



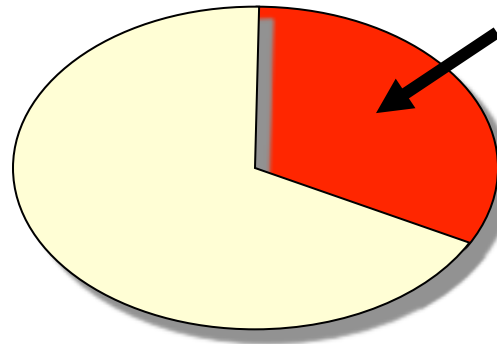
The Structural Shift in Building the Built Environment

Its Impact on Sustainable Development

Chris Leinberger,

President of Locus: Responsible Real Estate Developers & Investors

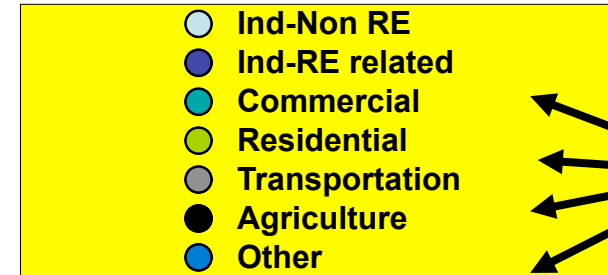
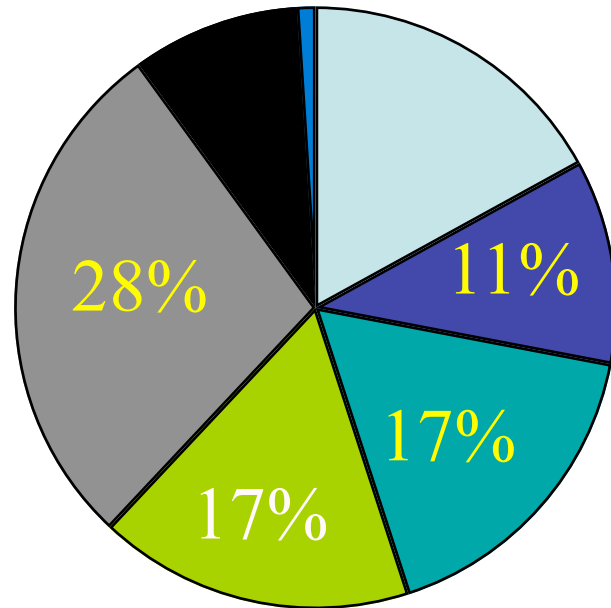
Size of Built Environment Vs Developed Economy Assets



**35% of Asset Base:
Corporate,
Household &
Government
Holdings**

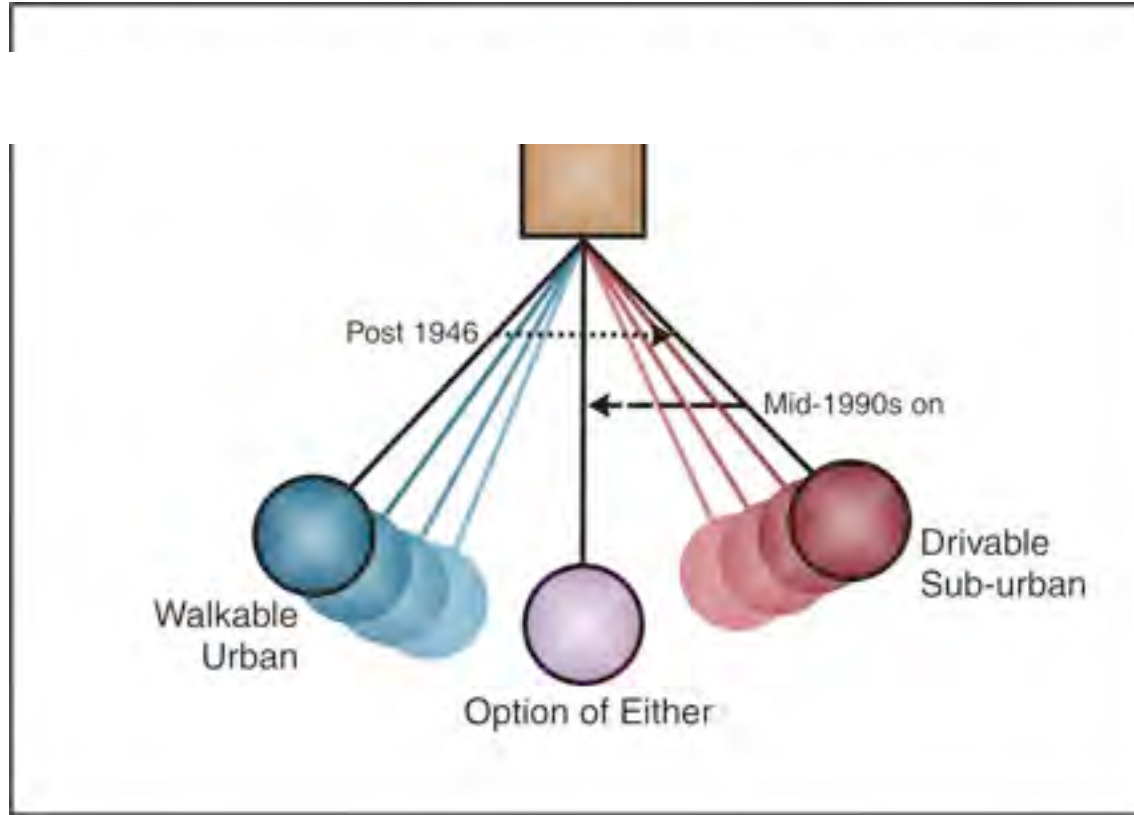
Largest Asset Class in Economy

Role of Built Environment on Green House Gas Emissions



**Built Env. =
73% of GHG
Emissions in
USA**

Only Two Ways to Build the Built Environment*



* There is a 3rd: Drivable Density-NOT Market Viable

Back to the Future-Old Town Center-1955

Video Here

Seeds of Change in 1955



Old Town Center-1985

Video Here

New Town Center-1985

Video Here

Built Environment is a Reflection of the Economy

Agricultural Economy



1800: 40 Acres and a Mule for 92%...walkable towns and cities for the rest

Industrial Economy



Post-WWII: Moving to the drivable suburbs made us wealthier

Interchanges to the ever expanding fringe



Regional malls as the new town center



We have only gotten better at building freeways



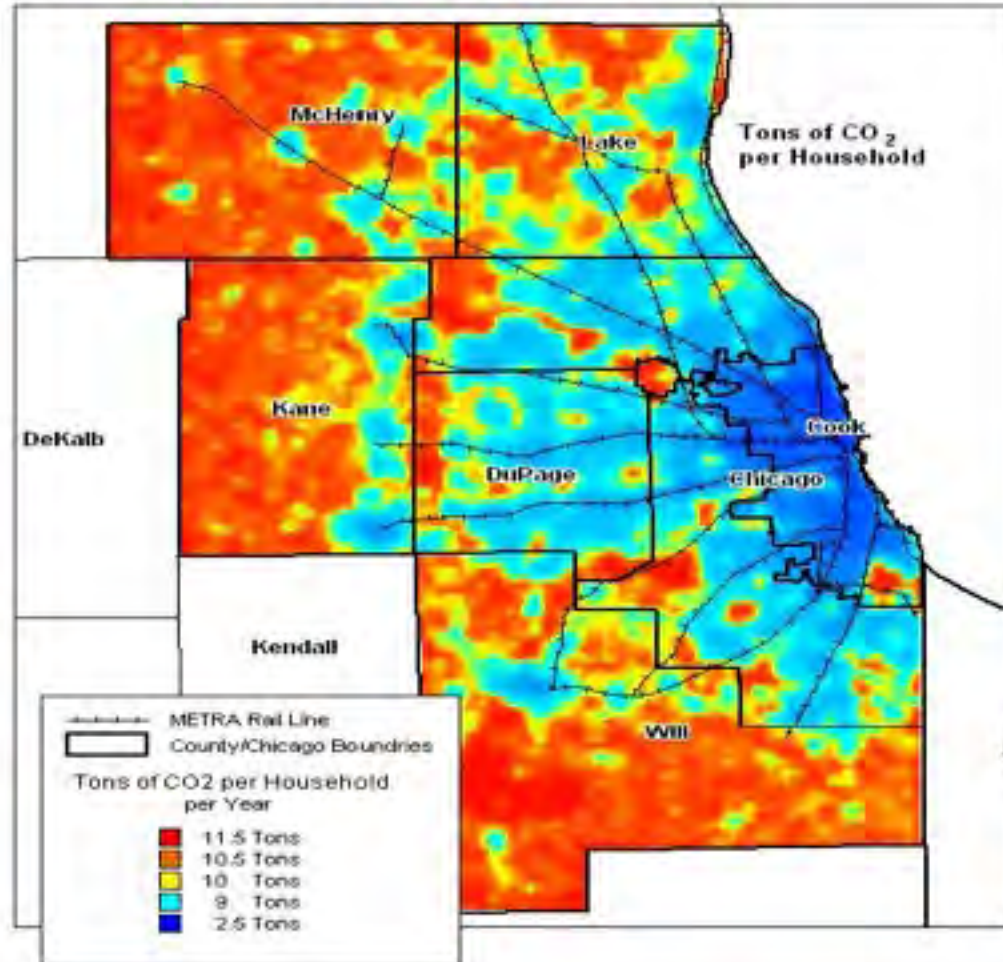
Our commercial strips have continued unabated



1% population growth has resulted in 3-6% land use growth

Regional Carbon Emissions

Chicago Metro Area



CO₂ Emissions

Center for Neighborhood Technologies

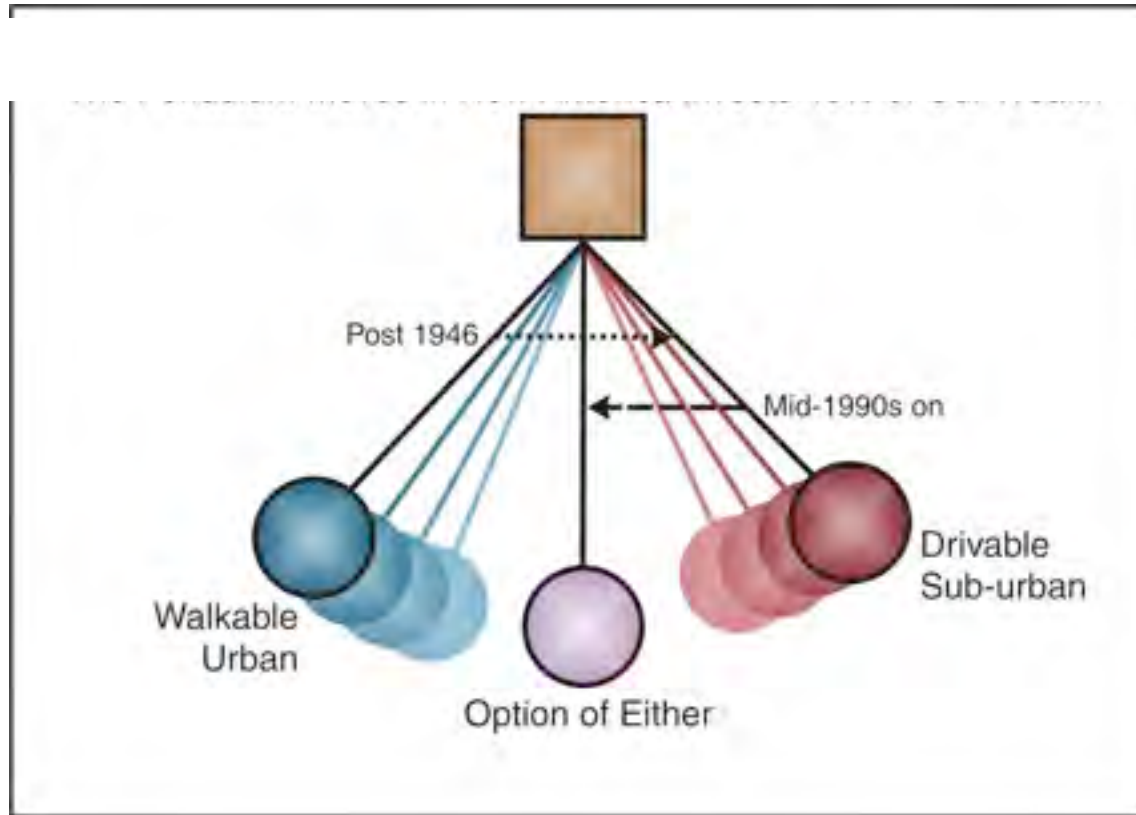
www.cnt.org

Knowledge/
Experience
Economy



Having the *Option* of either walkable urban or drivable suburban

Mid-1990s: Pendulum Starts to Swing Back



Reasons for Market Demand for Walkable Urban Places

Driven by Millennials

Baby Boomers have become empty nesters and soon retirees, starting in 2012 in big numbers

50% of Households in 1950s w/children/50% w/no children; 33% w/children today/67% without;

ONLY 14% of new households over next 20 years will have children/ 86% without → target WU market

Boredom with drivable sub-urbanism

“More is Less”

Expense of maintaining the household fleet of cars

Drivable Sub-urban

VS

Walkable Urban



Great Falls 425 sq meters/Lot: 8600 sq meters.
Walk Score: 6 of 100
Schools: Among best in nation



Dupont Circle: 340 sq meters/Lot: 160 sq meters.
Walk Score: 94 of 100
Schools: Among worst in nation

2010 \$/sq
meter



◆ Dupont Circle
◆ Great Falls

Walkable Urban Places

Teaching a *Race-car driver* to become a *Jet Pilot*
Must Have a Place-making Strategy &
Management to Succeed
Each New Element Adds Value to Existing
Assets...*IF* within Walking Distance (.5 to 1.0
kilometer)
Creates a Special Place...and Significantly
Greater Asset Values and Taxes
More is Better— Upward Spiral
Needed: Conscious Affordable Housing Strategy



Drivable Sub-urban VS

Walkable Urban



Great Falls

24% of HH income for transportation (92% for automobiles)

Exposure to elements on 5 sides of structure plus huge interior volumes to heat and cool
11.5 tons of CO2 per year



Dupont Circle

12% of HH income for transportation (many HHs do not have a car)

Exposure to elements on 3 sides (if flats then only 1-2 sides) plus less interior volume to heat and cool
2.5 tons of CO2 per year



Today: Economic Development =

Sustainable Development