Healthy Built Environments
Cowlitz-Wahkiakum County, Washington
Bringing Back Active Transportation and Health

Presented By Dan Burden, Blue Zones, LLC
Livability/Health and the role of Place, Walkability and Bicycling
Now that we are here ...

What can we do?
MOTHER: Vicky aged eight in 1979 was allowed to walk to the swimming pool alone half a mile away.

SON: Ed, now eight is only allowed to walk on his own to the end of his street (300 yards).

GRANDFATHER: Jack aged eight in 1950. Able to walk about one mile on his own to the woods.

GREAT-GRANDFATHER: George aged eight in 1919. Allowed to walk six miles to go fishing.
Demographics and Change
Only 25% of households are made up of the nuclear family today.
Your patient isn’t the only one who has become fat
The Secrets of Living Longer

Nepal: Inside the Revolution 45
Autumn in Acadia 28
Stealth Cats 86
War Letters 76
Indonesia's Undersea Oddballs 96
ZipUSA: Thanksgiving Turducken 114
The Economics of Place:
The Value of Building Communities Around People
Two Ways To Grow

Portland, OR

Property Taxes: 29%
Air Pollution: 86%
Neighborhood Quality: 19%

Atlanta, GA

Property Taxes: 22%
Air Pollution: 5%
Neighborhood Quality: 11%
It costs $2.8M per year for one fire station with two apparatus. A well connected system covers 4.6 times more houses.

($159 per year for well connected vs $740 for poorly connected) City of Charlotte, N.C.
How much does your commute cost (or save) society?

Every time you travel you put money into the system, but you also cost the system. Your contribution to and burden on the system differs depending on how you travel.

For example, when you ride the bus you pay a fare – money into the system. Your burden on the system includes the cost of operating the bus, and also less obvious impacts like emissions and noise pollution.

By looking at the ratio of what we put in versus what we cost the system, we see that different ways of travelling are more subsidized than others.

The practice of taking these less tangible costs and benefits into consideration and assigning them a dollar value is known as "full-cost accounting." While there are many ways of doing this, this infographic shows one example of how those costs and charges can be calculated.

Produced by Discourse Media, data by George Poulos. Calculate your commute at MovingForward.DiscourseMedia.org/CostofCommute
Cost of owning a car (per year):

- Relief staying in the local economy: $1,390
- Funds leaving the local economy: $7,095

If a city could reduce car ownership by 15,000 cars:

- Money that could stay in the local economy: $127,275,000

According to AAA, Americans spend on average $8,485 each year on their cars. Seems like a lot of money, doesn't it? And most of that money leaves your local economy. What if you were able to get rid of a car and spend—or invest—that money in your community? What if 15,000 people decided to make that same decision? That's exactly what happened in Washington, D.C. From 2005 to 2009, the District's population increased by 15,802 people while car registrations went down by close to 15,000 vehicles. Living in a walkable city has value beyond personal convenience—it also allows more of your money to stay closer to home while reducing your carbon footprint. With better information, can we make our cities more intelligent? We can. What makes a city intelligent? You do.
Two trees placed at the street (with a sidewalk) cost $2-3,000. In return, they raise property values $20-$40,000, can reduce private property energy costs 15-30%, prolong the life of asphalt by 70%, reduce crashes and crime, and eliminate up to 30% of drainage costs.
Health Through Active Transportation
If you plan cities for cars and traffic, you get cars and traffic.

If you plan for people and places, you get people and places.
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.
The simple needs of automobiles are more easily understood and satisfied than the complex needs of cities, and a growing number of planners and designers have come to believe that if they can only solve the problems of traffic, they will thereby have solved the major problems of cities.

Following that philosophy led to this, redundantly.

A new beaker and measure will lead to this.
Use this section when steep vertical terrain, wetlands, or other natural features must be addressed. Sidewalks are widened, bike lanes are used to create a buffer to moving traffic. Roundabouts, short medians or other treatments control speeds between 30-35 mph.

Note: Side Rails are used when edge is steep enough to constitute a hazardous condition.
Proposed section alternatives on Foothill Blvd – S side

18' travel
½ section curb to median south (school) side

11' planting
11.5' travel
Soft surface trail and bike lane

13' travel
median/CTL

soft surface trail
shy zone
new curb

11' 11.5' travel
Sidewalk and bike lane

Sidewalk, landscape buffer, and bike lane

11' 11.5' travel
Sidewalk, shy zone, new curb

median/CTL

6' bike

18' travel
½ section curb to median south (school) side
Bike lane & wider sidewalk with textured parking bays

- Median/CTL: 11.5’
- Travel: 11’
- Bike: 6’
- Parking: 15’
- Walking: 15’
Walkability Principles
The simple needs of automobiles are more easily understood and satisfied than the complex needs of cities.

*Jane Jacobs, Death and Life of Great American Cities*, 1961
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
LIFE RADIUS

INDIVIDUAL
- PLEDGE
- MOAI
- PURPOSE

PLACES
- STORES
- WORKPLACE
- RESTAURANT

POLICY
- FOOD
- TOBACCO
- BUILT ENVIRONMENT

10 MILES
size neighborhoods for a 5-minute walk
Density
Connectivity (compact block patterns)
Compact intersections
Design (right size, right scale streets, parks, plazas)
Access (The Right Mix -- Mixed Use, small parks, plazas)
Mix the New with the Old
Not a good place for multi-family

Not a good place for the town hall

Not a good place Seniors

Poor Location for Shopping Plaza

Okay Location for Shopping Plaza

Best Location for Shopping Plaza

Not a good place people with disabilities

Not a good place for Seniors

From City Hall this town seems healthy, vibrant and safe.

Transit allows me to see my friends at the senior center.

I'm walking to downtown to meet Marge for a coffee.

This new bike trail allows me to get to the park safely.

I can farm like my Dad without undue development pressure.

I can work downtown and live there, too.
300’ gap in road

~1½ miles

~½ mile
Active Transportation Principles
Complete Streets
Active Transportation Principles

- Support short local trips, not regional
- Roadway efficiency is of less importance
- Reward the short trip
- Stop over building for peak hour
- 20 mph is enough for downtown
- Start with 10’ lanes as default
- Start with 10-20’ corner radii downtown
- Build compact, low speed intersections
- Green and create place
- Activate many places (mixed use)
- Use short signal cycles (60 second) or
- Adopt a roundabouts first policy
Chico, CA
Nord Avenue
Chico, CA
Nord Avenue
Three meter travel lanes

Olive Avenue, West Palm Beach, Florida – Former 3-lane, One-Way

Three meter travel lanes
Trees provide an edge, buffering people on foot from moving autos.

A small forest preserve park of 4 acres.

Medians provide ground cover to absorb 20 percent of noise.
Don’t forget that your role as an advocate, planner, engineer or other “architect” of the built environment calls for a unique blend of an observer, problem solver, and a change agent."

Oh, you are also a networker, a coalition builder, a champion; you are always creative, assertive and innovative in your work.

Make a Difference!
1800 vehicles per hour per lane

800 vehicles per hour Per lane

Road Diets
Crossings: Mid-block, Pedestrian Crossing Islands
Is this an Complete Street?