Implementing Complete Streets

NY State Dept. of Health

A comfortable crossing for pedestrians (Albany).
Flow of the day . . .

• Health & complete streets.
  – *Work: Build your team.

• Making CS happen; Accessibility for all.
  – *Work: Policies in your community; barriers?

• Walk audit; demo projects.
  – *Work: Your audits & demos.

• Community engagement.

*Fill in your plan worksheet.

“But nobody walks in winter.”

(Elizabethtown, NY, winter.)
Why do health folks care about Complete Streets?

• Introductions.
• Perspective, the real epidemic, & what is not working.
• Stickiness, and four healthy community design principles.
• Four steps to Complete Streets.
• Building a stealth team!

Carthage, NY

www.markfenton.com
Name, job, & your *earliest* fond recollection of physical activity.
Not just my idea . . .

Kids held back with ‘over-organised’ play, says Shane Gould

The Australian, 14-Oct-2009
Changes in Walking & Cycling to School, 1969 to 2001
Ham et.al., Jour. of Physical Activity & Health, 2008, 5, 205-215

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W/B = Walk/Bike
Trends in Childhood Obesity & Overweight

CDC, National Center for Health Statistics. *National Health Examination Surveys (NHANES) II (ages 6–11) and III (ages 12–17), and NHANES I, II and III, and 1999–2006.*

America’s looming chronic disease apocalypse . . .

US “Obesity Epidemic”
Ogden et al. (JAMA 288, 14; Oct. 2002)
The Rant:
Change our thinking. It’s not just an obesity epidemic. It’s twin epidemics of physical inactivity and poor nutrition.*

* Two of the three biggest drivers of skyrocketing healthcare costs.
The bad news in just three numbers:

30 Minutes of daily physical activity recommended (60 min. for youth).

20 % of American adults actually meet these recommendation (thru LTPA).

365,000 Estimated annual deaths in America due to physical inactivity & poor nutrition. (2nd only to tobacco.)
Surgeon General’s Report 1996
Physical Activity Guidelines 2008

www.health.gov/paguidelines

- **150 minutes/week** of moderate physical activity; more is better.
- Any activity is better than none.
- Can be **broken up**.
- **300 min/week** for children.
- Reduced risk for CVD, diabetes, osteoporosis, obesity, dementia in old age, clinical depression, a growing list of cancers . . .

This counts.
Glens Falls

www.markfenton.com
Leisure Time Physical Activity in the US

(\textit{MMWR}: 50(09), 166-9; 54(39), 991-4)
Why is it so resistant to change?

I believe in large part the stickiness problem!
Exercise Participation
Effect of Short Bouts, Home Treadmills
(Jakicic et. al., J. Amer. Med. Assoc., 282, 16)
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Effect of Short Bouts, Home Treadmills
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Self-help vs. Commercial Weight Loss Programs
(Heshka et.al., J. Amer. Med. Assoc., 289, 14; Apr. 2003)
The point:
Simply telling people to “exercise” is not enough. We need to support increases in routine, daily physical activity for everyone.
Social Ecology Model

Determinants of behavior change

Individual
motivation, skills

Interpersonal - family, friends, colleagues

Institutional - school, work, health care & service providers

Community - networks, facilities

Public Policy - laws, ordinances, permitting practices & procedures

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Greater Impact

Easier to Implement
Socio-ecological successes?

Tobacco use

Seatbelts, child safety restraints

Water-borne disease

Recycling

Haiti
FIGURE 1. Annual adult per capita cigarette consumption and major smoking and health events — United States, 1900–1998


Thanks to Prof. Ross Brownson, Wash. Univ., St. Louis
Necessary and important, but not enough.

We must build communities where people are intrinsically more active.
If we build it, will they come?
YES! Four elements:

1. Variety of uses within walk, bike, & transit distance.
2. Connecting facilities: trails, sidewalks, bike lanes, transit.
3. Destinations are functional & inviting for pedestrians, bicyclists, & transit users.
4. Safe & accessible for all ages, incomes, abilities.

www.thecommunityguide.org

CDC Guide to Community Preventive Services
1. Land use.

Live, work, shop, play, learn, pray.

Mixed use, multi-family.

Housing above, retail below.

Compact neighborhoods & shared open space.

E.g. post office, grocery, schools
2. Network encourages active travel with:

- Presence of sidewalks, pathways, bike lanes, sharrows.
- Shorter blocks, cul-de-sac cut-throughs, neighborhood links.
- Access to destinations!
- Quality, reliable *transit.*
Bicycle network options:

Shar-row (shared use arrow)
3. Site Design:

Watertown
Site design?
Research & practice suggest:

- Buildings near the sidewalk, not set back; parking on street or behind.
- Details: bike parking, open space, plants, art, materials.
Possible incentives:
• Decrease, share parking (include bike racks).
• Build-to, not set-back requirements.
• 2\textsuperscript{nd} story residential.
• Expedite permits.

Elected, appointed officials & staff must be supported if expected to act courageously!
4. Safety & access.

- Engineering can markedly improve safety.
- Increasing pedestrian and bike trips decreases overall accident & fatality rates.

Lane re-alignments

- Often called road diets, being seen more often.

  Urbana, IL; before & after.

- Can reduce collisions & severity.
- Dramatically improves performance for pedestrians & cyclists.
Four Elements of Healthy Community Design:

- Ped, bike, & transit network
- Mix of destinations
- Safety & access
- Site design

www.activelivingresearch.org

www.markfenton.com
Shouldn’t the **free market** dictate how we build our cities & towns?
Economics. Walking the Walk: How Walkability Raises Housing Values in U.S. Cities (CEOs for Cities report)*

Higher score = ↑$4,000-$34,000 home value

*www.ceosforcities.org/work/walkingthewalk
www.walkscore.com
The Next Generation of Home Buyers:

• Taste for in-town living.
• Appetite for public transportation.
• Strong green streak.
• Plus, Americans are driving less overall!
Study of street redesigns in NYC:

- Pre- and post-project measurement of retail revenue.
- E.g. pedestrian plazas, bike paths, redesigned intersections, BRT . . .
- Improvement areas exceeded borough & control area averages.
So how do communities get there?
The evolving physical activity playbook:
Fenton, Community Design . . ., *Childhood Obesity*, 8(1); Feb 2012.

- Land use planning & zoning ordinance.
- Complete streets guidelines & routine practice.
- Transportation trail networks.
- Bike & transit infrastructure & incentives.
- Safe Routes to School, schools as healthy community centers.
The premise of Complete Streets:

- Anytime we touch a street (build, repair, maintain) we take into account all users of all ages & abilities:
  - Pedestrians.
  - Bicyclists.
  - Transit.
  - Motor Vehicles.

- Key question: Just “take into consideration” or actually “accommodate?”
Typical phases of CS policy implementation.

i. Passage of a policy resolution or executive order.

ii. Adoption of DPW/engineering policy.

iii. Adoption of detailed roadway design standards or guidelines. (Pirate’s code?)

iv. Planning & engineering practice (staff, consultants) include consideration of pedestrians, bicycles, & transit in absolutely every project (including routine maintenance).
i. Resolution or executive order

- Shows intent.
- Initiates an implementation discussion.
- May change absolutely nothing on the ground!
- Sell with:
  - Safety
  - Efficiency
  - Economics
ii. Policy – begin by changing routine practices & procedures.

- Multi-modal Transportation Analysis vs. Traffic Impact Analysis (MMTA vs TIA)
- Require mitigation for all four modes!
- Match design speed w/ land uses & intent.
- Only very limited exclusions. **Cost?**

  - Turn lanes? Signal?
  - Transit shelter, pathway?
  - Bike lane, sharrows?
  - Sidewalk link? Benches?
Ideal: Standardize off-site mitigation & impact fee requirements.

For any new development always include full \textit{transportation} (not just traffic) analysis including bike, pedestrian, & transit impacts.
iii. Update guidelines, design requirements.

- Create new preferred roadway cross-sections & profiles. (E.g. allow 10’ travel lanes on low speed neighborhood streets.)
iii. Essential guidelines:

- Full shoulders on rural roads.
- Sidewalks in towns, with key destinations as priorities.
- Bike lanes & sharrows for driver & cyclist comfort.
Guidelines must *detail* the wide range of treatments, depending on context & need.
iii. Update roadway design requirements:

- Match design to intended speed (not to 85th percentile!)
- Very limited, specific exclusions; do not base on current pedestrian & bike volumes.
iv. Make it routine:

• Consider full right-of-way width, including sidewalks, bike facilities, & side or separate pathways.
• Start with paint, signs.
• Incorporate in painting, maintenance, & all general utility work.
Candidate for a lane re-alignment?

Saratoga Springs
Broadway
E.g. Essex Co. Complete Streets Coalition:

- Essex County Highway Complete Streets committee - public health, DPW, planning, transportation, County Supervisor, & CBO (Rural Action Now).
- Developing active transport & recreation plan for Essex County.
- Used NYS DOH funding for small scale CS treatments (e.g. paint, signs), 2010-2012.
- Secure mini-grant funds for painting crosswalks, cones, shared roadway signs & bike racks (2011).

(Jessica Darney-Beuhler, Essex Co. Public Health)
Institutionalize CS! E.g. Nashville, TN Metropolitan Planning Organization (MPO)

- Scoring for Transportation Improvement Plan (TIP) includes impacts to pedestrian, bicycle, & transit travel, not just motor vehicles.

- Over 60% of scoring depends on active modes!

- Now, all funded projects are “complete.”
Build a compact, focused, interdisciplinary leadership team targeting healthy design:

- Planning & Zoning
- Engineering, DPW
- Parks, Recreation
- Public Health & Safety
- Education, schools
- Historical preservation
- Social justice & equity
- Chamber of Commerce
- Developers, Lenders, Realtors
- Neighborhood Assoc., Church & Service Groups
- Environment, Conservation

Policy information:
- www.lgc.org
- www.vtpi.org
The “org” chart:
The “stealth” chart:
To be on the stealth leadership team people must:

• Fully embrace the **vision** of active, healthy community design.
• Be able to spend time on this as part of **job responsibilities**; not just volunteers.
• Have **community influence** and be able to **reach** critical partners.
Final editorial thoughts:

• Don’t design for me. Build a sticky world for my mom, kids.

• Active design is not an “amenity.” Walk, bike, & transit oriented design is part of the transport network, not just recreation.

• Partner outside your discipline. Planners like policy, engineers build networks, architects & L.A.s design sites, health folks are good social marketers, and . . .

• Policy makers must be on-board.
Why care about stickiness & active community design?

• The inactivity epidemic; our kids may pay!
• Quality of life; safety & comfort; social equity.
• ~4,000 pedestrian, ~40,000 motor vehicle, ~400,000 sedentary-related deaths/year.
• Greenhouse gasses, over an hour of average commute time/day, traffic congestion and costs.
• OPEC; drilling in ANWR; oil wars in Mid-east.
• More eyes on the street, less crime.
• Shopping locally, healthier housing values.
• Higher employee retention, higher productivity, lower health care costs.
Olshansky et.al., “A Potential Decline in Life Expectancy . . .”

*New Eng. J. of Med.*, March 17, 2005
Your job now?

Fill in your worksheet!
Table Work #1:

• **2 mins:** Introductions, who’s at your table.
• **5-10 mins:** Whip around the table twice; each person quickly list two people you need on your action team who may be hard to engage and why. Get specific.
• **10 mins:** Discuss repeated challenges, and possible approaches to engaging these key stakeholders & partners. How to hook them?
• **3 mins:** Pick two good solutions to share w/ the group.