Health and Community Design:  
The Local Government Role in Promoting  
Active Living

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A National Program of The Robert Wood Johnson Foundation
The Emergence of a Sedentary Society

- Automobile
- Television
- Computers
- Convenience Engineering
- Built Environment
- Human Nature
Percent of Population Meeting Recommended Levels of Physical Activity
U.S. Adults, 1986-2000

Source: Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System
Walking and Bicycling Travel Behavior
North America & Europe 1995

Source: Transportation Research Board 1995
Walking and Bicycling Travel Behavior
United States 1977-2001

% of Total Trips

Bike Trips
Walk Trips

The Burden of Physical Inactivity

- **The Problem**
  - 70% do not achieve recommended dose of PA

- **Public Health Burden**
  - 64% overweight and 1 in 3 obese
  - CVD, Cancer, Diabetes
  - Physical inactivity is a primary factor in over 200,000 deaths annually.

- **Economic Burden**
  - Medical costs associated with physical inactivity may exceed $76 billion annually.

Obesity Trends* Among U.S. Adults
BRFSS, 1985
(*BMI ≥30, or ~30 lbs overweight for 5’4″ woman)

Obesity Trends* Among U.S. Adults

BRFSS, 1990

(*BMI ≥30, or ~30 lbs overweight for 5′4″ woman)

Obesity Trends* Among U.S. Adults
BRFSS, 1995
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Obesity Trends* Among U.S. Adults
BRFSS, 2000
(*BMI ≥30, or ~ 30 lbs overweight for 5’4” woman)

Obesity Trends* Among U.S. Adults

BRFSS, 2002

(*BMI ≥30, or ~ 30 lbs overweight for 5’4’’ woman)

Source: Behavioral Risk Factor Surveillance System, CDC
“Physical Inactivity is equivalent to smoking one pack of cigarettes per day.”

Physical Activity and Health: A Report of the Surgeon General, USHHS, 1996, Steven Blair, P.E.D., Senior Scientific Editor
Financial Cost of Sedentary Lifestyle - 2000

<table>
<thead>
<tr>
<th></th>
<th>sedentary</th>
<th>active</th>
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<tbody>
<tr>
<td>Smoker</td>
<td>$1,448</td>
<td>$1,079</td>
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<tr>
<td>Non-smoker</td>
<td>1,234</td>
<td>953</td>
</tr>
<tr>
<td>All</td>
<td>$1,349</td>
<td>$1,019</td>
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Overall Cost of Inactivity

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost</th>
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<tbody>
<tr>
<td>1987</td>
<td>$29.2 billion</td>
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<tr>
<td>2004</td>
<td>$117.1 billion</td>
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Cost to Government

New York State: $3 billion in 1999; 5% increase in physical activity would save $540 million (in medical care, worker’s compensation, lost-time injury)

Explaining the Epidemic:

- Genetic
- Medical Care
- Behavioral Choices
- Social Circumstances
- Environmental Conditions
Alternative Transportation

Healthy Environments and Active People

Transportation

Health

Physical Activity

Environment

Healthy Places and Spaces
Modifiable Factors that Influence Active Transportation

- Land Use Mix
- Network Connectivity
- Street Design
- Site Design
- Density
- Cognition
  - Personal Safety
  - Traffic Safety
  - Aesthetics
The Influence of Location on Walking/Bicycling Travel Behavior

- Americans spend on average 73 minutes per day in automobiles
- 25% of all trips are within 1 mile and 75% of these trips are auto-based

<table>
<thead>
<tr>
<th>Location</th>
<th>% of Trips Walk/Bike</th>
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<tbody>
<tr>
<td>Urban</td>
<td>17.7%</td>
</tr>
<tr>
<td>2nd City</td>
<td>6.2%</td>
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<tr>
<td>Suburban</td>
<td>4.5%</td>
</tr>
<tr>
<td>Rural</td>
<td>3.9%</td>
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</table>

Data Source: 1995 NPTS - 40 metropolitan statistical areas
Relationship of Walking and Overweight U.S. Adults 1995

Surface Transportation Policy Project. Based on data from the Nationwide Personal Transportation Survey and the Behavioral Risk factor Surveillance Survey – CDC
Advancing the Concept of Active Living

Active Living is a way of life that integrates physical activity into daily routines.
The Vision of Active Living By Design

• Re-engineering activity into people’s daily routines
  – Creating environmental supports
  – Providing cues to action
  – Fostering social supports
  – Institutionalizing the behavior
  – Building sustainability - the “formal program” never ends
Built Environment and Physical Activity
Research Conclusions

• Living in Activity Friendly Communities could...
  – Generate 2 more walk/bike trips per person per week
  – Prevent up to 1.7 pounds of weight gain per year
  – Positively affect walking/cycling for transportation but not recreation
  – Positively impact the total number of minutes of physical activity (40% more physical activity)
Environmental Correlates of Physical Activity – U.S. Children

- Several studies have concluded that being outdoors is best correlate for physical activity
- Access to programs & facilities are consistent correlates
- 70% of obese children (ages 10-13) become obese adults

A brisk walk in the park keeps Macy II in shape between dog shows. Her owner, Columbus resident Cathy S. Benson, got up early to give her 5-year-old Doberman his regular workout. They typically log 18 miles in Berliner Park.
Active Living Strategies

- Preparation
- Promotion
- Programs
- Policies
- Physical Projects
Strategy 1: Preparation

- Build diverse partnerships
- Build a vision
- Assess policies and environments
- Build a plan of action
- Identify a champion
Strategy 2: Promotions

- Utilize mass media for awareness and public education
- Utilize mass media for policy advocacy
- Develop key messages for target groups and settings
Strategy 3: Programs

- Safe Routes to School
- Commuter Choice Programs
- Incentive Campaigns: Bicycle Friendly Communities
- Parks and Trails Events
- Walking / Bicycling Clubs
Strategy 4: Policies

• School Siting - provide pedestrian accessible elementary school sites
• Update codes to encourage density and mixed land use
• Reexamine parking policies and fees
• Develop health impact statements for new development
Strategy 5: Physical Projects

- Build safe and well-connected pedestrian and bicycle networks
- Encourage mixed-use developments
- Adopt traffic calming measures to reduce speed, noise & volume
- Create pleasant and beautiful pedestrian and bicycling settings
Defining Our Work Here and Now

- Think Critically
- Build Upon Experience
- Imagine New Solutions
- Leap Out of Comfort Zone
- Expand Sphere of Influence
- Set Your Vision
What Will Your City Look Like in 2024?
“We must become the change we seek.”
M. Gandhi