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# Health and Transportation: Working Together to Improve the Lives of Oregonians

Oregon Public Health Association Conference Presentation  
October 13, 2014

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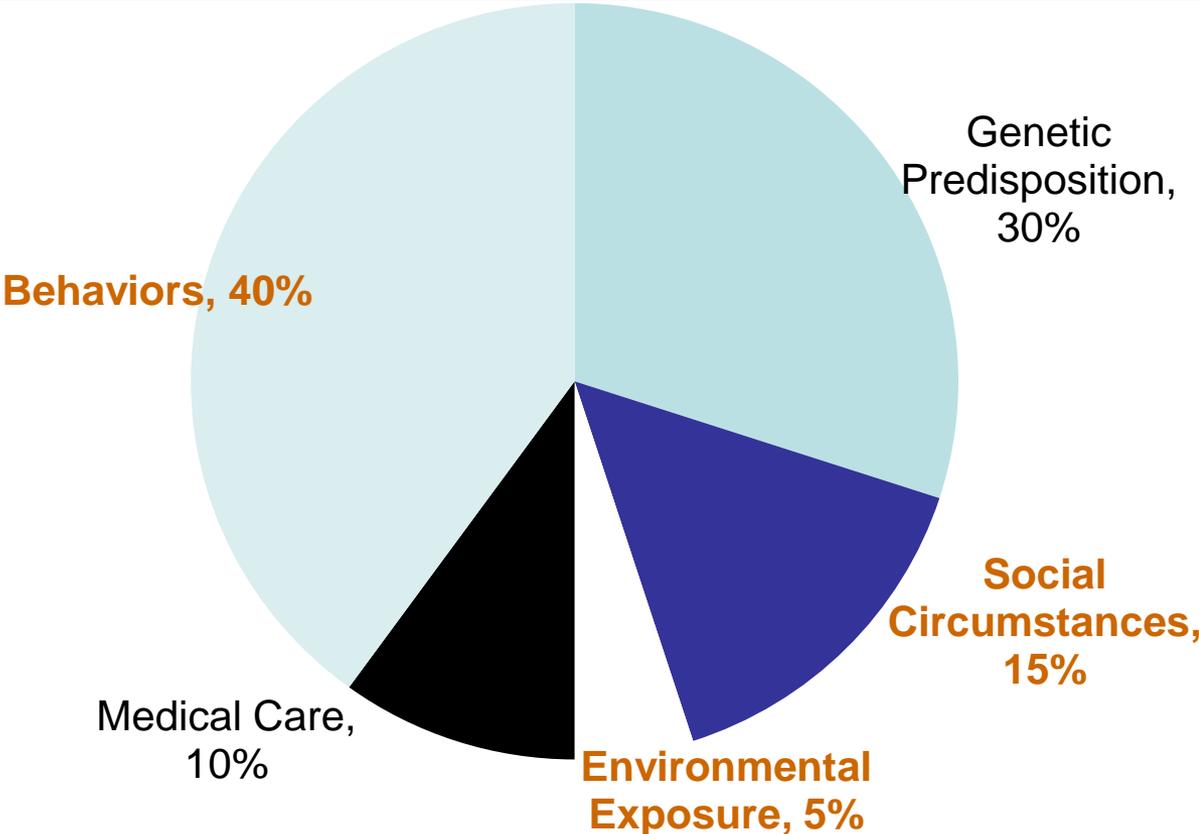


Center for Prevention & Health Promotion  
Public Health Division

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# Built Environment: A Determinant of Health

Determinants of Health and Contribution to Premature Death, U.S.



Adapted from McGinnis JM, Foegen WH. Actual causes of death in the United States.. JAMA 1993; 270:2207-2212.

# Top 10 Risk Factors for Poor Health and Number of Attributable Deaths, U.S.

Dietary risks	678,282
Smoking	465,651
High blood pressure	442,656
High body mass index	363,991
Physical inactivity	234,022
High blood sugar	213,669
High total cholesterol	158,431
Ambient air pollution	103,027
Alcohol use	88,587
Drug use	25,430

## Deaths Attributable to Physical Inactivity as an Independent Risk Factor:

6% of heart disease

8.3% of type 2 diabetes

12.4% of breast cancer

12.0% of colon cancer

**10.8% ALL CAUSE MORTALITY**

*Journal of the American Medical Association*

"The State of US Health, 1990-2010: Burden of Diseases, Injuries, and Risk Factors"



**Physical inactivity cited in >10% (\$100 billion) of health care costs**

# Physical Activity Trends

Sedentary Time ↑

Leisure Time ↔

Occupation ↓

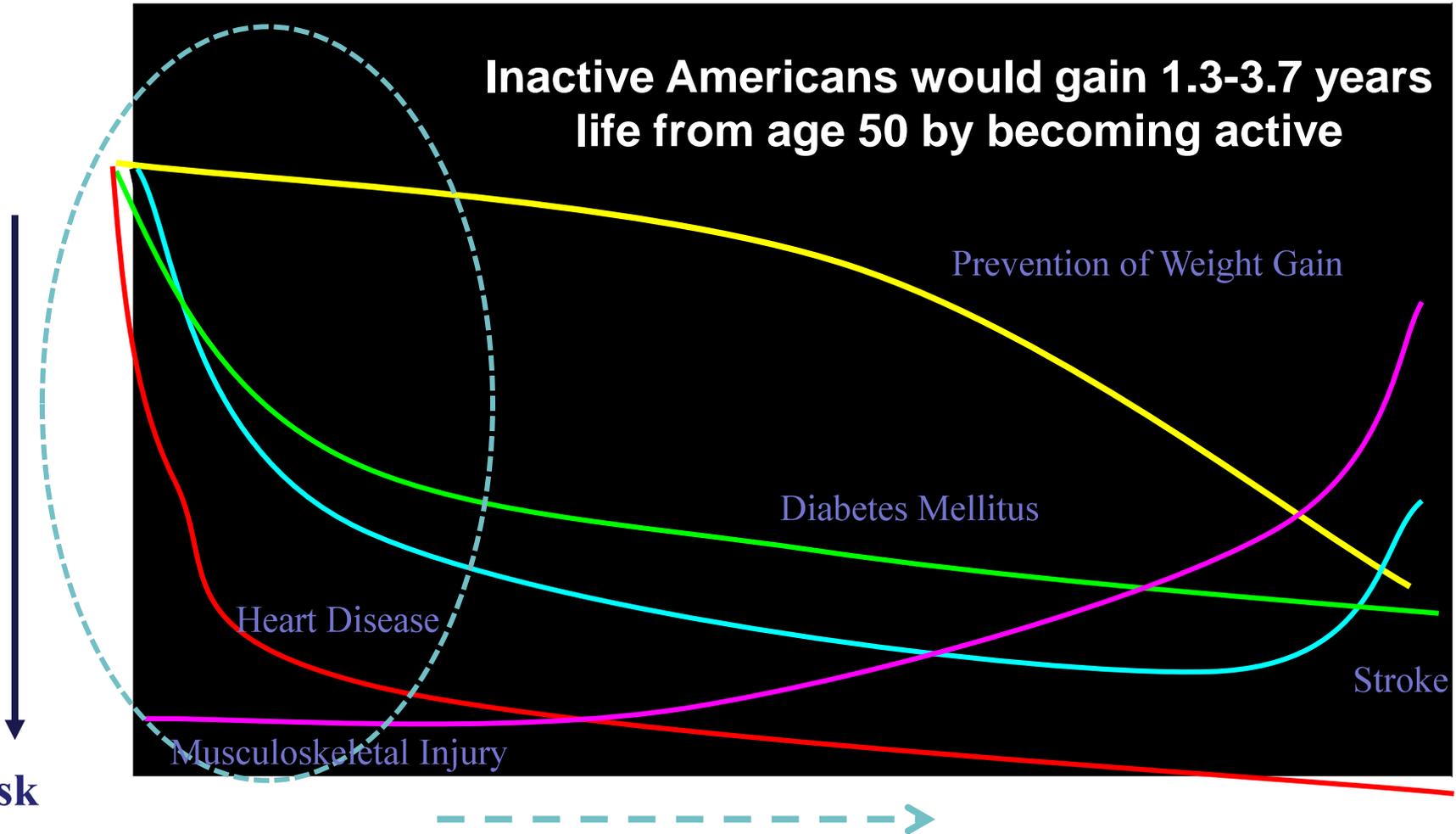
Transportation ↓

Home ↓



# Transportation to Meet Activity Guidelines

Inactive Americans would gain 1.3-3.7 years life from age 50 by becoming active

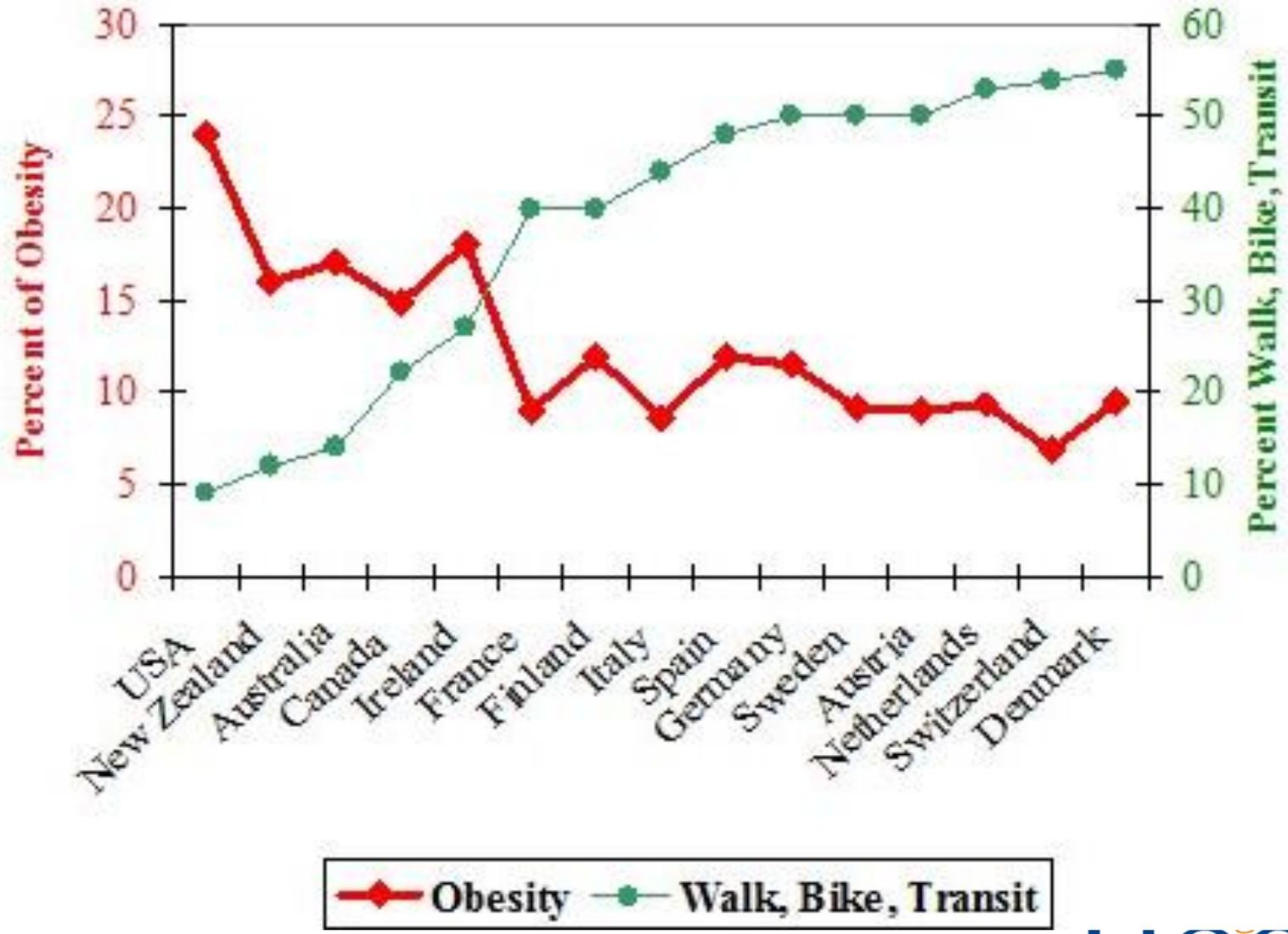


**Modest Change in PA Here = Big Reduction in Risk**

*N Engl J Med* 1986; **314**: 605-613. [CrossRef](#) | [PubMed](#)

*Arch Intern Med* 2005; **165**: 2355-2360. [CrossRef](#) | [PubMed](#)

# Active Transportation and Obesity: US vs Others



Bassett, Pucker et al. Journal of Physical Activity and Health, 2008, 5, 795-814 © 2008 Human Kinetics, Inc

# Why Focus on Transportation? Evidence:

*The CDC Guide to Strategies to Increase Physical Activity in the Community*

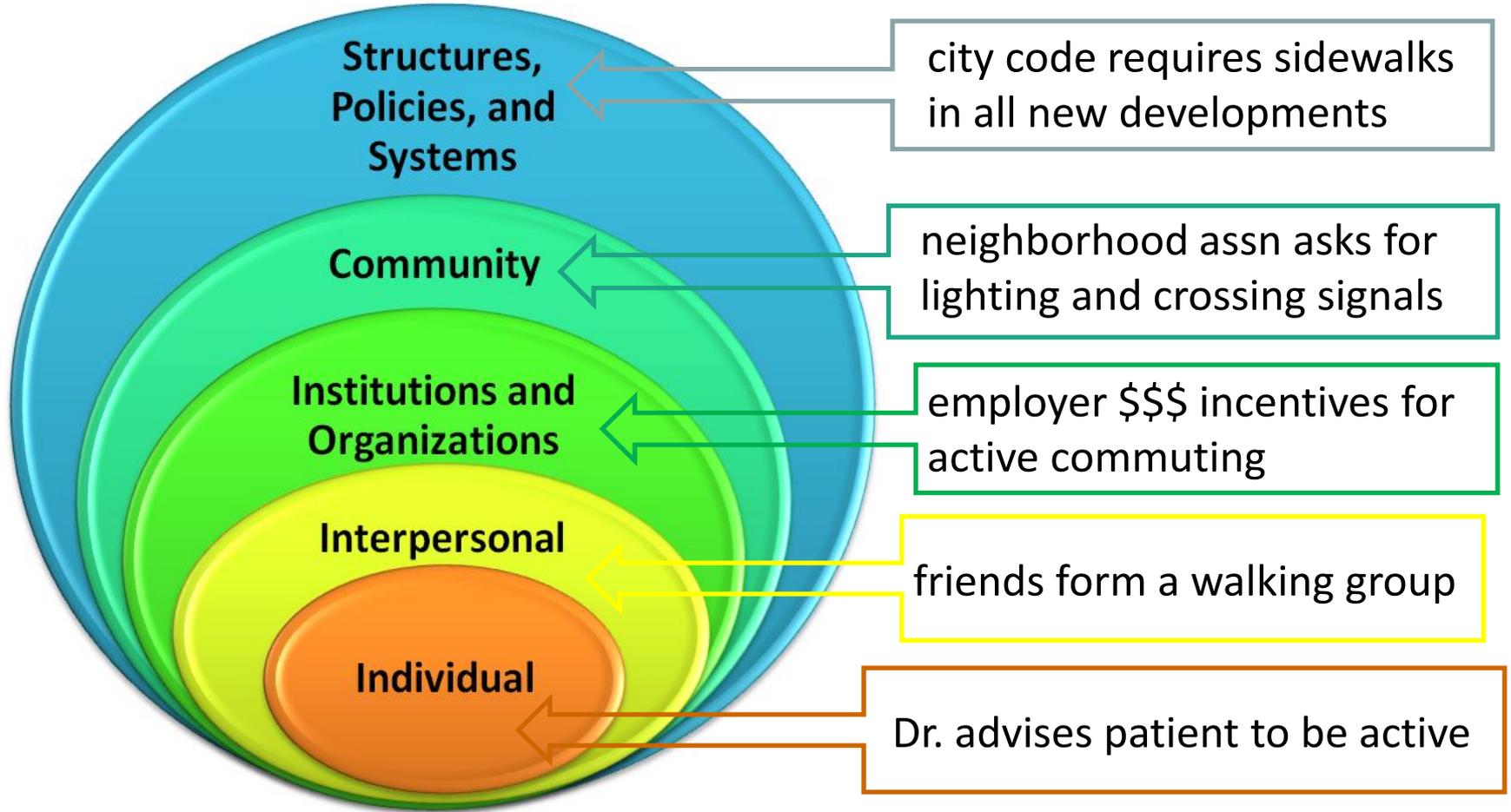
1. Individually adapted health behavior change programs
2. Social support interventions in community settings
3. School-based physical education (with minimum minutes)
4. Point-of decision prompts for using stairs
5. Community-wide awareness and education campaigns
6. Access to places for physical activity, combined with outreach
7. Street-scale urban design and land use policies
8. Community-scale urban design and land use policies
9. Active transport to school
10. Transportation and travel policies and practices

# Physical Activity & Transportation Takeaways

- **Powerful** effect on chronic disease (30-50% morbidity; 10% mortality)
- **Independent** of food intake or weight status
- **Priority** is to get sedentary people active
- At least 150 minutes a week
- Brisk walking a great choice
- **Active transportation** is one of the best ways

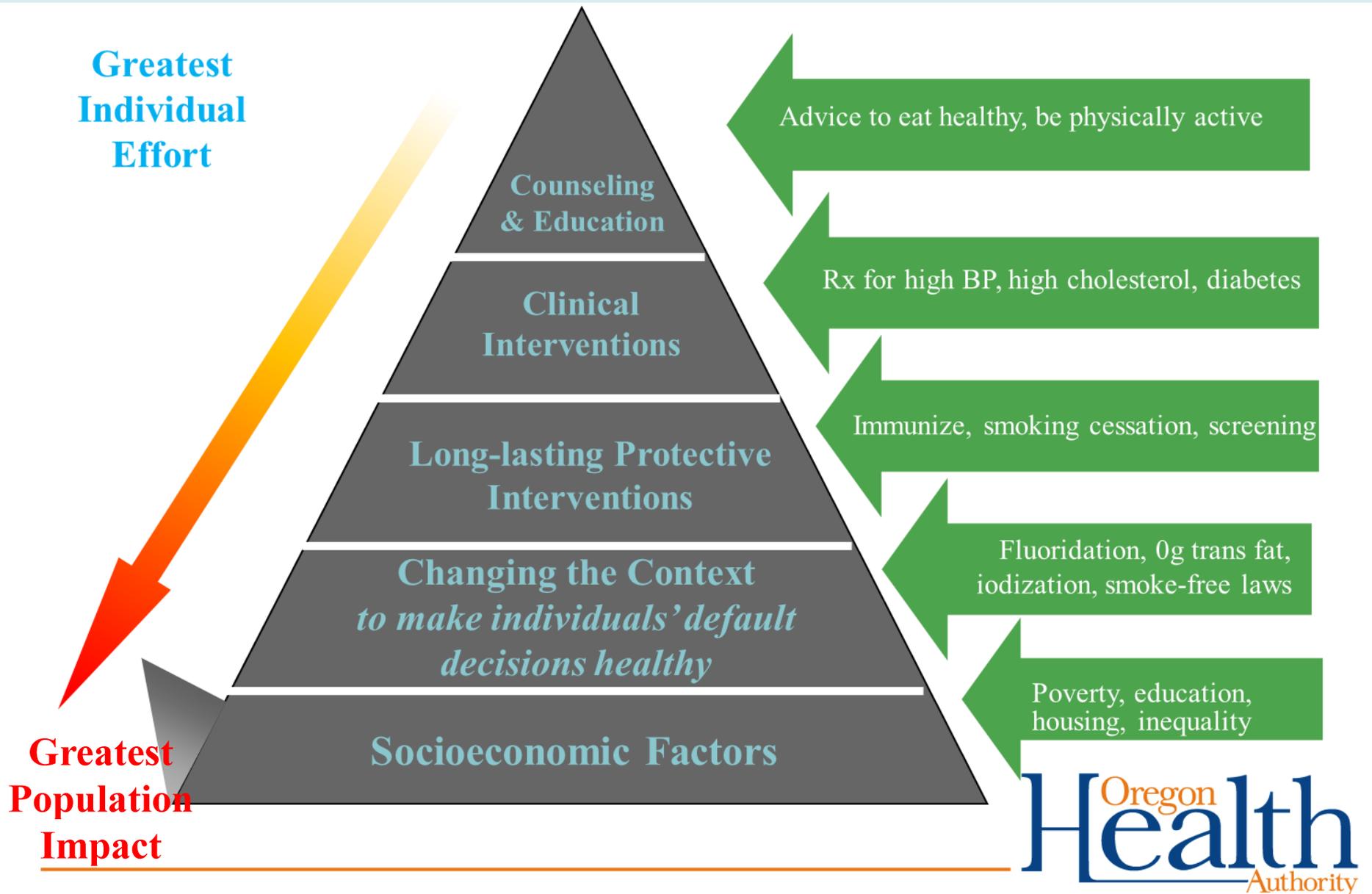


# Socio-ecological Model for Physical Activity



CDC DNPAO, adapted from Bronfenbrenner, U. (1977). Toward an experimental ecology of human development." American Psychologist, 32: 513-531.

# Transportation as a PSE Strategy



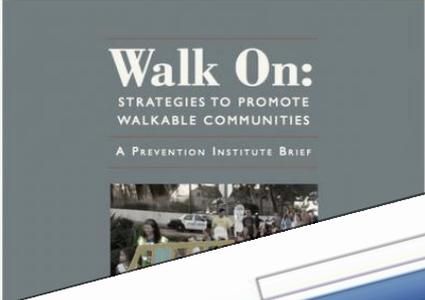
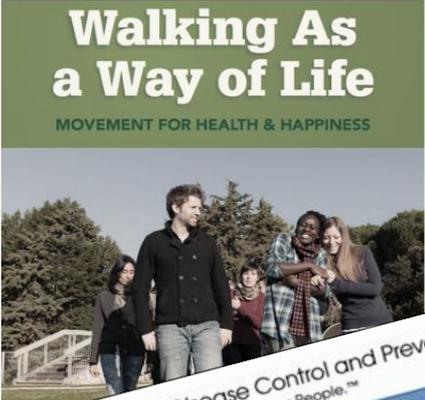
# Online Resources



HOME | READ | WATCH | ACT | COLLABORATIVE | DOCUMENTARY

EVERY BODY WALK! COLLABORATIVE DOWNLOADS

Reports & Presentations | Logos | Infographics



**CDC Centers for Disease Control and Prevention**  
 CDC 24/7: Saving Lives. Protecting People.™

A-Z Index A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

## CDC Transportation Recommendations

Recommend | Tweet | Share

### Brief

The U.S. transportation system has been shaped by many policy inputs and concrete actions which have arisen from transportation and community planners, funding agencies at Federal, state and local levels. Today, the transportation system is being redesigned to move people and goods efficiently; how others are designed to move awareness across communities there is a growing awareness across communities that transportation systems impact quality of life and health. Government and non-government agencies are seeking to protect and promote health while accomplishing their mission.

### The Opportunity

**Resources**

- Health in Transportation Working Group
- Frequently Asked Questions
- Training Opportunities
- Related Links

**Contacts**

For more information, please contact:

- Frederick Bowers
- Tameka Macon
- Victoria Martinez
- Aung Gye
- Jill Stark

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APHA > Topics & Issues > Transportation Issues from the Public Health Perspective

## Transportation Issues from the Public Health Perspective

Transportation decisions affect our lives, economy and health. We use various modes of transportation...

Topics & Issues | ACA Basics | Environmental Public Health | Global Health | Healthy Communities

American Planning Association | Making Great Communities Happen

National Centers for Planning | Green Communities Center | Hazards Planning Center | Planning and Community Health Center | Projects | Priority Areas | About the Centers

HEALTH: The Planning and Community Health Center advances practices that human environments in order to promote public health.

U.S. Department of Transportation  
**Federal Highway Administration**

Office of Planning, Environment, & Realty (HEP)  
 Planning • Environment • Real Estate

## Health in Transportation

Resources

FHWA → Planning

### Health in Transportation

Welcome to the Federal Highway Administration's (FHWA) webpage is designed to be a comprehensive resource of

Linking health and transportation brings together transportation collaborative process to improve transportation decision developing transportation options that promote and improve

USDOT is committed to promoting better consideration focused on the following objectives:

- Promote safety,
- Improve air quality,
- Respect the natural environment through Context Sensitive Solutions
- Improve social equity by improving access to jobs

Planning and Community Health Center

Community is designed has a direct effect on the health of land development patterns, zoning ordinances, and specifications impact walkability, access to services, transportation options. With an understanding of how the environment affects public health, it is possible to create more livable spaces and places.

Planning and Community Health Center is dedicated to understanding how the built environment affects public health. Through research, partnerships, and education, this center supports the integration of health into planning practice at the local level.

News

APA Receives \$2.9 million CDC Grant

In partnership with the American Public Health Association, APA was awarded \$2.9 million from the Centers for Disease Control and Prevention to help communities improve health.

APA Recognized in National Prevention Strategy Annual Report



# Policy Frameworks and Tools

**Oregon Pedestrian Safety Policy and Systems Change Strategies 2012-2015**

**CA4health** **ChangeLab Solutions**

**Incorporating Safe Routes to School into Local School Wellness Policies**

**MOVE THIS WAY** Making Neighborhoods More Walkable and Bikeable

**Getting the Wheels Rolling**  
A Guide to Using Policy to Create Bicycle Friendly Communities

**ChangeLab Solutions**

**Urban Street Design Guide**

**National Association of City Transportation Officials**



**STATEWIDE TRANSPORTATION PLANNING FOR HEALTHY COMMUNITIES**

April 2014

Prepared for:  
U.S. Department of Transportation  
Office of Planning, Environment, and Realty  
Federal Highway Administration

U.S. Department of Transportation  
Federal Highway Administration

**2014 State Indicator Report on Physical Activity**

**CDC**

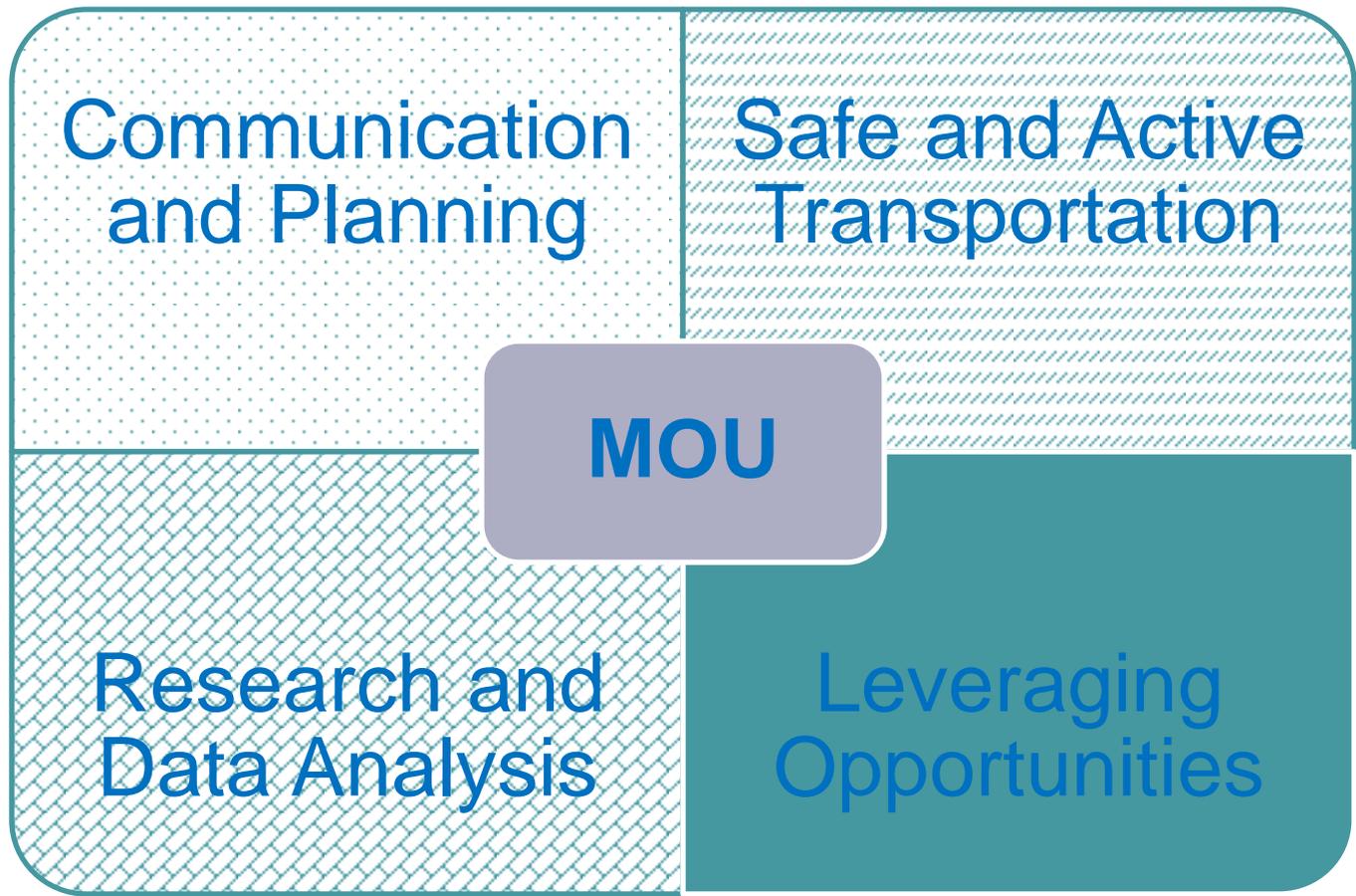
**Priority**

# ODOT and OHA Partnership

- Build mutual understanding
- Identify joint policy and program objectives
- Build supportive framework to promote connection between transportation and public health, statewide



# Key Areas of Work: ODOT and OHA-PHD



# Roles for Local Public Health Partners

- Amplify critical health issues: asthma, chronic disease, injury
- Bring awareness of a population-level approach
- Bring a health in all policies perspective
- Provide evidence, surveillance, data
- Engage community, health experts
- Apply equity lens to address disparities
- Broaden focus beyond built environment, where relevant (e.g., incentives, campaigns for behavior norm change)



# Emphasize: One Health Lens, Multiple Benefits

- Cut **air pollution** to reduce respiratory and heart illnesses;
- Make streets safe to reduce the number of **fatalities and serious injuries** from crashes;
- Provide access to places to be **physically active**, to reduce rates of chronic diseases;
- Reduce **greenhouse gasses**
- Alleviate the **transportation cost burden** for the public, by offering low-cost alternatives.



# Other Wins!

“People out walking make our towns livelier, safer and more attractive places to live, work, play, shop and invest.”

“Is a step toward social equity, since walking can be made accessible to all ages, races, incomes, and abilities.”



“Walking is not just about health. It’s about **joyfulness** and fun.”  
-- WalkBoston

“It is hard to get people to eat healthier. But we can get them to walk. All they need are shoes.” – KP CEO

“Walking is safe, simple, and doesn’t require practice, or any fancy gear.” -- U.S. S.G.

It connects us to the places where we live, it makes us healthier, and it’s cheap. -- Oregon Walks

# Thank you!

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Photo of the signing of the Bicycle Bill in 1971, which started the Bike and Ped program and all that has come after.