The Built Environment and Health:

Engaging in Land Use & Transportation work in 2014-2015

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Community Programs Meeting

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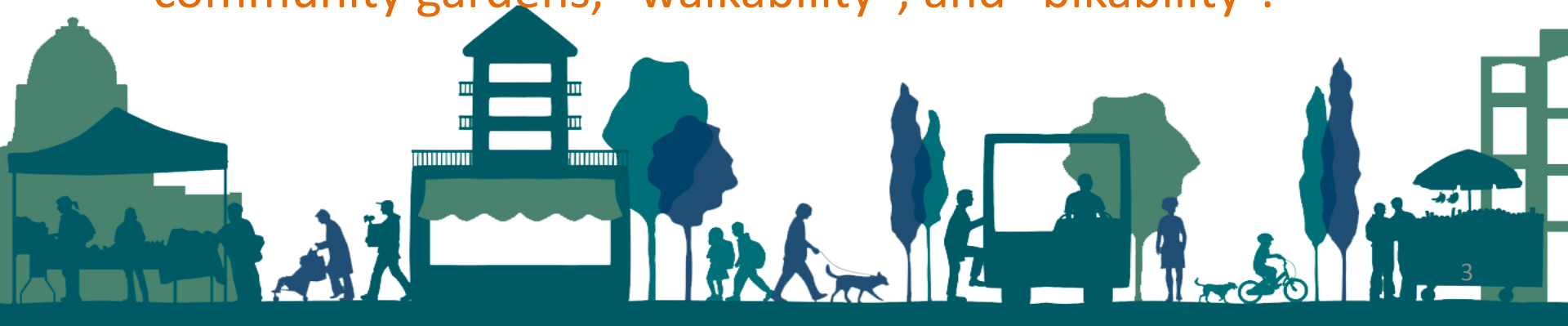
What we will cover today

- **Why** the built environment as a setting?
- **What** is there to know about the built environment?
- **What** is PHD/HPCDP doing to tie into this new setting at the state level?
- **How** does LU/T ties into HC program work?
- **How** are/can HC Coordinators engage in LU/T work in the 2014/15 grant year?

Built Environment

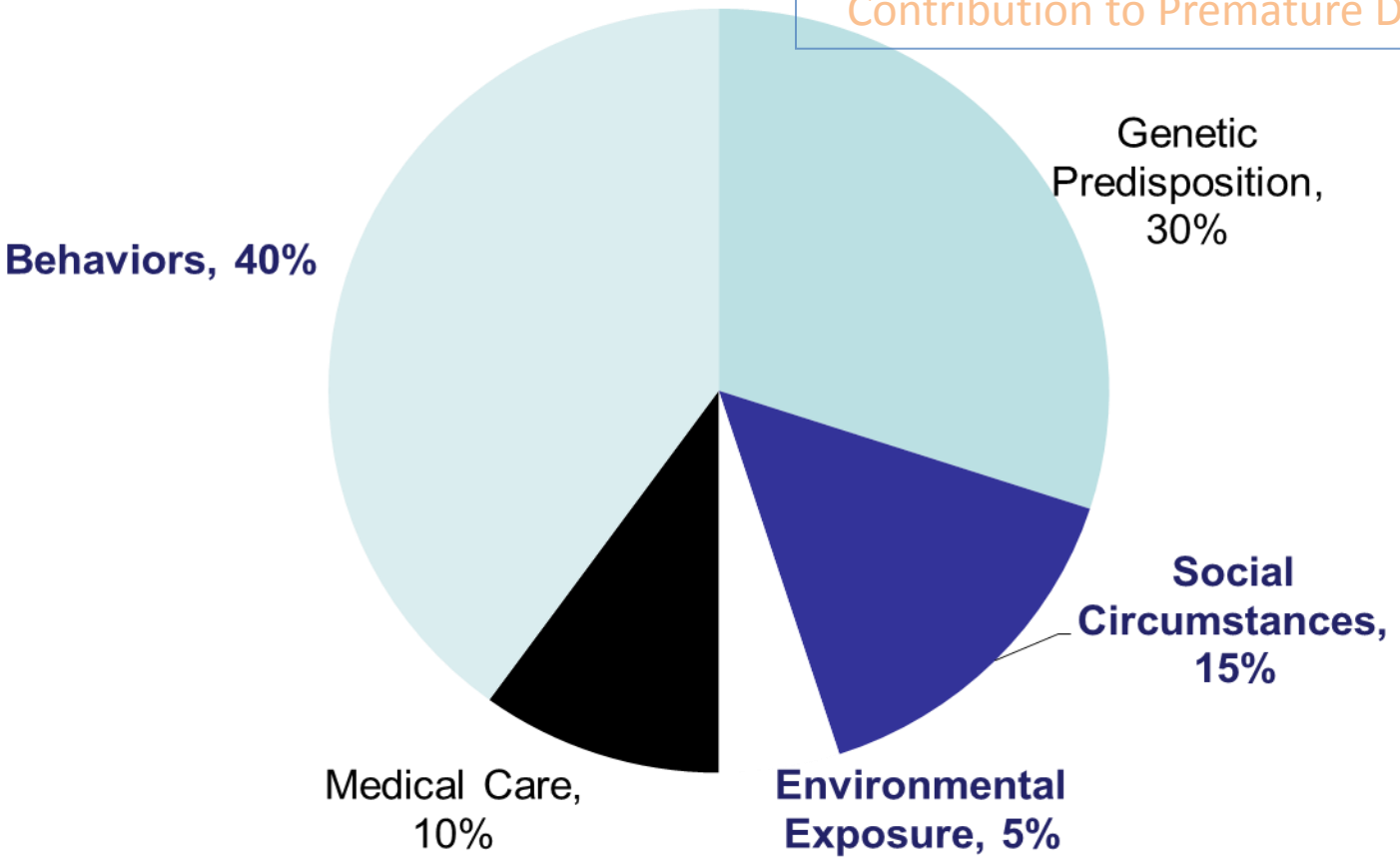
- Refers to the **human-made surroundings** that provide the setting for human activity, ranging in **scale** from buildings and parks or green space to neighborhoods and cities that can often include their supporting **infrastructure**, such as **water supply**, or **energy networks**.
- The "**human-made space in which people live, work, and recreate on a day-to-day basis"**
- Encompasses **places** and **spaces** created or modified by people including **buildings, parks, and transportation systems**". In recent years, public health research has expanded the definition to include healthy food access, community gardens, "walkability", and "bikability".



Why the Built Environment as a priority setting?

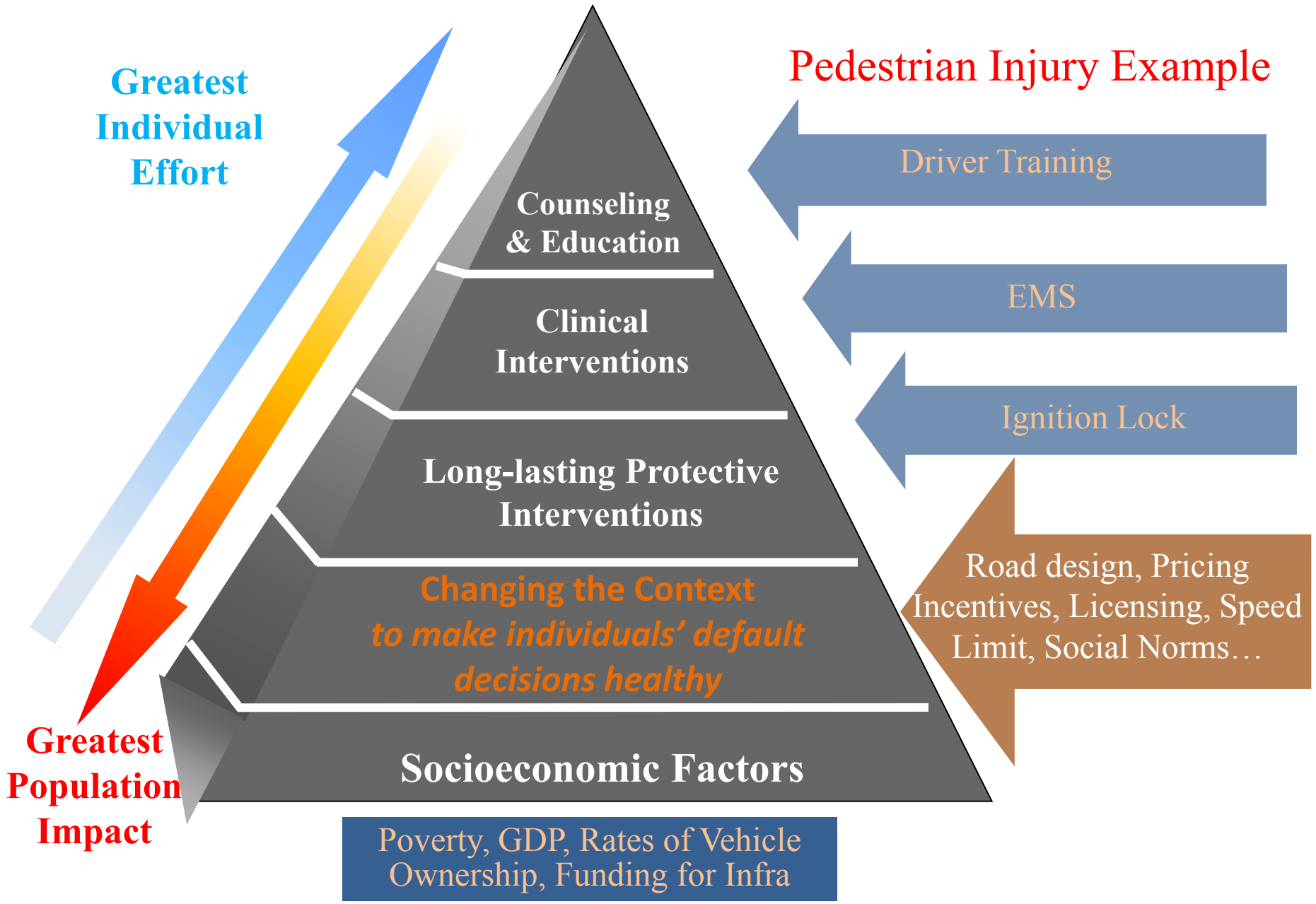
What Creates Health?

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



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

Health Impact Pyramid



Transportation and Land Use as Determinants of Health

Oregon leading causes of death, 2012

- Cancer
- Heart disease
- Chronic lower respiratory disease
- Stroke
- Unintentional injuries

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

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

Why Focus on Transportation?

Sedentary ↑

Hours of screen time/week, U.S.: 53 (2009) (including multi-tasking, 75 hours/week)

8th graders using a screen more than 3 hours/day outside school, Oregon: 27.3%

Leisure ↔

Slight fluctuation (5-10%), depending on education, gender, race, since 1990

23.4% of Oregon adults meet the CDC guideline

Occupation ↓

Workers in low-activity occupations, U.S.: 12.4% (1950) to a 40.2% (2000)

Workers who "mostly sit or stand" at work, Oregon: 64.9% (2009)

Travel Behavior – All Starting to Moderate or Reverse Trends

Driving cars for all trips, U.S.: 67% (1960) vs. 88% (2000)

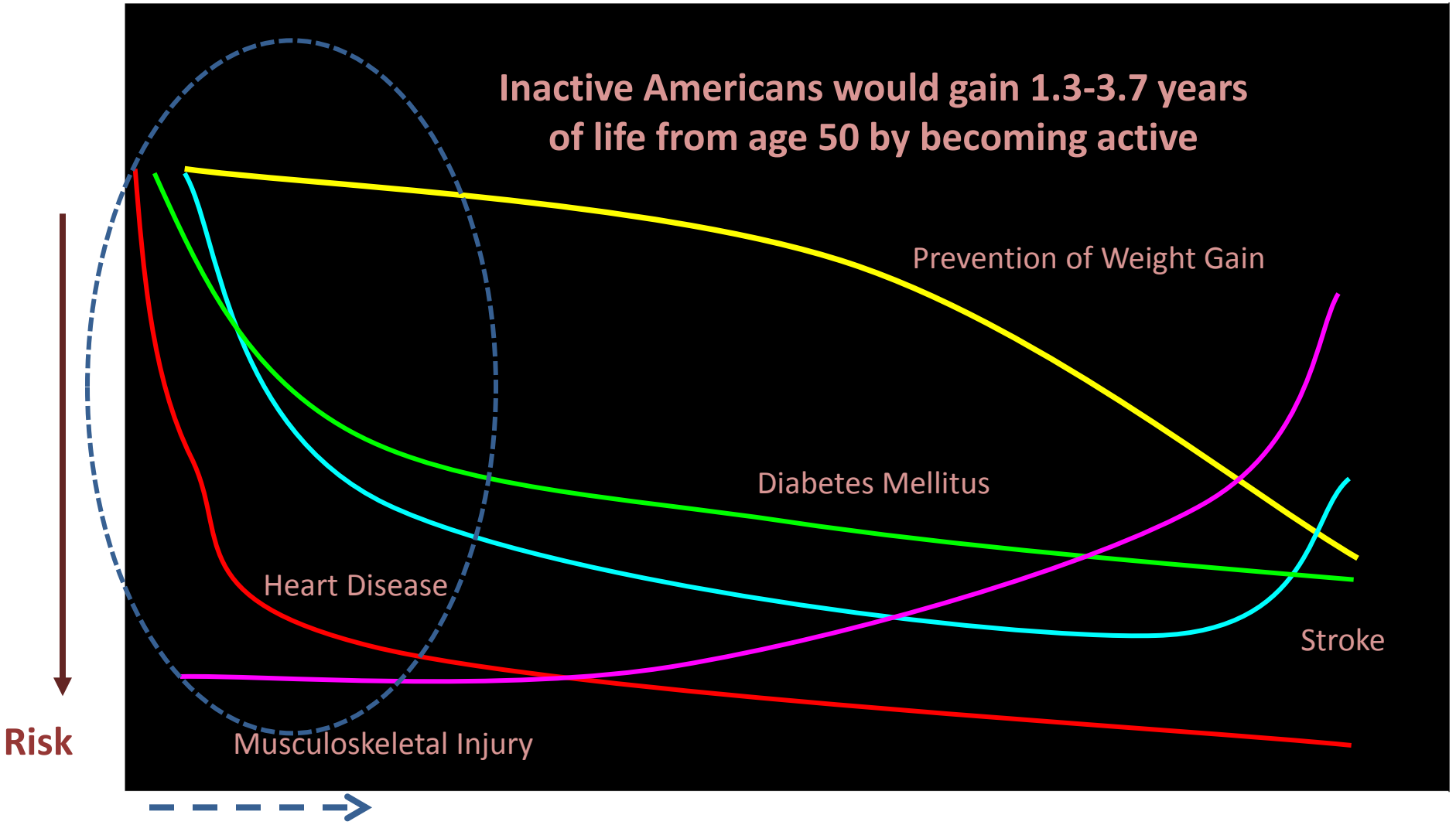
Walking or biking to school, U.S.: 40% (1969) vs. 13% (2001)

Proportion of residents living in suburbs: doubled 1950 to 2000

Home ↓

Daily caloric expenditure, women, U.S.: 666 kcal (1965) to 400 kcal (2010)

Activity and Health Curves



Modest Change in PA Here = Big Reduction in Risk

CDC Evidence Base for Physical Activity

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

One Strategy, Multiple Benefits

- Cut air pollution that contributes to respiratory and heart illnesses;
- Reduce the number of fatalities and serious injuries from crashes;
- Increase physical activity to reduce rates of diabetes, cancer and other chronic diseases;
- Reduce greenhouse gas emissions; and
- Alleviate the high cost of transportation.

What is the Built Environment and Land Use/Transportation Planning?

A lot to learn…what's appropriate?

- Planning theory and concepts
- Regulatory history and current regulatory environment
- Policy & design tools ***or*** policy, system and environment levers/tools
- Funding process and opportunities
- Connection between built environment & health

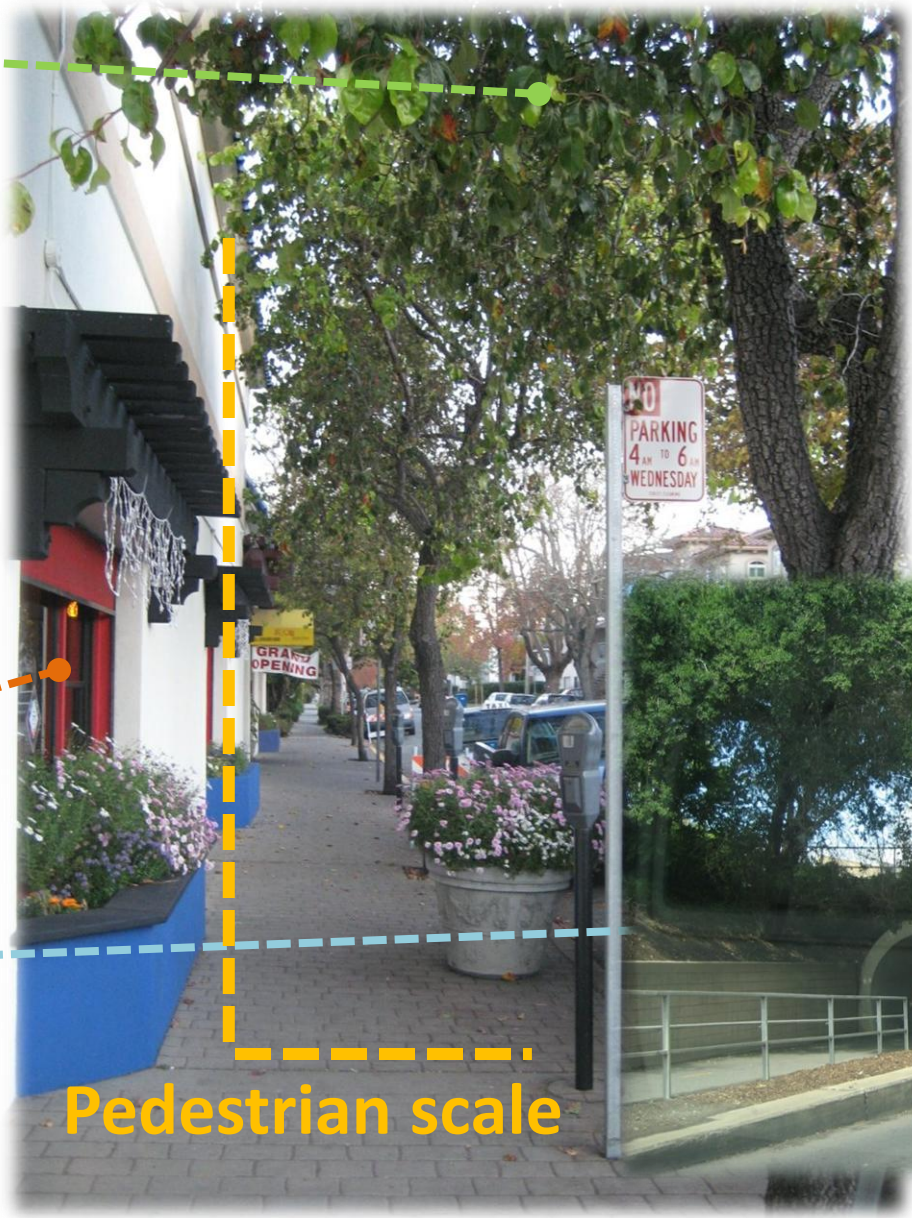
Design theory and concepts - LU

Vegetation

Mix of textures & Colors

Pedestrian engagement (economic development)

On-street parking



Pedestrian scale

Character (Districts)

- Eliminate barriers
- Safety (perceived and real)

Engineering & Design Elements - Transportation

Pedestrian Activated Signal

Reverse Angle Parking

Highly Visible Crossing

Roundabout

Road Diet, Crossing, Bike Lane

Curb Cuts

Street Furniture

Pavers, Street Features

Pedestrian Zone/Plaza

Photos courtesy of Walkable Communities

History of Land Use Planning in Oregon

1973: On May 29, SB 100 is approved. The bill creates the Land Conservation and Development Commission (LCDC) and the Department of Land Conservation and Development (DLCD).

1974: On Dec. 27, LCDC adopts first 14 Statewide Planning Goals.

1986: All Oregon cities and counties have approved comprehensive plans that meet Planning Goals.

1991: LCDC, with support from the Oregon Department of Transportation (ODOT), adopts the Transportation Planning Rule.

Oregon's Statewide Planning Goals

Goal 1 Citizen Involvement

Goal 2 Land Use Planning

Goal 3 Agricultural Lands

Goal 4 Forest Lands

Goal 5 Natural Resources, Scenic and Historic Areas, and Open Spaces

Goal 6 Air, Water and Land Resources Quality

Goal 7 Areas Subject to Natural Hazards

Goal 8 Recreational Needs

Goal 9 Economic Development

Goal 10 Housing

Goal 11 Public Facilities & Services

Goal 12 Transportation

Goal 13 Energy Conservation

Goal 14 Urbanization

Goal 15 Willamette River Greenway

Goal 16 Estuarine Resources

Goal 17 Coastal Shorelands

Goal 18 Beaches and Dunes

Goal 19 Ocean Resources

Where does community design begin?

Who are the groups/agencies/departments?

- Federal government
- State government
  - Department of Land Conservation and Development (DLCD)
- Regional planning agencies
  - Metropolitan Planning Organization (MPOs)
  - Council of Governments (COGs)
  - Area Commissions on Transportation (ACT)
- County, City and town
  - Planning Departments
  - Redevelopment Agencies
  - Parks and Recreation

Planning Tools/policy levers

- Statewide and regional planning efforts
- Comprehensive Plan
- Zoning Ordinance
- Transportation System Plans (TSPs)
- Other Planning tools:
  - Master Plans, Specific Plans (Active Transportation plans, Neighborhood plans)
  - Capital Improvement Plans
  - Redevelopment/ Urban Renewal Plans
  - Design Review

Five E Levers to Enhance Ped/Bike Environment

Engineering	Education	Encouragement	Enforcement	Evaluation
Adopt, codify active transportation principle/guidelines • Traffic calming • Streets as shared public spaces • Crossings that minimize risk • Intersections that are compact Design to be: • Safe, predictable, accessible, simple • Make the invisible visible • Easy to use Design for : • Mobility, access, aesthetics • Peak demand vs other 22 hrs • Not max capacity	Subsidize quality driver education Ped/bike content in driver ed and tests Awareness campaigns Wayfinding; publish route maps Create safety in numbers: • Walk to School • Bike to Work • Ciclovia Events	"Drive Less Connect" Allow bikes on transit; provide secure bike parking Permit vehicle sharing; bike share Make driving $$$: • Inc registration $ • Inc licensing $ • Inc Gas Tax Rate • Institute VMT Tax • Remove Fuel Subsidy • Discount transit for low-income Charge for: • Parking • Congestion hours • Tolling	Prioritize laws impacting peds and bicyclists Reduce and enforce speed limits Implement crosswalk enforcement stings Increase patrols of impaired driving and walking Require investigations of ped/bike injury crashes Increase training to enhance above officer skills	Innovate with Performance Measures: • Level of multi-modal • Mode splits • Crash index • Ped delay times

Funding

Federal: Moving Ahead for Progress in the 21st Century (MAP-21)

- Sweeping Funding, Policy, and Structural Change
- More Streamlined, Performance based, and Multi-modal
- Set asides and discretionary programs (e.g., SRTS, high risk rural roads) gone
- Reauthorization in 2014. At least three bills for gas tax…other proposals

State: ODOT is taking advantage of **flexibility** in MAP-21 to combine pots of money.

Most of the MAP-21 money comes to Oregon in "Major Projects" ($750 Million) and "Highway Funding" ($483 Million). We add more $$$ via gas tax and general fund.

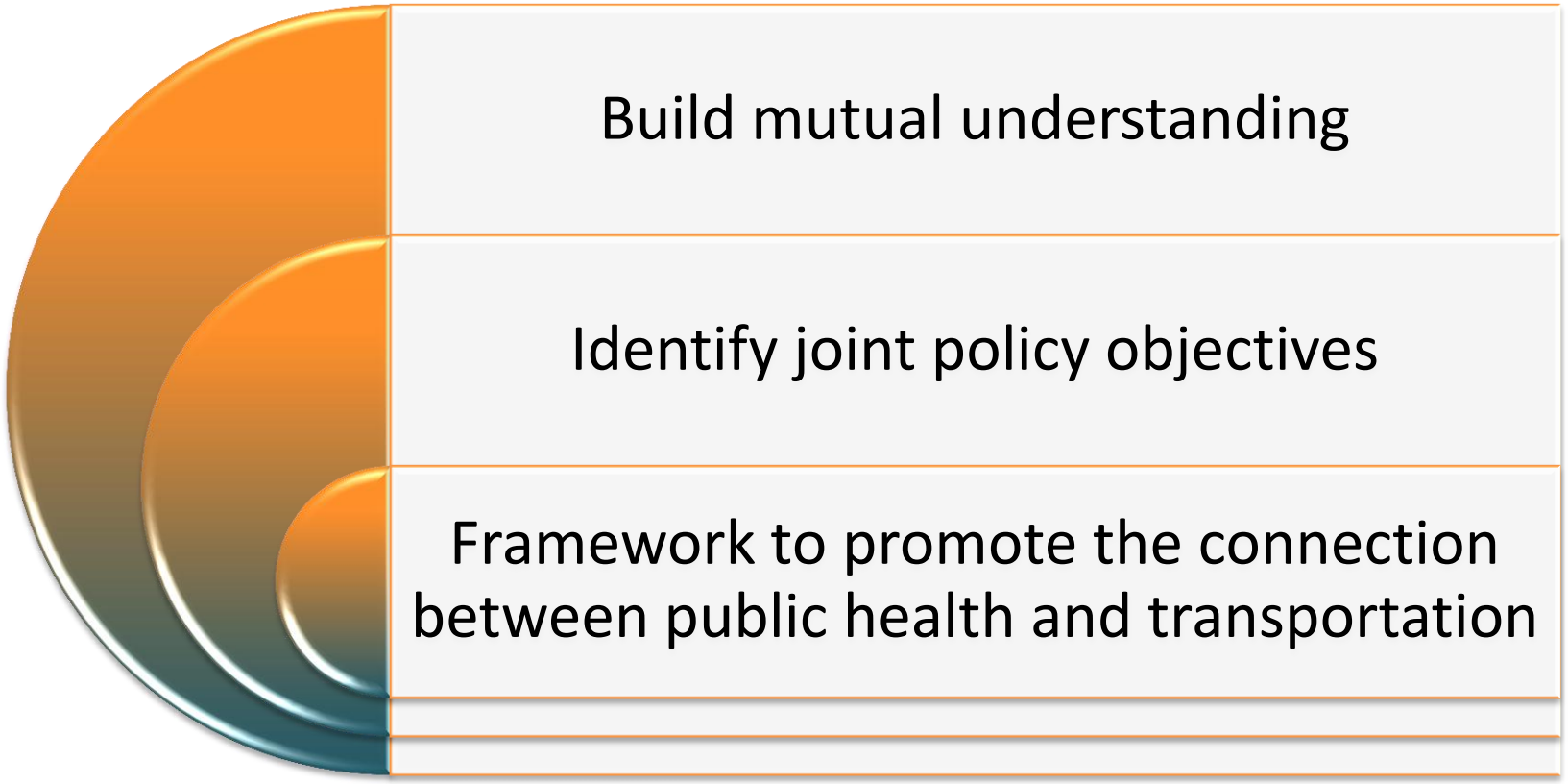
Other projects – especially ped, bike and trail, happen because they get on the Surface Transportation Program list ($132 Million) or come through other pots of money like ConnectOregon ($142 Million)

We are still learning…

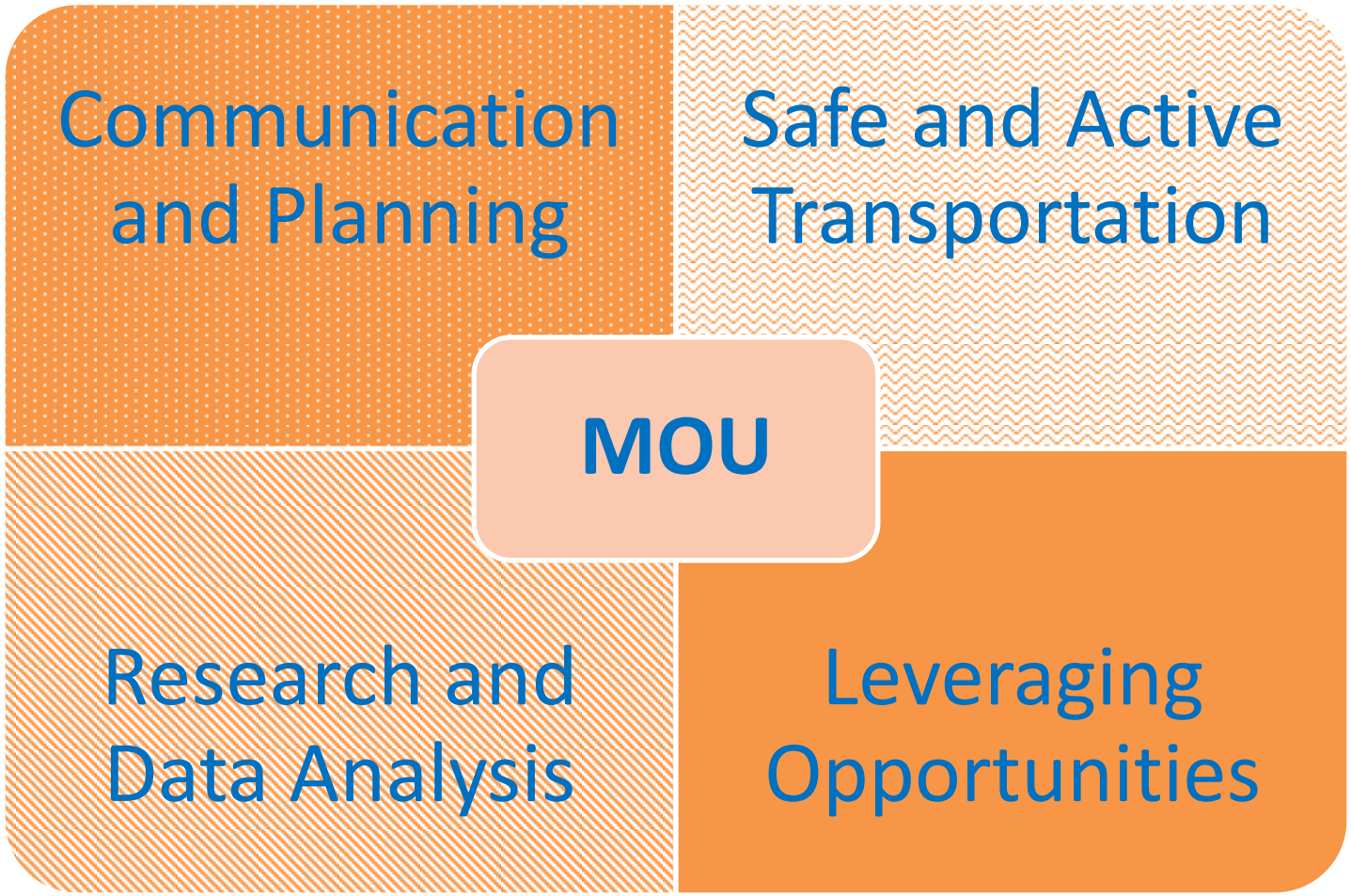
Connection between built environment & health

What is PHD & HPCDP doing to tie into LU/T at a state level?

ODOT and OHA Partnership



Joint Policy Objectives



Current Drivers for our LU/T Work

HPCDP Strategic Plan and 1305 Grant Activities

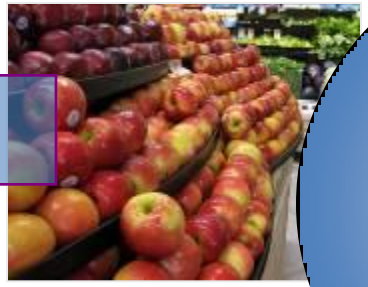
- Build internal HPCDP capacity for built environment work by summarizing evidence base and best practices, identifying priorities and strategies, disseminating info.
- Expand work with TGM Advisory Committee.
- Develop metrics that use health as criteria for project $.
- Implement Safe States grant.
- Participate in Oregon Pedestrian and Bicycle Plan Update.
- Link LPH to ACTs and encourage LPH participation in ODOT programs.
- Develop guidance, objectives and required activities for next RFP for Healthy Communities.
- Develop training and guidance for Healthy Communities grantees on:
  - factors that influence walking and biking
  - assessing comp plans and/or other LU/T variables
  - convening or joining planning partners
  - how to increase or improve walking and bicycling infrastructure and active transportation, and connectivity via land use planning
  - passing local policies supporting environmental change & enhanced places to walk

Why and how to tie LU/T into HC program work?

Public health can't do it alone:
work a multi-disciplinary policy environment

Land Use

Redevelopment



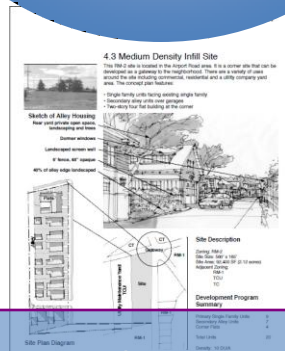
Economic Development

Health in All Policies

Housing

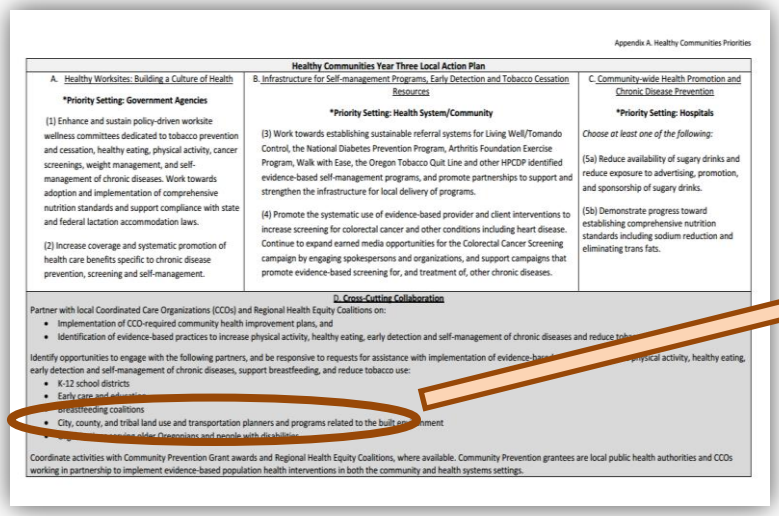
Transportation

Schools



Development Review

2014/15 Continuation Application



Appendix A. Healthy Communities Priorities

Healthy Communities Year Three Local Action Plan

A. Healthy Worksites: Building a Culture of Health	B. Infrastructure for Self-management Programs, Early Detection and Tobacco Cessation Resources	C. Community-wide Health Promotion and Chronic Disease Prevention
***Priority Setting: Government Agencies** (1) Enhance and sustain policy-driven worksite wellness committees dedicated to tobacco prevention and cessation, healthy eating, physical activity, cancer screenings, weight management, and self-management of chronic diseases. Work towards adoption and implementation of comprehensive nutrition standards and support compliance with state and federal lactation accommodation laws. (2) Increase coverage and systematic promotion of health care benefits specific to chronic disease prevention, screening and self-management.	***Priority Setting: Health System/Community** (3) Work towards establishing sustainable referral systems for Living Well/Tomando Control, the National Diabetes Prevention Program, Arthritis Foundation Exercise Program, Walk with Ease, the Oregon Tobacco Quit Line and other HPCDP identified evidence-based self-management programs, and promote partnerships to support and strengthen the infrastructure for local delivery of programs. (4) Promote the systematic use of evidence-based provider and client interventions to increase screening for colorectal cancer and other conditions including heart disease. Continue to expand earned media opportunities for the Colorectal Cancer Screening campaign by engaging spokespersons and organizations, and support campaigns that promote evidence-based screening for, and treatment of, other chronic diseases.	***Priority Setting: Hospitals** *Choose at least one of the following:* (5a) Reduce availability of sugary drinks and reduce exposure to advertising, promotion, and sponsorship of sugary drinks. (5b) Demonstrate progress toward establishing comprehensive nutrition standards including sodium reduction and eliminating trans fats.

D. Cross-Cutting Collaboration

Partner with local Coordinated Care Organizations (CCOs) and Regional Health Equity Coalitions on:

- Implementation of CCO-required community health improvement plans, and
- Identification of evidence-based practices to increase physical activity, healthy eating, early detection and self-management of chronic diseases and reduce toba

Identify opportunities to engage with the following partners, and be responsive to requests for assistance with implementation of evidence-base physical activity, healthy eating, early detection and self-management of chronic diseases, support breastfeeding, and reduce tobacco use:

- K-12 school districts
- Early care and educ
- breastfeeding coalitions
- City, county, and tribal land use and transportation planners and programs related to the built env ment
- ing older Oregonians and people with disabilities

Coordinate activities with Community Prevention Grant awards and Regional Health Equity Coalitions, where available. Community Prevention grantees are local public health authorities and CCOs working in partnership to implement evidence-based population health interventions in both the community and health systems settings.

City, county, and tribal land use and transportation planners and programs related to the built environment

*"Identify opportunities to **engage** with the following partners, and **be responsive to requests for assistance** with implementation of evidence-based practices to increase physical activity, healthy eating, early detection and self-management of chronic diseases, support breastfeeding, and reduce tobacco use."*

What specific activities or actions can Coordinators do/take?

Roles for Public Health Working with LU/T Partners

- Amplify health as a critical issue
- Bring a health in all policies perspective
- Bring awareness of population-level approach (vs individual)
- Provide evidence, surveillance and data
- Engage the community and health experts
- Apply an equity lens to address disparities
- Broaden focus beyond built environment, where relevant (e.g., incentives and disincentives for behavior change)

Discussion

- What kinds of LU/T activities do you have planned for the coming year?
- Thoughts about roles and responsibilities moving forward?
- What type of knowledge – training - skills do you need to be successful in this work?
  - What outside professionals or content experts would you be interested in hearing from?