

# Positioning P&R Agencies as Preventive Public Health Providers – Research

GP RED

Indiana University

East Carolina University

North Carolina State University

5 Beta Sites for the Healthy  
Communities Surveillance and  
Management Toolkit™

NCSU Penbrooke  
PhD Dissertation  
2017

Comprehensive  
Literature Review

NCSU Delphi Panel  
And Case Studies

Over 500  
Community Plans

Repository of  
Sample Policies and  
Strategies



# Evidence & Guiding Theory

**Parks & Recreation (P&R) agencies can help improve Public Health (PH) through various health factors:**

- Increasing physical activity and improving nutrition
- Providing psychological and physical benefits from access to nature
- Facilitating social benefits and parental engagement
- Addressing health equity issues, transportation, and safety
- Addressing stress management, smoking, alcohol and drug consumption, etc.

Burns, 2016; Godbey & Mowen, 2010; Kuo, 2013; Sallis, Floyd, Rodriguez, & Saelens, 2012; Slater, Ewing, Powell, Chaloupka, Johnston, & O'Malley, 2010; Wells, 2013; Young, Ross, Kim, & Sturts, 2013

# Systems Approach to relationships between access to public P&R spaces and wellness



Adapted from EPA, 2014; Kuo, 2015; Saw, Lim, & Carrasco, 2015; Sturm & Cohen, 2014

# Big Finding NOW

Research is shifting from one of asking *IF* P&R agencies can positively affect Public Health factors, to *HOW* they can best do so with limited resources and prioritization needs.

# Our Fit in Overall Community Public Health Systems



# Learning from HIAs and other Available Assessment Tools

- ▣ Geographic Site or Topic Specific Assessments
- ▣ Food Availability – Deserts / Swamps / Local
- ▣ Physical Activity Indicators – design, activity, or emotional components
- ▣ Safe Routes to School
- ▣ Walk and Site Audits
- ▣ Prescriptions for Play / Park Rx
- ▣ Let's Move, Achieve, It Starts in Parks, and other programs designed to evoke change

**How does an agency know what to do?**

Modifiable  
Factors  
Spaces,  
Programs, and  
Policies

Public Safety  
& Perception  
of Safety

P&R Agencies  
& Strategies

Medical Care  
and Public  
Health  
Agencies

Modifying  
Preventive PH  
through P&R  
Systems  
Thinking

Social &  
Parental  
Engagement

Preventive  
Community  
Health

Partners &  
Providers

Transportation  
and Access

Schools /  
Education

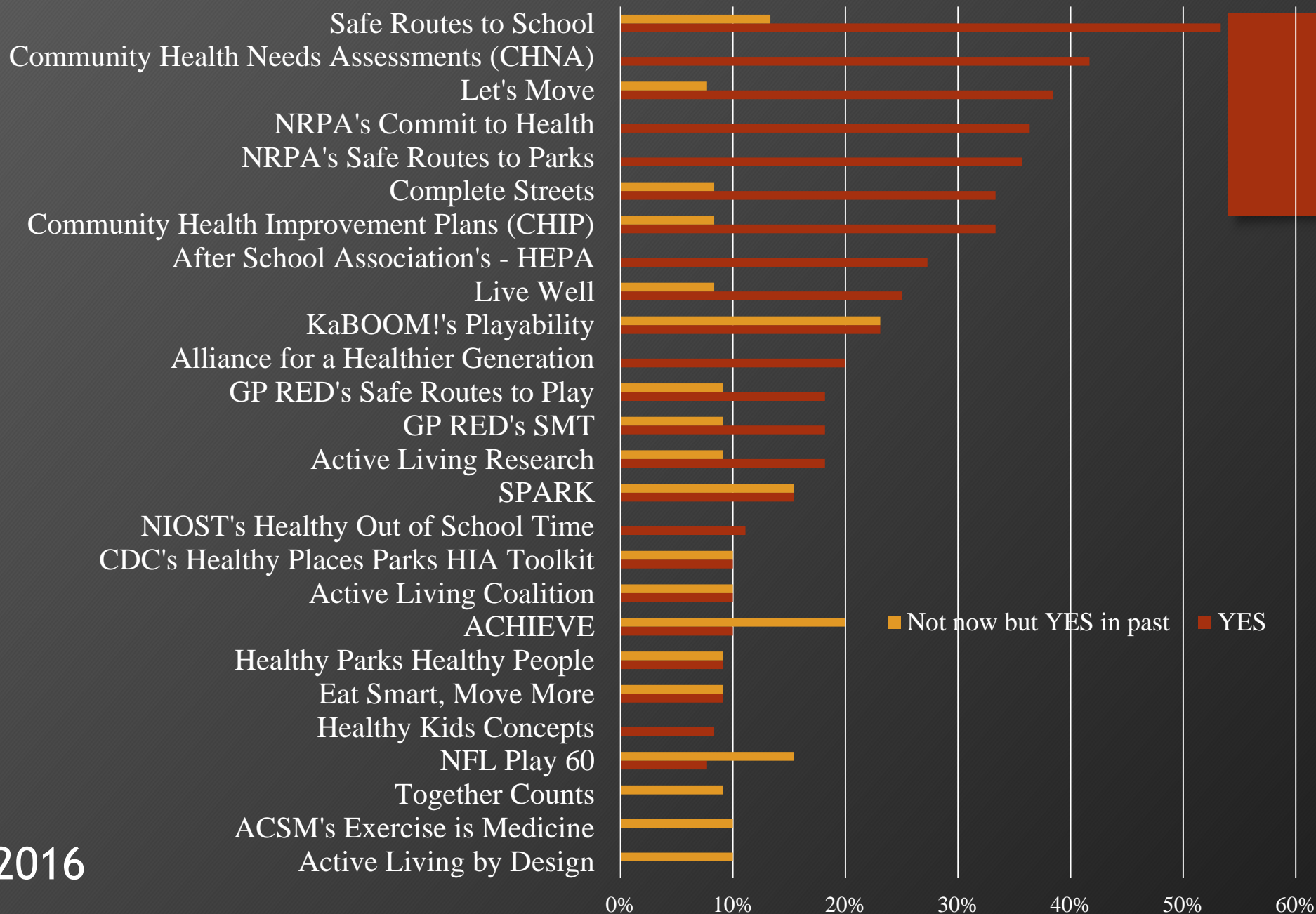
Actors  
Facilitating  
Partnerships  
and outcomes  
in the  
Community

Physical  
Activity &  
Nutrition

Academic  
Research &  
Methods

Actions on all levels  
(Penbrooke, 2017)

# National Initiatives – Are you active with them?

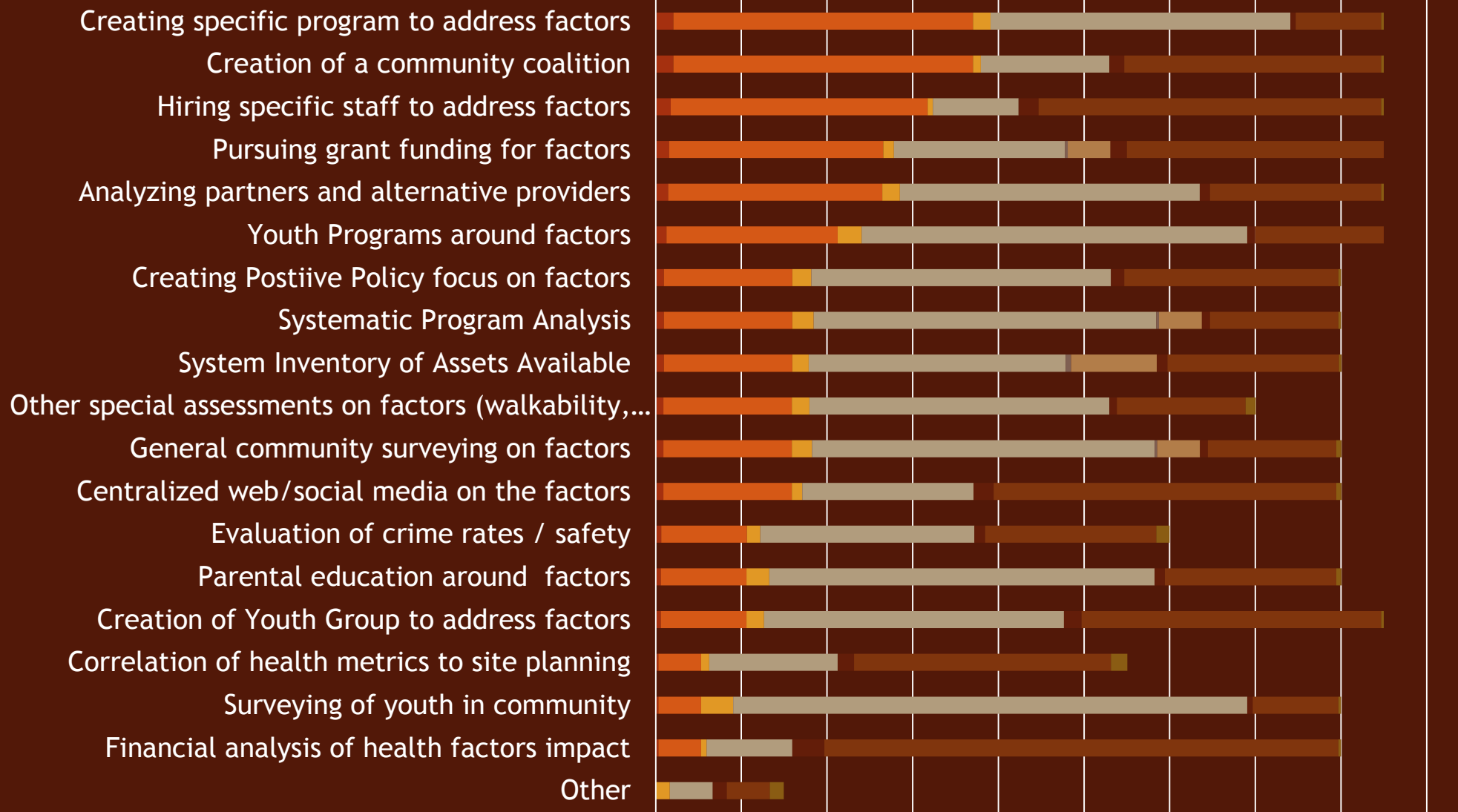


2016



# Penbrooke National Delphi Panel - 2016

## Effectiveness of Potential Methods to Address Factors



Other (1) = MVPA- SO PLAY study

0% 200% 400% 600% 800% 1000% 1200% 1400% 1600% 1800%

Most effective to least effective, then Never Used or DK

# HOW CAN P&R AGENCIES ADDRESS MODIFIABLE FACTORS?

## - Step by Step “Toolkit” Approach

### CONCLUSIONS

1. Convene staff, key stakeholders, and the public - FRAME & PARTNER
2. Collect community-specific information using valid methods
  - Inventory and analysis of assets and programs available / participation / awareness
  - Analysis of current policies, practices, financial, and allocation of resources
  - Demographics, regional trends, alignment with national initiatives
  - Document partnerships, current providers, and social networks
3. Determine Gaps - Culture? Programs? Assets? Social? Policies? Staff? \$\$?
4. Create an Action Plan / Logic Model for priorities - MESSAGING & ACTION
5. Report, communicate, and garner resources
6. Evaluate and repeat

# Healthy Communities Research Group

## Five Elements for Systems Analysis



### Warrant for Action

- Start inquiry
- Input information
- Create documents
- Start database
- Data transmission
- Warrant for intervention
- Proposal for action



### Community Systems

- Convene Stakeholders
- Intersections
  - Collaborations
  - Partnerships
  - Agreements
  - Shared assets
- Negative Markers



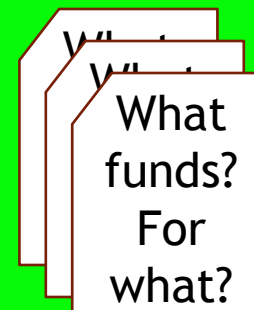
### Policies, Laws & Procedures

- Laws (Fed, State, County, City)
- Ordinances
- Agency regulations
- Agency policies & practices



### Fiscal Resources & Distribution

- Identify funding paths
- Determine allocation patterns/%
- Identify sources of \$\$
- Document use of \$\$\$
- Identify ROI



### Inventory of Assets & Affordances

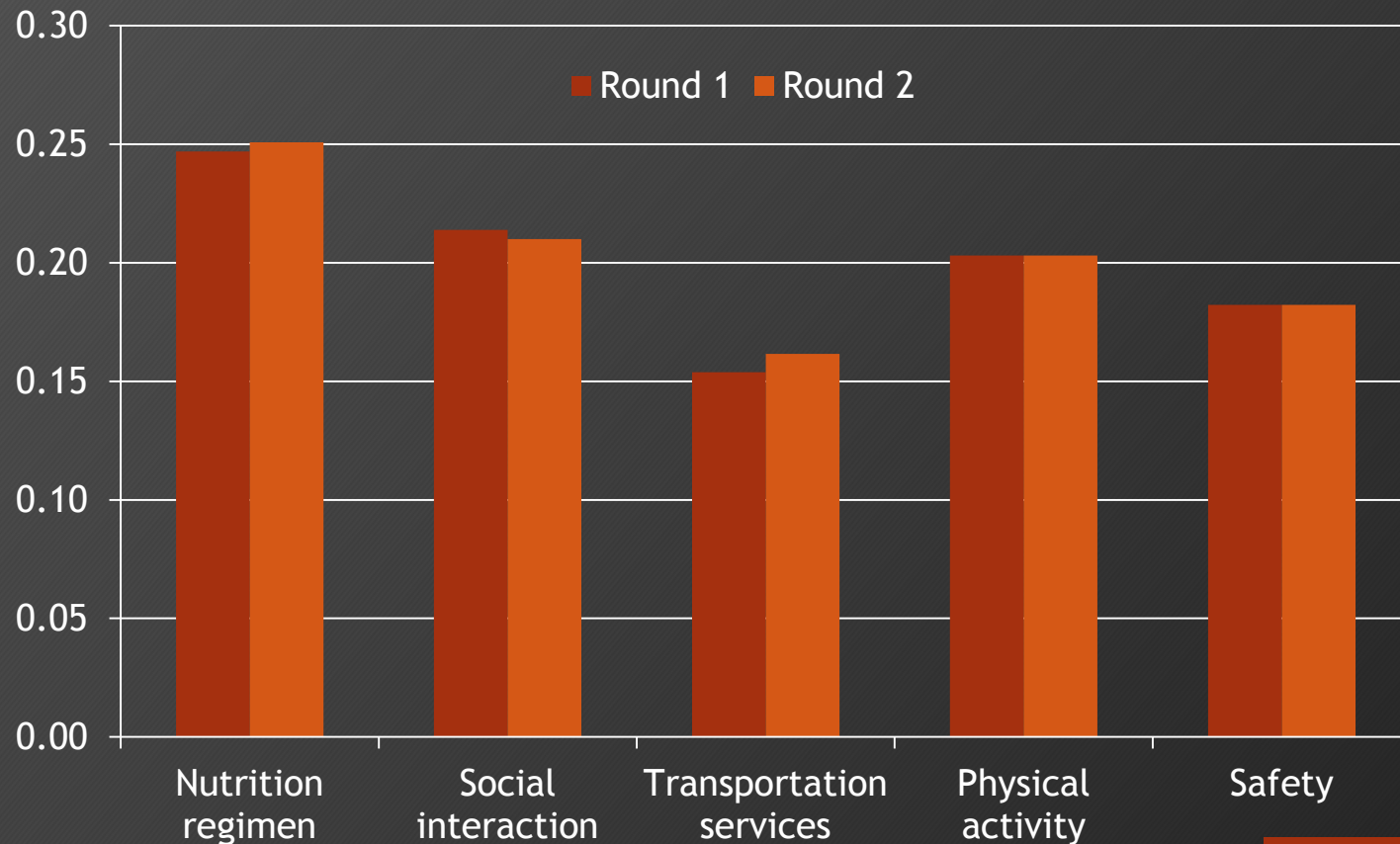
- Assets
  - Built
  - Natural
- Affordances
  - Formal programs
  - Services



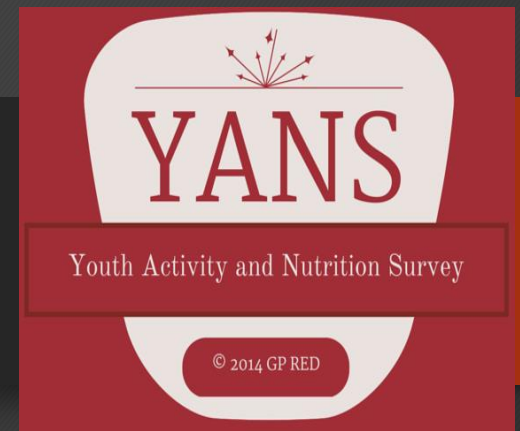
# Priority of Health Factors for P&R in Hutchinson

## Multi-Attribute Utilities Technique (MAUT)

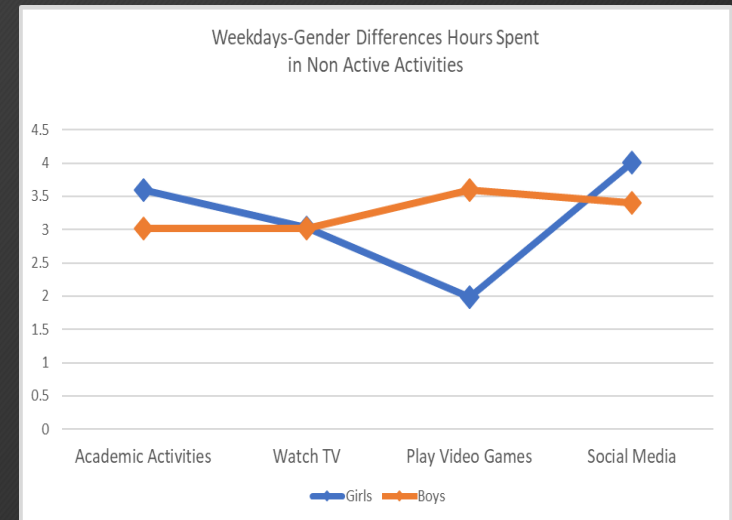
### MAUT Analysis



# Hutchinson Youth Activity and Nutrition Survey



- 804 Middle School Students
- Significant findings
  - Nutrition - SSB & Breakfast frequencies
  - Screen Time & Activities
  - High Perception of Safety
  - Low Active Transportation for Youth
  - Strong Parental Support, but lower Personal Modeling



OST	Walk	Bike	Bus	Adult drives	Other
Total	12.3%	0.4%	1.3%	70.5%	11.8%
Girls	9.3%	2.1%	0.03%	79.0%	9.3%
Boys	15.0%	5.8%	2.2%	62.5%	14.2%

# Component-Based Methodology (CBM) GIS Inventory and LOS Analysis (including walkability)

- Components
- Access
- Functionality
- Quality
- AEE
- Programs



Among the factors assessed was an Active Energy Expenditure rating based upon recent research



Active Energy Expenditure or "AEE Value"



(Floyd et al., 2015; Layton, 2016)

**Evidence  
Based  
Methods**

**Community  
Specific**

**Outcomes  
Focused**

**Logic Model  
Adaptations**

**Action  
Plan  
Oriented**

# Bloomington, IN Outcomes

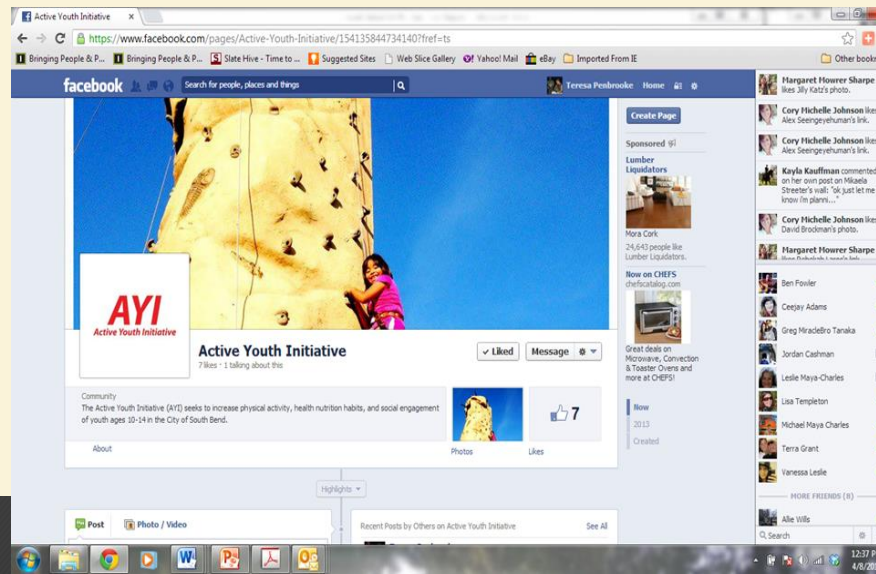
- Toolkit Template creation and utilization for tracking capabilities and awareness
- Partnership with IUB for Get Onboard Active Living (GOAL) - focus on family relationships, food, activity, behavioral, nutrition, mentoring - 12 week program. Kinesiology Graduates working with youth for personal training - more than 60 so far .
- Funded FT Health and Wellness Coordinator
- Multiple grants, tracking outcomes



# South Bend, IN - Active Youth Initiative AYI Accomplishments & Outcomes

- Passport to Play
- AYI Facebook Page
- Prescription to Play
- Alternative Providers Documented
- Participation Increases

Mayor  
Pete Buttigieg  
Adopted!



**Get Ready for a Season of Play!**

**Sunday, March 17 • 2:30 to 4:30 p.m.**  
HealthWorks! Kids' Museum • 111 W. Jefferson Blvd.



Powered by:



**passport to Play**  
Kick-off Celebration

**Exciting games and activities for the whole family!  
Awesome giveaways! And, it's FREE!**

**Passport to Play is a season-long adventure that begins March 17.  
Outdoor fun at South Bend Parks! • A different adventure each month!**

For more information, call **574-647-KIDS** or check us out on Facebook®; search **"Passport to Play."**

# Liberty, MO L-CHAT (Community Health Action Team) Outcomes

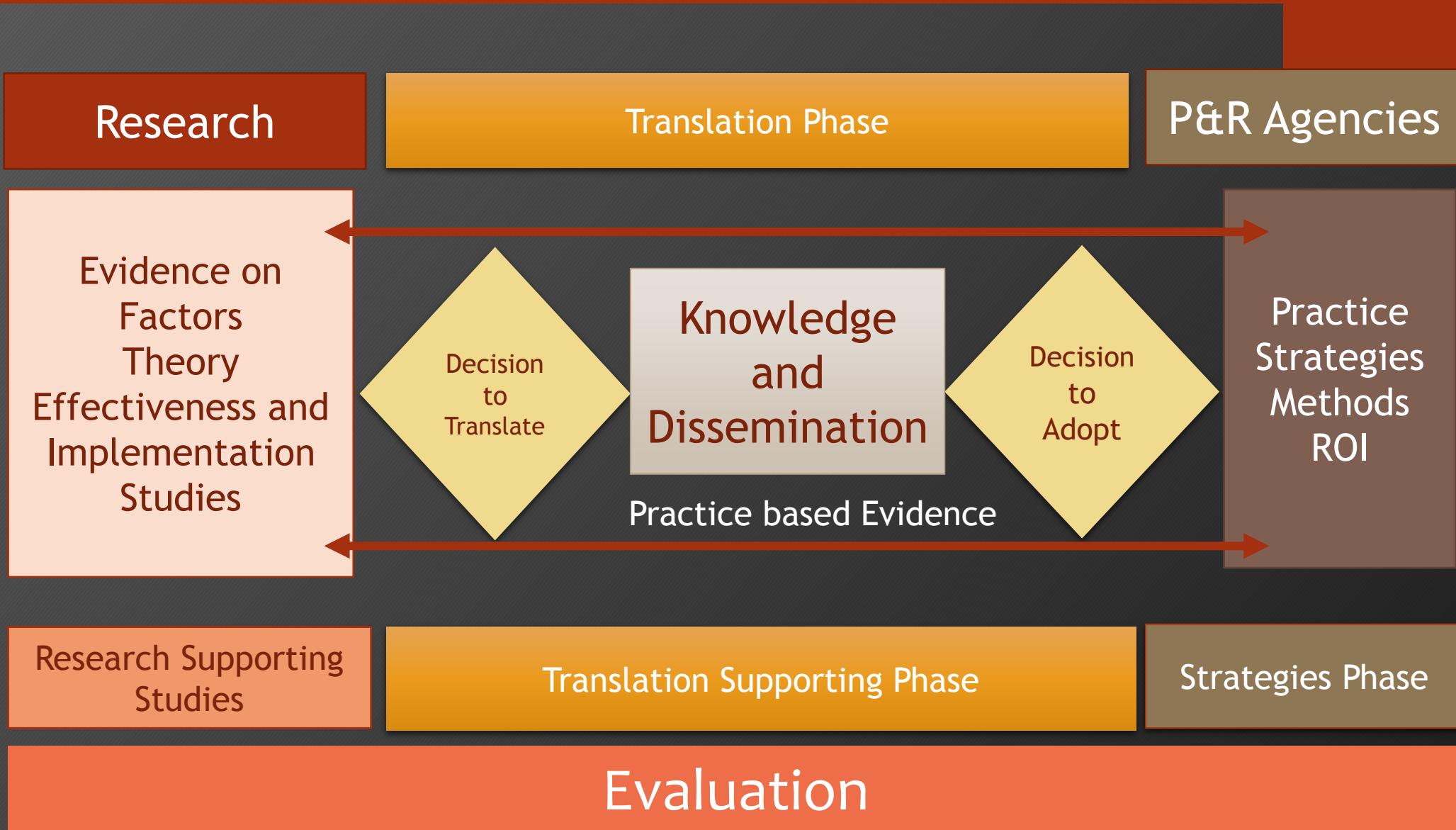
- Increased partnerships with County Health, Schools, and Hospitals
- Stakeholder identification and new programs
- Full inventory and focus on connectivity
- Helped create new HCRG Youth and Nutrition Survey (YANS) (created with East Carolina University)
- Hired FT Fitness and Wellness Coordinator

# AHPD, IL Key Outcomes

1. Strong **increased partnerships** for the newly formed *Arlington Heights Health Action Alliance (AHHAA)* – created a buzz!
2. A complete **inventory and level of service analysis** for all facilities, parks, trails, and programs.
3. The Youth Focus Group & YANS gave **youth a voice**.
4. Relevant trends, demographics, financial, and **key management aspects** were compiled.
5. **Program & participation enhancements** achieved!

# Applying Systems Thinking Adapted Knowledge to Action (K2A) Framework for P&R

(CDC, 2017; Penbrooke 2017)



# Key Conclusions for P&R and Health

## CONCLUSIONS

- Organizational culture is key to effectiveness - must have leadership and incorporation of health into all messaging
- Assignment of resources matters - staffing gets it done
- Creation of community collaboration is crucial
- Good sample policies, methods, and guidelines are available and are working
- Measurement, toolkit and evaluation - built in (ROI)
- P&R agencies do not need to “make up” their own methods, but application to practice may be different

**Thank you for attending!**

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