Stand by:

The future is coming…
Energizing Main Street

Sponsors:
New Hampshire Main Street Program
Dover Main Street Program
September, 2003
Dan Burden, Walkable Communities, Inc.
Walking Audit
American Public Works Annual Meeting

Keynote Recovery Presentation
September 12, 2001
Our People Come First
Eva Gates - Homemade Preserves

Making the finest quality Fruit Preserves and Syrups since 1949
Big Fork, Montana
Greenville, South Carolina
1

Land Use and Transportation Principles
The Future: What Will It Be?
The Cycle of Strip Development

**INPUTS**
- Auto Oriented Business
- Single Use Zoning
- Single Family Residential

**GROWTH**
- Isolated Neighborhoods
- Multiple Automobile Trips
- Poor Mobility
- Difficult Walking

**OUTCOMES**
- Wide Roads
- Reduced Traffic
- More Traffic

**INPUTS**
- Traffic Demand Forecasting
- Congestion

**GROWTH**
- Transportation Planning
Breaking The Cycle of Strip Development

INPUTS

- Diversity of Business
- Mixed Use Zoning
- Diversity of Residential Units
- Context Sensitive Solutions
- Community Involvement

OUTCOMES

- Healthy Neighborhoods
- Choices of Transportation
- More Open Space
- Sense of Place
- Sense of Community

OUTCOMES

- Increased Mobility
- More Walking & Bicycling
- Increased Access
THE PURPOSE OF CITIES

Cities are an invention to maximize exchange (goods, culture, friendship, knowledge) and to minimize travel.

The role of transport is to maximize exchange.

....David Engwicht

Whoops!!!
Cars are happiest when they have unlimited freedom -- when few other cars are around.

Victoria, British Columbia
People are happiest when there are many others around.

Victoria, British Columbia
What are these people doing?
3 Building from our values
National Health Epidemics

- Diabetes
- Overweight
- Heart Failure
- Depression
- Hypertension
- Isolation
- Asthma
- Poorly Developed Neural Pathways
- Lack of Association
Point 1: It’s not just an obesity epidemic. It’s an epidemic of physical inactivity.
A brisk walk in the park keeps Maxy II in shape between dog shows. His owner, Columbus resident Cathy Stumbo, gets up early to give her 3-year-old Doberman his regular workout. They typically jog 3 miles in Berline Park.
Surgeon General’s 1996 Activity Recommendation

- 30 minutes of activity.
- Most days of the week.
- Can be broken up.
- Reduced risk for CVD, diabetes, osteoporosis, obesity, clinical depression, some forms of cancer.
The Obesity Epidemic in the US
Flegal et. al. (JAMA 288, 14; Oct. 2002)

National Health and Nutrition Examination Survey data

% Obese (BMI>30)
Is Physical Inactivity Really a Problem?

29% of adults are sedentary
73% are not active enough
36% of young people in grades 9-12 do not participate in vigorous activities 3 or more days a week
One-fourth of those aged 6-17 are already overweight

Source: U.S. Surgeon General
Obesity/Overweight

- Over one in four adults is obese
- 61% of adults are overweight
- Rates of seriously overweight children more than doubled since the 1970s.
- There has been a dramatic increase in the number of children with adult-onset diabetes in the last five years.

Sources: Centers for Disease Control and Prevention, NHANES, 1999
Obesity* Trends Among U.S. Adults

BRFSS, 1990

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

BRFSS, 1995

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

BRFSS, 2000

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

**BRFSS, 2001**

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

![Usa Obesity Trends Map](image)

No Data  
<10%  
10%-14%  
15-19%  
20-24%  
≥25%  
Orange
For every 10 minutes you spend driving, you are 10% LESS likely to get involved in your community.
The Myth

America’s high level of dependence upon the automobile has lowered the standard of living, snarled traffic, and lowered air quality.

The Facts

The mobility provided by our highways is critical to the modern lifestyle.

The Quality Growth Coalition … includes American Road and Transportation Builders Association, National Asphalt Pavement Assoc.
Livable, Active Living, Walkable Neighborhoods

Many Villages (1/2 mile apart)
Low speed, Green Streets
Many Connections, Walkways and Trails
Open Space within 800 feet of all homes
Plenty of Association, Ways to Associate
Minimal Off-Street Parking
Housing Density, Mixed Use
Mixed Income, Affordable
Great Boulevard Streets
Great Entries
Ten Steps To Walkability

Compact, lively town center

Low speed streets, distributed volumes

Fine grained streets, many trails, transit links

Neighborhood schools and parks, within one quarter mile or one eighth mile

Public places with inviting features: benches, restrooms, shade, water and art

Convenient, safe and efficient crossings

Many people of all ages and abilities walking many hours

Celebrated public space and public life, parades, markets, festivals, awards

Land use and transportation partnerships

Affordable, inspiring, well maintained streets and homes.
Dear Dan,

I have lived in Alpharetta, Georgia for the past 12 years and I am literally choking with all the traffic and development. I would like to move to a town where my kids can ride their bikes or motorized scooters to school or to the bakery or to the beach. When I was younger my family lived in Spring Lake, New Jersey and my husband's family lived in Winnetka, Illinois where you could do those kinds of fun things. Do you know of a book or resource that could help us research towns such as those so we can begin the planning stage of where to move to. Thank you ...
Five keys to success

Security
Convenience
Efficiency
Comfort
Welcome
Provide Services

Downtowns should provide essential services

Postal Residential Commercial Public Space Restrooms

FERNDALE CALIFORNIA
Sustainable Communities

Built with Common Sense

Not A CODE Book

• 5-Minute Walk from Center
• 10 Minute Walk Across Town

Crested Butte, Colorado

One-Quarter Mile Radius

Crested Butte, Colorado
Mount Crested Butte, Colorado

Built with a CODE Book
Not with common sense
Meredith, New Hampshire
Build for Multiple Uses

Beauty
Function
Open Space
Diversity, Inclusiveness
Art/Music
Green
Friendly
Economic prosperity
The Greatest Access on Earth
Art Walk Master
Doug Rice
With
Median adopter, Arnie
Does your girlfriend know about Alice?

Does your boss know about Alice?

Does your boyfriend know about Alice?

It's okay to take Alice to bed.
Wayfinding

VISITOR INFORMATION

CARMEL BUSINESS ASSOCIATION
SAN CARLOS BETWEEN 5TH & 6TH

HARRISON MEMORIAL LIBRARY
OCEAN AT LINCOLN

CITY HALL
MONTE VERDE BETWEEN OCEAN & 7TH
Farmer's Market
Saturdays A.M.
What is “Place?”

Thornton, Colorado
Littleton, New Hampshire
100% Location

- Bridge
- Appropriate Technology Lift
- Visual Treats
- Activity Center
Levels of Quality
SIDEWALK CAPACITY

Highway Capacity Manual - Page 13-12

LOS A

LOS B

LOS C

LOS D

LOS E

LOS F
Level of Service A
The Ramblas, Barcelona, Spain

Level of Service
F

Level of Quality
A
Streets are our primary public space
EXAMPLES OF LEVEL OF SERVICE BY MODE FOR URBAN ROADWAYS

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Automobile</th>
<th>Bicycle</th>
<th>Pedestrian</th>
<th>Bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/B</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td></td>
<td>&gt;4 buses/hour</td>
<td>2 to 4 buses/hour</td>
<td>&lt; 1 bus/hour</td>
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</tbody>
</table>
## Walking -- Levels of Quality

<table>
<thead>
<tr>
<th>Sidewalks</th>
<th>Exemplary</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Hall of Shame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walkability increases with added width. Buffers to the street, many eyes on the walk, attractive edges. Five feet minimum widths are needed. Conditions improve as numbers of driveways are reduced, or set back. Non-mountable curbing is important.</td>
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</table>

<table>
<thead>
<tr>
<th>Main Streets</th>
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</thead>
<tbody>
<tr>
<td>Main Street sidewalks should be wide, attractive, with many shops and residential units watching over the street. Many activities are needed to keep sidewalks in use many hours a day. Good lighting and street furniture are essential. Maintenance is key.</td>
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<table>
<thead>
<tr>
<th>Local Streets</th>
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</thead>
<tbody>
<tr>
<td>Local streets should be narrow, well landscaped with on-street parking to act as sidewalk buffers. Driving speeds of 10-20 mph are best, 20-35 are acceptable. Homes should be proximate to the street.</td>
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<table>
<thead>
<tr>
<th>Avenue/Boulevard</th>
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</thead>
<tbody>
<tr>
<td>Avenues and boulevard sidewalks should be 5-6 feet wide in most applications. Planter strips and bike lanes create essential separation from motorists. Trees, other landscaping, medians help slow motorists. Lanes can be as narrow as 10 feet.</td>
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<table>
<thead>
<tr>
<th>Crossings</th>
<th></th>
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<tbody>
<tr>
<td>Crossings should be well marked, accentuated by curb extensions. On multi-lane boulevards it is essential to have exceptionally well marked crossings. In some cases signals are warranted.</td>
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</tbody>
</table>
We all have choices

People report that they would not walk in the lower photo unless forced to by circumstance.

People say they choose to walk in the above setting.

Henderson, Nevada
Which Makes More Money?
MAIN STREET DEVELOPMENT

Typical Small Town

Main Street

Neighborhood

Typical Small Town
MAIN STREET DEVELOPMENT

Main Street

Strip Development

Subdivision

Neighborhood

Typical Small Town
7 Public space
DWINDLING PUBLIC SPACE

Downtown and main street trends

Percent of available public space

Year

1930 1940 1960 1980 2000

OTHER, WALKWAYS, PARKS, MARKETS, PARKING, VEHICLE
“I Like To See A Man Proud Of The Place In Which He Lives”

Abraham Lincoln
Before and After
- One lane main street
- Diagonal parking
- Heated sidewalks
- Urban infill
- Traditional Villages
Lakeshore Road (SR 5), Hamburg, NY
Cities are places for Association
Build Villages Not Strips
**Town Center**

1. Boulevards permitted  
2. 2-3 civic buildings  
3. Plazas each 1/8th mile  
4. Mixed income housing  
5. 40,000 sq ft commercial buildings  
6. Residential 16-40 du/a  
7. Multi-family residential  
8. Parking structures permitted  

**Hamlet Center**

1. Avenues  
2. 1-2 civic buildings  
3. Plaza each 1/8th mile  
4. Affordable housing  
5. 20,000 sq ft commercial buildings  
6. Residential 11-16 du/a  
7. Single family cottage/garden  
8. Parking on street, and shared
Develop Village Centers

1. Enterprise Zones are established

2. Land is set aside for town or hamlet centers

3. Land swaps are made for buffers between villages

4. Buffer areas are developed with public space and appropriate lighter density settlement
Development Pulsing

Higher-density, mixed-use development that is integrated horizontally and vertically.

Low- and mid-rise office, multi-family, and neighborhood retail development.

Higher-density urban core that is integrated vertically and horizontally and contains a finer-grain street grid, pedestrian-oriented blocks, a critical mass of activity, and a sense of place.

Lower-density attached and single-family detached residential development.

Parks, recreational areas, and open space that provide amenities and serve as buffers.
Hillcrest Neighborhood, San Diego
Winter Park Village, Winter Park, Florida
Convert off-street parking to plazas and new buildings
Establish municipal parking lots, set maximum off street parking allowances
HRRCU
Member
Parking
Only
Consider curb extensions the norm...
... not something you add to a street
What would the street look like without on-street parking?
Now think of parking as the bonus!

*Tada! Look like curb extensions...*
Ten Foot Travel Lanes
Six Foot Parking Lanes

Abacoa Downtown
San Francisco, California
No arrangement could be more pleasing . . .
five streets meeting at the ample common,
with its circular crown of trees backed up by the fine white church.
—Barry Faulkner, 1917—

Keene, New Hampshire
Road Diets
1800 vehicles per hour per lane
800 vehicles per hour Per lane
Asylum Avenue Near Prospect
Intersections
Common Elements

Pedestrian and Bike Friendly Intersection

Median Nose

Channelized Island

Full width

Bike Lanes

Two ADA Ramps Per Corner
Speeds dropped from low 30s to 15-20 mph
Older people came back
Disabled came back
Store occupancy rate 100%

Venice, Florida
1990
Roundabouts
Narrow Streets / Wide Nodes

400

600 + 600 = 1200 VPH

4 lane road

600

1200

2 lane road
Cotati, California:
Old Redwood Highway looking north
Gridley, California:
State Highway 99 looking north
Example
Roundabout

Benefits:
Injuries reduced 90%
30% more traffic capacity
Gateway entry
Pedestrian friendly
Speeds controlled
Reduced noise
Reduced pollution
Reduced maintenance
Business friendly
Modesto Roundabout
LaLoma and “G” Streets
20,000 vehicles per day
Roundabouts work in Snow Country
Our Place

Our People
Dance as if no one were watching
Sing as if no one were listening
Live each day as if it were your last

Imagine a world with no men
It would be full of happy fat women
STATE LAW

YIELD TO

IN CROSSWALK
Overcoming Fear of Change
Narrow streets
Short blocks
Tight corner radii
Great plazas
Beautiful buildings
Limited parking

Built by Pirates

OLD TOWN,
KEY WEST,
FLORIDA
Designed by college graduates

NEW TOWN, KEY WEST, FLORIDA
Designed by experts ...
Designed by other experts, with public input!

Cambridge, Massachusetts
Small Apartment - Typical

Residential

Collector Street

1  2  3  4
The Birdhouses