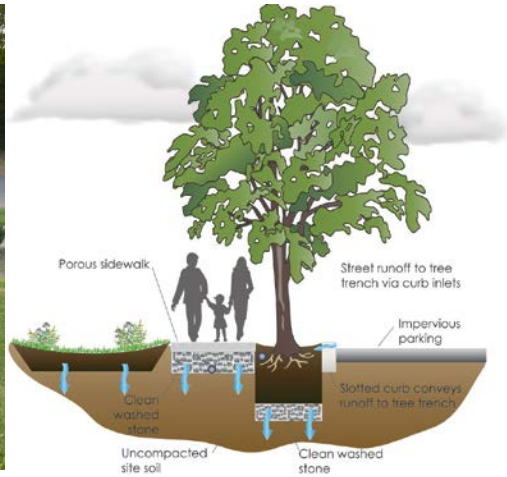
Built Environment and Public Health

Utilizing community infrastructure to
prevent cancer, chronic disease and obesity.

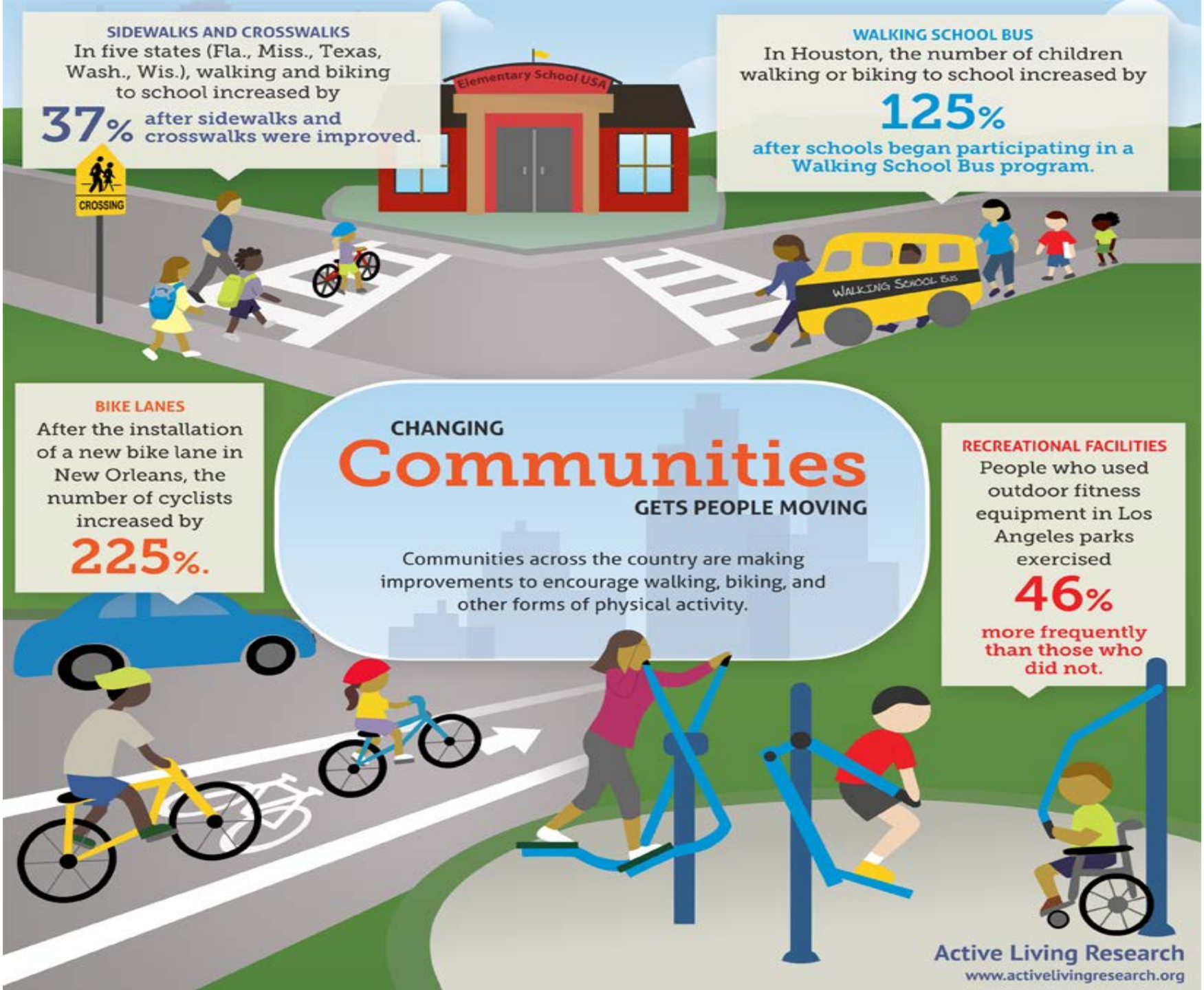


Cate Townley MURP, MUD

Built Environment Specialist

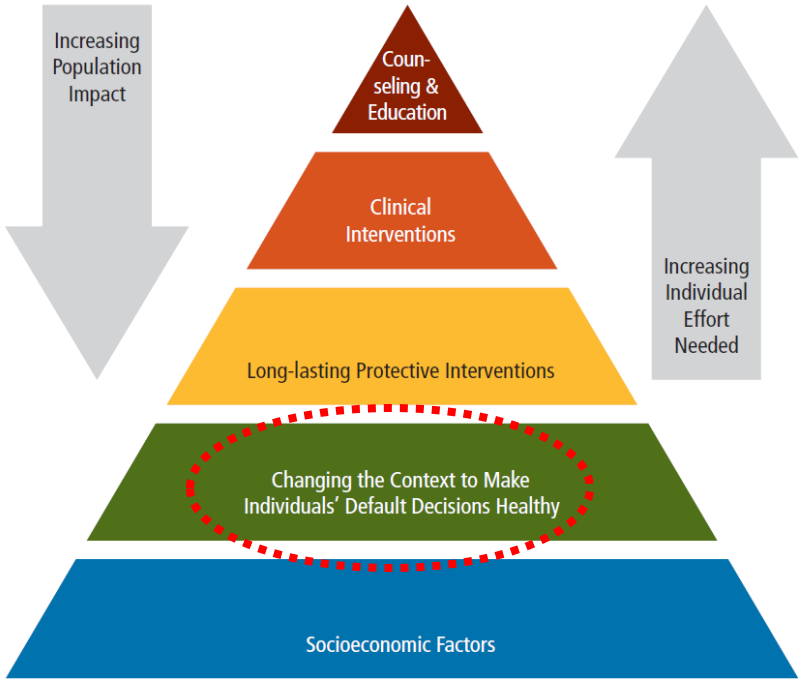
Colorado Department of Public Health and Environment

COLORADO
Department of Public Health & Environment


SIDEWALKS AND CROSSWALKS
In five states (Fla., Miss., Texas, Wash., Wis.), walking and biking to school increased by
37% after sidewalks and crosswalks were improved.
CROSSING
Elementary School USA
WALKING SCHOOL BUS
In Houston, the number of children walking or biking to school increased by
125%
after schools began participating in a Walking School Bus program.
WALKING SCHOOL BUS
BIKE LANES
After the installation of a new bike lane in New Orleans, the number of cyclists increased by
225%.
CHANGING
Communities
GETS PEOPLE MOVING
Communities across the country are making improvements to encourage walking, biking, and other forms of physical activity.
RECREATIONAL FACILITIES
People who used outdoor fitness equipment in Los Angeles parks exercised
46%
more frequently than those who did not.
Active Living Research
www.activelivingresearch.org

"Making the Healthy Choice the Easy Choice"

- Obesity risk increases 6% with every mile spent in the car, and decreases 5% with every .62 miles walked. [1]
- People living near trails are 50% more likely to meet physical activity guidelines. [2]
- People living in walkable neighborhoods are twice as likely to get enough physical activity as those who do not.[3]
- Teens in low-income or racial/ethnic minority neighborhoods are 50% less likely to have a recreational facility near home.[4]

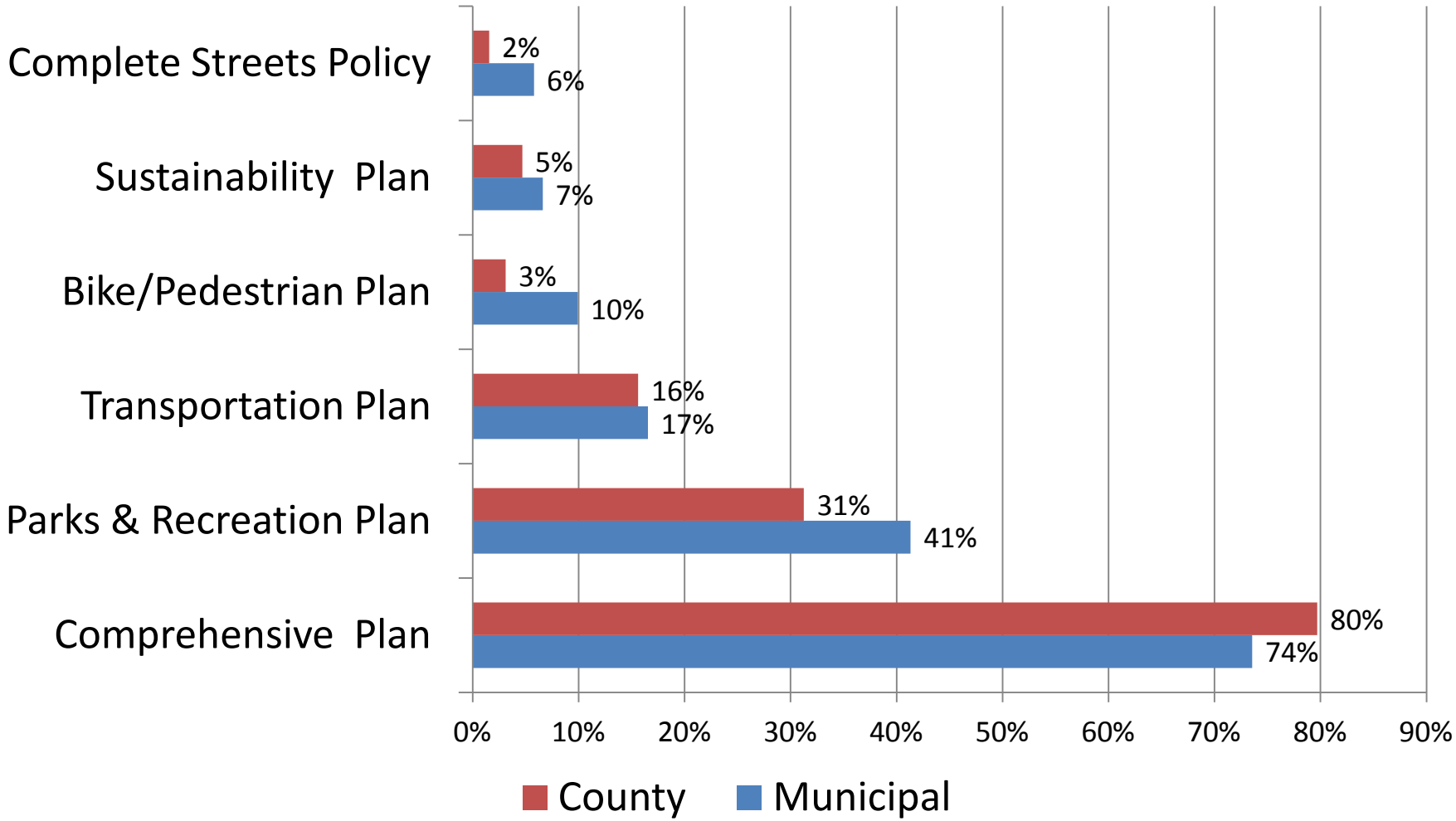


Health Impact Pyramid

Source: Thomas R. Frieden, A Framework For Public Health Action: The Health Impact Pyramid, 100 Am. J. Pub. Health590, 591 (2010).

1. Trust for America's Health and The Robert Wood Johnson Foundation. 2013. F is in Fat: How Obesity Threatens America's Future. Retrieved from http://healthyamericans.org/health-issues/wp content/uploads/2013/08/TFAH2013FasInFatReport29.pdf
2. Institute of Medicine (IOM). 2012. Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation. Washington, DC: The National Academies Press.
3. Active Living Research. 2013. Better Transportation Options = Healthier Lives. Retrieved from http://activelivingresearch.org/blog/2013/05/better-transportation-options-healthier-lives
4. Active Living Research. 2012. The Role of Communities in Promoting Physical Activity. Retrieved from http://activelivingresearch.org/files/ALR_Infographic_Communities_June2012.jpg

Built Environment Policy Scan



Active Living Policy and Planning Documents

Built Environment Policy Scan

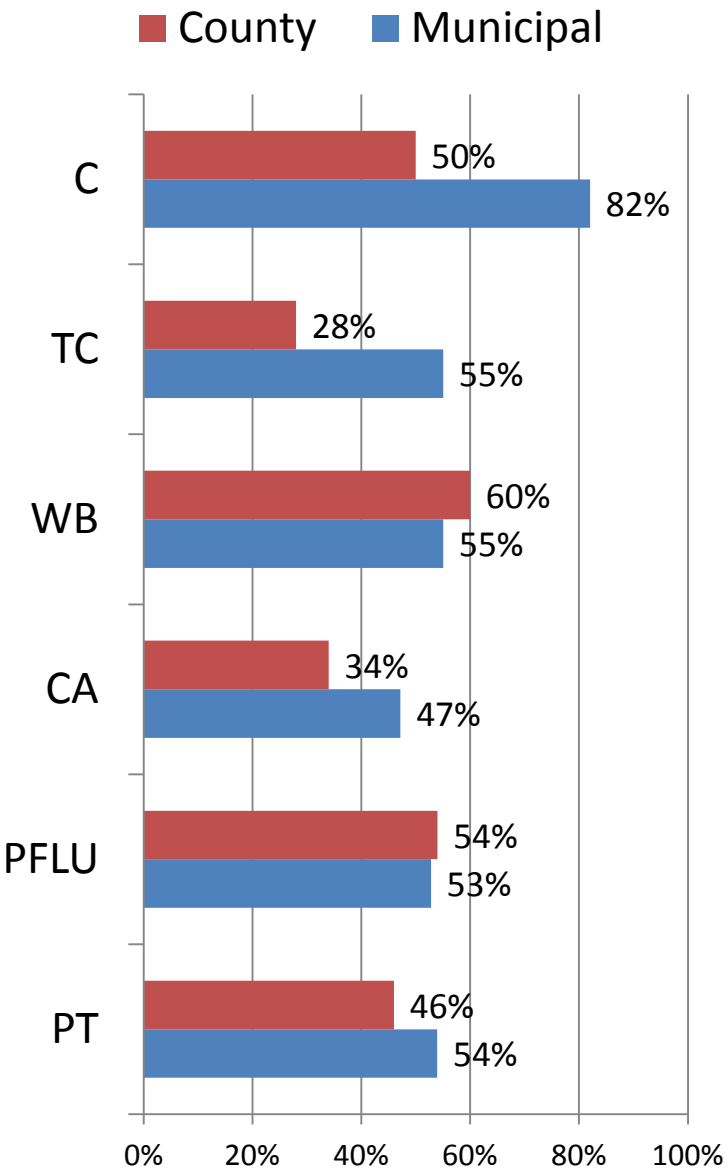
Active Living Language

Walking and Biking (W/B)
Traffic Calming (TC)

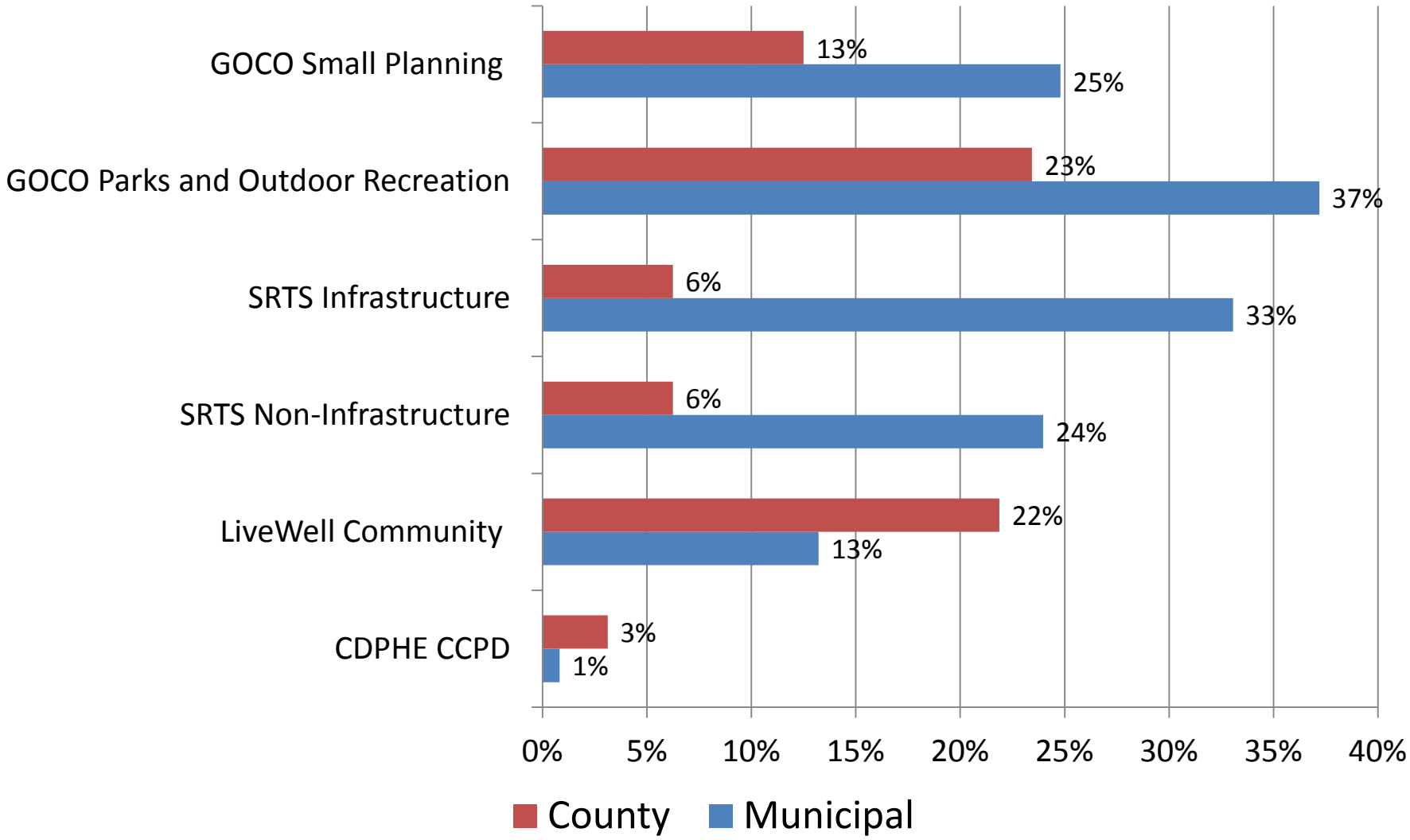
Pedestrian Connectivity (C)
Pedestrian Comfort (C/A)

Public Transportation (PT)

Pedestrian Friendly Land Use (PFLU)



Built Environment Policy Scan



Active Living Funding and Capacity Building

Built Environment/Active Living Scan - November 2013
Overweight and Obese Population in Colorado

Overweight and Obesity Homepage (CDPHE)

Colorado Department of Public Health and Environment

This map illustrates the locations of funding and policy initiatives with overweight or obese adult population data. Click on any county or symbol to get information on local initiatives.

1 Adult Prevalence: Overweight or Obese

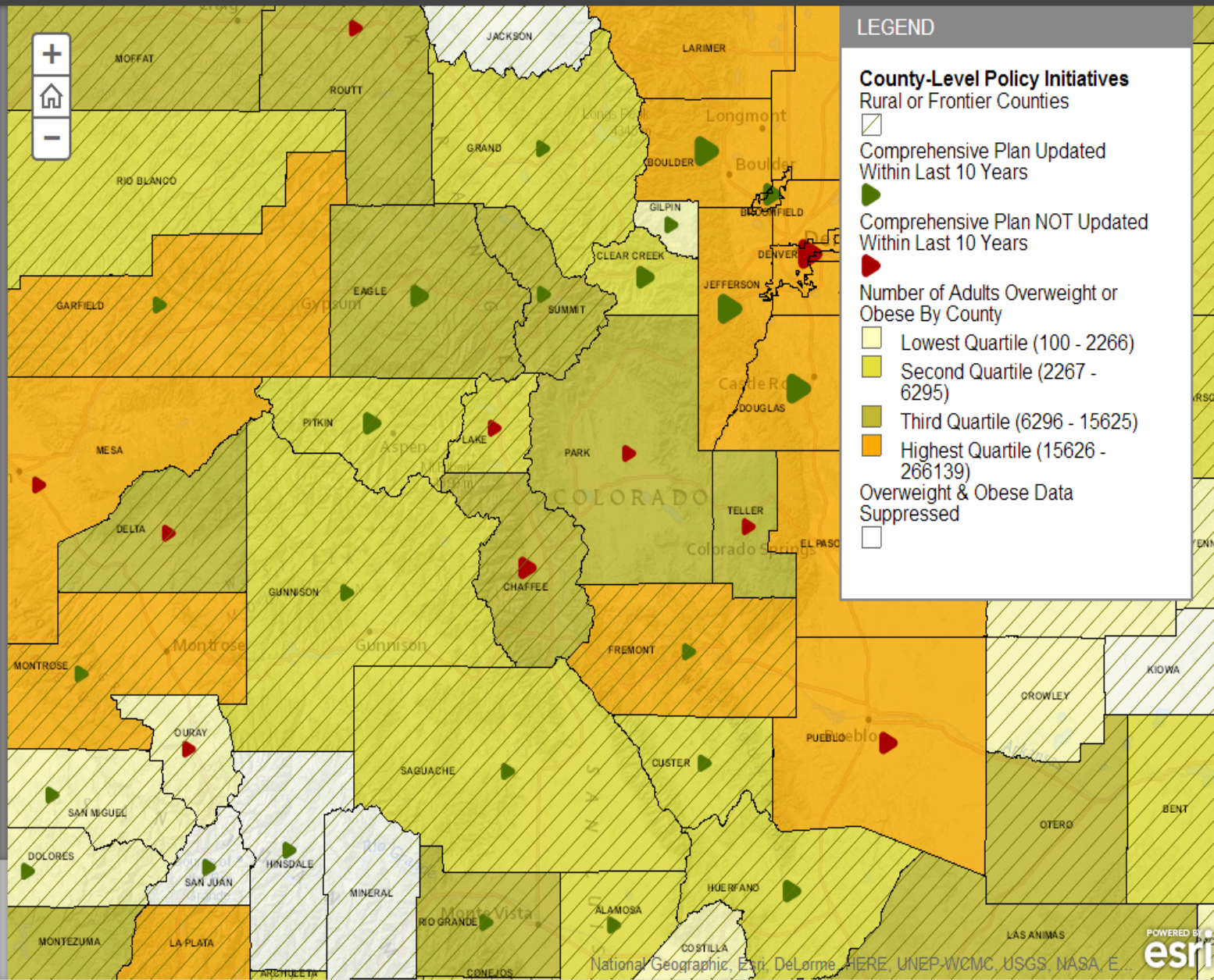
2 Number of Adults Overweight or Obese

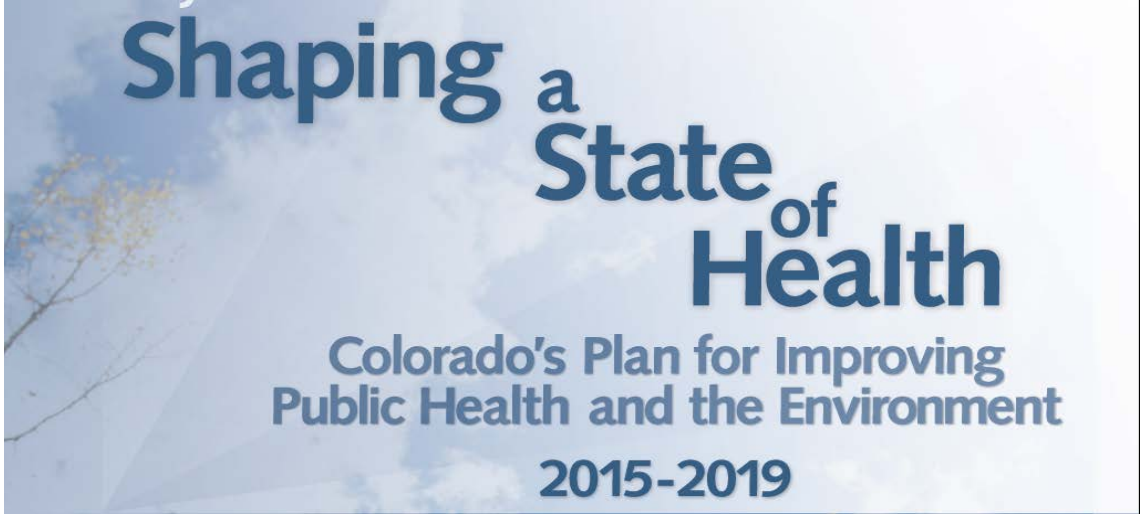
3 County-Level Funding Initiatives

4 Municipality-Level Funding Initiatives

5 County-Level Policy Initiatives

This map illustrates County-Level Active Living Policy Initiatives, symbolized by those initiatives that have updated their comprehensive plan during the past 10 years (GREEN) versus those that have not (RED). The size of the symbol represents the number of initiatives within each County.





6. **Advance 'health in all policies' as a widespread philosophy for actively engaging in state and local land use, transportation, agriculture and community development initiatives and develop policy and environmental strategies that focus on increasing access to physical activity and promoting health equity.**

   Objective 1: By 2020, at least 170 Colorado local governments adopt and/or implement policies and environmental strategies to increase safe, equitable access to physical activity through the built environment.

   2017 Target: 145 local governments

   Baseline: 120 local governments in 2014

   Partners in implementation: CDPHE, LPHAs, local government agencies, Colorado Department of Transportation, Safe Routes to School, LiveWell Colorado, HEAL Cities Campaign, the Colorado Health Foundation, Kaiser Permanente and elected officials

Policy Change

THE ROLE OF

Parks and Recreation

IN PROMOTING PHYSICAL ACTIVITY

PROPERTY VALUES

Homes near parks can sell for up to

$2,262

more than homes without parks nearby.

RACIAL DISPARITIES

70% & **81%**

of African-American neighborhoods & of Hispanic neighborhoods

lack recreation facilities, compared to 38% of white neighborhoods.

TRAILS

A study in Nebraska found that for every $1 spent on trails, there was almost

$3 in savings in direct medical costs.

OPEN SPACE

Youths in neighborhoods with 7 recreational facilities were

26% more likely to be active 5 times per week than those in areas without facilities.

Active Living Research

www.activelivingresearch.org

Sources: RACIAL DISPARITIES: Moore LV, Diez Roux AV, Evenson KR, et al. "Availability of Recreational Resources in Minority and Low Socioeconomic Status Areas." American Journal of Preventive Medicine, 34(1): 16–22, 2008. PROPERTY VALUES: Bolitzer B and Netusil N. "The Impact of Open Spaces on Property Values in Portland, Oregon." Journal of Environmental Management, 59(3): 185–193, July 2000. OPEN SPACE: Gordon-Larsen P, Nelson M, Page P, et al. "Inequality in the Built Environment Underlies Key Health Disparities in Physical Activity and Obesity." Pediatrics, 117(2), 417–424, 2006. TRAILS: Wang G, Macera CA, Scudder-Soucie B, et al. "A cost-benefit analysis of physical activity using bike/pedestrian trails." Health Promotion Practice, 6(2): 174–179, 2005.

SafeRoutes

Colorado Safe Routes to School

For more information please contact:

Cate Townley,

Cate.Townley@state.co.us

303-692-2074

COLORADO

Department of Public Health & Environment

LiveWell Colorado
HEAL
CITIES & TOWNS
CAMPAIGN

HEAL Cities & Towns Campaign

LPH Obesity Networking Call

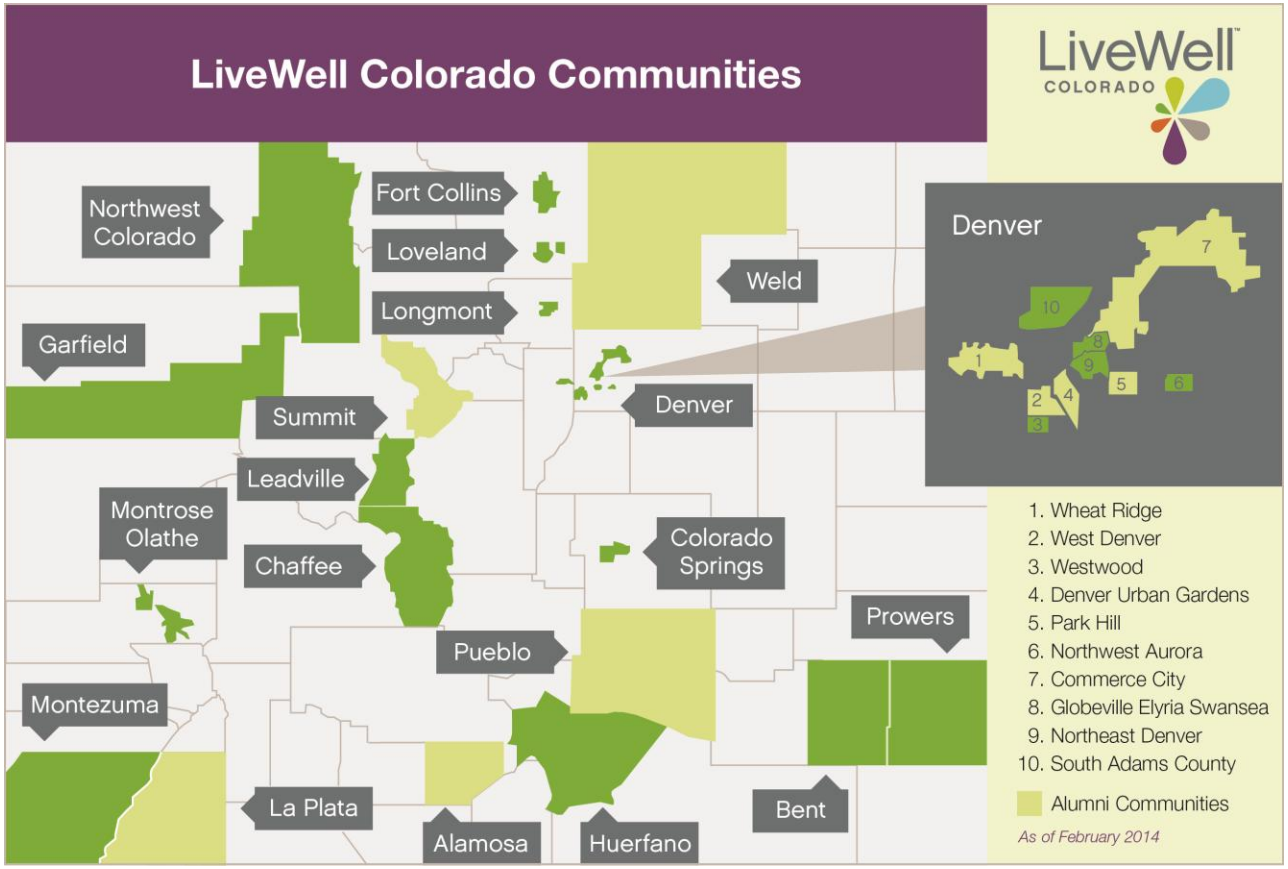
March 25, 2015

CML
COLORADO MUNICIPAL LEAGUE
The Voice of Colorado's Cities and Towns

LiveWell Colorado

- LiveWell Colorado is a non-profit organization committed to reducing obesity in Colorado by promoting healthy eating and active living. In addition to educating and inspiring people to make healthy choices, LiveWell Colorado focuses on policy, environmental and lifestyle changes that remove barriers and increase access to healthy behaviors.

LiveWell Communities



LiveWell Colorado

HEAL

CITIES & TOWNS CAMPAIGN

LiveWell COLORADO

CML

COLORADO MUNICIPAL LEAGUE

The Voice of Colorado's Cities and Towns

Colorado Department of Public Health and Environment

KAISER PERMANENTE®

Why the Campaign?

- Engaging municipal officials in promoting HEAL through policy and environmental change
- HEAL in municipal policies = healthy options for residents
- Healthy communities = positive economic driver
- Focus on low- and no-cost solutions

Focus on High Poverty Areas

- Focus on 47 high priority municipalities

- Expand technical assistance opportunities and push quality over quantity

Campaign Focus Areas

- Active Community
- Access to Healthy Food
- Healthy Workplace

Active Community

Infrastructure investment and planning create access to active living. Municipalities can:

- Include HEAL in comprehensive, land use and transportation plans;
- Adopt mixed use or TOD zoning to make walking and biking safe and easy;
- Invest in safe routes to places, including schools and other key destinations.

Access to Healthy Food

Municipalities can:

- Adopt zoning that allows farmers' markets and community gardens;
- Facilitate and promote the use of SNAP benefits at farmers' markets;
- Incentivize retailers that offer fresh produce.

Healthy Workplace

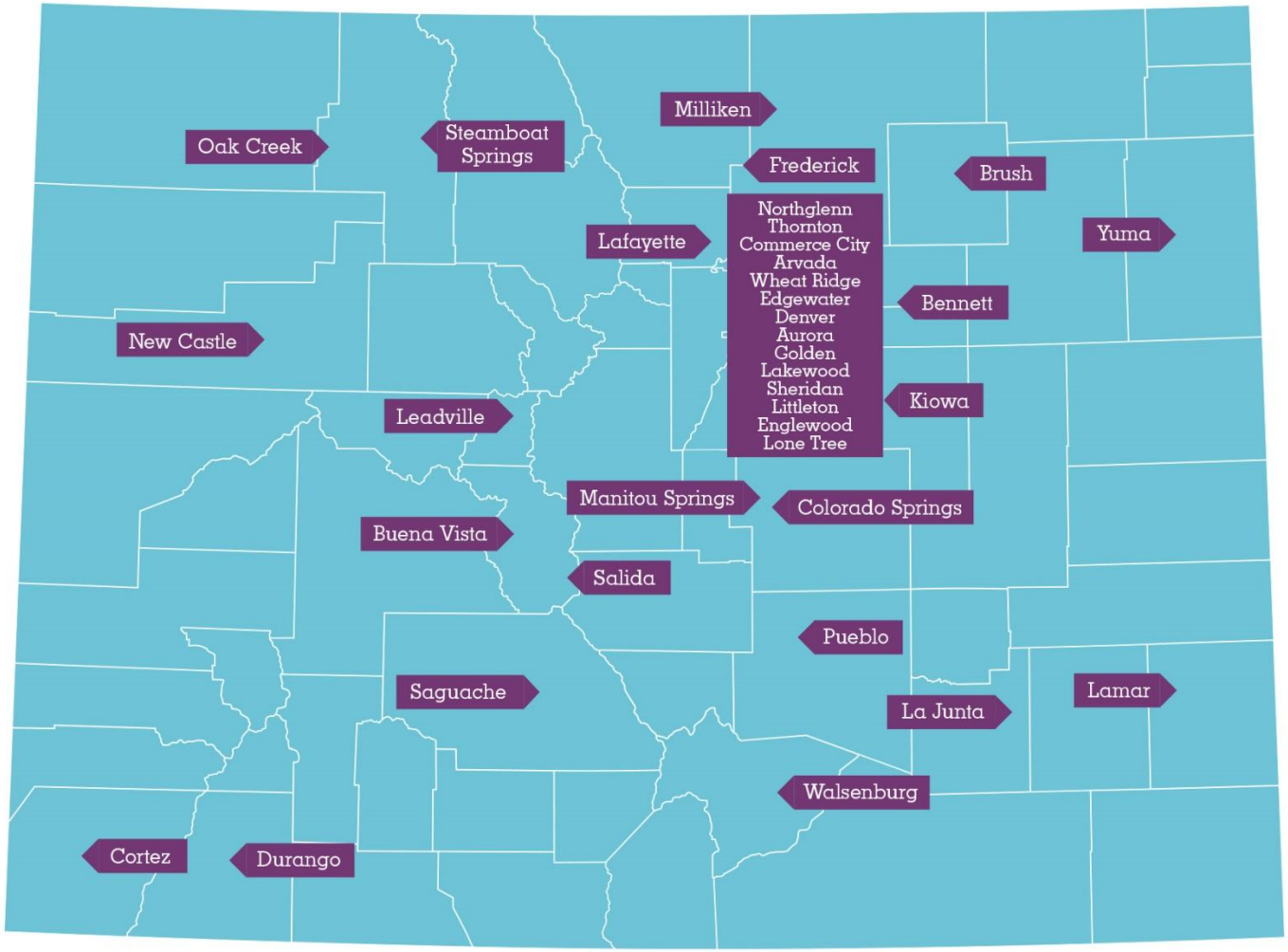
Healthy workplace policies institutionalize a culture of health among staff and visitors. Examples include:

- Nutrition standards for healthy vending;
- Food policies for city meetings; and
- Encouraging the use of stairwells.

Campaign Levels

EAGER	Just starting out.
ACTIVE	Have already embraced HEAL policies before joining the Campaign. By joining the Campaign they pledge to do more.
FIT	Have adopted a policy in each of the three Campaign policy areas after joining the Campaign.
ELITE	Fit Cities/Towns that adopt two additional policies, bringing total policy adoption to five.

36 HEAL Cities and Towns



Campaign Benefits

- Use of HEAL Cities & Towns logo
- Recognition on web site
- Free technical assistance and training
- Connecting with resources

Campaign Benefits

- Connecting with other municipalities
- Media Assistance
- Recognition at CML Regional Meetings
- Plaque to display in municipal building

How to Join

- City/town council adopt a resolution stating HEAL policy goals - gives direction for future policies that promote HEAL

- The Campaign provides assistance, training and networking

Success Stories

- Littleton and Cortez
  - First “fit” cities in the Campaign
- Arvada
  - Urban agriculture, farming on city owned land
- Bennett
  - Park improvements and plans for a new park
- La Junta
  - Healthy workplace focus & trail plan

Join Today!

Julie George, Director, HEAL Cities & Towns Campaign

juliegeorge@livewellcolorado.org

720-353-4120, x217 or 720-233-4662

LiveWellColorado.org/HEALCampaign

HEAL Indicators and Data

Obesity Networking Call

March 25, 2015

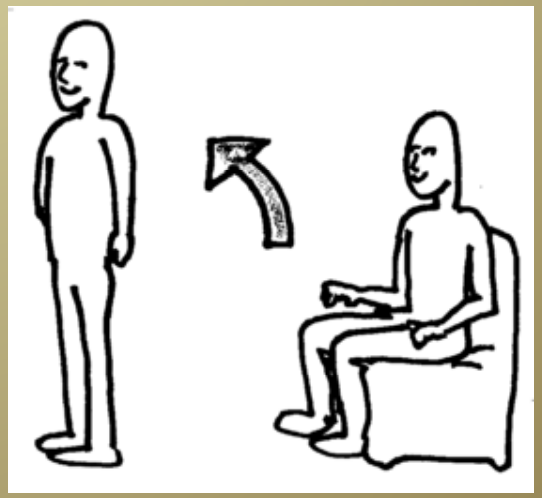
Renee Calanan, PhD

Chronic Disease Epidemiologist

CDPHE

Agenda

1. HEAL Surveillance Work Group
2. Standardized Set of HEAL Indicators
3. Sources of HEAL data
4. Data Access and Use Survey



HEAL Surveillance Work Group

Objectives:

1. To develop a coordinated plan for population-based survey questions for surveillance of obesity, healthy eating, and physical activity measures across partners.
2. To submit proposals for survey questions as a unified group, with a funding plan for each question – reducing competition and ensuring relevance.
3. To collaborate on dissemination of HEAL data and information – increasing dissemination and use of data and ensuring wider dissemination.

HEAL Surveillance Work Group Members

One representative from each:

- CDPHE – CHED, OPP, PSD/HEAL Team
- Colorado Health Foundation
- Colorado Health Institute
- Kaiser Permanente
- LiveWell Colorado
- Local public health agencies
  - Urban: Tri-County Health Department
  - Rural: **vacant**

HEAL Surveillance Work Group Projects

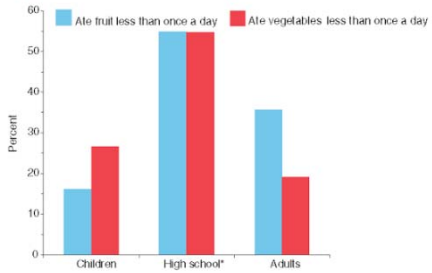
- BRFSS, CHS, and HKCS question submission plans
- Annual submission of question proposals
- Standardized set of HEAL indicators
- Fact sheets
  - CDPHE: data
  - CHI: evidence-based interventions
    - –Fruit and Vegetable Consumption
    - –Childhood Overweight and Obesity
    - –Sugary Beverage Consumption

Fruit and Vegetable Consumption in Colorado

Facts for Action: Chronic Diseases and Related Risk Factors in Colorado

Many Coloradans do not eat fruits and vegetables every day.

Percent of children (ages 1-14), high school students (grades 9-12), and adults (ages 18+) who did not eat fruits and vegetables at least once a day, Colorado, 2013.



*High school data do not include fruit juice.

- 16% of children, 55% of high school students and 36% of adult Coloradans did not eat fruit at least once a day.
- Fruit juice substantially contributes to children's total fruit consumption. The percent of children who did not eat fruit at least once a day jumped from 16% to 24% when fruit juice was excluded from consideration.
- 29% of children, 55% of high school students and 19% of adult Coloradans did not eat vegetables at least once a day.

Obesity and healthy eating

In 2013, 21% of adult Coloradans were obese.. **56% were overweight or obese.**

- The doubling of the adult obesity prevalence in the United States in the past 18 years has multiple causes including genetic, behavioral (e.g., diet, physical activity), and environmental factors (e.g., food retail and transportation infrastructure).
- Obesity has been shown to increase the risk of numerous adverse health conditions including coronary heart disease, type 2 diabetes, high blood pressure, stroke, and various cancers.[1]
- Obese children are more likely to become obese adults; if children are overweight, obesity in adulthood is likely to be more severe.[2]
- The estimated annual medical cost of obesity in the U.S. was $147 billion in 2008 U.S. dollars; the medical costs for people who are obese were $1,429 higher than those of normal weight.[3]
- While no single-factor strategy can solve this complex problem alone, promotion of healthy eating patterns, especially the regular consumption of fresh fruits and vegetables, can help to reduce obesity and alleviate associated health burdens.[4]

>80%

Overall, 86% of adult Coloradans did not meet recommendations for fruit and vegetable consumption in 2013. Depending upon the age of adults, 4-5 cups of fruits and vegetables is the recommended daily amount for men and 3.5-4.5 cups for women.[5]

More than 80% of adult Coloradans (ages 18+) who have been diagnosed with a chronic condition did NOT meet age/sex-specific recommendations for fruit and vegetable consumption in 2013.

Percentage not meeting recommendations relative to other adverse health outcomes:

- 90% of adults with diabetes
- 90% of adults who had a heart attack, angina, coronary heart disease or stroke
- 89% of adults with high blood pressure
- 87% of adults with high blood cholesterol
- 86% of adults with a depressive disorder
- 82% of adults who have or had cancer (excluding skin cancer)

Colorado data sources: Behavioral Risk Factor Surveillance System, Colorado Child Health Survey, Healthy Kids Colorado Survey

1. CDC. 2012. Adult Overweight and Obesity: Causes and Consequences. [ONLINE] Available at: http://www.cdc.gov/obesity/adult/causes/index.html. [Accessed 24 November 14].
2. CDC. 2012. Adult Overweight and Obesity: Basics About Childhood Obesity. [ONLINE] Available at: http://www.cdc.gov/obesity/childhood/basics.html. [Accessed 24 November 14].
3. Finkelstein EA, Trogdon JG, Cohen JW, Dietz W. Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates. Health Affairs 2009;Sw822-w831.
4. CDC. 2013 State Indicator Report on Fruits and Vegetables. [ONLINE] Available at: http://www.cdc.gov/nutrition/downloads/State-Indicator-Report-Fruits-Vegetables-2013.pdf. [Accessed 24 November 14].
5. USDA. MyPlate Food Groups [ONLINE] Available at: http://www.choosemyplate.gov/food-groups/. [Accessed 24 November 14].

COLORADO Department of Public Health & Environment

November 2014

https://www.colorado.gov/cdphe/chronicdisease

Community-Based Strategies

Fruit and vegetable consumption is lower among people who must travel long distances to a grocery store or who don't have access to transportation. Cost is an important factor as well. People with limited incomes will pass up expensive food. Attracting grocers to high-need neighborhoods has the potential to stimulate the economy, bring revenue into communities, and create jobs for local residents.[10] Economics aside, proximity to a healthy food retailer can result in better dietary choices.[11]

Promising Community-Based Food Retail Strategies

- **Transportation:** Developing safe, efficient and affordable public transportation between high-need areas and grocers or attracting food retailers to transportation hubs are promising strategies for promoting greater access to supermarkets and food retailers.[12,13]
- **Zoning Laws:** Cutting red tape can encourage the development of grocery stores in high-need communities.[14] Zoning boards can grant variances allowing stores to open on sites that would otherwise prohibit a retail outlet or ease parking requirements to accommodate a grocery store. By lowering such barriers, zoning and city planning policies can expedite food retail expansion and promote access to fruit and vegetables in communities.

Communities short on fruit and vegetables don't have to wait for a grocery groundbreaking. Mobile markets or community gardens can bring healthy food to underserved neighborhoods at much lower start-up costs than building brick-and-mortar grocery stores.

Proven Community-Based Strategies

- **SNAP Incentives for Fresh Foods:** Many low-income adults and families rely on Supplemental Nutrition Assistance Program (SNAP) benefits for food purchases. Attracting retailers who accept SNAP to low-income neighborhoods or neighborhoods with few fresh food options increases access to healthy foods, as does encouraging existing vendors to accept SNAP. Creating financial incentives for SNAP beneficiaries to purchase fresh food is a proven strategy for increasing fruit and vegetable purchases and consumption.[15]
- **Healthy Incentives Pilot:** Participants in the U.S. Department of Agriculture's 2008 Healthy Incentives Pilot (HIP) received a 30-cent refund for each SNAP dollar they spent on fruit and vegetables.[16] Evaluation results suggested that financial incentives encouraged fruit and vegetable consumption. HIP participants ate 26 percent more fruit and vegetables daily and spent more of their SNAP benefits on produce than SNAP participants who did not participate in the pilot.
- **Food Insecurity Nutrition Incentive Program:** The 2014 federal Farm Bill created the Food Insecurity Nutrition Incentive program that provides financial incentives to SNAP beneficiaries to purchase more fruits and vegetables.[17] Support for the program stemmed from reports of demonstrated success in prior initiatives, including the Healthy Incentives Pilot, New York City's Health Bucks program and Michigan's statewide "Double up Food Bucks" initiatives, which similarly reimbursed beneficiaries for purchasing fresh produce.

http://coloradohealthinstitute.org/key-issues/detail/community-health/fruit-and-vegetable-policy-strategies

Standardized Set of HEAL Indicators

Objective: To create and share as a resource a list of select HEAL indicators with standardized definitions, including numerator/denominator definition and data source

- Approximate timeline:
  - March 25: input on final product design/content
  - April 8: full compiled list
  - April 15: prioritized/categorized list
  - April 22: final product disseminated

Standardized Set of HEAL Indicators

Where are the indicators coming from?

- Proposed metrics from local PHIPs
- Metrics in state PHIP
- "Colorado Health Indicators"
- CDPHE chronic disease surveillance system
- CDC indicators:
  - Chronic Disease Indicators
  - Recommended community measures – obesity
  - State indicator reports
  - Prevention status reports
- County Health Rankings indicators
- Healthy People 2020 objectives
- HHS National Prevention Strategy indicators

Indicator Metadata

- DRAFT themes
  - Healthy food access
  - Built environment (physical activity-related)
  - HEAL in health care and worksite settings
  - HEAL in school settings
  - Food insecurity
  - Weight status
  - Food and beverage consumption
  - Breastfeeding
  - Physical activity
  - Physical inactivity/screen time

Anything missing?

Indicator Metadata

- Info about each indicator:
  - Short-, intermediate-, or long-term
  - Data source
  - Numerator
  - Denominator
  - Finest granularity
  - Possible sub-populations
  - Related HP2020 objectives
  - Sources of indicator
  - Notes

Do you have other ideas for format or content that would be useful?

Sources of HEAL Data

- CHSI 2015
  - **http://wwwn.cdc.gov/CommunityHealth/home**
- County Health Rankings (RWJF)
  - **http://www.countyhealthrankings.org/**
  - ➢New rankings *today*!
- BRFSS: CDPHE statistical modeling project
  - Census-tract level obesity prevalence estimates
  - Data release planned by the end of summer

Data Access and Use Survey

- Purpose: To gather input on stakeholders' data needs including data access, data format, data products, and functionalities on the CDPHE website to help inform plans for future data dissemination and data products.
- Survey will be open in early April.
- NOTE: survey purpose is <u>not</u> to gather input related to data availability and suppression (e.g., sub-state-level data, race/ethnicity categories, etc.) or specific data sources or indicators.

Questions?
Suggestions or requests for discussion items at future Obesity Networking calls?

Renee Calanan

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(303)692-2876