

# **Public Health PBRN**

## **Monthly Virtual Meeting**

### **September 19, 2013**


Research-in-Progress Presentation by  
Colorado PBRN

**Implementing the Minimum Package of Public Health Services: Preliminary findings in the  
Core Services Research Project in Colorado.**

**Sarah Lampe, Adam Atherly, Julie Marshall and Lisa VanRaemdonck**

If you are dialed into the conference line on the telephone 877-394-0659 code 7754838037#,  
please turn off your computer speakers.

Please mute your telephone until the Q&A. If your telephone does not have a mute button,  
press \*6 to mute and #6 to unmute



# Implementation of Core Public Health Services in Local Public Health Agencies Across Colorado



**COLORADO PUBLIC HEALTH PRACTICE  
BASED RESEARCH NETWORK  
DECEMBER 2011 – NOVEMBER 2013**

**PROJECT FUNDED BY:  
ROBERT WOOD JOHNSON FOUNDATION**

**SARAH LAMPE  
ADAM ATHERLY  
JULIE MARSHALL  
LISA VANRAEMDONCK  
KATHLEEN MATTHEWS**



**Colorado School  
of Public Health**



Colorado Department  
of Public Health  
and Environment

# Presentation Roadmap



- **Core Services Project Summary**
- **Core Services Measurement Development**
- **Core Services Preliminary Data**
- **Core Services Future Analysis and Dissemination**

# Background



- **The Public Health Act of 2008:**
  - Restructured the local governmental public health system
  - Defined the duties of a local public health agency and local boards of health
  - Established a collaborative, five-year planning cycle at the state and local levels
  - Directed the Colorado Board of Health to:
    - ✦ Establish minimum qualifications for public health directors
    - ✦ Define **core public health services** and quality standards
    - ✦ Determine a funding formula for local public health agencies

# Core Services



- **Core Services Promulgated into Rule October 2011:**
    - Assessment, Planning, and Communication
    - Vital Records and Statistics
    - Communicable Disease Prevention, Investigation, and Control
    - Prevention and Population Health Promotion
    - Emergency Preparedness and Response
    - Environmental Health
    - Administration and Governance
- ...performed in accordance with the 10 Essential Public Health Services*

# Core Services Research Aims



- 1. Examine the effect of the core services regulation on the adoption/assurance of core services by LPHAs**
- 2. Examine LPHA-level structural factors related to change in the adoption of core services**
- 3. Examine changes in health outcomes related to adoption of core services**

# Core Services: Study design



- **Longitudinal pre-post assessment of core service delivery**
  - PRE: Baseline review completed by August 2011
  - INTERVENTION: Core Services Rule Making in October 2011
  - POST: Follow-up in early 2013 via Annual Report
- **Structural measures as covariates**
- **Health outcomes will be matched to core service delivery measures where possible**

# Baseline Review



**CONDUCTED IN SUMMER 2011**





# Methods: Baseline Review of LPHA's



- **Conducted Spring/ Summer 2011**
- **All 54 local public health agencies participated**
  - Extensive tool filled out prior to visit
  - 3-4 hour interview
    - ✦ Directors and staff members
    - ✦ Board of health members (uncommon)
  - Data review and resubmission for any additional gaps

# Baseline Review Tool



- **Used existing and validated tools as a starting point for development of Baseline Review Tool**

# NACCHO Profile 2010



## Population-based Primary Prevention Activities

54. Check all that apply. (Variable values: unchecked= 0, checked= 1)

	Performed by LHD directly	Contracted out by LHD	Performed NEITHER by LHD directly <u>NOR</u> contracted out by LHD
Injury	c6q87a	c6q87b	c6q87h
Unintended pregnancy	c6q88a	c6q88b	c6q88h
Chronic disease programs	c6q89a	c6q89b	c6q89h
Nutrition	c6q90a	c6q90b	c6q90h
Physical activity	c6q91a	c6q91b	c6q91h
Violence	c6q92a	c6q92b	c6q92h
Tobacco	c6q93a	c6q93b	c6q93h
Substance abuse	c6q94a	c6q94b	c6q94h
Mental illness	c6q95a	c6q95b	c6q95h

# Baseline Review Tool



\*Note: Direct Services in these areas are located within the Direct Services & Other Tab.

Educational Materials
Educational Media
Cultural/ linguistic materials
Cultural/ linguistic specific programs
Education/Training Programs and Groups
Community Development (e.g. coalitions)
Policy Initiatives (including Social/ Environmental/Organizational Change
Other (please name)

Chronic diseases, conditions and related risk factors prevention and education*								
Tobacco Prevention								Please name here
Nutrition Promotion								Please name here
Physical Activity								Please name here
Obesity Prevention								Please name here
Worksite wellness								Please name here
Substance Abuse								Please name here
Mental health								Please name here
Automated External Difibrillator (AED)								Please name here
Cardiopulmonary Resuscitation (CPR)								Please name here
Other (please name)								Please name 'other' here

# Other data gathered



- **Per Service Category**
  - Self-Reported Capacity
- **Per Core Service**
  - FTE and personnel
  - Funding
  - Areas of Improvement
  - Promising Practices

# Follow-up Data Collection



# Core Services Research: Measures



- Had to allow for pre-post comparison to baseline survey (August 2011)
- Did not want to ask as much as Baseline
  - Baseline = 1,750 measures

# Core Services Research: Follow-up Measures



- **Measures**
  - Follow-up = 250 measures
    - ✦ Final measures determined using modified Delphi process with input from the Project Advisory Committee (PAC)
- **Administered in annual survey format in April-May 2013**
- **Measure some aspect(s) of the following:**
  - availability, volume/intensity, capacity, reach, and/or quality



# Service Delivery Measure Prioritization Process: Example



Environmental Health

Baseline = **843** Measures



Experience from Baseline Interviews

Removed = **565**

Remaining = **278** Measures



1<sup>st</sup> Prioritization - PAC Survey

Removed **149**

Remaining = **129** Measures



2<sup>nd</sup> Prioritization

Removed at least **54**



Final

For **75** measures

# Core Services Research Project Advisory Committee

## **Alice Nightengale**

Environmental Public Health Manager  
Denver Environmental Health

## **Alison Grace Bui**

Public Health Data Coordinator  
CDPHE

## **Beth Gyllstrom**

Research Scientist  
Minnesota Department of Public Health

## **Edward Dauer**

Dean Emeritus  
University of Denver Sturm School of Law

## **Gulzar Shah**

Associate Professor  
Georgia Southern University

## **Indira Gujral**

Senior Epidemiologist  
CDPHE

## **Jennifer Ludwig**

Public Health Director  
Eagle County Public Health

## **Kim Gearin**

Research Scientist  
Minnesota Department of Health

## **Laurie Schneider**

Public Health Training Center Coordinator  
Public Health Training Center, CSPH

## **Martha Meyer**

PhD student  
CSPH

## **Tom Butts**

Director of Environmental Health  
Tri-County Health Department

# Measure Types



- **Service Delivery/Availability Measures**
- **Capacity Measures**
- **Direct Service Measures**
- **FTE and Staffing Measures**
- **Funding Measures**

# Pilot Testing, Reliability, and Validity



- **Pilot Testing**

- Tested all measures within a stratification of agencies across the state

- **Reliability**

- Test-Retest Reliability on selection of measures across all core services 4 weeks after initial instrument was completed

- **Validity**

- Convergent and Divergent Validity using data from the 2013 NACCHO Profile which uses the same time period and gathers data using similar constructs

# What do we know now?



**DATA ANALYSIS AND FINDINGS THUS FAR**

# Findings

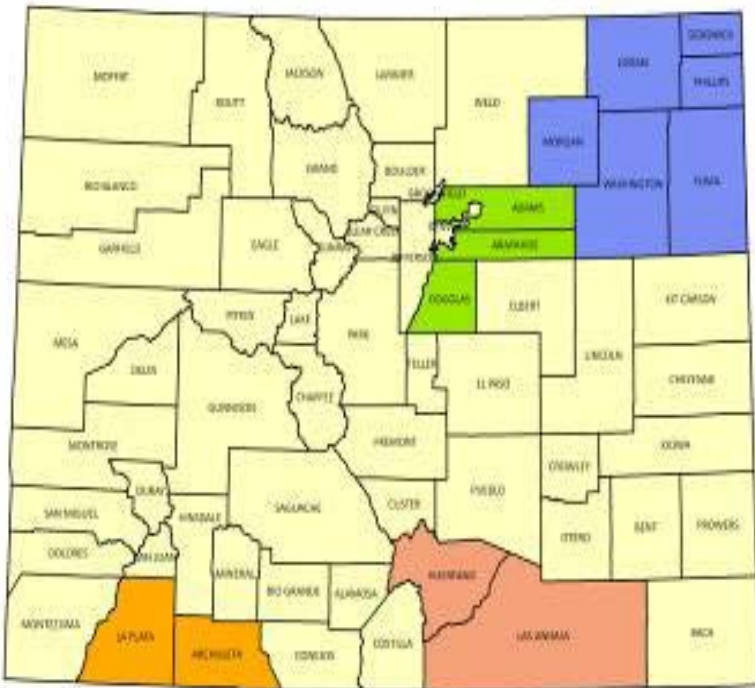


- **Preliminary**
- **Few areas all in aggregate**
  - Some service delivery
  - Funding
  - Staffing

# Overall Structure



- **54 LPHAs (51 reporting in these data)**
  - Single County Agency - 38
  - District/Multi-County Agency - 4
  - Part of HHS - 8
  - Other - 4
- **58 satellite offices**



# Governance



## Local Boards of Health Composition

<b>Composition BOH</b>	
County Commissioners	122
City Council Members	15
Other Elected Officials	4
Medical Officer	5
Other Community Representatives	70
<b>TOTAL number of BOH members</b>	<b>215</b>

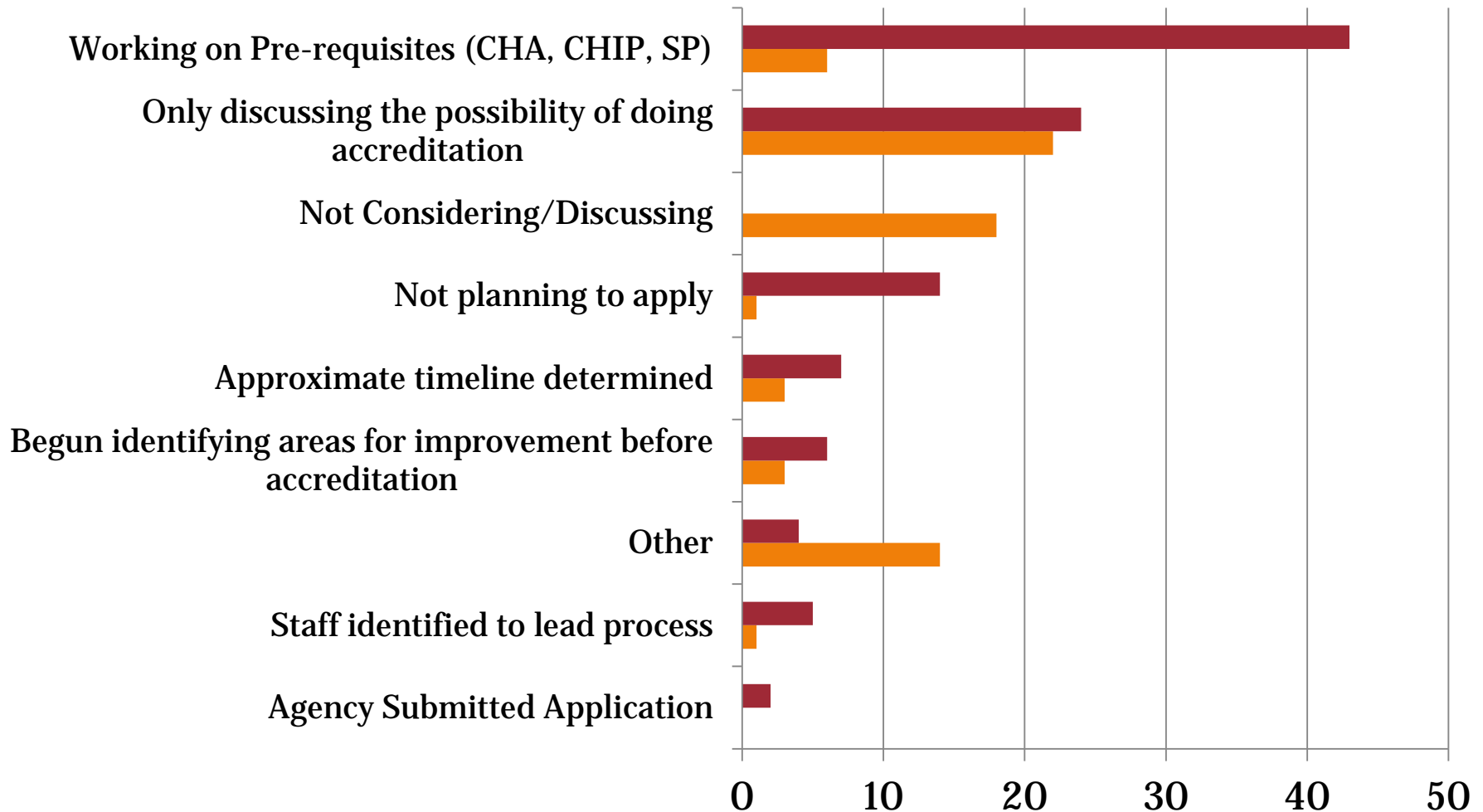
## Local Boards of Health Expertise

	Total Number	Agencies
Public Health Expertise	16	10 (20%)
Environmental Health Expertise	13	9 (18%)
Other Health Expertise	41	19 (37%)



# PHAB:

Which of the following best describes your LPHA with respect to participation in the Public Health Accreditation (PHAB) program?



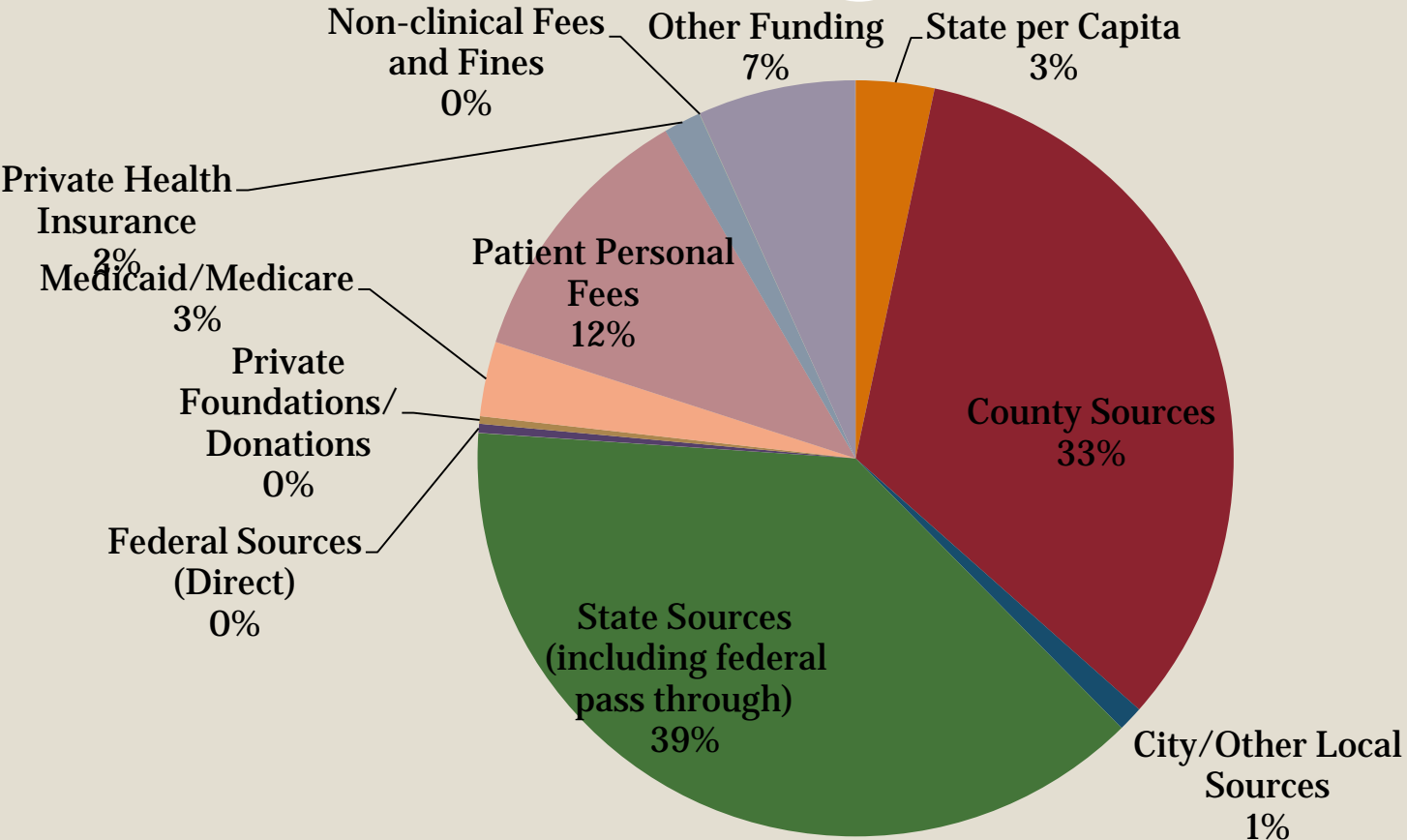
# Communicable Disease

## FTE



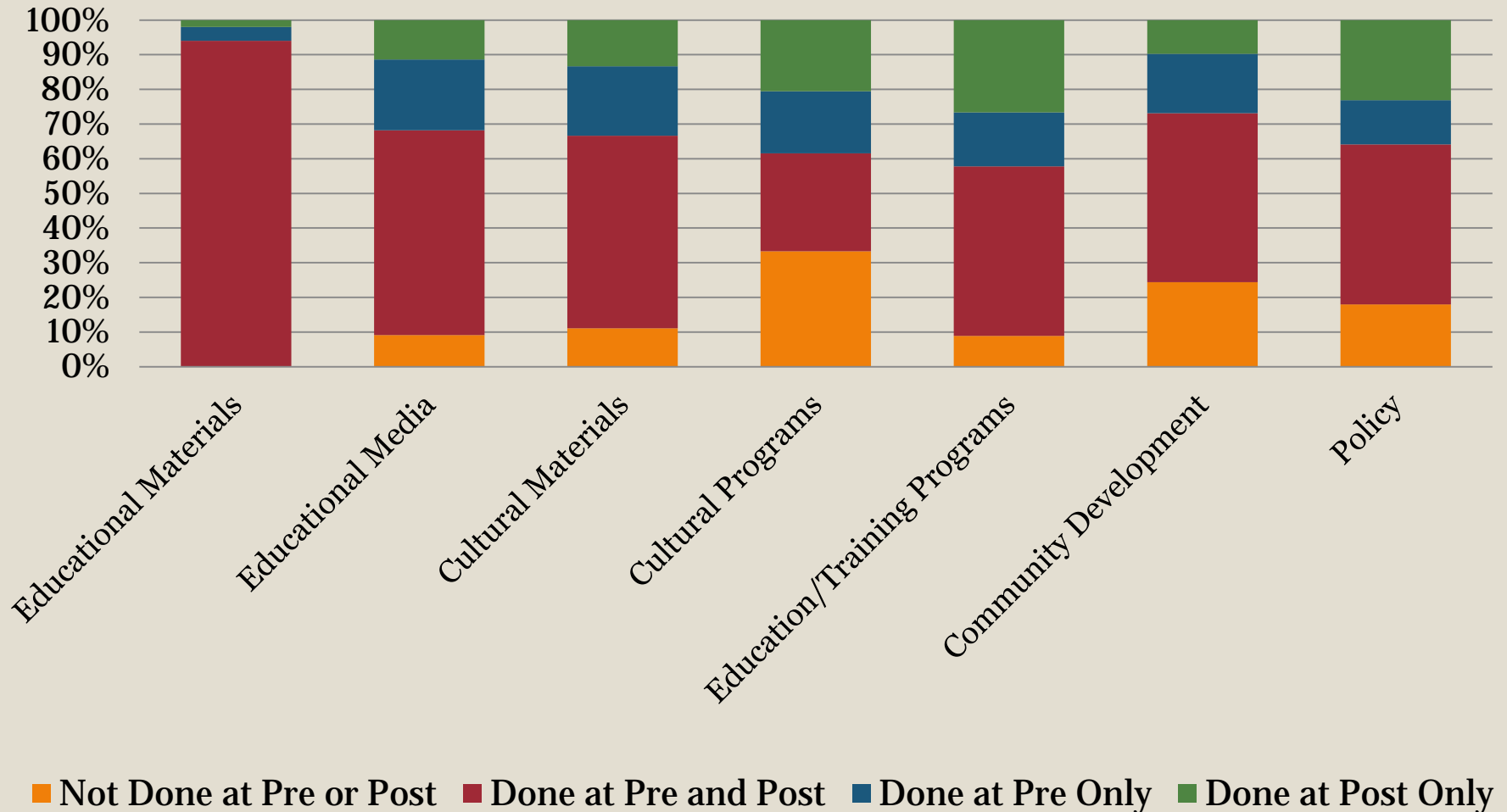
	<b>Personnel</b>	<b>FTE</b>
<b>Total</b>	183.50	112.03
<b>Mean</b>	4.08	2.55
<b>Median</b>	3.00	1.00
<b>Max</b>	27.00	26.12
<b>Min</b>	0.00	0.00

# Communicable Disease Funding

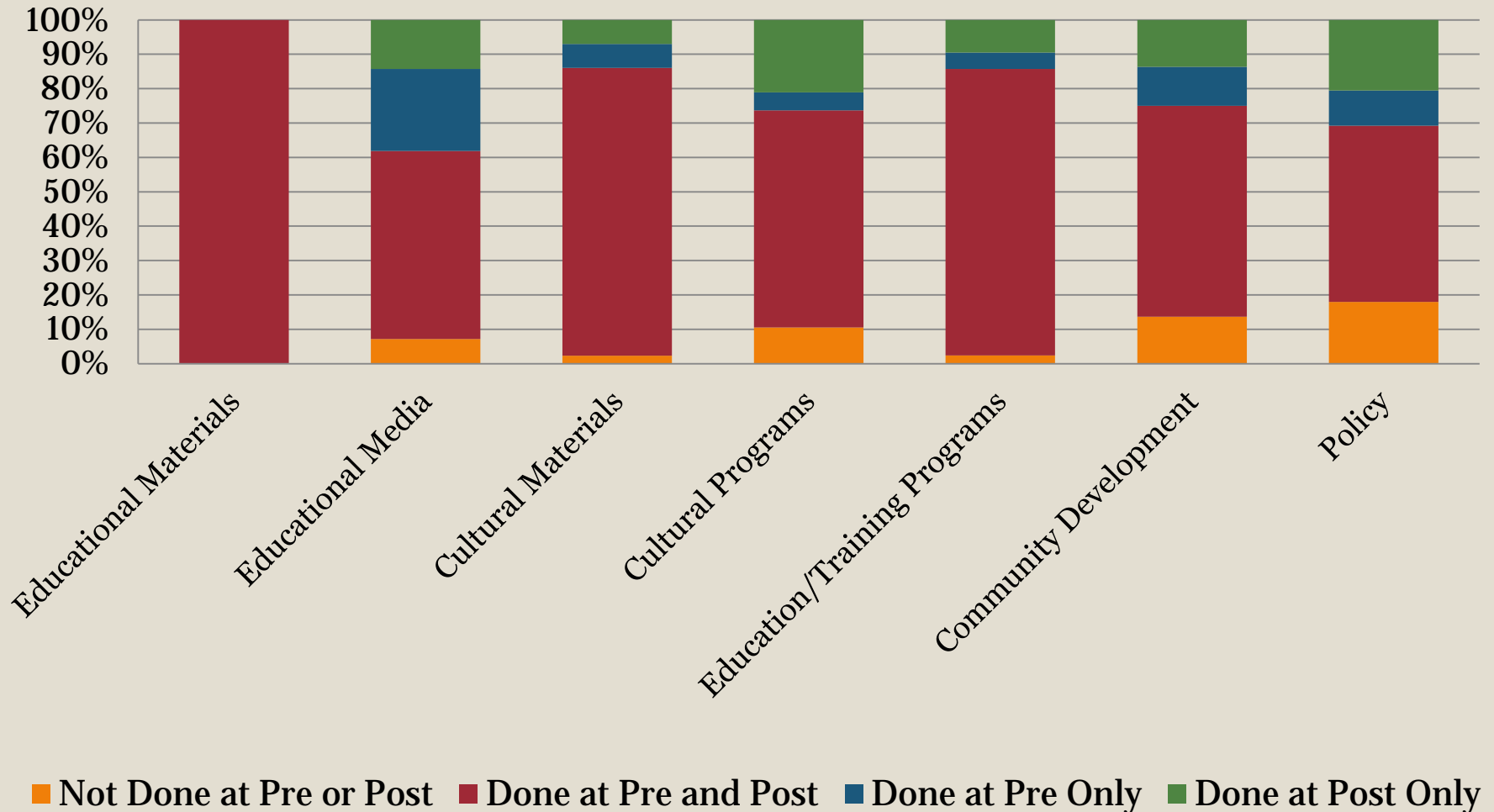


**Total**  
**\$9,342,747**

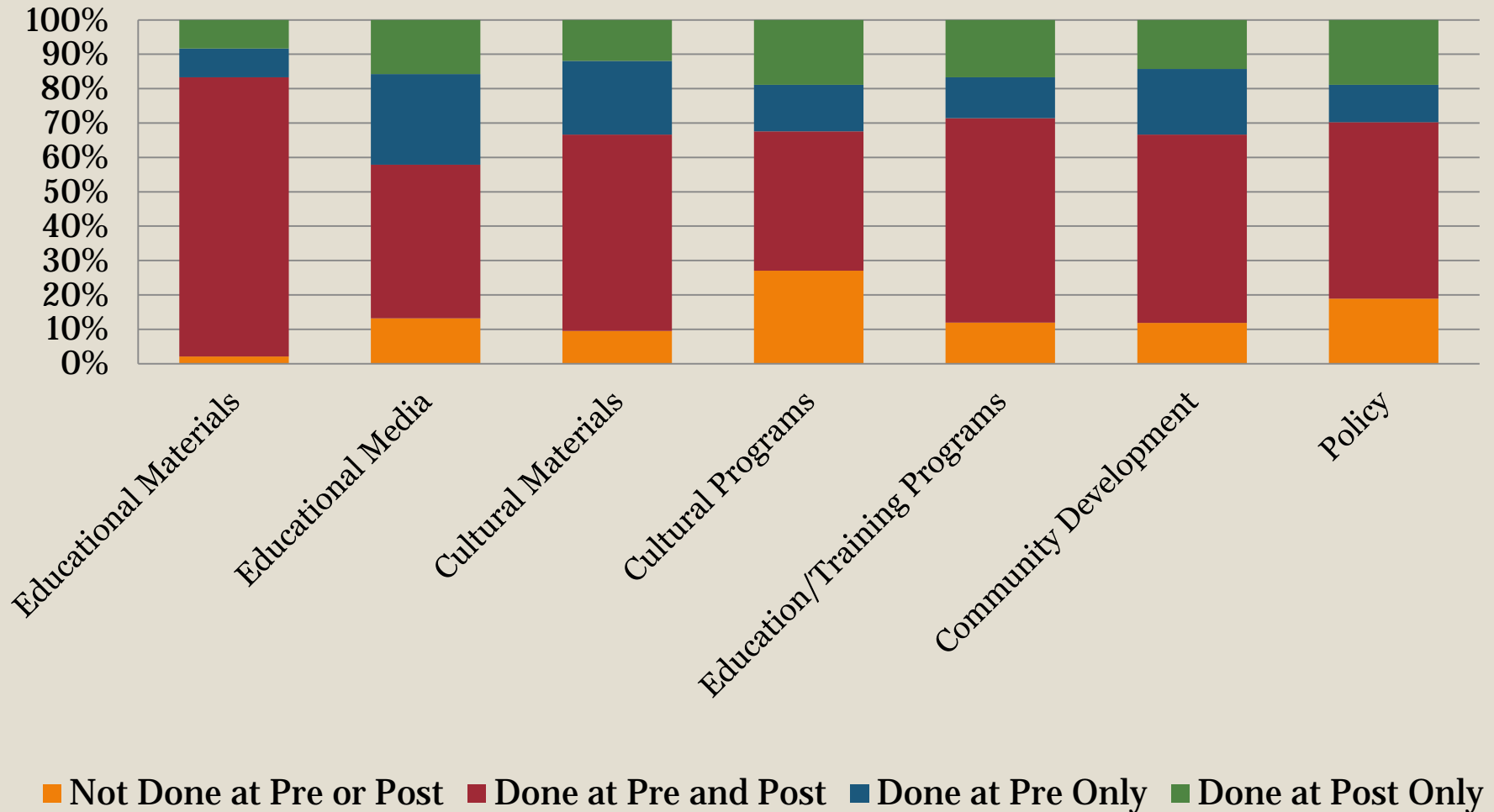
# Prevention & Population Health Promotion: Tobacco



# Prevention & Population Health Promotion: Nutrition



# Prevention & Population Health Promotion: Physical Activity



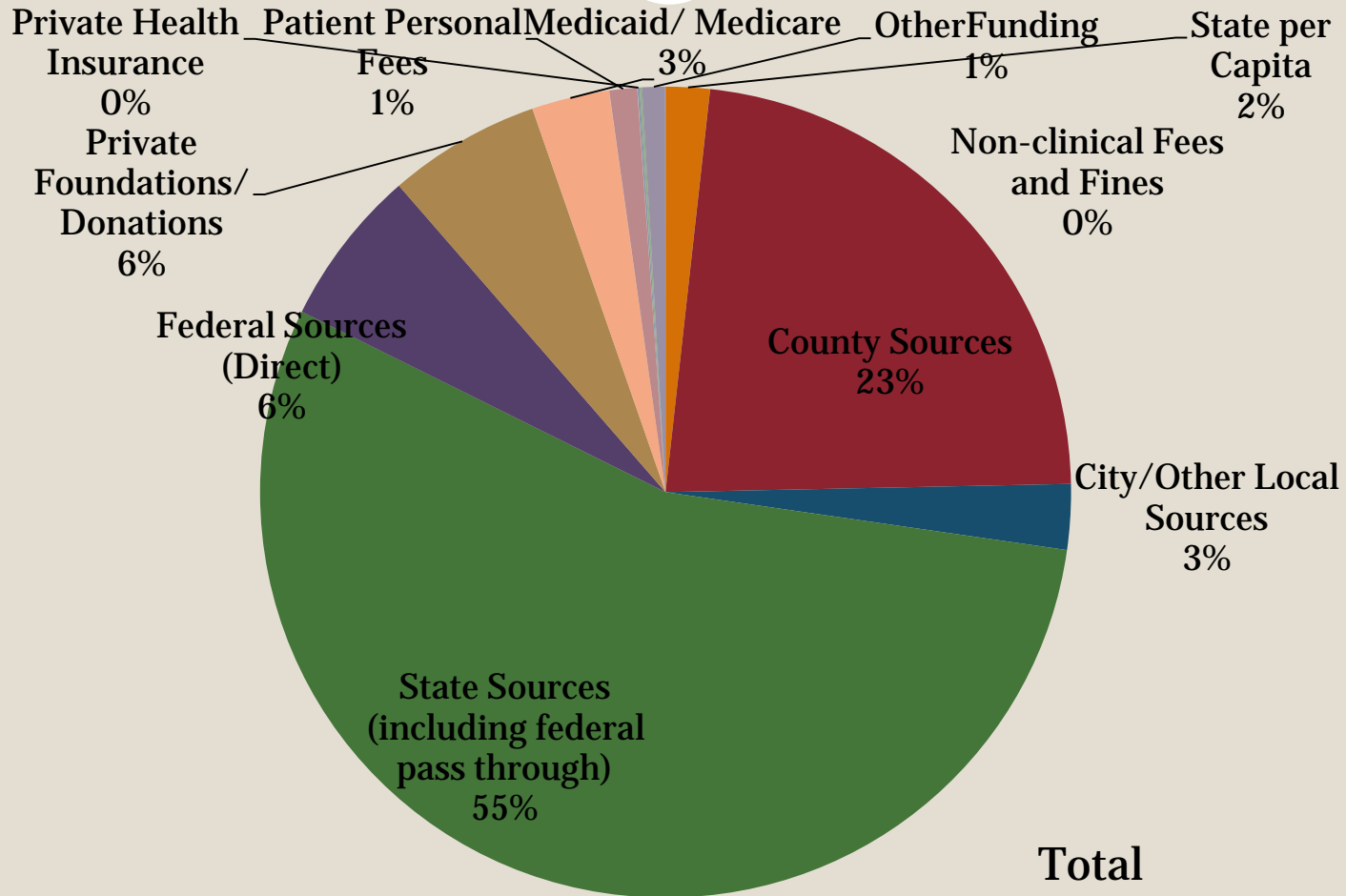
# Prevention & Population Health Promotion

FTE



	Personnel	FTE
<b>Total</b>	348.00	367.45
<b>Mean</b>	7.57	7.99
<b>Median</b>	3.00	1.22
<b>Max</b>	66.00	103.00
<b>Min</b>	0.00	0.00

# Prevention & Population Health Promotion Funding



**Total**  
**\$32,351,843**

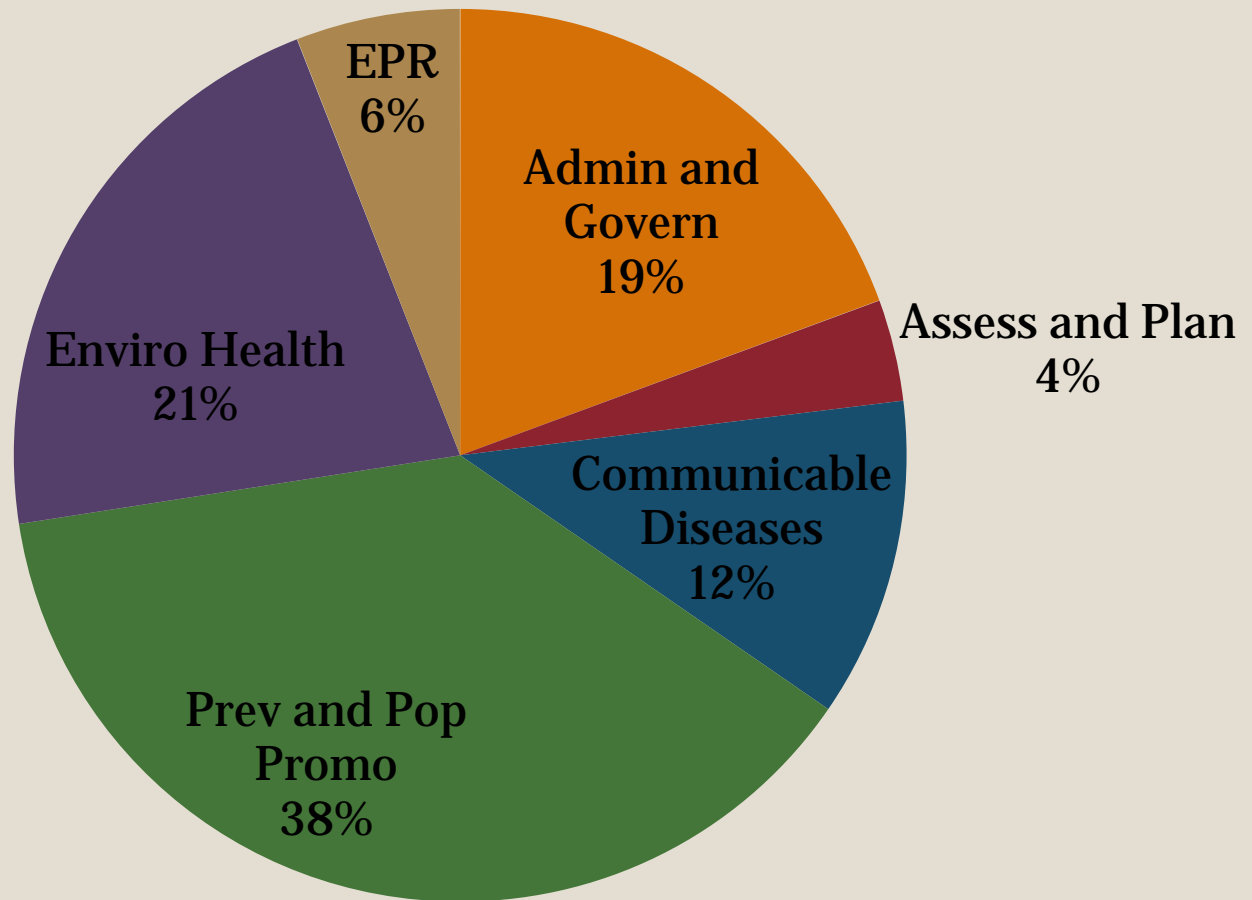


# Overall FTE

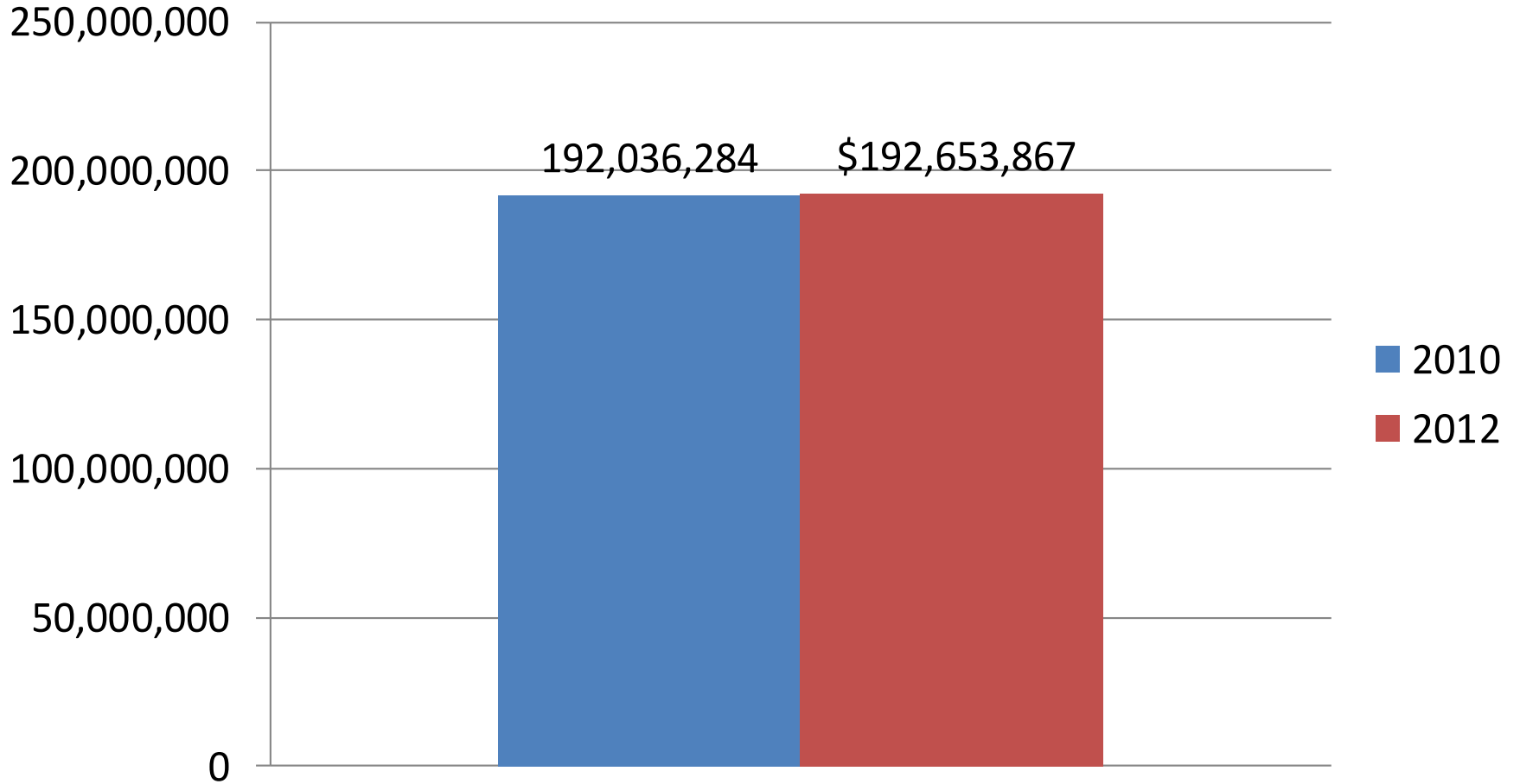


	2010	2012	Difference
<b>Total</b>	2151.40	1933.69	<b>-217.71</b>
<b>Mean</b>	44.82	39.46	<b>-5.36</b>
<b>Median</b>	14.00	11.30	<b>-2.7</b>
<b>Max</b>	398.60	315.80	<b>-82.8</b>
<b>Min</b>	1.00	1.00	0

# FTE by Core Service Area



# Overall Funding



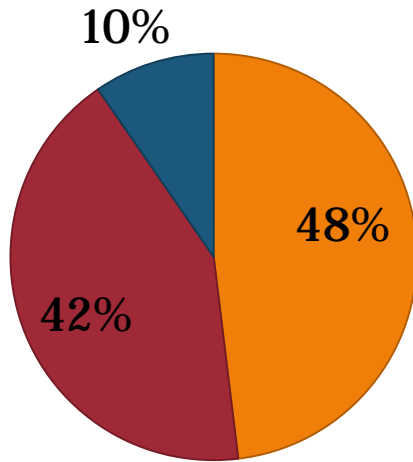
# Changes in Funding:

I expect my LPHA's budget in the NEXT fiscal year will be



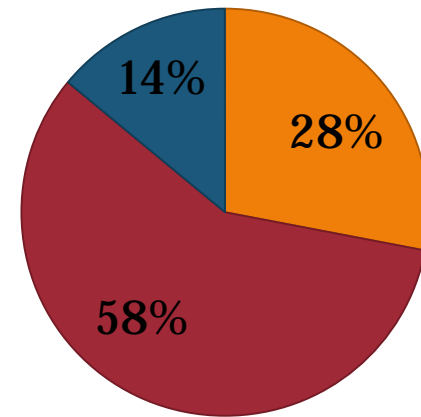
2010

- Less than previous year's budget
- Approximately the same (+/- 1%) as last year's budget
- Greater than previous year's budget

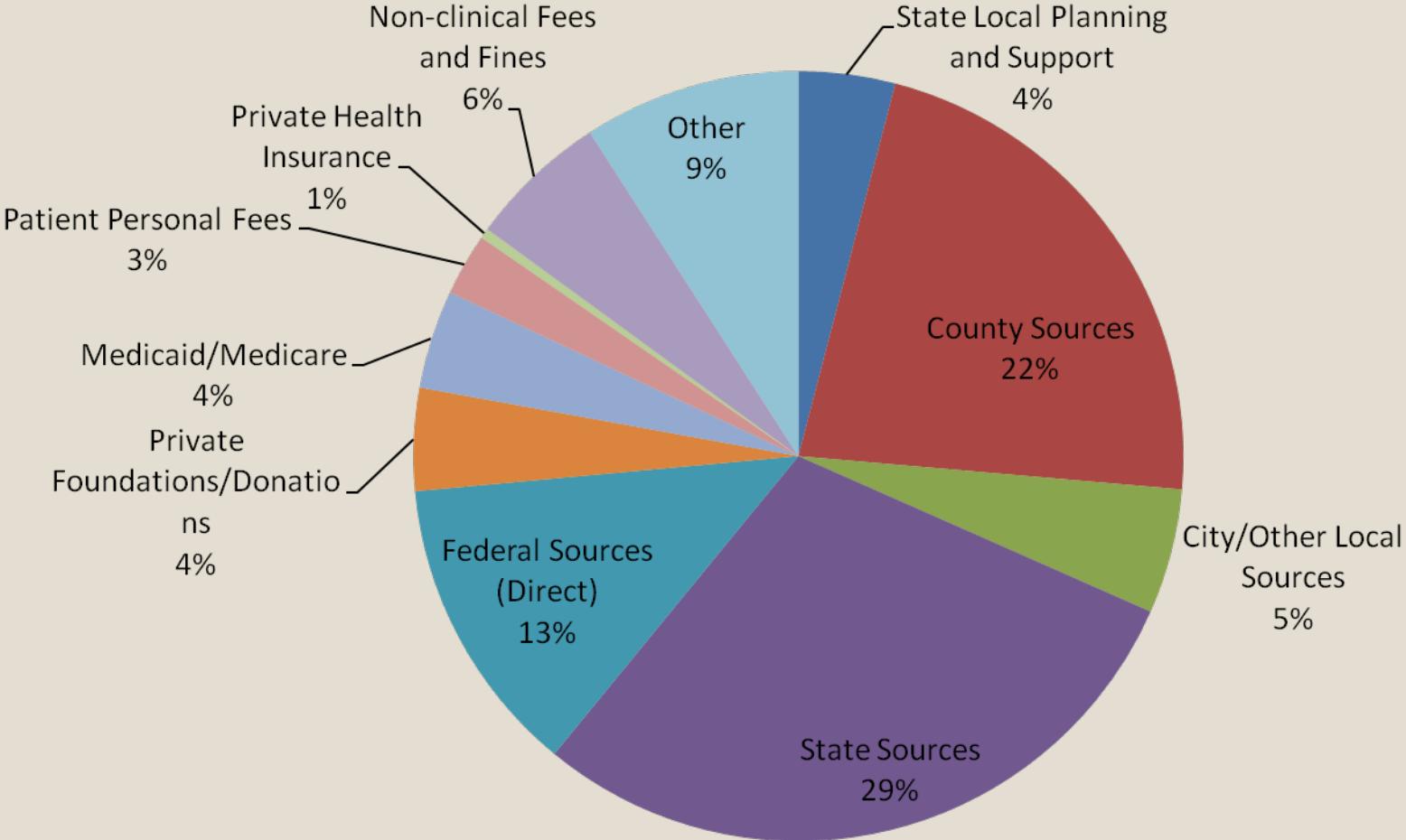


2012

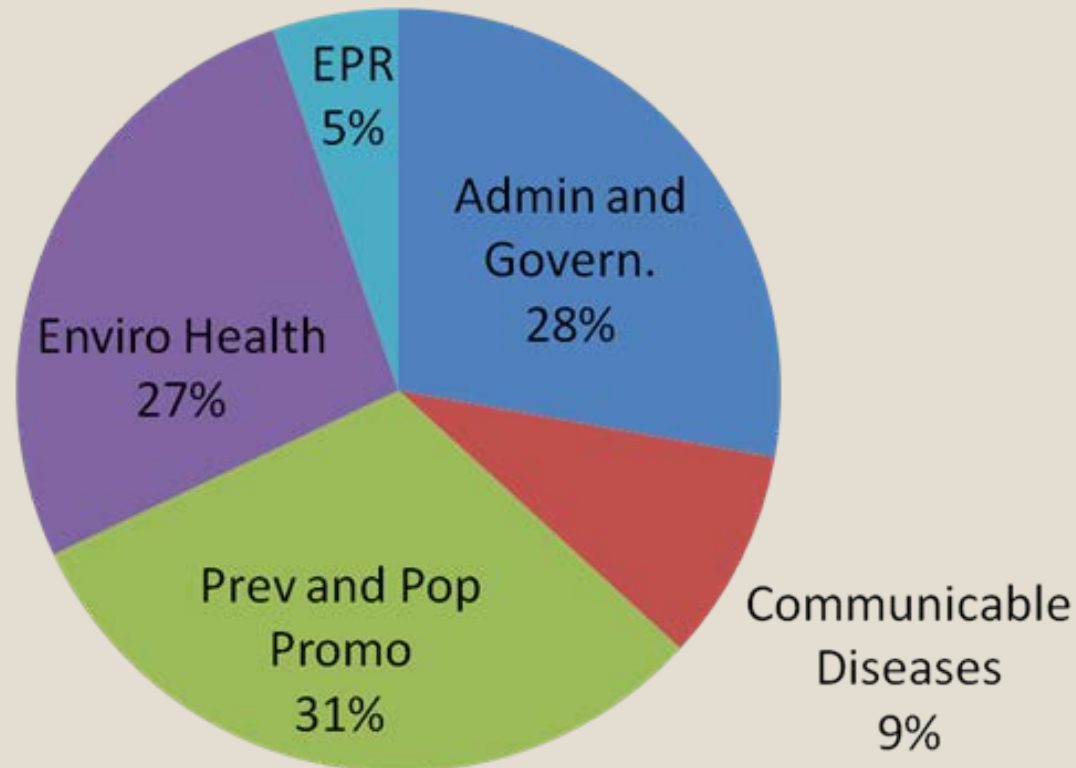
- Less than previous year's budget
- Approx the same as last year's budget (+/- 1%)
- Greater than previous year's budget



# Sources of Funds



# Spending by Core Service Area



# Summary



- **More to come...**
  - How else can these data be interpreted?
  - What else would you like to know from these data?
  - How else would you like to see these data presented?

# Questions?





# Other Meeting Agenda Items

## AcademyHealth Scholarship Reports

- **Marian Arledge-NC PBRN**
- **Scott Frank- OH PBRN**
- **Michelle Menegay- OH PBRN**
- **Britney Johnson- NY PBRN**
- **Sarah Lampe- CO PBRN**
- **Julie Marshal- CO PBRN**


## Agenda, Cont'd

### Consolidated Center Operations

### Dissemination Opportunities

- *Frontiers in PHSSR*
- Keeneland Conference and PBRN Grantee Meeting
- Website redesign
- APHA presentations- send schedules, social hour

### Funding Opportunities

- Quick Strikes
  - Mentored Research Scientist
  - PRC and ICRC FOAs from CDC
  - Accreditation Research
- 

- **Congratulations to Natalie Pawlenko: White House Champions for Change**
- **[www.whitehouse.gov/champions](http://www.whitehouse.gov/champions)**

## Reminders: Upcoming Meetings and Events

- **October 17, 2013 Public Health PBRN Monthly Virtual Meeting: Research-in-progress presentation by the New Jersey PBRN**
- **APHA Annual Meeting, November 2-6, 2013 Boston, MA**



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