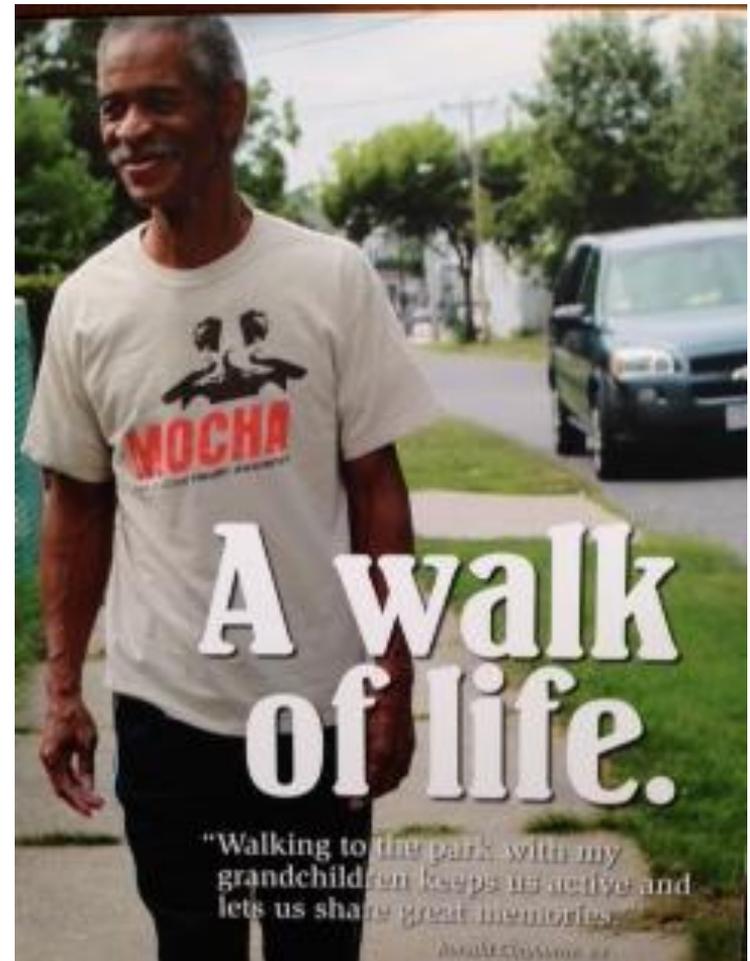


HEALTHY COMMUNITY DESIGN FOR HEALTHY AGING

Pioneer Valley Planning Commission with financial support from
MA Dept of Public Health and the MA Council on Aging

Learning Objectives

- Explain how healthy aging is related to healthy community design
- Identify barriers to healthy aging in the built environment
- Understand the basic regulatory structure that controls community planning and design
- Identify key planning tools for facilitating healthy aging



Background



- MA DPH engaged PVPC to prepare Healthy Community Design toolkit in 2013
- Now we are re-engaged to assure consideration of the needs of elders in toolkit

Poll

- Please report # attendees out of total who attended last years' 1/2 day session on tools for **Leveraging Positive Change**
- For example, 8:11 OR 2:5, etc.
- Survey Results.....

Overview of **Leveraging Positive Change**

- For those who attended last years' training, please take this time to:
 1. **reflect** on an elders' experience in the built environment you observed in the last six month since you participated in the **Leveraging Positive Change** training, &
 2. Remember aspects of the built environment that facilitated or hindered that elder's ability to meet/fulfill her/his need/errand/activity, i.e. *housing, mobility, nourishment, spiritual development, health, family, &*
 3. reflect on how local government could improve her/his life by modifying the existing built environment through physical as well as regulatory changes, &
 4. Get to the **Leverage Point** for local change

Massachusetts Healthy Community Design Toolkit

The design of the built environment affects human health and well-being. The toolkit supports improved health outcomes by **making planning tools more accessible to public health advocates.**



Massachusetts Healthy Community Design Toolkit

Organized by “leverage points” describing **specific land use and planning tools that can be used to improve the built environment for better health outcomes**

- ❑ Subdivision Regulations
- ❑ Site Plan and Special Permit Review
- ❑ Community Plans
- ❑ Smart Growth Development
- ❑ Road Design
- ❑ Stormwater Management
- ❑ Walking, Biking and Transit Networks
- ❑ Green and Fit Buildings
- ❑ Municipal Policies and Programs



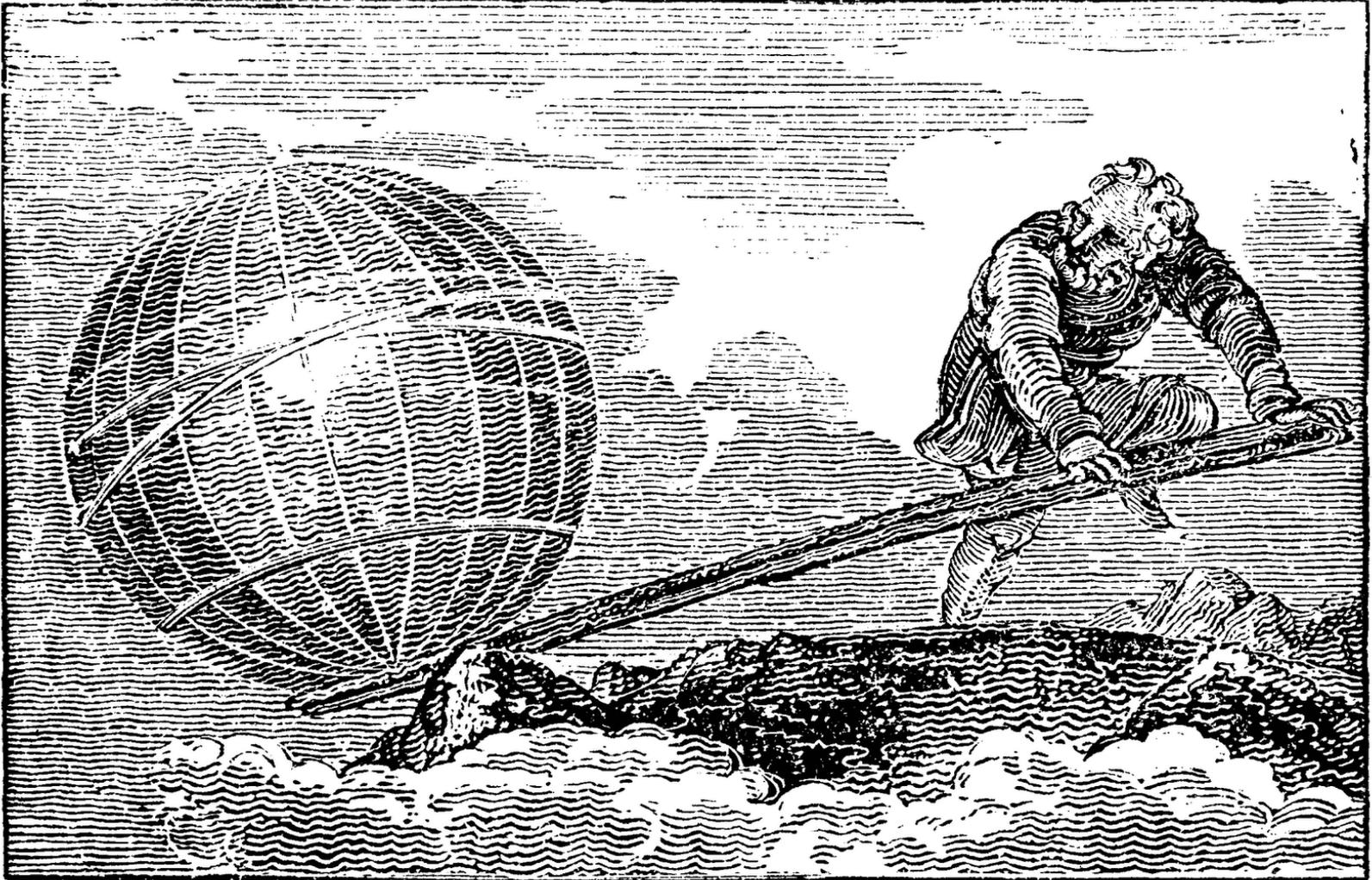
Healthy Community Design Toolkit

- Every leverage point has:
 - definitions,
 - an introduction,
 - a checklist and
 - additional resources.

- The checklists describe specific actions to take.
Additional resources include:
 - example bylaws,
 - policies and
 - other tools for action.



Massachusetts Healthy Community Design Toolkit



Major Findings of Research

- Healthy community design for elders will benefit all.
- An Informed and Educated public is a key leverage point in general but/and...
- Informed elders are an even more 'key' leverage point (*think of who serves on most of your City/Town committees...*) because of their disproportionate power in local government, especially in Towns

Social determinants of health and environmental health promotion

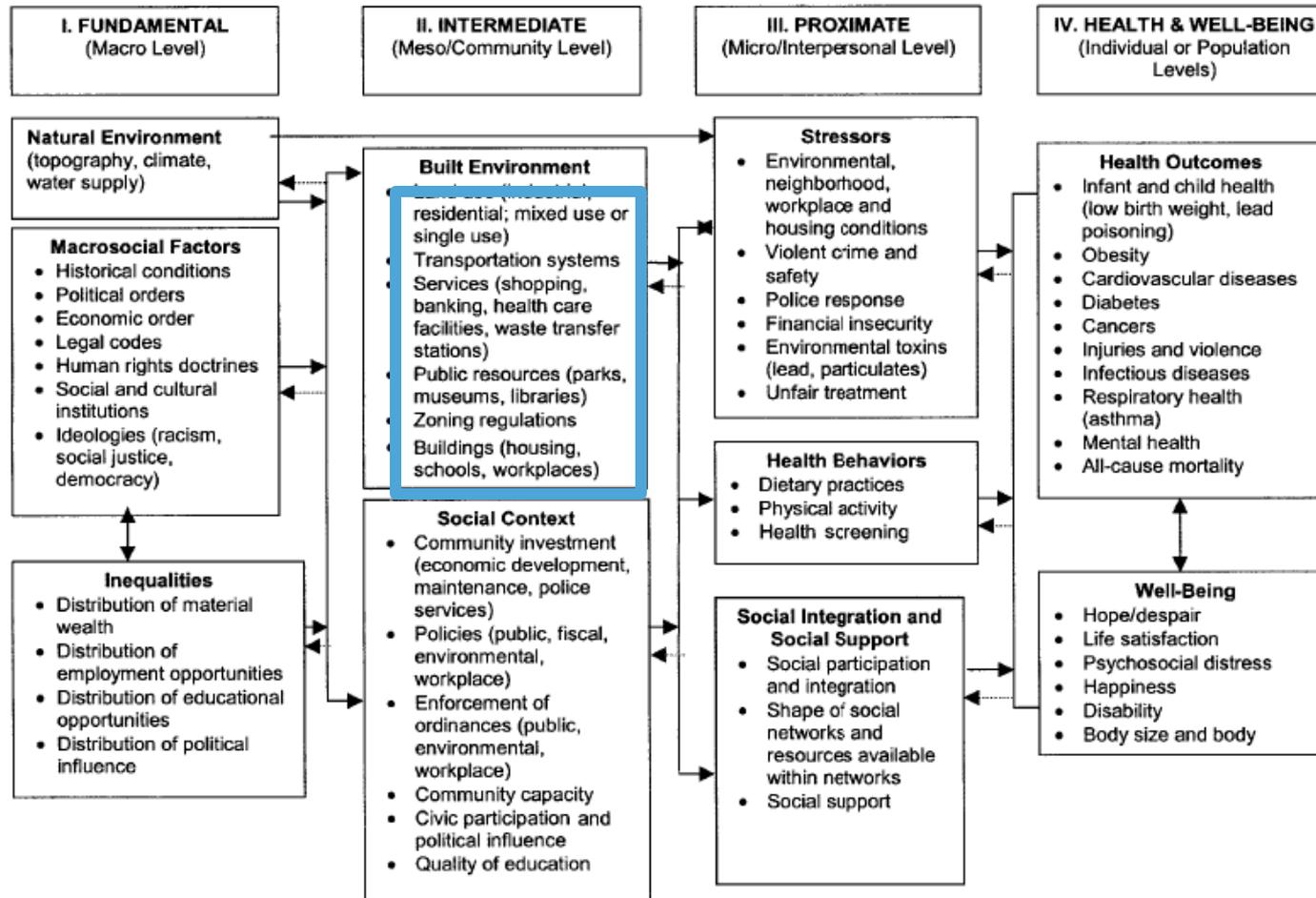


FIGURE 1. Social determinants of health and environmental health promotion. The model was developed for an article by AJ Schultz and ME Northridge.⁵

Community Planning & Public Health

- Shared Goals & History
- “Health, Safety and General Welfare”
- The “Built Environment”
- Communities ARE planned and designed

Obvious

- We intuitively know that the built environment is related to health
- Diversity in built environment can provide people with options so that they can make healthy choices



The Built Environment

How communities get planned, designed, & built

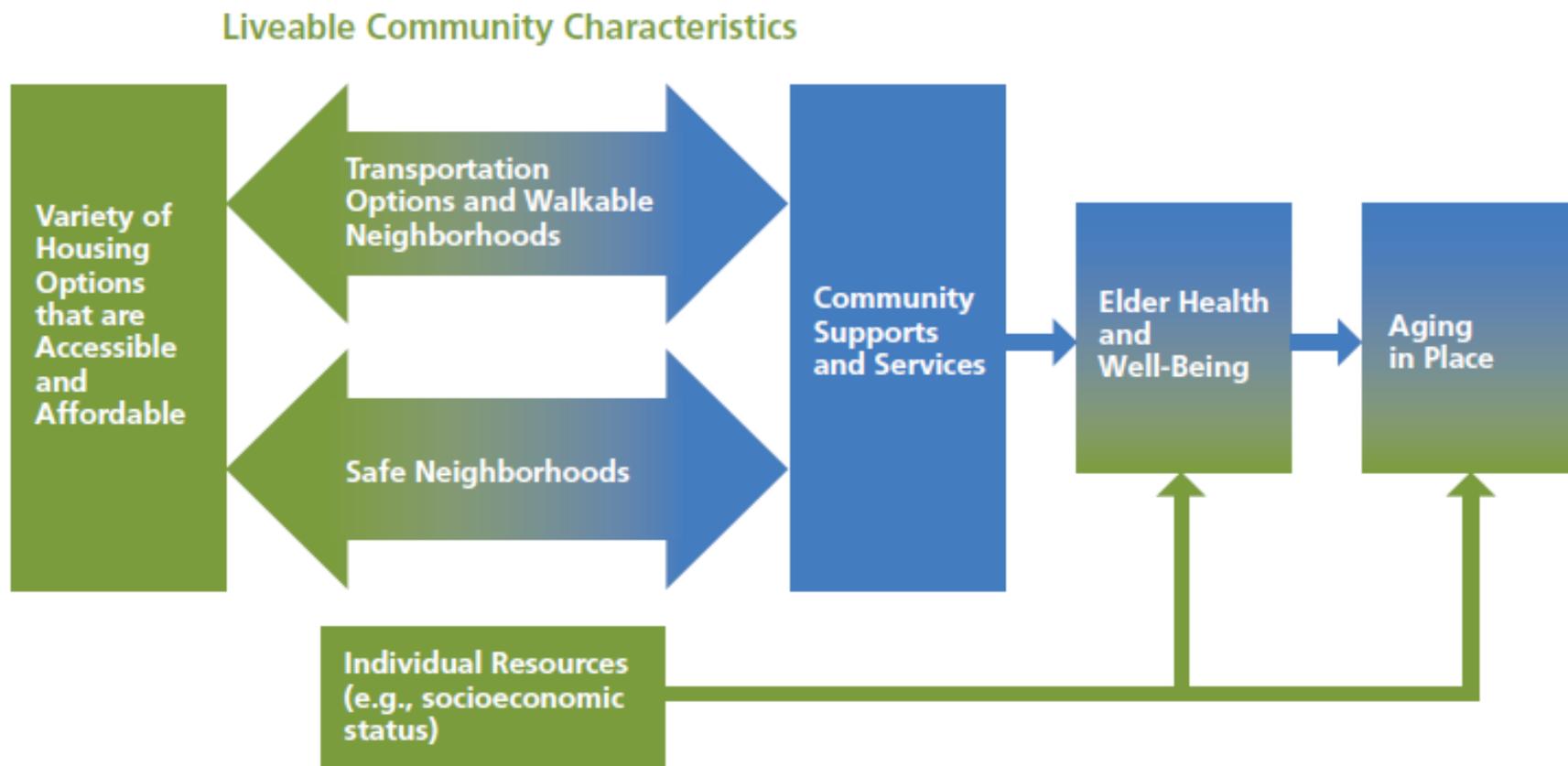
The built environment

- The part of the environment that is shaped by human activity



Livable Communities

Figure 1: Livable Communities and Aging in Place



Development 101

Market + Precedent + Regulations = What gets built

“da money”

“this is how we do things here”

“tell me what you want”

“time is money”

“you get what you ask for”

Transportation 101

Advocacy + Study (\$) + Design (\$) + Construction (\$) = What gets built

“We care about safety, efficiency, livability, sustainability”

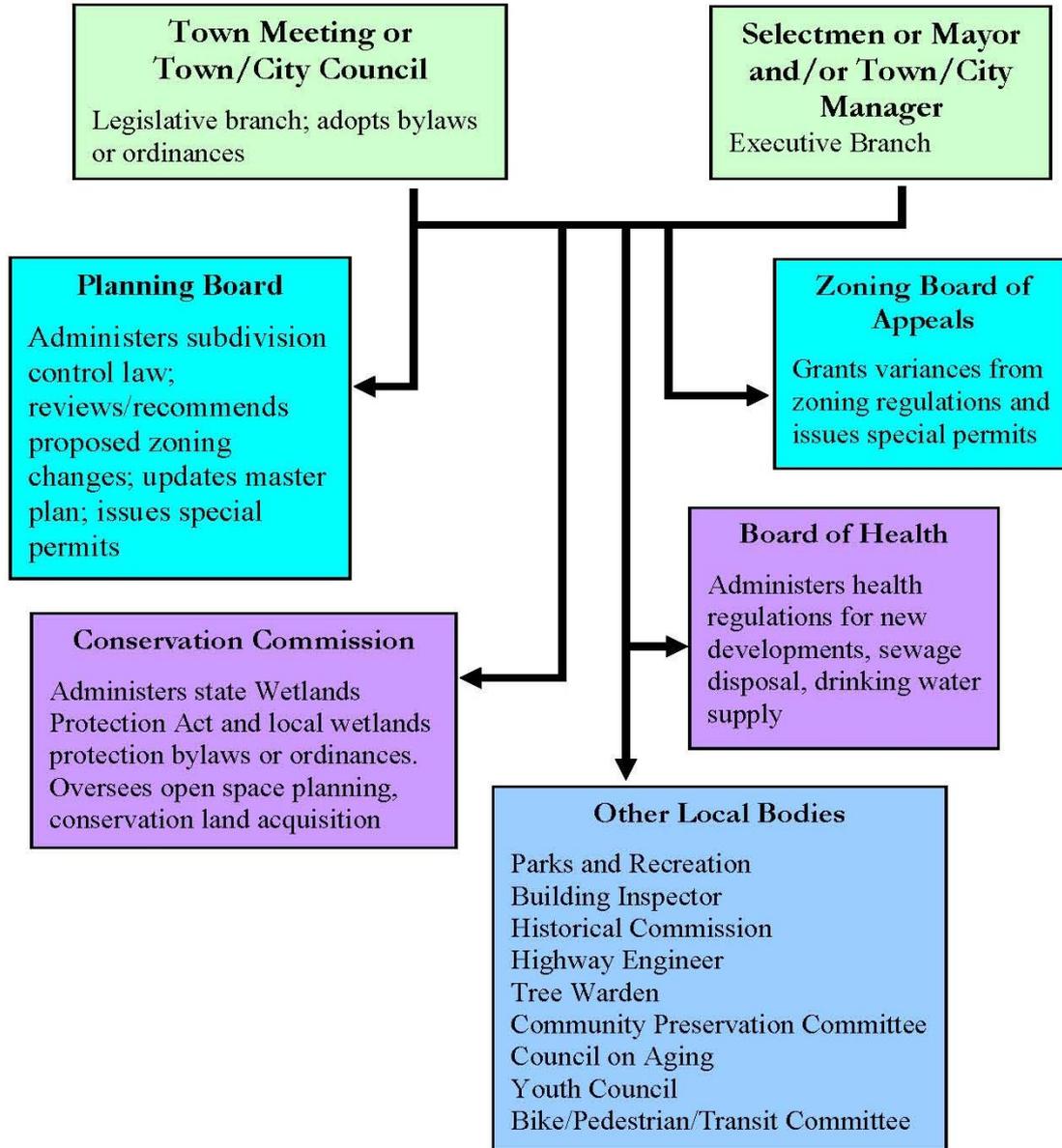
“There’s never enough money”

“I’m a pedestrian... until I get in my car”

Land Use Regulatory Structure

- What we build is shaped by local plans, laws, and policies
- Community Plans: Master Plan, Open Space and Recreation Plan
- Laws: Zoning, Subdivision regulations, Stormwater regulations
- Policies: Complete Streets Policy, Siting requirements for municipal buildings, Affordable housing policy

Local Government Organizational Chart



Healthy Aging

Healthy Aging

- Older people (60+) are a growing segment of our population
- They increasingly want to “age-in-place”



Healthy Aging

“...An enabling environment can help [older people] function at the highest level possible.

An environment that provides obstacles to functioning will actually hasten the decline of remaining abilities.”

Source: Independent for Life: Homes and Neighborhoods for an Aging

America pg. 90

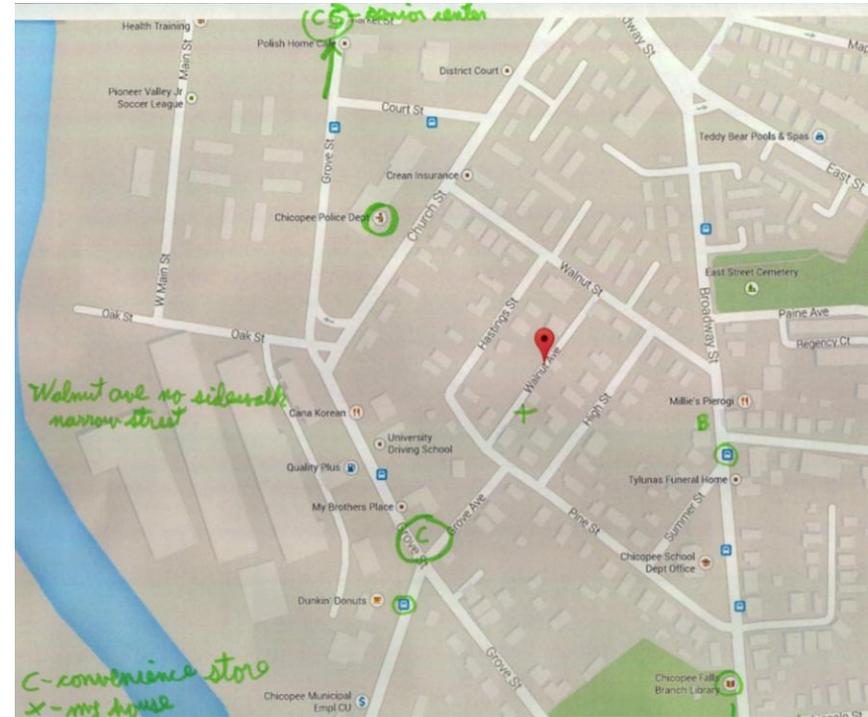


Good Fit=Independence
Poor Fit = Decline

Healthy Aging

“Elderly people spend more of their time at home and in their immediate neighborhoods than younger Americans, and as a result, they are more affected by the opportunities and constraints created by the design of their community.”

Source: [Independent for Life: Homes and Neighborhoods for an Aging America](#), pg 147)



Map of an older person's neighborhood showing important destinations

Focus Groups

- Chicopee/Holyoke/Springfield
 - Dogs
 - Sidewalks
 - Sidewalks/Traffic/Bus-stops—Complete Streets
- Amherst/Hadley/Northampton/Williamsburg
 - Mobility—Complete Streets
 - Food Access

Healthy Aging

Community design that is healthy for older people is good for everyone.



Healthy Aging

- Characteristics of Older People

- ?

- ?

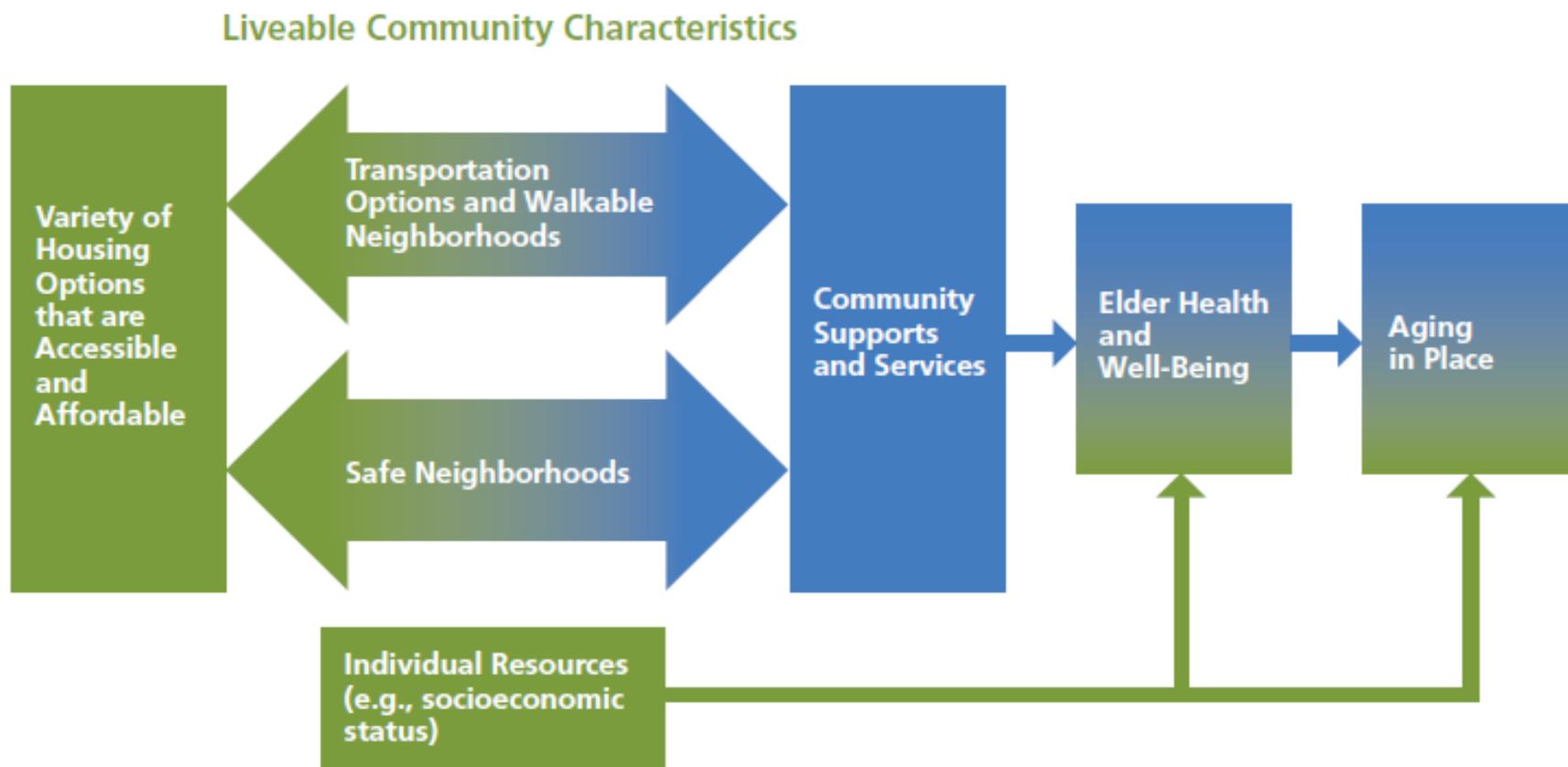
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Healthy Community Design for Healthy Aging

Livable Communities

Figure 1: Livable Communities and Aging in Place



Housing

Housing Needs of Older People

- Diverse unit type and sizes
- Housing that remains affordable with a fixed or declining income
- Designed to accommodate diverse physical abilities
- Close proximity to goods and services
- Minimal maintenance required



Housing Unit Type, Size & Cost

- Single-family, two-family, multi-family
- Big, small, tiny, medium, just right
- Simple, fancy, regular
- Of special interest to older people:
 - ▣ Accessory Dwelling Units
 - ▣ Elder cohousing
 - ▣ Mixed-age communities
 - ▣ Retirement community
 - ▣ Assisted living
 - ▣ Skilled nursing
 - ▣ Shared housing
 - ▣ Cottage housing



Housing Location

- Proximity to goods and services is directly related to community planning
- Most zoning does not allow mixed uses



Housing Design

- Universal Design
- Visitability
 - ▣ Zero step entrance
 - ▣ Wider doors (32”+)
 - ▣ Wider hallways
 - ▣ A ground-floor half bath



Transportation

Diverse Transportation Options

- ❑ Proximity of desired destinations
- ❑ Driving
- ❑ Walking
- ❑ Biking
- ❑ Public transportation
- ❑ Taxis
- ❑ Ride Sharing



Proximity

Land Use pattern

- ▣ Proximity of goods and services
- ▣ Street connectivity
- ▣ Block length and frontage requirements



Transportation-Driving

- Diverse road types (speeds, width)
- Four-way stops instead of two-way
- Dedicated left-turn lanes
- Limit right-turn on red
- Highly visible signs (placed in visible location, reflective, high contrast, large type)
- A well-connected road network
- Use medians to minimize glare from on-coming cars on streets with a lot of traffic

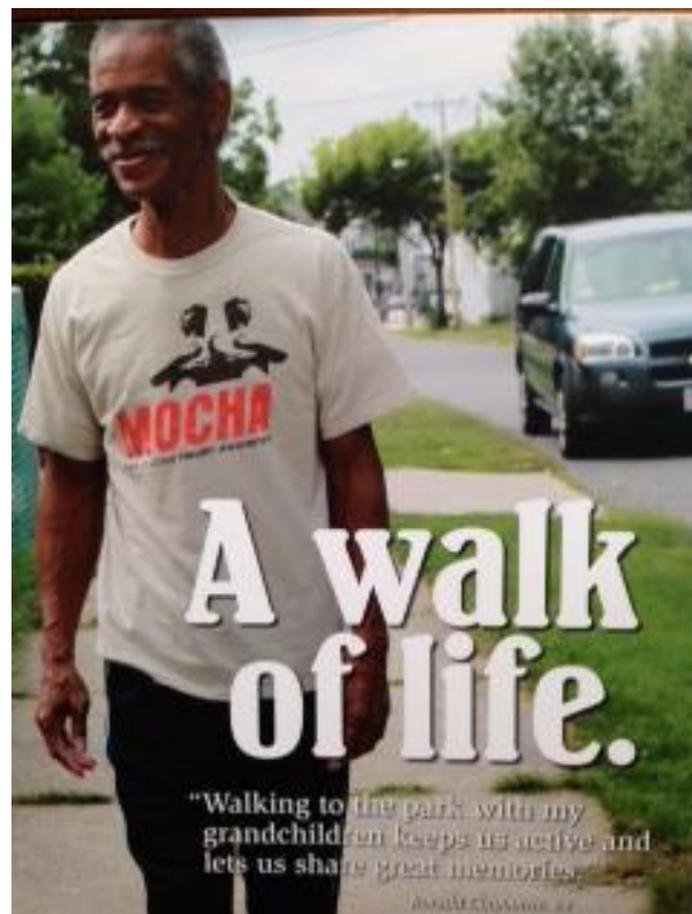
Transportation-Walking

- Adequate sidewalks
 - ▣ 4-6 feet wide minimum “pedestrian clearway”
 - ▣ Smooth non-slip pavements
 - ▣ High contrast grade changes (like curbs)
 - ▣ Curb ramps that lead directly to sidewalks
 - ▣ Longer crossing times on Walk signals
 - ▣ Minimal cross-slope on sidewalks



Transportation-Walking

- Adequate shade (street trees)
- Resting places (benches)
- Public bathrooms
- Snow removal and general maintenance



Transportation-Biking

- Dedicated lanes
- Bike paths
- Bike parking and showers
- Shared-bike programs (including rentals)



Transportation-Public Transportation

- Density has to support public transportation
- Routes go to destinations that are desirable to older people
- Route maps and timetables that are legible
- Courteous drivers
- Shelters and benches at bus stops
- Seats that are reserved for older people
- Public restrooms near bus stops



Transportation-Social Networks

- Taxis
- Ride Sharing (websites/social media)
- Shuttle buses

Destinations

Goods and Services/ Destinations

- Zoning regulates allowed uses and mix of uses
 - (Housing)
 - Food stores
 - Community gardens
 - Pharmacies
 - Banks
 - Healthcare facilities
 - Senior Centers
 - Parks and Green Spaces



Once you arrive, can you get inside?

- Zoning regulates basic site design
 - Sidewalks (safe route to door)
 - Entrances to buildings (zero-step)
 - Parking Lots
 - Obvious circulation patterns with directional arrows
 - Angled instead of 90 degree or parallel parking
 - Parking close to building entrance
 - Gathering spaces
 - Trees
 - Adequate site lighting with minimal glare



Safe Neighborhoods

Safe Neighborhoods

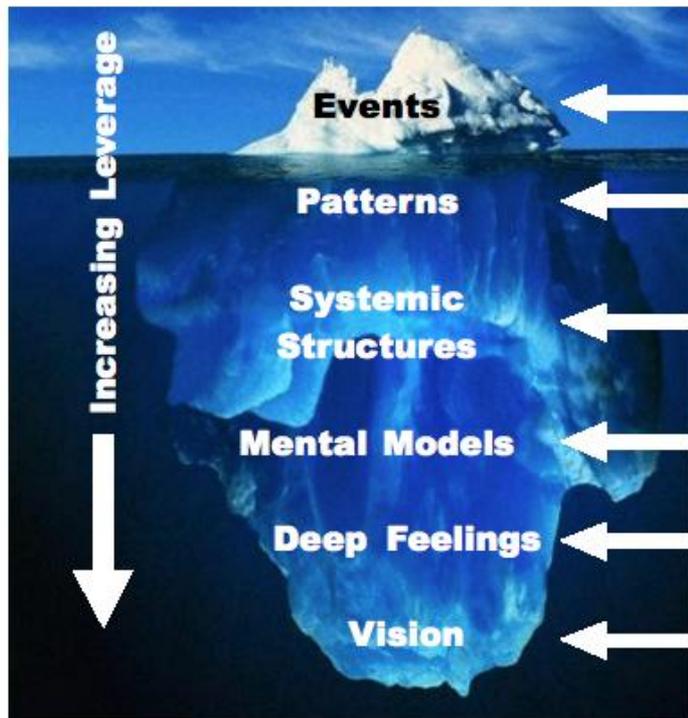
- “Eyes on the street”
- Transportation safety
- Environmental safety: minimal noise, odors, toxins
- Emergency preparedness: older people are more vulnerable during disasters



Leverage Points

Leverage Points

Iceberg: A Deep Systems Approach to Transformation



We observe seemingly random data
What we see on the surface

We notice that the events form a
pattern that repeats itself over time

We identify systems loops or
"archetypes" that underlay that pattern

We uncover the deep beliefs that hold
that systemic structure in place

We become aware of the emotions
that are fostering our mental models

We articulate our aspiration for the
world we want

Health indicators

Regulations

Community Plans &
Personal priorities

Leverage Points

- Informed, educated and active elders = KEY leverage point
- Senior Centers and Councils on Aging = leverage point
- And all the leverage points previously identified, as noted, what's good for elders is what's good for all, only more urgently now!

Image credits

- All images courtesy of PVPC unless otherwise noted
- Slide 2: Source: **Sorting Out the Connections Between the Built Environment and Health: A Conceptual Framework for Navigating Pathways and Planning Healthy Cities**. Mary E. Northridge, Elliott D. Sclar, and Padmini Biswas. Journal of Urban Health: Bulletin of the New York Academy of Medicine Vol. 80, No. 4, December 2003
- Slide 7: Source: **Livable Community Indicators for Sustainable Aging in Place**. March 2013, Met Life Mature Market Institute
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