

# EVALUATION STRATEGIES

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# CDC 6 STEP MODEL



**ENGAGE  
STAKEHOLDERS**



**PLAN THE PROGRAM**



**FOCUS THE  
EVALUATION**



**GATHER CREDIBLE  
EVIDENCE**



**JUSTIFY  
CONCLUSIONS**



**ENSURE USE AND  
SHARE LESSONS  
LEARNED**

# **JAY'S STEPS TO EVALUATION**

**Where do you want to end up?**

**How are you going to get there?**

**How are you going to prove it you  
got there?**

**How do you not make the same  
mistakes next time?**

**How do you let other people know  
what you did?**

# **BIG QUESTIONS?**

**What are you trying to do?**



**How are you going to do it?**



**How do you know if it worked?**

# SMART OBJECTIVES

- **DEVELOP SMART OBJECTIVES. OBJECTIVES SHOULD BE SMART— THAT IS, SPECIFIC, MEASURABLE, ACHIEVABLE, RELEVANT, AND TIME-SPECIFIC.**





## **LET'S PLAN A PARTY!**

- **OBJECTIVES: LOTS OF PEOPLE SHOW UP. EVERYBODY HAS FUN.**
- **GET INTO SMALL GROUPS AND WRITE SMART OBJECTIVES.**
- **ARE YOUR OBJECTIVES, SPECIFIC, MEASURABLE, ACHIEVABLE, RELEVANT AND TIME SPECIFIC?**

# QUESTIONS?



A close-up photograph of several vibrant green leaves, likely basil, resting on a clear glass. The background is a soft, out-of-focus light blue.

# **EVALUATING POLICY AND ENVIRONMENTAL INTERVENTIONS**





# PREMISE

**Policy and environmental interventions are often more difficult to evaluate since we often do not make the change**

**Trick is to figure out what we control and the plausibility of this having the desired effect on the desired outcome.**

# OUTCOME EXAMPLE

- TRADITIONAL: BY 2025, DEVELOP AND IMPLEMENT A SMOKING CESSATION PROJECT THAT WILL ENROLL 300 PARTICIPANTS AND HAVE A 40% LONG TERM QUIT RATE.
- NEW: BY 2025, THE STATE OF HAWAII WILL PASS A SMOKE-FREE LAW TO BAN SMOKING IN ALL BUSINESSES.

# GOOD NEWS!



**WE USE THE  
SAME TOOLS**



**SMART  
OBJECTIVES**



**LOGIC MODELS**



**CDC 6 STEP  
MODEL**

# SMART OBJECTIVE EXAMPLE



- BY 2025, ALL COUNTIES IN HAWAII WILL HAVE PASSED AND IMPLEMENTED COMPLETE STREETS LEGISLATION.



**DEVELOPING LOGIC  
MODELS FOR  
ENVIRONMENTAL  
AND POLICY CHANGE**





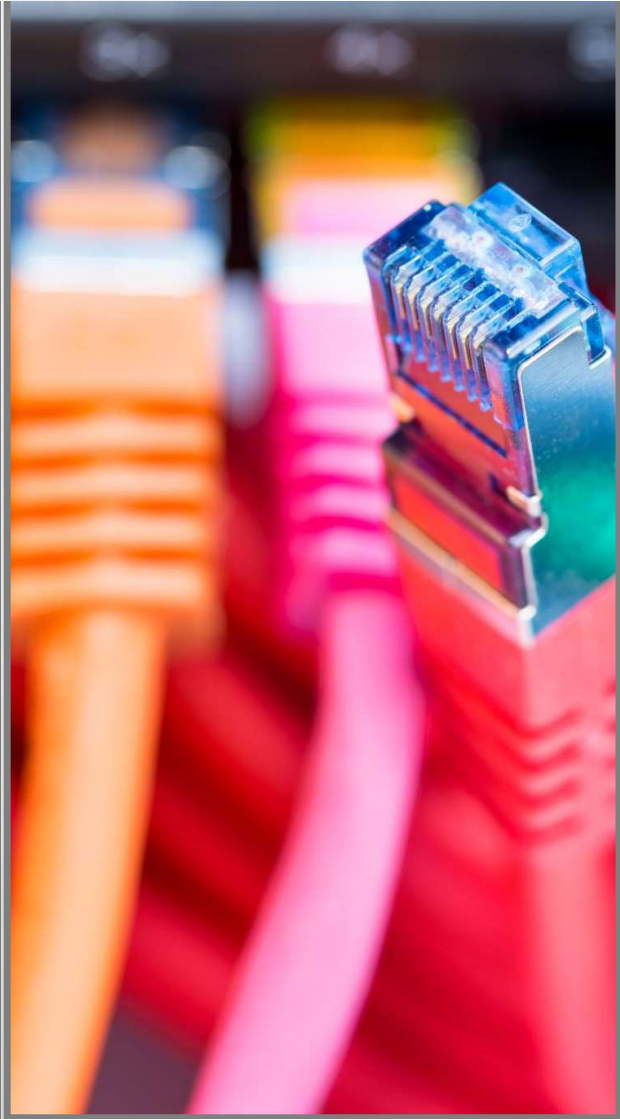


# Logic Model Complete Streets Legislation

| <b>Inputs</b>  | <b>Activities</b>   | <b>Outputs</b>  | <b>Outcomes</b>  | <b>Impact</b>   |
|--|---|---|--|---|
| <p>Hawaii NPAC coalition</p> <p>AARP</p> <p>Citizens for a livable Hilo</p> <p>Strong support from the mayor's office</p> <p>Inkind support from Honolulu County and Hawaii State offices on aging</p> <p>Foundation funds</p> | <p>Hire staff</p> <p>Advocacy training</p> <p>Train volunteer organizers (10)</p> <p>Get baseline data on county council members support.</p> <p>Have mayor introduce bill</p> <p>Implement calling campaign to council members office</p> <p>Produce PSA</p> <p>Coordinate testimony</p> | <p>Coordinator hired</p> <p># trained</p> <p># trained</p> <p>% strongly supporting</p> <p>Bill introduced</p> <p># of calls per member</p> <p># of times shown</p> <p># of testimony submitted</p> | <p>Hawaii County Council passes complete streets legislation.</p> <p>Hawaii County Department of Transportation implements complete streets in all new roadway projects.</p> | <p>All news roads in Hawaii County are built to accommodate pedestrians, cyclists and motor vehicles in that order.</p> |

# **INPUTS – AKA RESOURCES**

- **RESOURCES, SUCH AS**
  - **FUNDING**
  - **FACILITIES**
  - **STAFF**
  - **VOLUNTEERS**

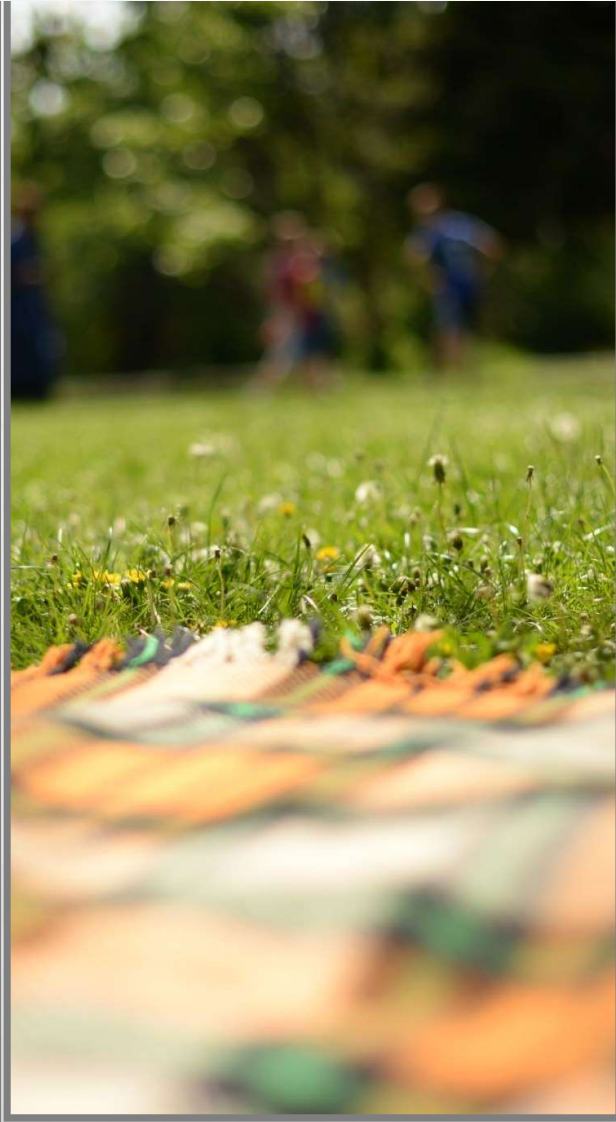


# INPUTS

- **HAWAII NPAC**
- **AARP**
- **CITIZENS FOR A LIVABLE HILO**
- **STRONG SUPPORT FROM THE MAYOR'S OFFICE**
- **IN-KIND SUPPORT FROM HONOLULU COUNTY AND HAWAII STATE OFFICES ON AGING**
- **FOUNDATION FUNDS**

# **ACTIVITIES AKA PROCESSES OR TASKS**

- **EVENTS OR ACTIONS OF THE PROGRAM, SUCH AS**
  - **RECRUITING VOLUNTEERS**
  - **RUNNING THE PROGRAM**
  - **COLLECTING DATA**



# ACTIVITIES

- **HIRE STAFF**
- **ADVOCACY TRAINING**
- **TRAIN VOLUNTEER ORGANIZERS (10)**
- **GET BASELINE DATA ON COUNTY COUNCIL MEMBERS SUPPORT.**
- **HAVE MAYOR INTRODUCE BILL**
- **IMPLEMENT CALLING CAMPAIGN TO COUNCIL MEMBERS OFFICE**
- **PRODUCE PSA**
- **COORDINATE TESTIMONY**



# **OUTPUTS AKA PROCESS OBJECTIVES**

- **DIRECT PRODUCTS OF THE PROGRAM, SUCH AS**
  - **NUMBER OF VOLUNTEERS TRAINED**
  - **NUMBER OF CALLS MADE**



# Outputs

## Activities

Implement calling campaign  
to the council members'  
offices



## Outputs

**Number of calls made**

20

# **OUTCOMES AKA OUTCOME OBJECTIVES**

- **DESIRED EFFECTS OF THE PROGRAM, SUCH AS**
  - **POLICY PASSES**
  - **POLICY IMPLEMENTED OR ENFORCED**

# **IMPACT AKA GOAL(S)**

- **MISSION OR PURPOSE OF THE PROGRAM**
- **SUCH AS**
  - **WHAT DOES THE LEGISLATION ACTUALLY DO.**
- **ALL NEW ROADS IN HAWAII COUNTY ARE BUILT TO ACCOMMODATE PEDESTRIANS, CYCLISTS AND MOTOR VEHICLES IN THAT ORDER.**

# EVALUATORS

- **CONGRATULATIONS! YOU HAVE ALL BEEN HIRED AS EVALUATORS.**
- **YOUR JOB IS TO HELP THE HEALTH DIRECTOR OF CAINTWALK, SC ASSESS IF HIS WALKABLE COMMUNITIES INITIATIVES ARE WORKING.**



**Mark Fenton, Director, Caintwalk, SC**



# **ANSWER THESE QUESTIONS FOR EACH PROGRAM**

**Where do you want to end up?**

**How are you going to get there?**

**How are you going to prove it you got there?**

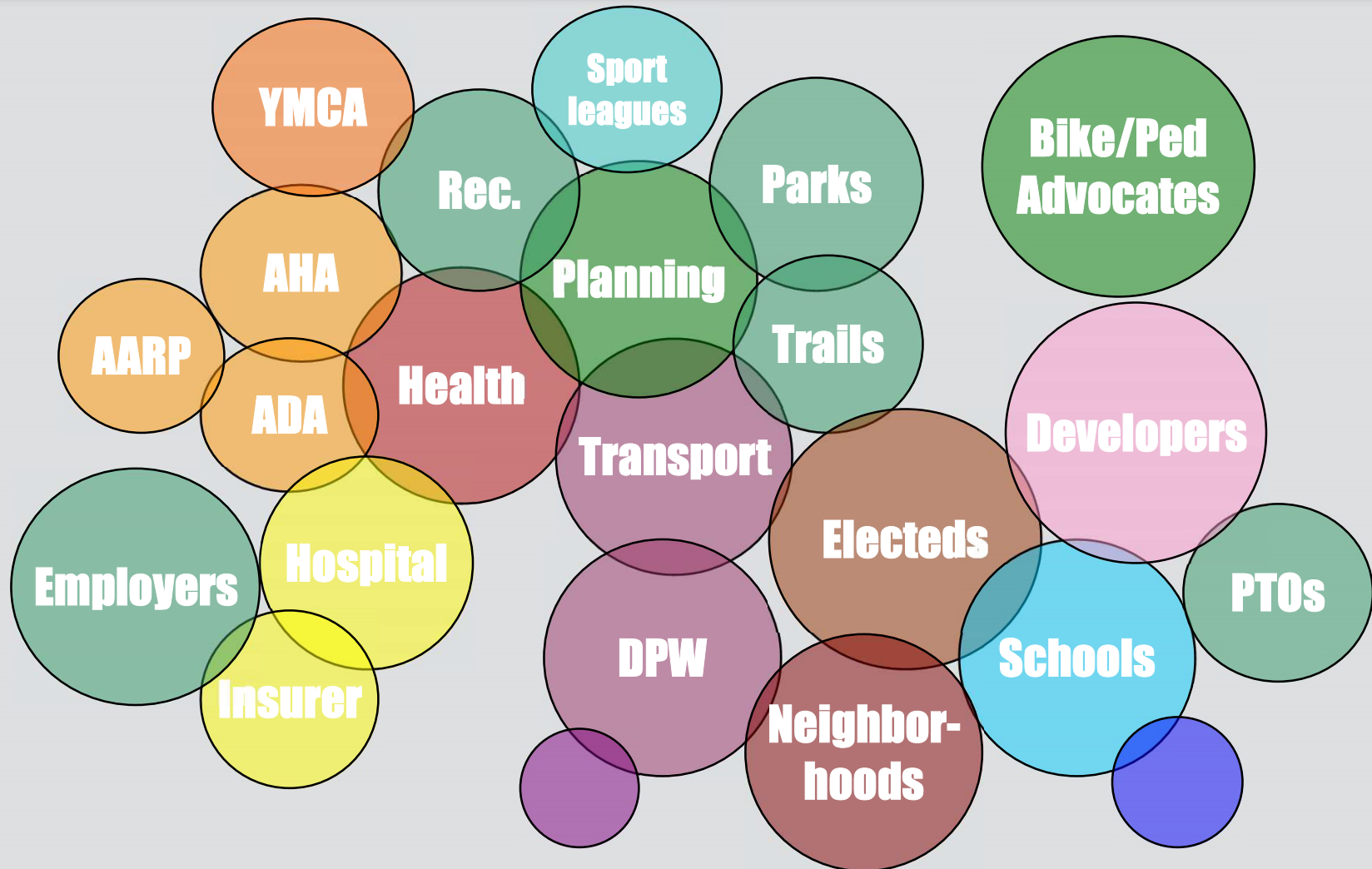
**How do you not make the same mistakes next time?**

**How do you let other people know what you did?**

# WALKING TRAIL WITH EXERCISE EQUIPMENT



# Town Obesity Coalition





**Complete Streets Policy: All users; ages & abilities; modes; all the time!**



[completestreets.org](http://completestreets.org)

# COMMUNITY-WIDE CAMPAIGN



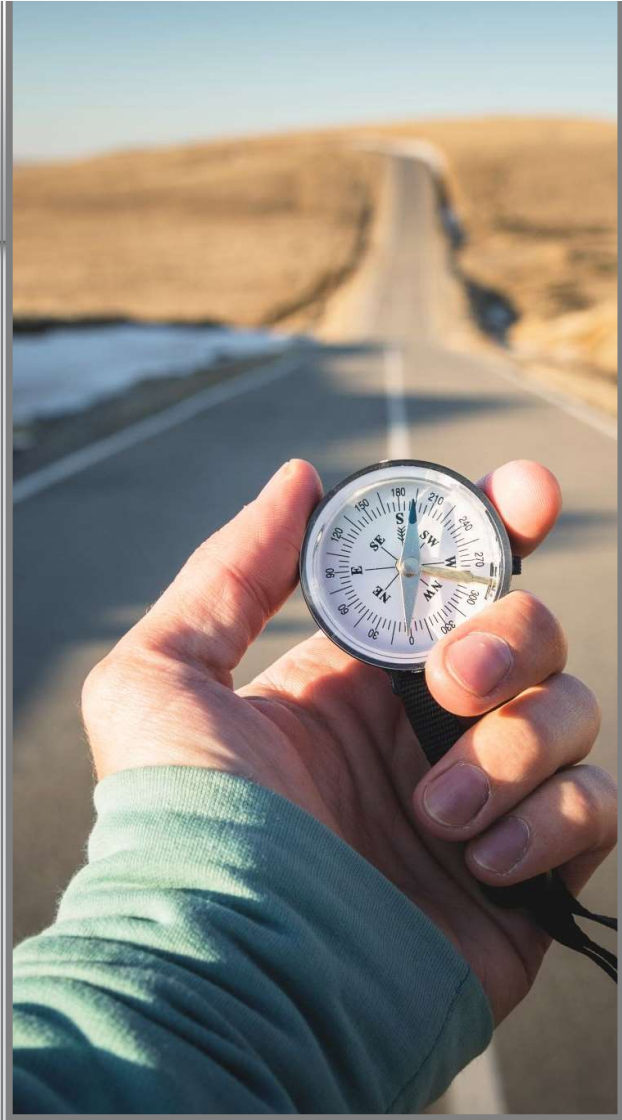
- **MEDIA CAMPAIGN**
- **WALKING CLUBS WITH MAYORATHON**
- **CIVIC ENGAGEMENT (ADVOCACY) GROUPS**
- **WALK WITH A DOC**
- **GREAT WEIGH OUT**



# SOME TOOLS



- SOPARC
- COUNTY POLICY ASSESSMENT
- POLICYMAKERS ATTITUDE SURVEY
- WALK/BIKE AUDITS - PEDS
  
- OTHERS?

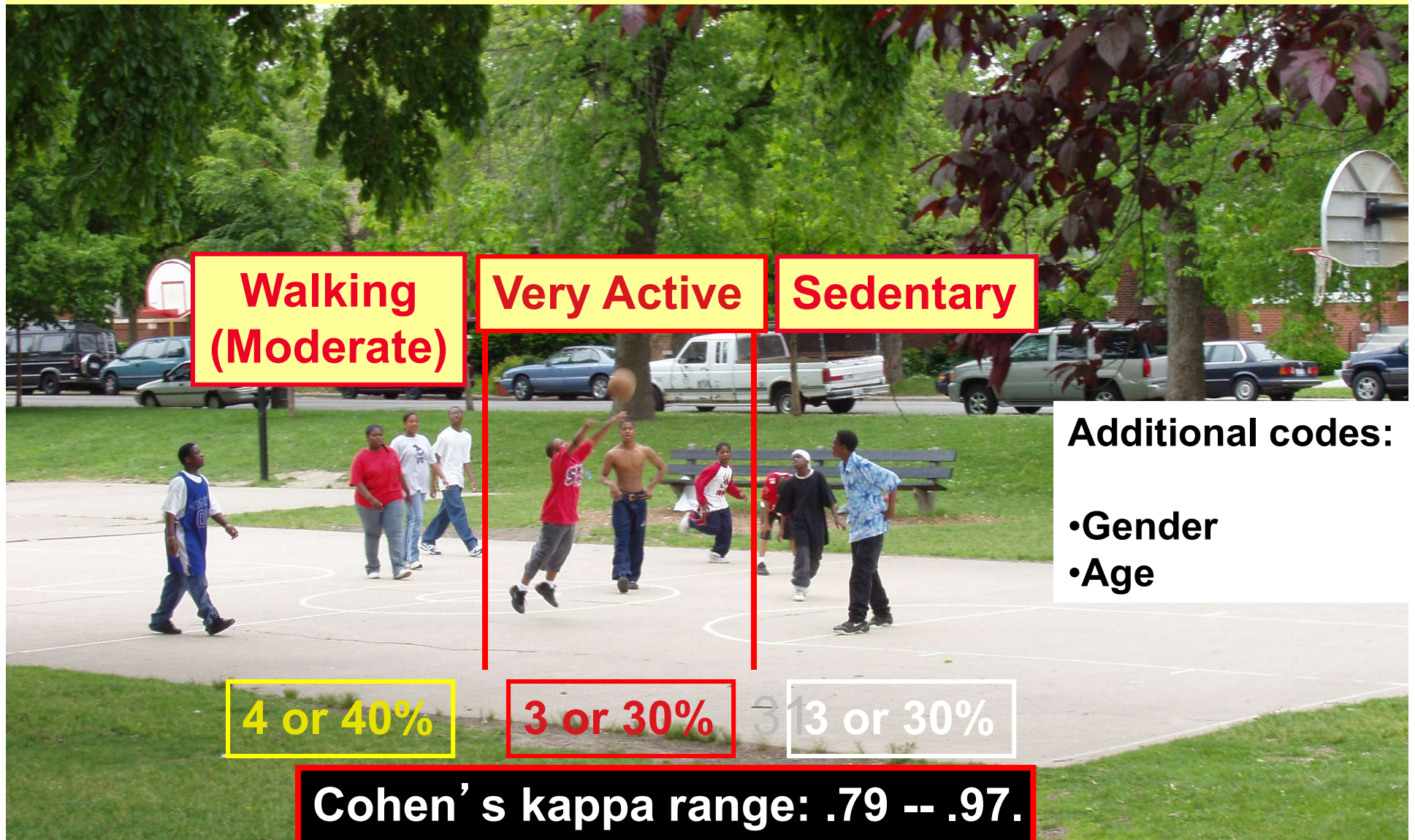


## **SOPARC/SOPLAY/SOFIT**

- SYSTEMATIC, OBSERVATIONAL MEASUREMENT IN A PREDEFINED SETTING.
- ALL INDIVIDUALS IN THE SETTING ARE OBSERVED AND RECORDED AT A POINT IN TIME.
- GIVES A REPRESENTATIVE SLICE OF BEHAVIOR AT A SPECIFIC TIME ALONG WITH RELATED ENVIRONMENTAL CHARACTERISTICS.



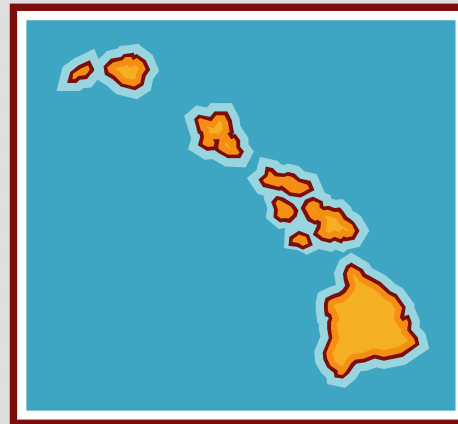
# Observational Tool: Modified “System for Observing Play and Leisure Activity among Youth” (SOPLAY)



# ASSESSING ACTIVE COMMUNITY ENVIRONMENTS

- SURVEYS ASSESSING POLICIES IN SIX DOMAINS (SIDEWALKS, BIKE LANES, GREENWAYS, RECREATIONAL FACILITIES, COMMERCIAL BUILDINGS AND SHARED-USE PATHS) AT THE COUNTY LEVEL.
- LIBRETT JJ, YORE MM, SCHMID TL. LOCAL ORDINANCES THAT PROMOTE PHYSICAL ACTIVITY: A SURVEY OF MUNICIPAL POLICIES. *AM J PUBLIC HEALTH* 2003 SEP;93(9):1399-403.

# A SURVEY OF POLICIES AND LOCAL ORDINANCES SUPPORTING PHYSICAL ACTIVITY IN HAWAII COUNTIES



- STUDY 1

Heinrich KM, Johnson CB, Jokura Y, Nett B, Maddock JE. A survey of policies and local ordinances supporting physical activity in Hawaii counties. *Preventing Chronic Disease* 2008;5(1), [http://www.cdc.gov/pcd/issues/2008/jan/06\\_0153.htm](http://www.cdc.gov/pcd/issues/2008/jan/06_0153.htm)

# Background

- **Active Community Environments (ACEs) are environments with characteristics that promote physical activity, such as:**
  - **Public access to facilities**
  - **Streets with sidewalks**
  - **Increased housing density.**





# PROBLEM AND PURPOSE

- **PURPOSE: TO PROVIDE A BASELINE ASSESSMENT OF THE EXISTING POLICIES AND ORDINANCES RELATED TO ACES AND PHYSICAL ACTIVITY IN THE STATE OF HAWAII.**
- **HYPOTHESIS: MORE POLICIES WILL EXIST FOR HONOLULU THAN KAUAI, MAUI, OR HAWAII**

# **METHOD INSTRUMENTS**

- **15-QUESTION AGES SURVEY ASSESSED COUNTIES' POLICIES/ORDINANCES RELATED TO SIX DOMAINS:**
  - **SIDEWALKS (NEW, REDEVELOPED, MIXED-USE)**
  - **BIKE LANES (NEW, REDEVELOPED, MIXED-USE)**
  - **GREENWAYS (NEW, REDEVELOPED, MIXED-USE)**

# Method Instruments

- **15-question ACEs survey assessed counties' policies/ordinances related to six domains:**
  - 4. Recreational facilities (new, redeveloped, mixed-use)**
  - 5. Commercial buildings (site plans)**
  - 6. Shared-use paths (dedicated for pedestrians; in master plan)**

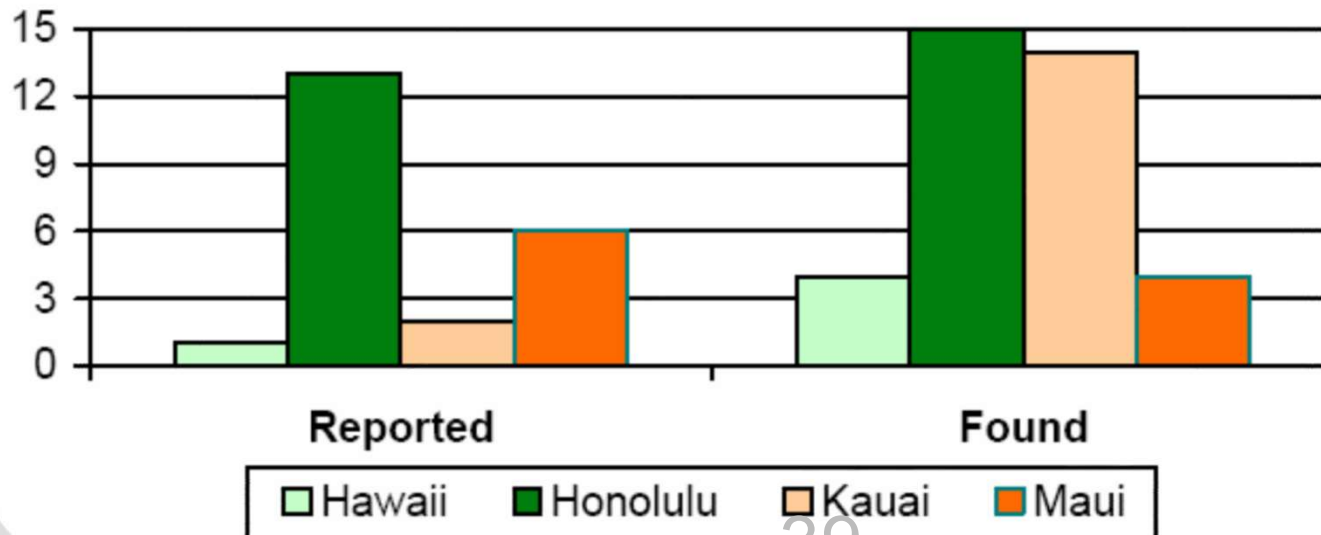
# Procedure

- **Spring 2006**
- **Cover letter and survey were mailed to planning & permitting, parks & recreation, and public works departments in Kauai, Honolulu, Maui, and Hawaii counties.**
- **100% response rate**
- **Verification of written policies**

# Consequences

- **ACEs policies and ordinances varied greatly among counties (15 possible)**

Figure. Number of Active Community Environment Ordinances by County, Hawaii, Spring 2006



**Table 1. Reported and Written Active Community Environment Policies for New, Redeveloped, and Mixed-Use Communities, Four Hawaii Counties, Spring 2006**

| County   | Population That Walks to Work, % <sup>a</sup><br>(n) | Sidewalks |    |    | Bike Lanes |    |    | Greenways |    |    | Recreational Facilities       |    |    |
|----------|--|-----------|----|----|------------|----|----|-----------|----|----|-------------------------------|----|----|
|          |  | N         | R  | M  | N          | R  | M  | N         | R  | M  | N                             | R  | M  |
| Hawaii   | 3.0 (1,873)  |           |    |    |            |    |    |           |    |    | X <sup>b</sup> Y <sup>c</sup> | Y  | Y  |
| Honolulu | 5.6 (23,022)   | XY        | XY | XY | XY         | XY | XY | XY        | XY | XY | XY                            | XY | XY |
| Kauai    | 1.9 (500)  | XY        | XY | Y  | Y          | Y  | Y  | Y         | Y  | Y  | Y                             | Y  | Y  |
| Maui     | 2.8 (1,739)  | X         | X  | X  |            |    |    |           |    |    | XY                            | Y  | XY |

N indicates new communities; R, redeveloped communities; M, mixed-use communities. Blank cells indicate that the policy did not exist for that category.

<sup>a</sup> Percentages calculated from total number of people who reported working.

<sup>b</sup> X = Policy was reported to exist by survey respondent.

<sup>c</sup> Y = Policy wording was found in analysis of existing policies.

**Table 2. Reported and Written Active Community Environment Policies for Commercial Buildings and Shared-Use Paths, Four Hawaii Counties, Spring 2006**

| County   | Commercial Buildings | Shared-Use Paths for Pedestrians | Shared-Use Paths in Master Plan |
|----------|----------------------|----------------------------------|---------------------------------|
| Hawaii   |                      |                                  | Y <sup>a</sup>                  |
| Honolulu | X <sup>b</sup> Y     |                                  | Y                               |
| Kauai    | Y                    |                                  | Y                               |
| Maui     | X                    |                                  | Y                               |

Blank cells indicate that the policy did not exist for that category.

<sup>a</sup> Y = Policy wording was found in analysis of existing policies.

<sup>b</sup> X = Policy was reported to exist by survey respondent.



# Interpretation

- **Existence of ACEs policies varied widely.**
- **Survey responses underrepresented existence of ACEs policies.**

# Priority of Activity-Friendly Community Issues among Key Decision Makers in Hawaii

## ■ Study 2



Maddock JE, Reger-Nash B, Heinrich K, Leyden KM, Bias TK. Priority of activity-friendly community issues among key decision makers in Hawaii. *Journal of Physical Activity & Health*, 2009;6(3):386-390.

# Background

- **Needs for population-level changes in PA:**
  - **Policy changes at all government levels**
  - **Land-use regulations and enforcement changes**



# Rationale

- **Elected and appointed officials are essential for health and promoting AFCs**
- **Little research has assessed AFCs**
- **Unclear what issues are priorities for policymakers**
- **Purpose: to assess the priority of AFC policies among decision makers in Hawaii**

# Methods

- **Cover letter and survey mailed to 185 appointed/elected officials in Feb. 2007**
  - **25 state senators**
  - **51 state representatives**
  - **2 executive branch members**
  - **34 county council members**
  - **4 mayors**
  - **69 appointed state-level officials (directors and deputy directors of state departments)**



# Survey



- **Asked to list the three most important problems that needed to be addressed in Hawaii (open-ended)**
- **Asked to rate the severity of 23 problems in Hawaii**
  - **1 – not a problem to 5 – problem of extreme importance**

# Survey



- **6 AFC items on list**
  1. **Poorly planned development and sprawl**
  2. **Increasing traffic**
  3. **Lack of pedestrian walkways, crosswalks and sidewalks**
  4. **Pedestrian safety**
  5. **Lack of recreational activities**
  6. **Obesity**
- **Asked what Hawaii needs most to solve these problems**

# Results

- **70.4% response rate (n=126)**
- **Most important problems**
  - **Affordable housing (n=44)**
  - **Environmental/sustainability issues (n=42)**
  - **Sprawl/traffic/population growth (n=33)**
  - **Healthcare issues (n=33)**
  - **Economy (n=28)**
  - **Obesity (n=1)**

# Results

- **Problem Importance**
  - 1. Affordable housing (68% extreme importance)**
  - 2. Drug abuse (54.5%)**
  - 4. Increasing traffic (43.9%)**
  - 8. Poorly planned development and sprawl (36.6%)**
  - 12. Pedestrian safety (24.4%)**
  - 17. Lack of pedestrian walkways, crosswalks and sidewalks (10.6%)**
  - 18. Obesity (9.7%)**

# Results

- **What Hawaii needs to solve these problems:**
  - **46.3% more active participation for citizens**
  - **24% more funding**
  - **6.6% more expert, legal or scientific assistance**



# Discussion

- **Only 2 of the 6 AFC policy areas (traffic & poorly planned development and sprawl) in top 50% of priority items**
- **Lack of AFC priority compared to other public health and social welfare issues**

# Discussion

- **Education is needed of directors/deputy directors**
- **Overall need for public health education of elected and appointed officials**

# ENVIRONMENTAL ASSESSMENTS



- WALKABILITY/BIKABILITY
- PARK INVENTORIES
- SIDEWALK MILES
- EXISTING GIS DATABASES
  
- [HTTP://ACTIVELIVINGRESEARCH.ORG/](http://activelivingresearch.org/)

# **WALKABILITY / BIKABILITY SURVEILLANCE**



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- **USE GIS TO SELECT A RANDOM SAMPLE OF STREETS**
- **MEASURE W/B USING PEDS**
- **COMPARE COUNTIES/TOWNS ACROSS TIME**

# YOUR TURN

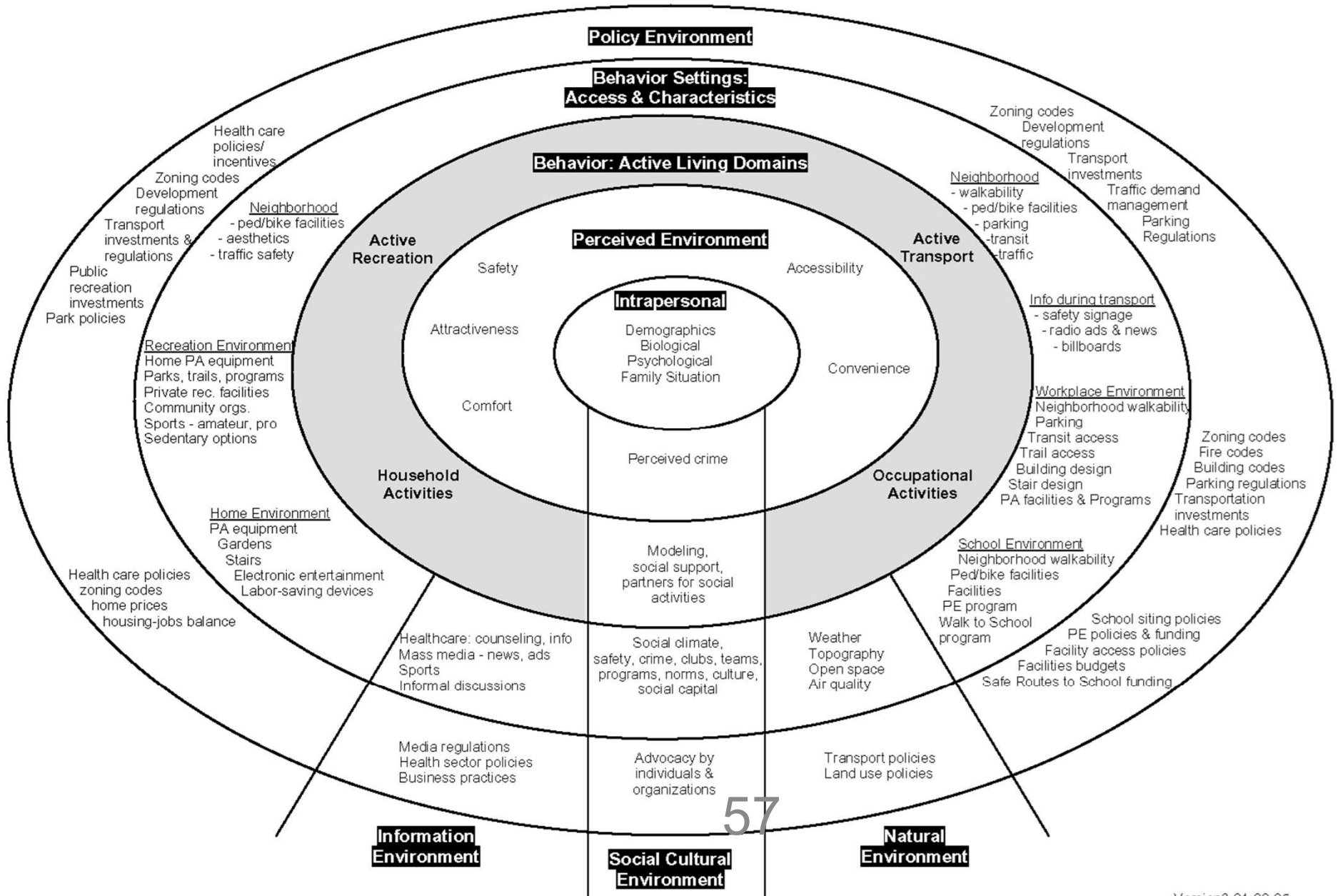
- **DEVELOP A LOGIC MODEL AND EVALUATION PLAN FOR YOUR CAPSTONE PROJECT.**
- **FOLLOW THE 6 STEP MODEL**
- **DEVELOP MEASURABLE OBJECTIVES**
- **CREATE A LOGIC MODEL**



# A SYSTEMS APPROACH

- MANY OF US KNOW HOW TO EVALUATE A SINGLE PROGRAM.
- HOW TO DEVELOP OBJECTIVES AND MEASURE PROCESS AND IMPACT OUTCOMES.
- THE QUESTION IS HOW DO WE MEASURE:
  - THE IMPACT OF OUR PORTFOLIO
    - OR PROJECTS WHERE WE HAVE LIMITED CONTROL LIKE COALITIONS.

# Ecological Model of Four Domains of Active Living



# WHAT ARE YOU TRYING TO DO?



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 **WHAT ARE THE MOST IMPORTANT OUTCOMES OF WHAT YOU/YOUR PROGRAM IS TRYING TO DO?**

 **HOW DO WE CHOOSE FROM THE SOCIAL ECOLOGICAL MODEL?**

# WHERE ARE WE NOW?

- GOOD DATA IS ESSENTIAL TO SYSTEMS EVALUATION. SINCE WE ARE TRYING TO CHANGE A STATE/COUNTY/CITY WE NEED GOOD SURVEILLANCE DATA.
- DO YOU HAVE THIS DATA AND DO YOU KNOW BY HEART THE MOST IMPORTANT INDICATORS?

## **EPIDEMIOLOGICAL ASSESSMENT**

- SURVEILLANCE TOOL - BRFSS
- COMMUNITY PROFILES  
[HAWAIIHEALTHMATTERS.COM](http://HAWAIIHEALTHMATTERS.COM)
- SUBGROUPS, DISPARITIES
- USE TO DEVELOP THE PROGRAMS ULTIMATE BENEFIT.
- “INFANT MORTALITY WILL BE REDUCED BY 25% IN KAUAI BY 2010.”
- HEALTHY PEOPLE 2010 OBJECTIVES

# DATA SOURCES

- BRFSS AND YRBS MOST COMMON
- OTHER SOURCES?
- HOW WELL DO YOU KNOW YOUR POPULATION?
  - WHO IS THE MOST AT-RISK?
    - GENDER
    - AGE
    - RACIAL GROUPS
    - GEOGRAPHY

WALKABILITY SURVEILLANCE?

POLICY SURVEILLANCE?



WORKING BACKWARDS TO DIAGNOSE WHICH  
COMBINATION OF IV STRATEGIES WILL BEST ACHIEVE  
THE OBJECTIVES.

- WHAT DO WE WANT TO ACHIEVE?
  - OBESITY REDUCTION
  - INCREASING PHYSICAL ACTIVITY
  - OTHER



## 2. HOW DO WE ACHIEVE THIS OUTCOME?

- LEISURE TIME PA
- TRANSPORTATION
- INCIDENTAL PA

- WHO ARE WE TRYING TO CHANGE

- AGE GROUPS

- GENDER

- RACIAL AND ETHNIC GROUPS

- GEOGRAPHIC REGIONS

- OTHER?

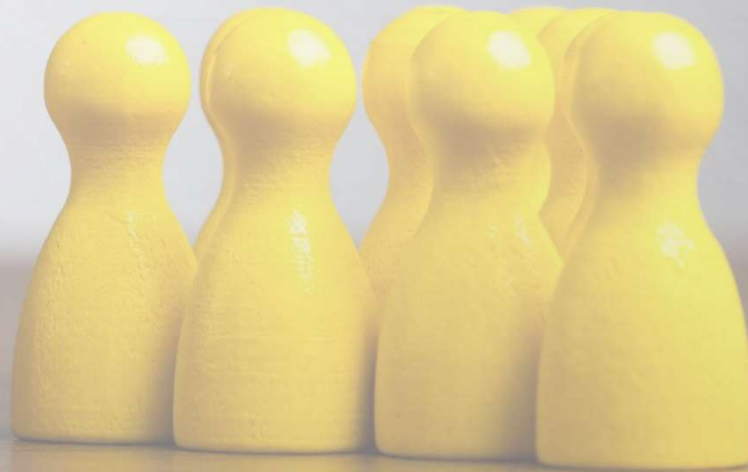
- WHAT ARE THE MAJOR BARRIERS IN THESE GROUPS TO PERFORMING THE BEHAVIORS OF INTEREST?

-SAFETY

-ACCESS

-SKILLS

-TIME





# BRAINSTORMING QUESTIONS



- START BY ASKING “WHY” OR “HOW” QUESTIONS ABOUT DETERMINANTS OF BEHAVIORAL AND ENVIRONMENTAL CONDITIONS.
- “WHY DO ADOLESCENT GIRLS STOP EXERCISING”
- “HOW CAN POLICY INCREASE ACTIVE COMMUTING”

- MORBIDITY AND MORTALITY
- BEHAVIORAL OUTCOMES
- PROGRAM OUTCOMES
  
- IF YOUR PROGRAMS ARE SUCCESSFUL WILL THEY LEAD TO MEASURABLE CHANGES IN BEHAVIORAL OUTCOMES?





# **PUBLIC HEALTH EQUATION**

- REACH \* EFFECTIVENESS =  
IMPACT
- $200 * 80\% = 160$  PEOPLE CHANGE
- $500,000 * 25\% = 125,000$  PEOPLE  
CHANGE
- $4,000,000 * 5\% = 200,000$  PEOPLE  
CHANGE



**PAU**

