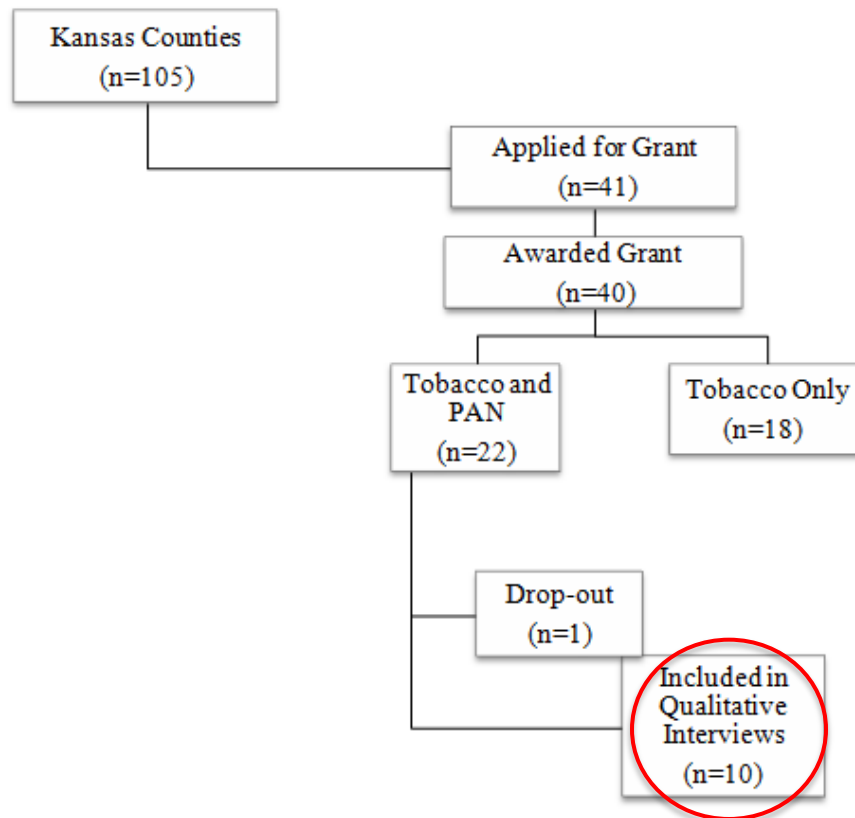
- Development of semi-structured interview guide
  - Topics: community background, opportunities, resources, and barriers for PAN in the community, community norms and traditions, training and current TA

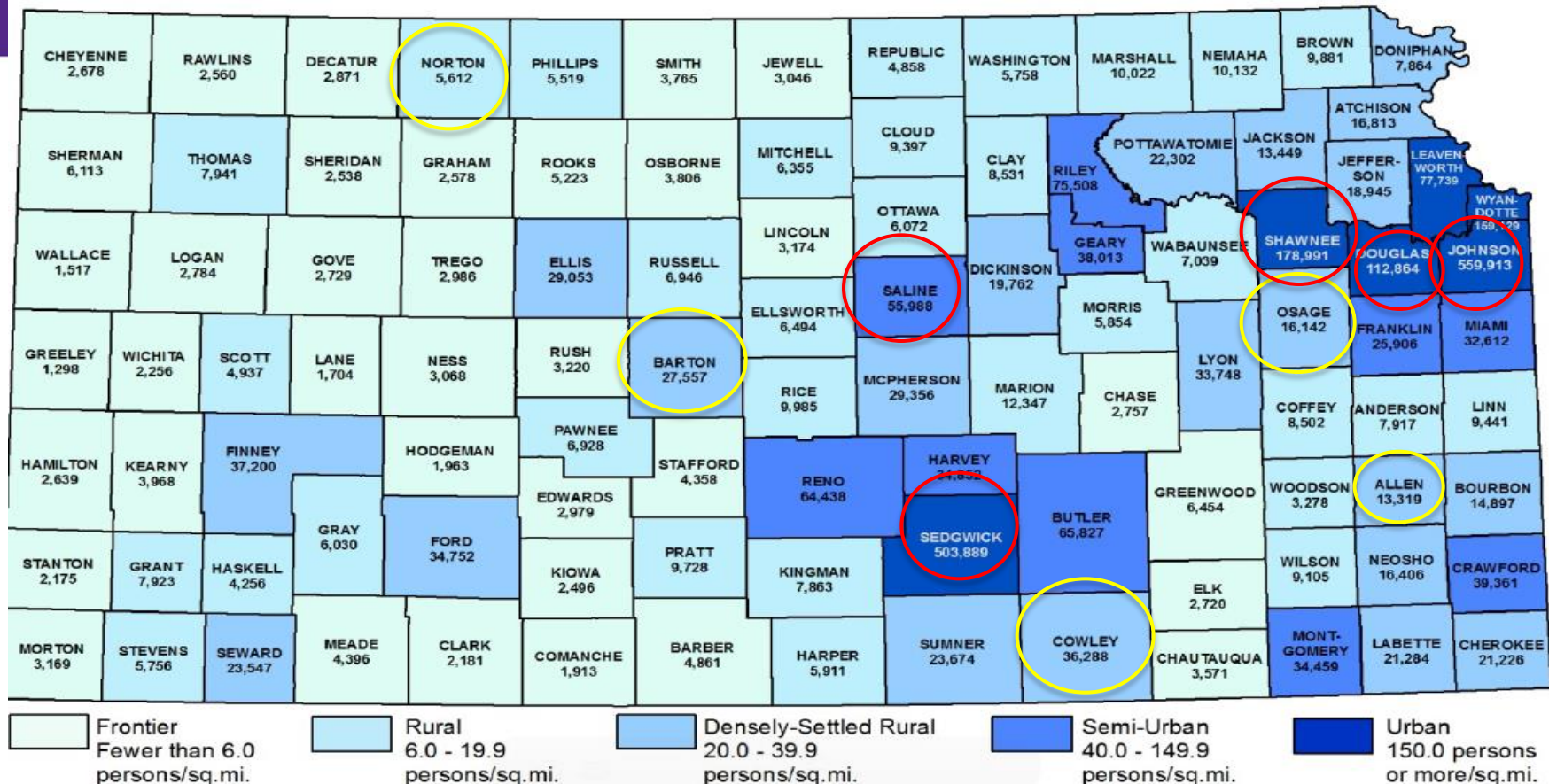
# Methods

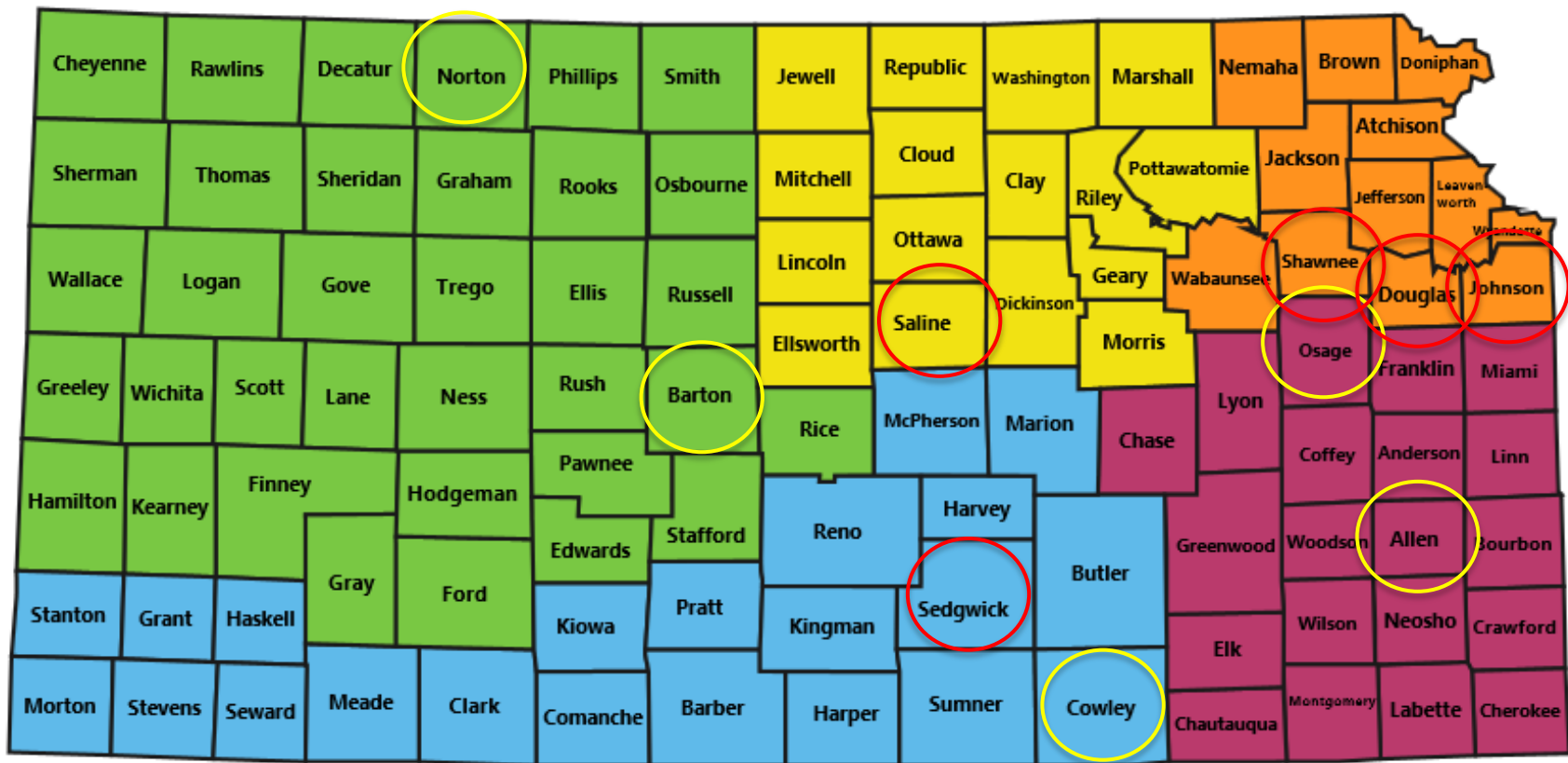
- Meetings with each KDHE CDRR Community Health Specialist (n=5)
- Development of semi-structured interview guide
- Selection of participants/grantees (n=10)
  - Rural counties n=5
  - Urban counties n=5



# FY 2015 CDRR PAN Grantees – Participants







# Interview Guide



- 1) Tell me about your community
  - a. What are the major issues facing your community?
    - i. What information, training, and skills do you need to effectively achieve your PAN goals?
  - ii. Are there any specific strategies (technical assistance) that you would like to see?
    - Is there any assistance we are providing that is working well?
- 2) What role do you think the community plays in achieving PAN goals?
- 3) How do you think the community can best support PAN goals?
  - a. Are there any specific strategies (technical assistance) that you would like to see?
  - b. Is there any assistance we are providing that is working well?
  - c. Is there any assistance that we currently provide that is not beneficial?
- 4) Will you explain to me what you mean by that?
  - a. Do members of the community have the necessary skills to achieve PAN goals?
- 5) What information, training, and skills do you need to effectively achieve your PAN goals?
  - a. What barriers do you have to achieving those goals?
  - b. In what ways do you adapt and choose what PAN interventions you utilize?
  - c. Do you feel as though your staff/team has appropriate training and skills to achieve PAN goals using these interventions?
    - i. What barriers do you have when participating in training?
- 6) In what ways can the PAN outreach better help you and your community?
  - a. Are there any specific strategies (technical assistance) that you would like to see?
  - b. Is there any assistance we are providing that is working well?
  - c. Is there any assistance that we currently provide that is not beneficial?
    - i. If yes, then what improvements would you like to see?

# Methods Continued

- Semi-structured interviews conducted by telephone throughout a 3-week time period
- Crude method of theming results to find common themes from qualitative data



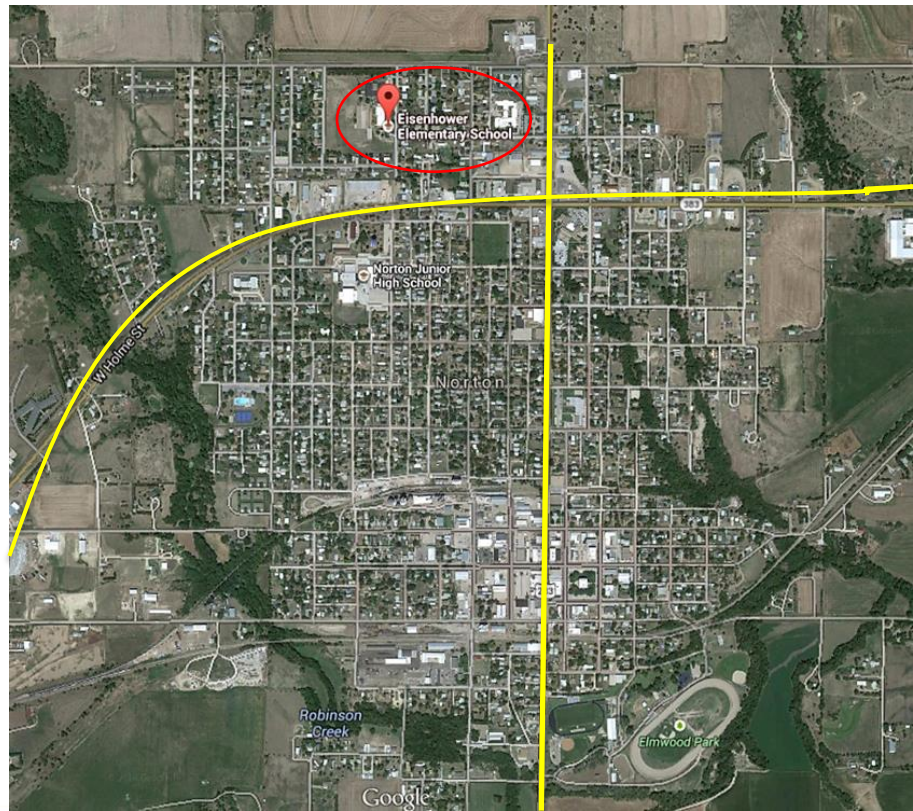
# Results



# Results: Common Rural Barriers to PAN

- Inadequate sidewalks & crossings  
*“major issue”      “huge barrier”*
- Lack of funding for PAN
- Community and/or leaders don't understand the importance of supporting PAN initiatives

*“They (community) don't see it as a priority and don't grasp the strong link between physical activity and obesity rates.”*



# Results: Common Urban Barriers to PAN

- Prioritizing efforts

“ongoing challenge trying to prioritize where to start”

- Food deserts in parts of the city
- Lack of existing trail interconnectivity



# TRAIL GUIDE - Hiking and Biking in Johnson County, Kansas

Northeast  
Johnson County



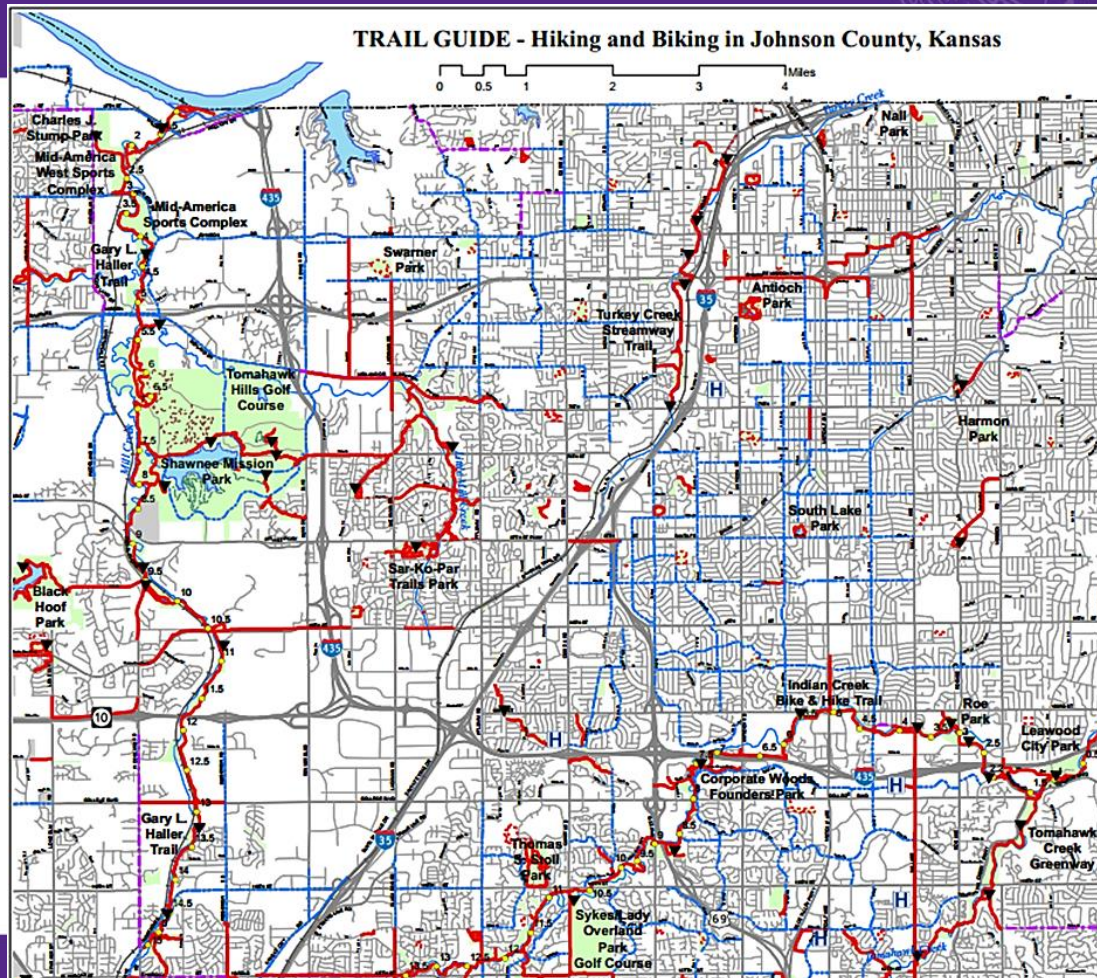
JOHNSON COUNTY  
PARK & RECREATION  
DISTRICT

[www.jcprd.com](http://www.jcprd.com)



## Legend

- Hospitals
- Trailhead Parking
- Trail Mile Marker
- Paved Shared Use Trail
- Paved Walking Trail
- Hiking Trail
- Mtn Bike Trail
- On-Street Bike Lane
- Shared Roadway
- Lake
- Park/Open Space
- Future Park



# Results: Rural Training/TA Barriers

- Lack of staff/time
- Funding

*“(we) don’t have a lot of resources, period.”*

- Distance from trainings

# Discussion

## Rural

- Consistent with previous research:
  - Sidewalks/Crossings
  - Human Capital
  - Funding
  - Training
  - Lack of community/leader support

## Urban

- Large Population– hard to prioritize
- Food deserts
- Trail Connectivity

### Rural & Urban

- Need for “best practices”/ resource guide

# Recommendations

- Community health assessments
- Partnerships & Collaboration
- Utilizing and expanding upon existing social environmental facilitators
  - Shared-use agreements, walking school bus
- Conduct proper evaluation
- Separate PAN funding from tobacco funding

# Progress

- *“All PAN Grantees were given a list of other grantee projects and contacts. Since last week, several (12 in total out of 21) grantees have begun initiating conversations between themselves to overcome barriers in their own communities.”* – PAN Program Manager

# Acknowledgements

- Dr. David Dzewaltowski
- Dr. Ric Rosenkranz
- Dr. Katie Heinrich
- Anthony Randles
- KDHE Bureau of Health Promotion Staff
- Dr. Michael Cates
- Barta Stevenson

THANK  
YOU!

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# Questions?



NOVEMBER 20, 2014





# Supplemental Slides

# Learning Objectives

1. Understand the technical assistance needs of local public health offices
2. Gather, utilize and disseminate qualitative data for the purpose to improve community health interventions
3. Identify public health policies, systems and environmental solutions related to specific issues
4. Apply knowledge to develop webinars for local grantees
5. Communicate effectively both in writing and orally

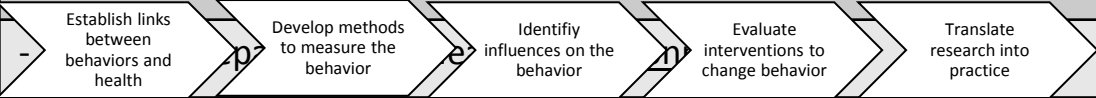
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# What is “Rural”?

- **U.S. Census Bureau** (<http://www.census.gov/geo/reference/urban-rural.html>)
  - Urbanized Areas: 50,000 or more people
  - Urbanized Clusters: 2,500–50,000 people
  - Rural: everything else
- **Office of Management & Budget**  
(<http://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b13-01.pdf>)
  - Metro Statistical Areas: at least one are of 50,000 or more people
  - Micro Statistical Areas: at least one cluster of 10,000–50,000 people
- **U.S. Department of Agriculture Economic Research Services**  
(<http://www.ers.usda.gov/topics/rural-economy-population/rural-classifications/what-is-rural.aspx>)
  - Nonmetro Counties
    - Open countryside
    - Rural Towns: fewer than 2,500 people
    - Urban Areas: 2,500–49,999 people

# MPH Core Competencies

Competency	Field Experience Project/Exposure
Biostatistics	- CDRR: Qualitative Assessment & interview guide design
Environmental Health	
Epidemiology	<ul style="list-style-type: none"> <li>- Prevalence of overweight &amp; obesity</li> <li>- Behavioral Epidemiology Framework (Sallis, Owen, &amp; Fotheringham, 2000)</li> <li>- Chronic Disease <u>Risk</u> Reduction Program</li> </ul>
Health Services Administration	<ul style="list-style-type: none"> <li>- State-level health department &amp; interactions with various levels (local, national)</li> <li>- BHP meetings &amp; Conference calls (Coalition)</li> <li>- KSFMNP data management</li> <li>- CDRR: Rural vs urban (Demographic trends)</li> <li>- Grant applications</li> </ul>
Social & Behavioral Sciences	<ul style="list-style-type: none"> <li>- CDRR: Qualitative Interviews</li> <li>- Technical Assistance in WY County (SCT → improving self-efficacy)</li> <li>- Underserved populations, social characteristics: rural counties, KSFMNP</li> </ul>