

CNU Transportation Summit
The Convenient Remedy
Transport and the Carbon
Challenge

London, England
November 13, 2007

Overview

- Tools for achieving sustainability
- Options for reducing GHGs
- Strategy for national transportation legislation

Tools for achieving sustainability

- Location efficiency
- Location Efficient Mortgages
- Housing + Transportation Affordability Index

Some Challenges

- Globalization
- Technology
- Population Growth
- Urbanization
- Resource Depletion
- Climate Change
- Environmental Degradation
- Economic Inequality

Place Matters Response

- Cities are renewable resources
- Density & Convenience Pay
- Social Capital
- Urban Form and Networks
- Best places to redefine and lead the larger economy

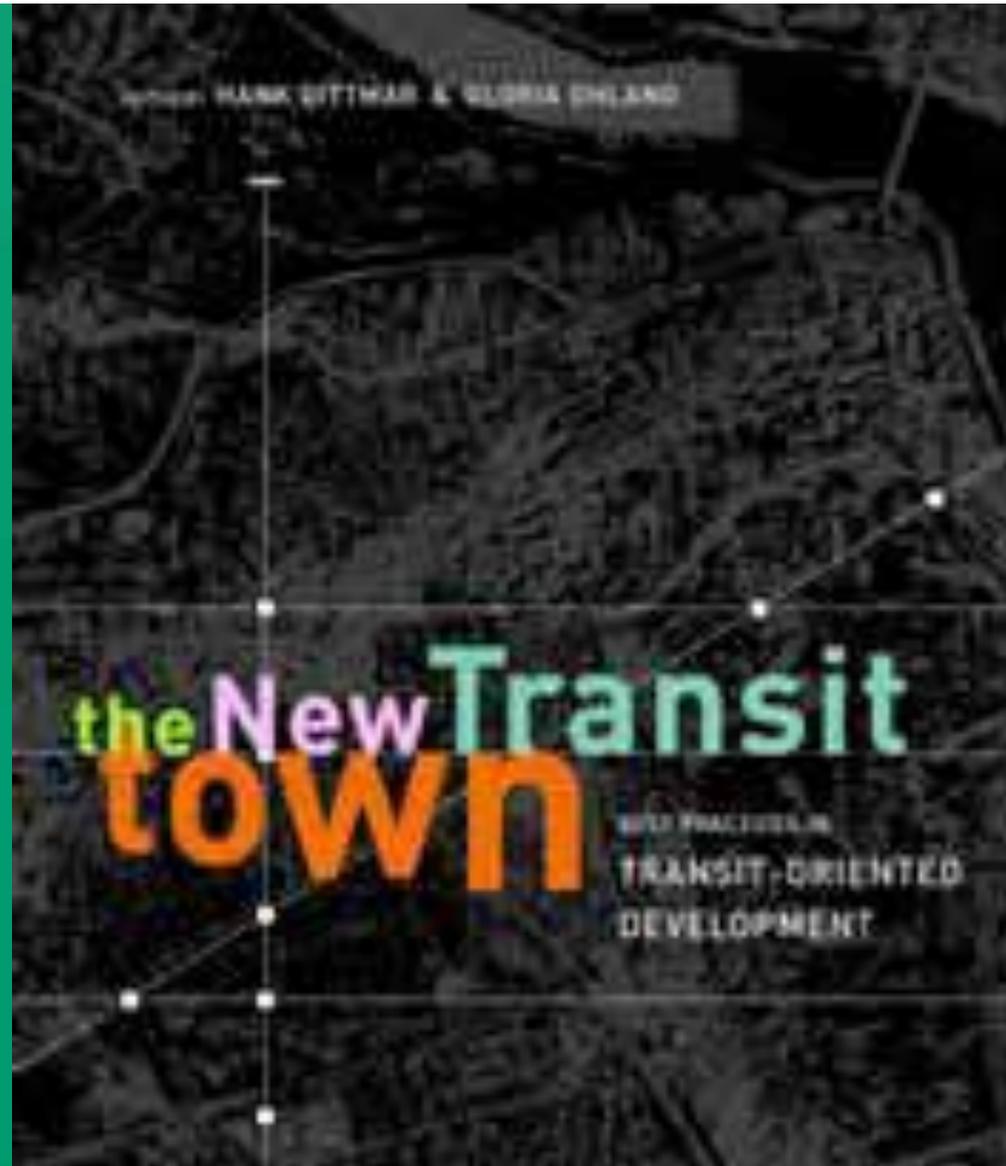
A Theory of Change: Sustainability

Urban Sustainability produces multiple benefits

- Lower urban resource intensity
- Increase permanence/longevity
- Improved environmental performance
- Economic growth
- Decreased household expenses

Making the Case for Location Efficiency

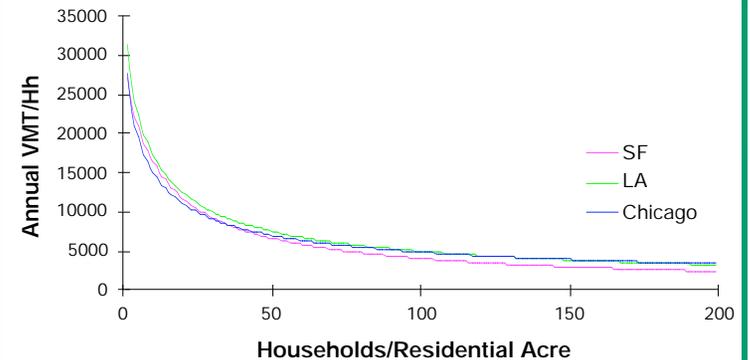
Showing the Value of Location Efficiency



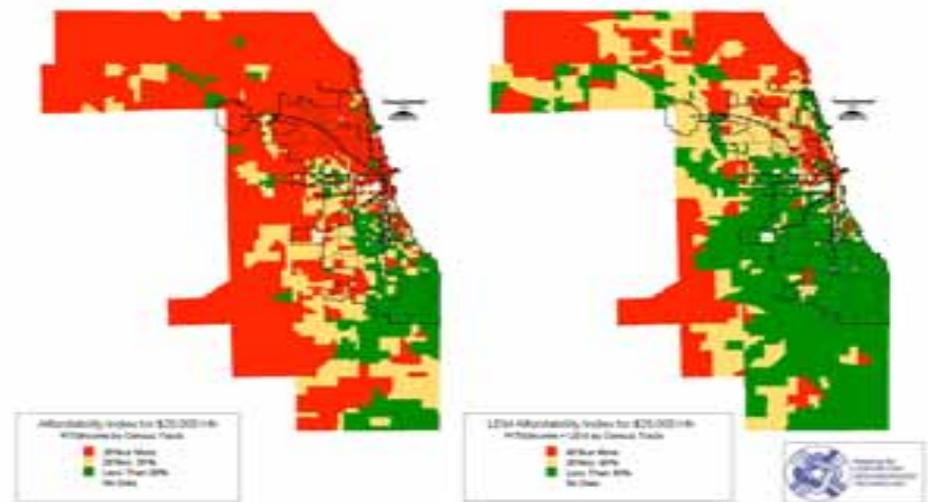
Location Efficient Mortgages: Stuck in Pilot but Adapting

- LE theory posed and validated
- LE Valuation model posed and verified
- Product proposed to Fannie Mae
- Offered in two dozen cities as LEMs, Smart Commute, Walk to work and Take the T Home
- Experiment conducted, good results, no path to deploy

Driving vs Residential Density



How much more of Cook County is Affordable for the Working Poor when we count Transportation Savings



Location Efficient Mortgages: Stuck in Pilot but Adapting

Chicago Tribune

18 Section 1

Sunday, June 4, 2000

Skip the car, buy a house

There's a lot of hand-wringing nowadays about suburban sprawl and the need for "smart growth."

But like the weather, nobody's doing much about it.

Much of the home-buying public still opts for wide-open spaces along the metropolitan fringe. And despite thoughtful warnings from civic and regional groups, political realities in Illinois militate against significant governmental action.

Now comes a modest but innovative pilot program that just might make a small difference. Maybe even a big difference—if it educates the public about the true cost of living "out there."

It's called the Location Efficient Mortgage, or LEM, and it has been developed by environmental groups such as Chicago's Center for Neighborhood Technology along with Fannie Mae, the government-chartered, stockholder-owned repurchaser of home mortgages.

It works like this: Participating lenders, in evaluating applicants, take into consideration how close the dwelling is located to public transportation. If it's so close the applicant can live without a car, or a working couple can get by with just one, the estimate of dispos-

able income is increased, and with it, the size of the mortgage for which they qualify.

A couple jointly earning \$60,000 and buying into Chicago's transit-rich Edgewater neighborhood, for instance, would qualify for a home selling for \$212,218. Out in the boonies, under traditional guidelines, the limit would be \$158,364.

And there are sweeteners. LEMs are not subject to income limits and they offer more flexibility, including lower down payments, than conventional mortgages. The City of Chicago, moreover, is offering vouchers worth \$900 toward the purchase of energy-efficient appliances to the first 100 LEM borrowers.

Downsides? There's mandatory counseling. And for now it's limited to Chicago and three West Coast cities.

The ultimate value of LEM, however, may be to show, in ways people readily understand, that sprawl does impose costs. Some of that cost is paid, knowingly and gladly, by those who choose to live "out there." Much of it, however, is hidden, and paid indirectly by those who live "back here."

For more information about LEMs call 1-800-732-6643.

NOW IT'S EASIER TO OWN YOUR OWN HOME!



Introducing the LEM™, the Government Community Mortgage.

LEM is sponsored by:

Center for Neighborhood Technology
The Center for Neighborhood Technology is the nation's first LEM center in the Chicago Area. CNT is a not-for-profit organization committed to helping the greater Chicago area protect the environment, save energy, save money, and build sustainable, affordable communities. For more on what CNT has been doing and implementing programs that will save lives, visit www.cnt.org.

Fannie Mae
Fannie Mae is the largest and best regulated mortgage company in the world. It operates pursuant to a federal charter and is the largest issuer of financing for home mortgages. Over the past 30 years, Fannie Mae has provided \$1.5 trillion of financing for over 30 million families. For more information call 1-800-FANNIE (1-800-732-6643) or visit www.fanniemae.com.

The Greater Chicago Housing Corporation
100 W. South Avenue
Chicago, IL 60604
(312) 467-6600
www.gchc.org

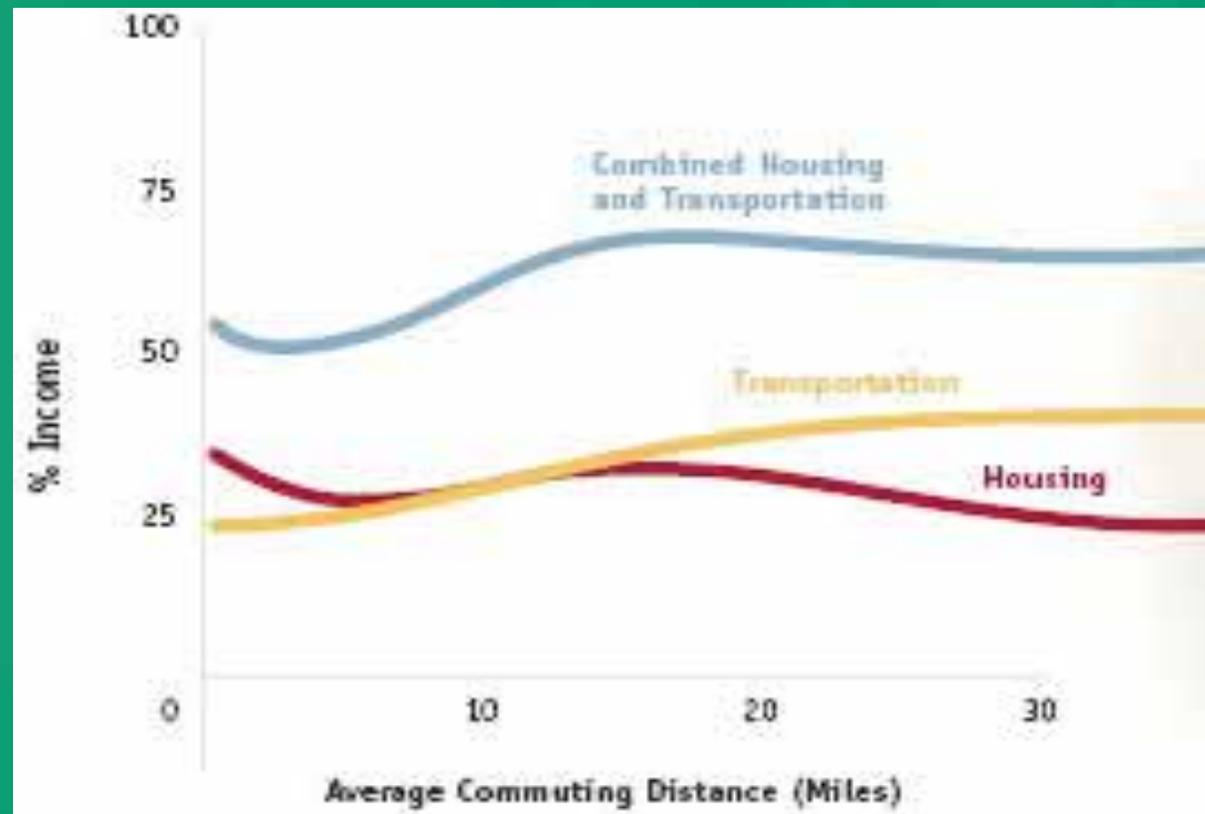
LEM LOGO HERE

To learn more about the LEM Government Community Mortgage or for a list of participating lenders, contact:

The Center for Neighborhood Technology
100 W. South Avenue
Chicago, IL 60604
(312) 467-6600
www.cnt.org

The "Location Efficient Mortgage" is a program of the Center for Neighborhood Technology, Chicago, IL. Fannie Mae is a member of the Federal Reserve System. The Greater Chicago Housing Corporation is a public housing authority. © 2000 Fannie Mae. All rights reserved.

Where We Build Matters: Poor Locations Drive Up Emissions and Costs

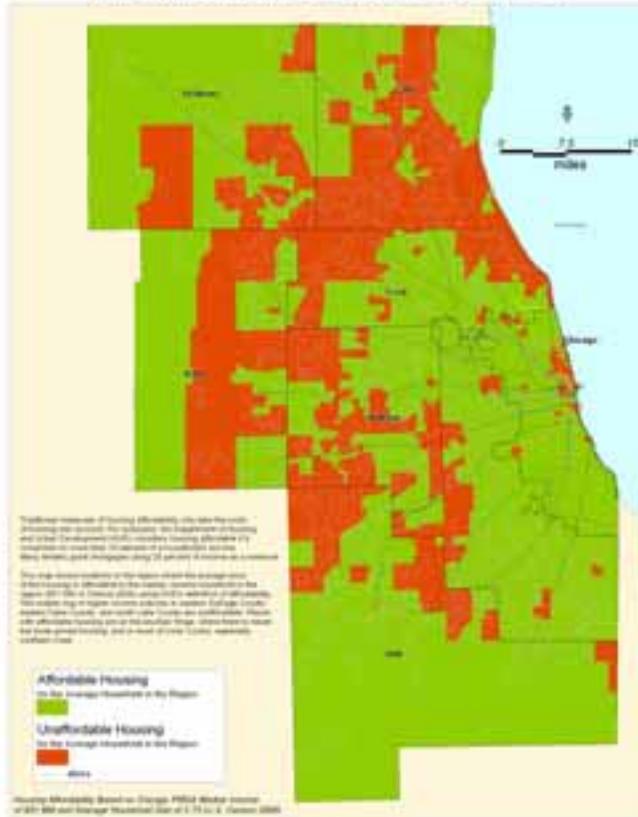


Where Is the Affordable Housing???

Really???

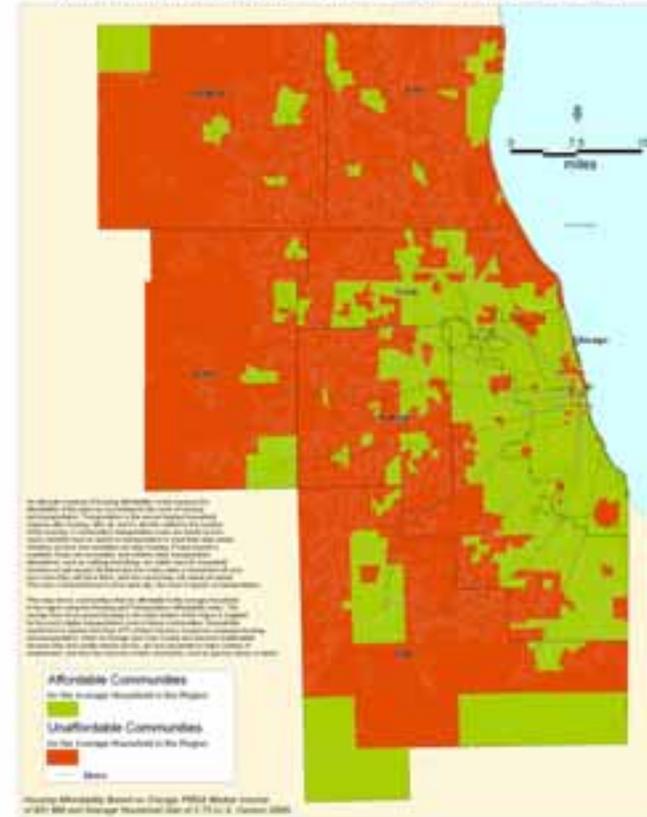
Traditional View of Housing Affordability

(Housing Costs Only as a percentage of Household Income)



The New View of Housing Affordability

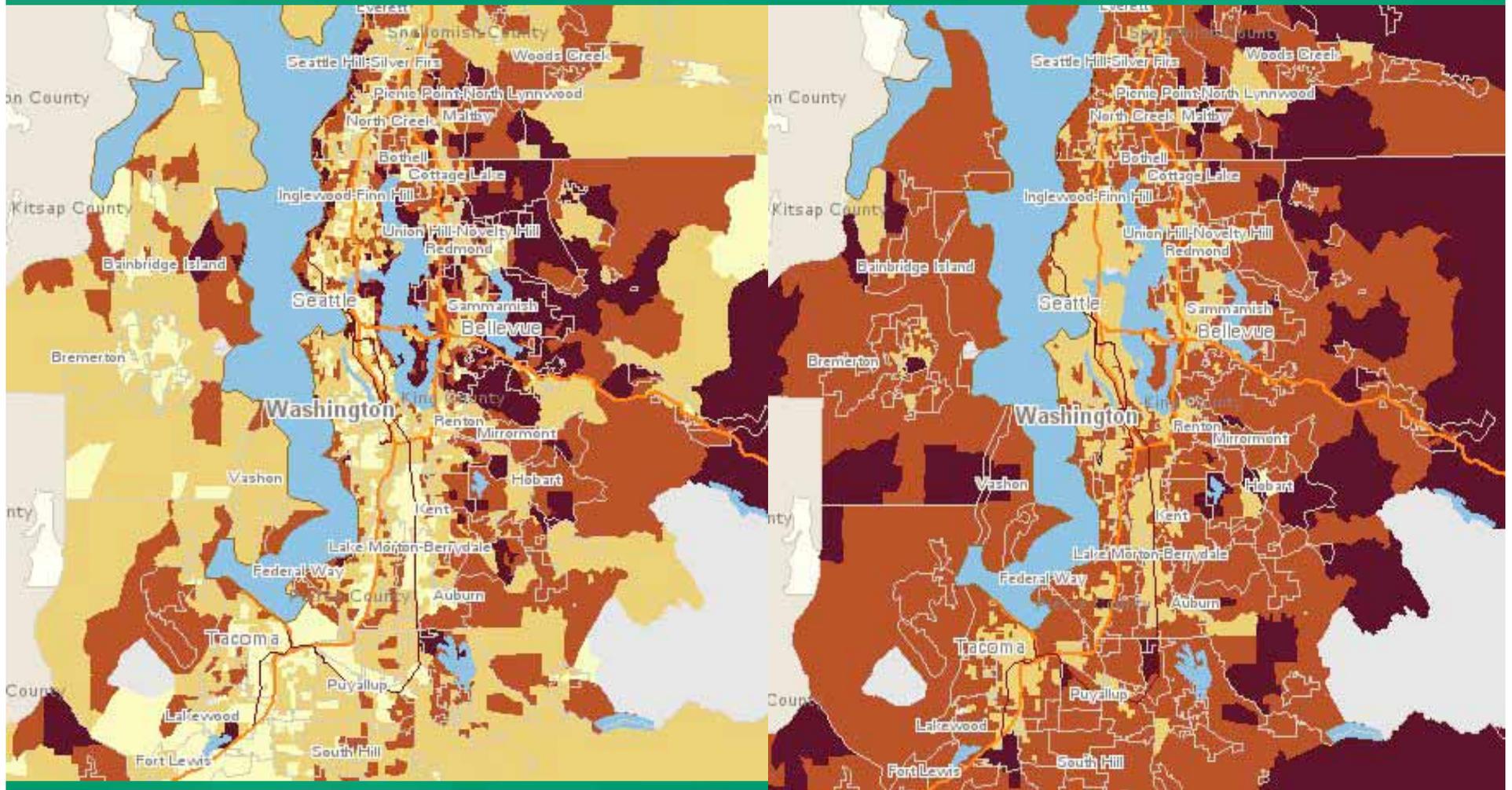
(Housing & Transportation Costs as a percentage of Household Income)



Housing as % of Income



Putting the Puzzle Together—H versus T?

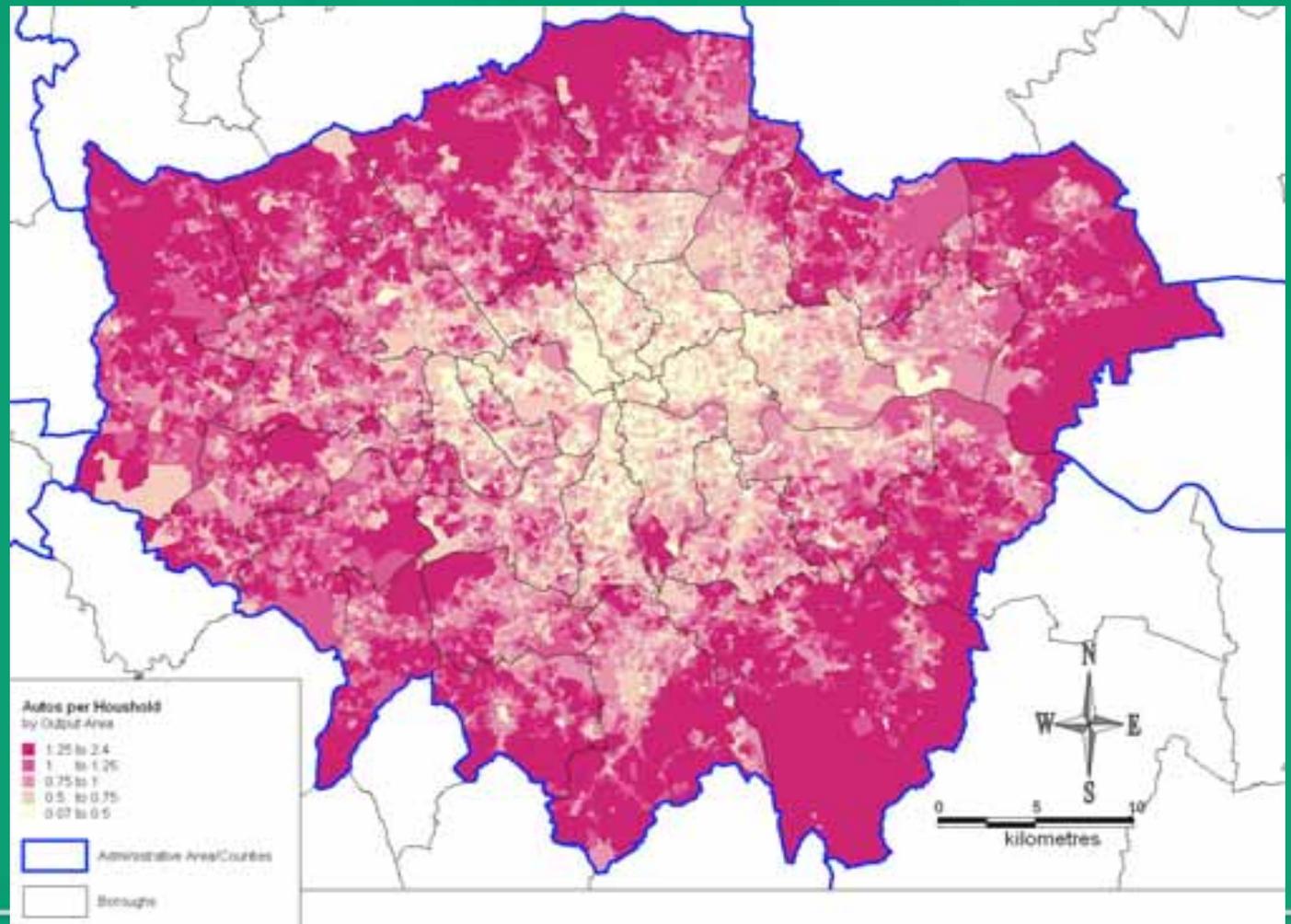


True Affordability—Housing *and* Transportation (H+T)

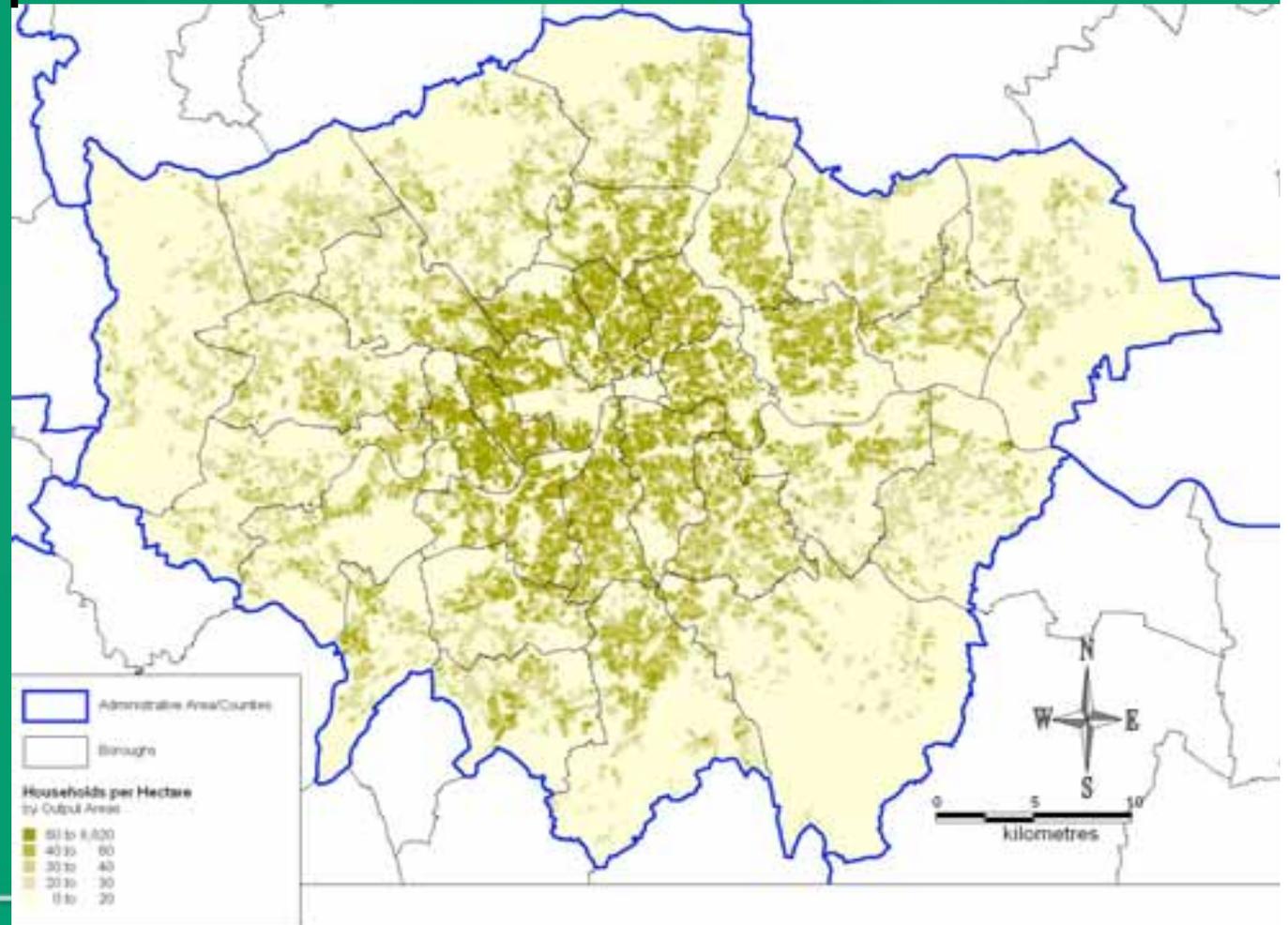
New
Affordability
Index
for 52
regions



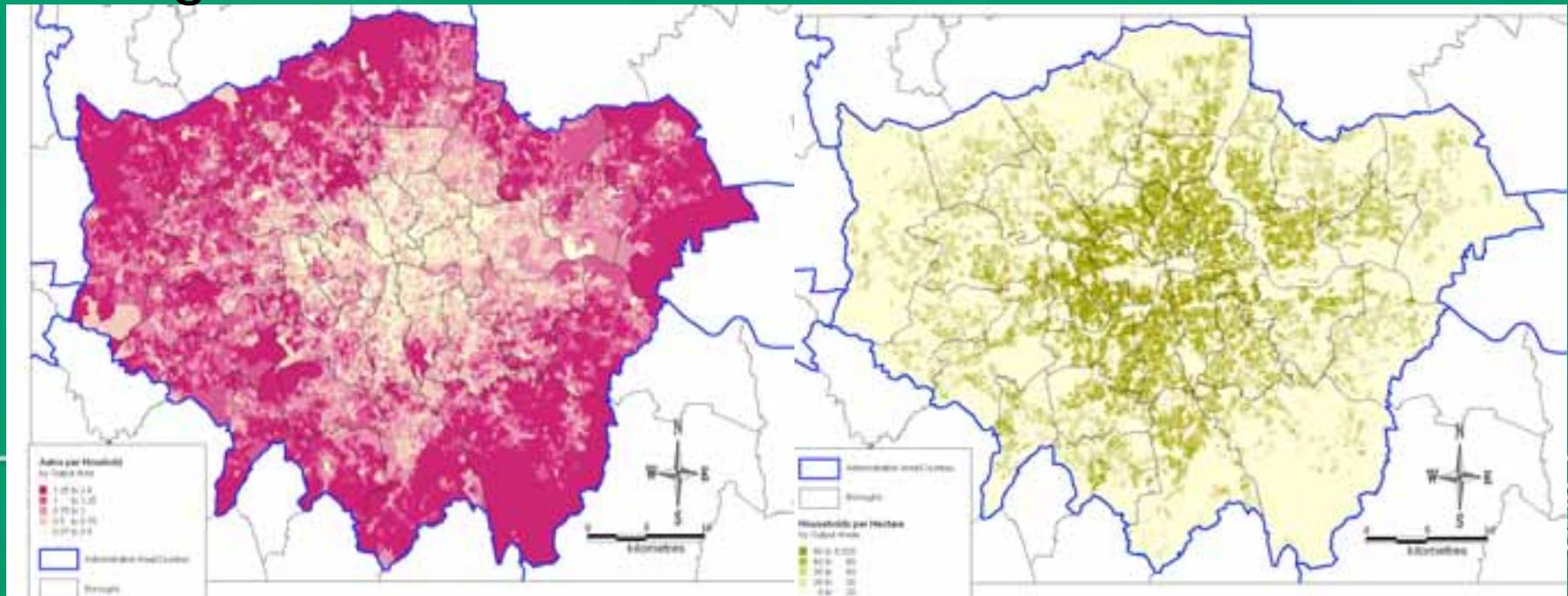
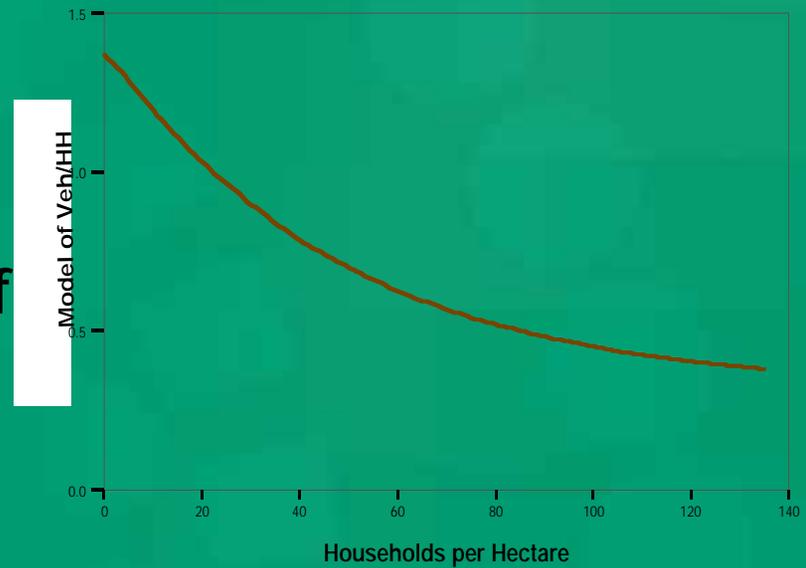
First View of London— Vehicles per Household



First View of London— Households per Hectare



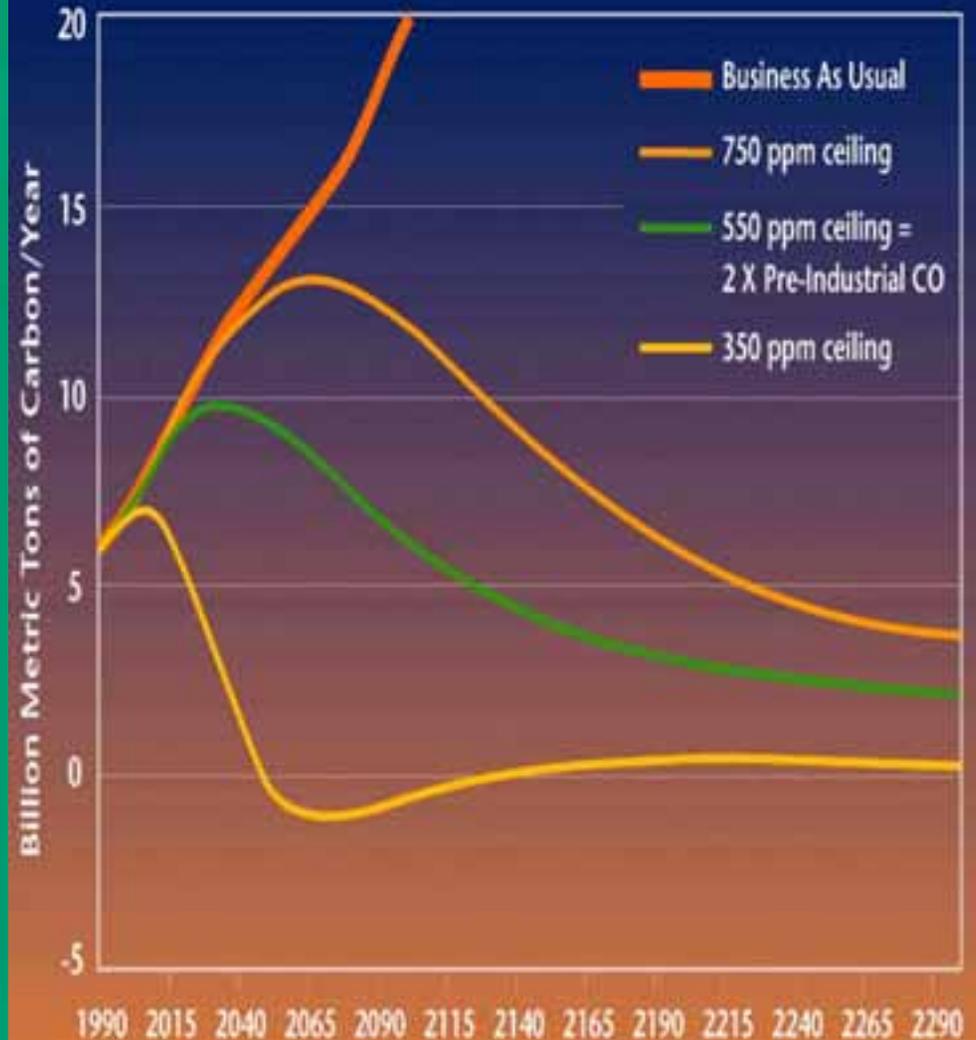
- London Location Efficiency 2007
- Similar curve to US and Japanese cities
- Produced by CNT for Prince's Foundation EbD in Borough of Waltham Forest
- Shows LE an asset for both urban quality and climate change



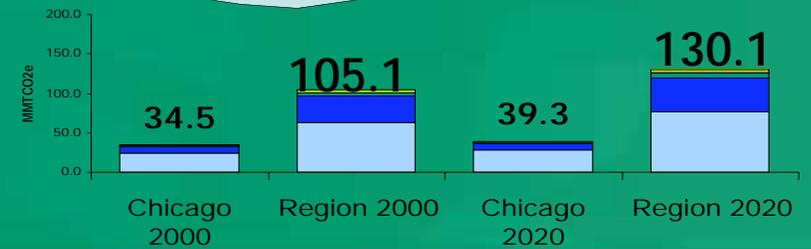
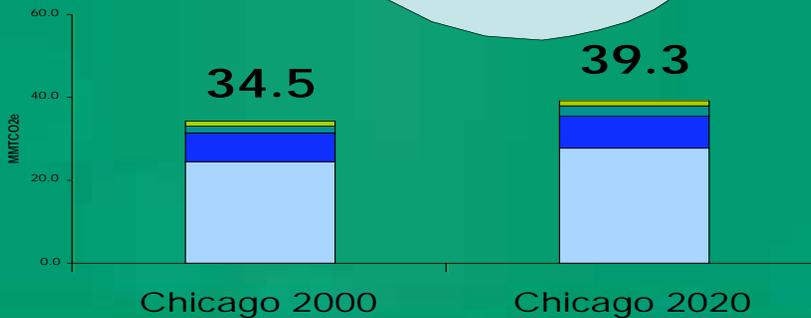
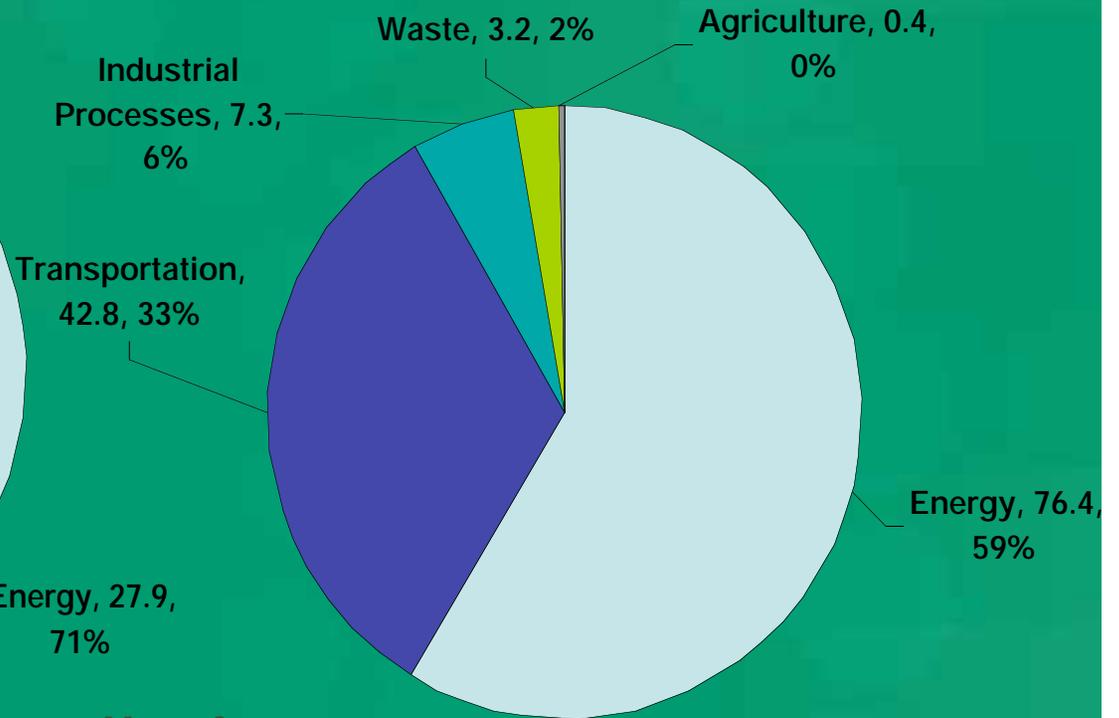
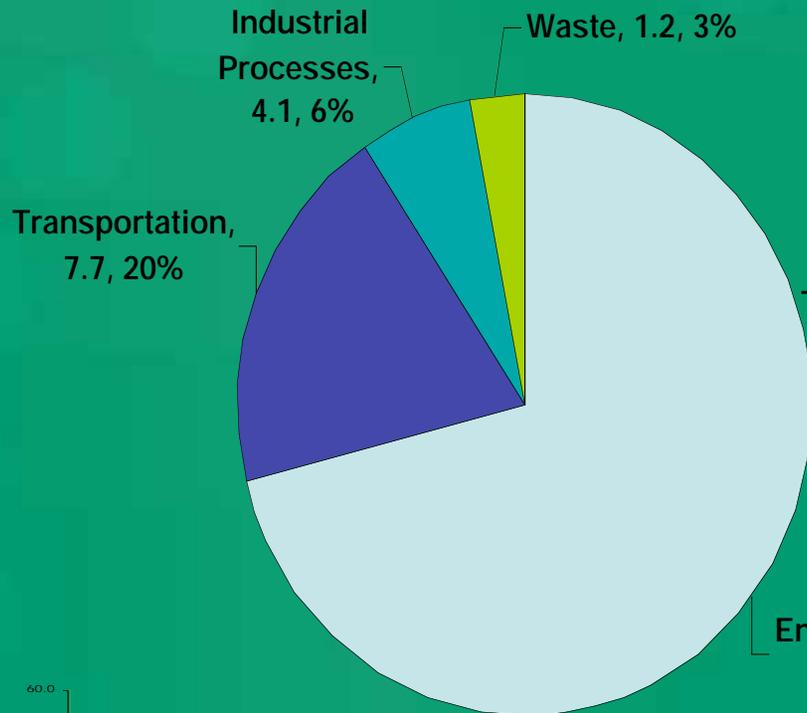
Green House Gases: Options??

No Time to Waste

- Every ton counts
- Learning rates and deployment at least as important as invention
- A leaner world where “nothing and no one is wasted”
- Where we build and live is as important as what we build

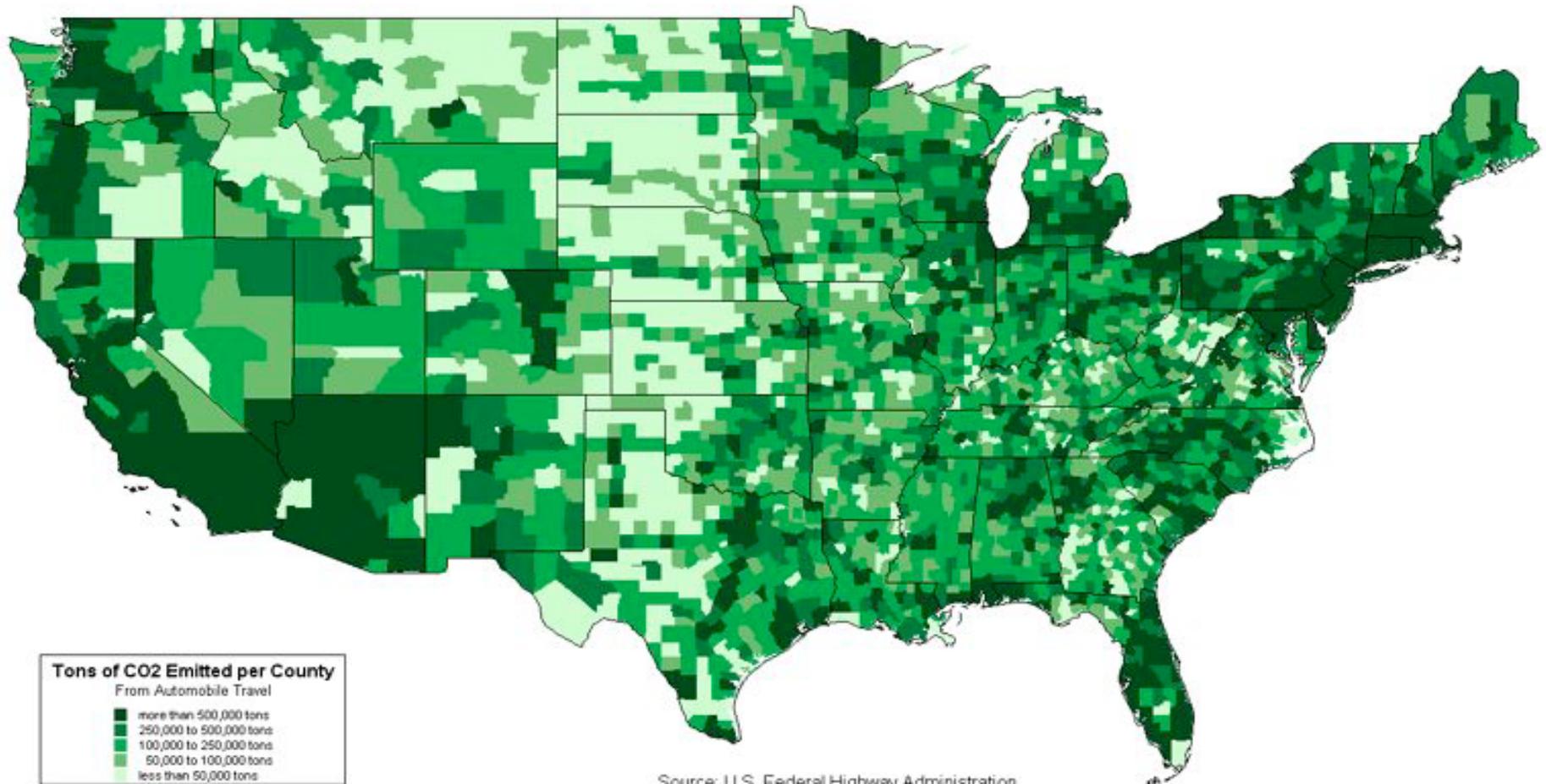


2020 Chicago vs. Metro Region Transportation GHGs Grow Twice as Fast in Suburbs



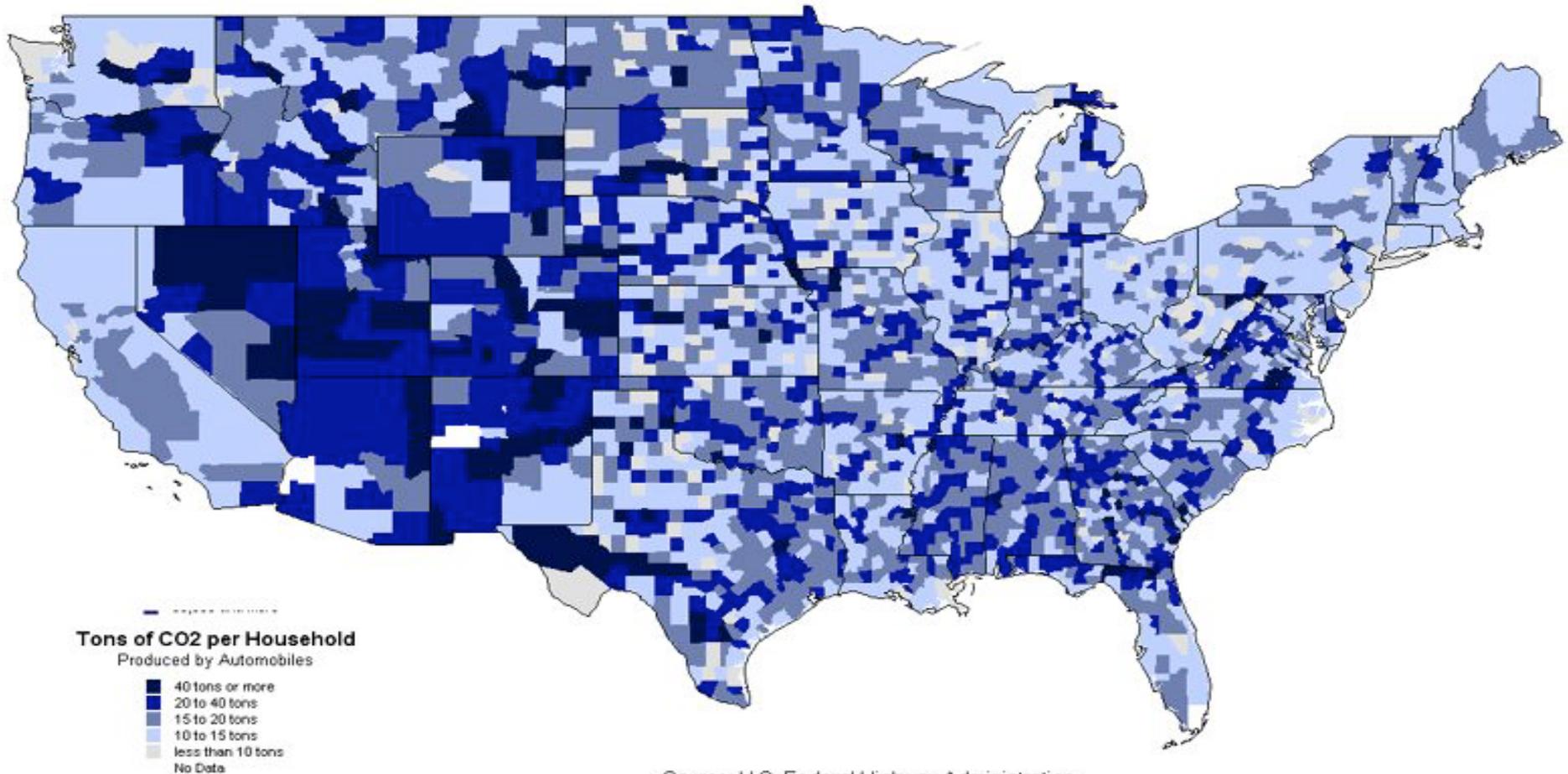
Making the Connection: Cities and Carbon Dioxide

CO2 Emissions per County from Automobile Travel

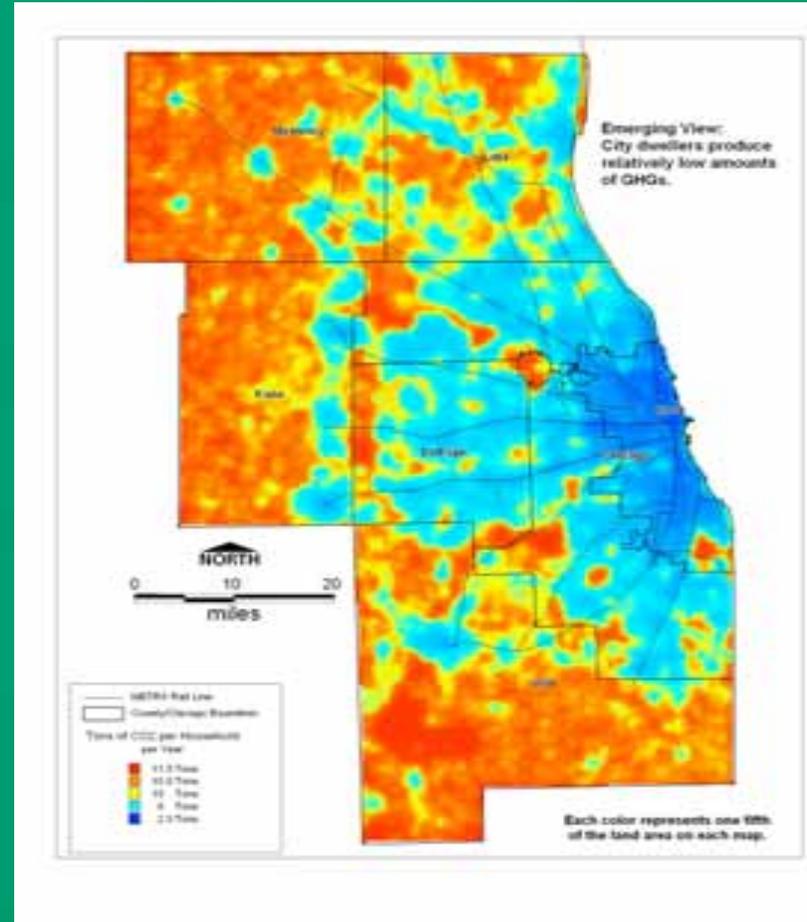
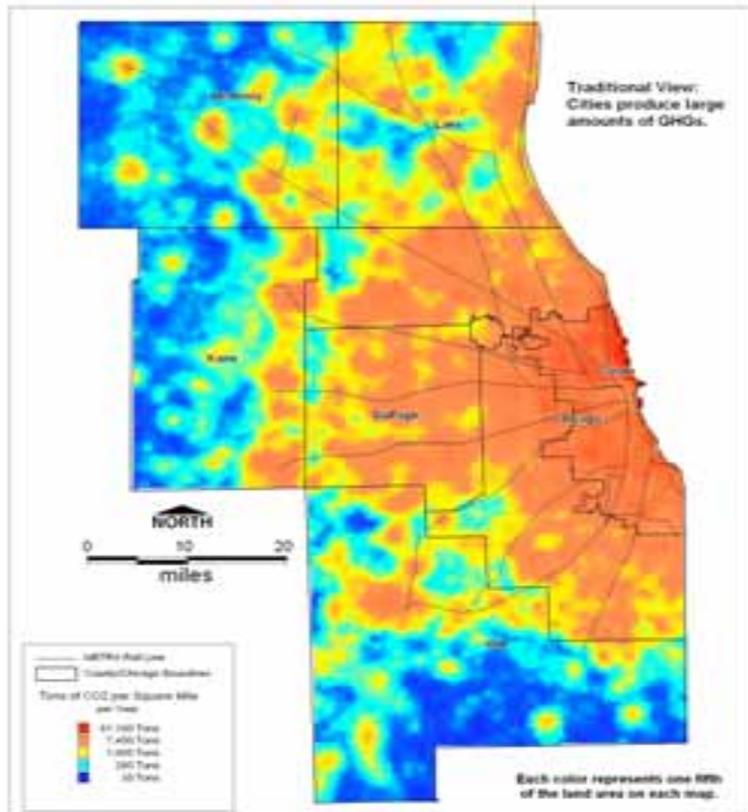


More Transit Options = Reduced Carbon Dioxide Emissions

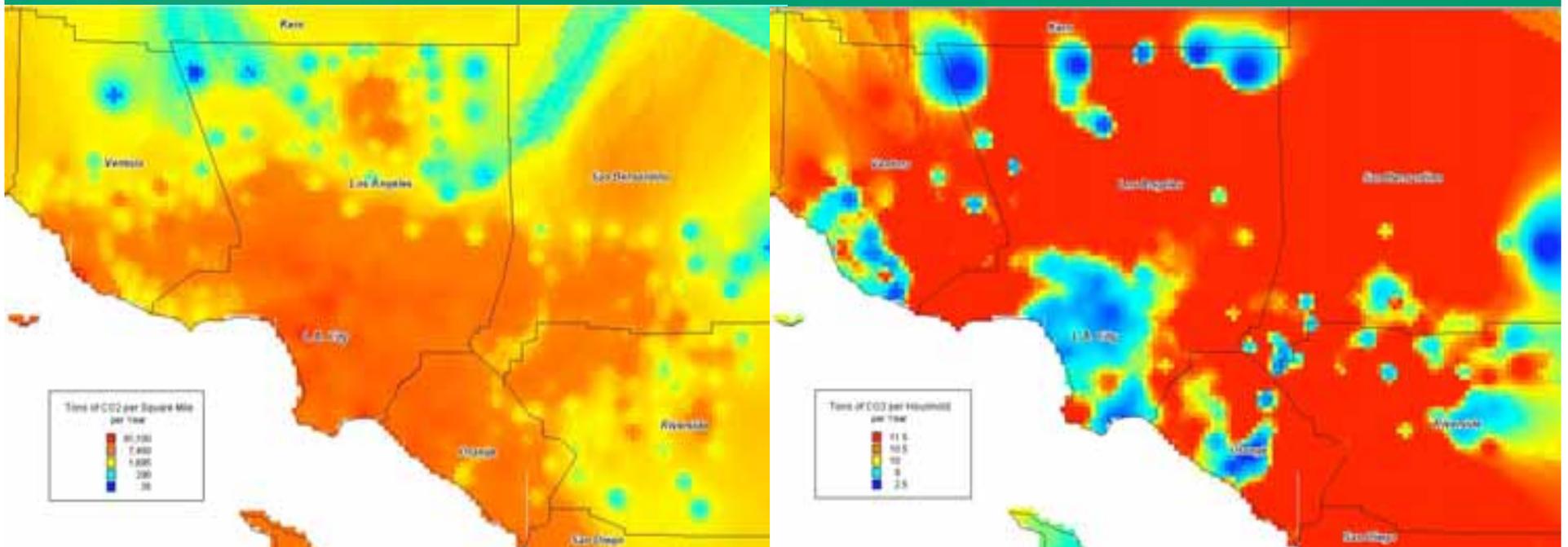
CO2 Emissions per Household from Automobiles



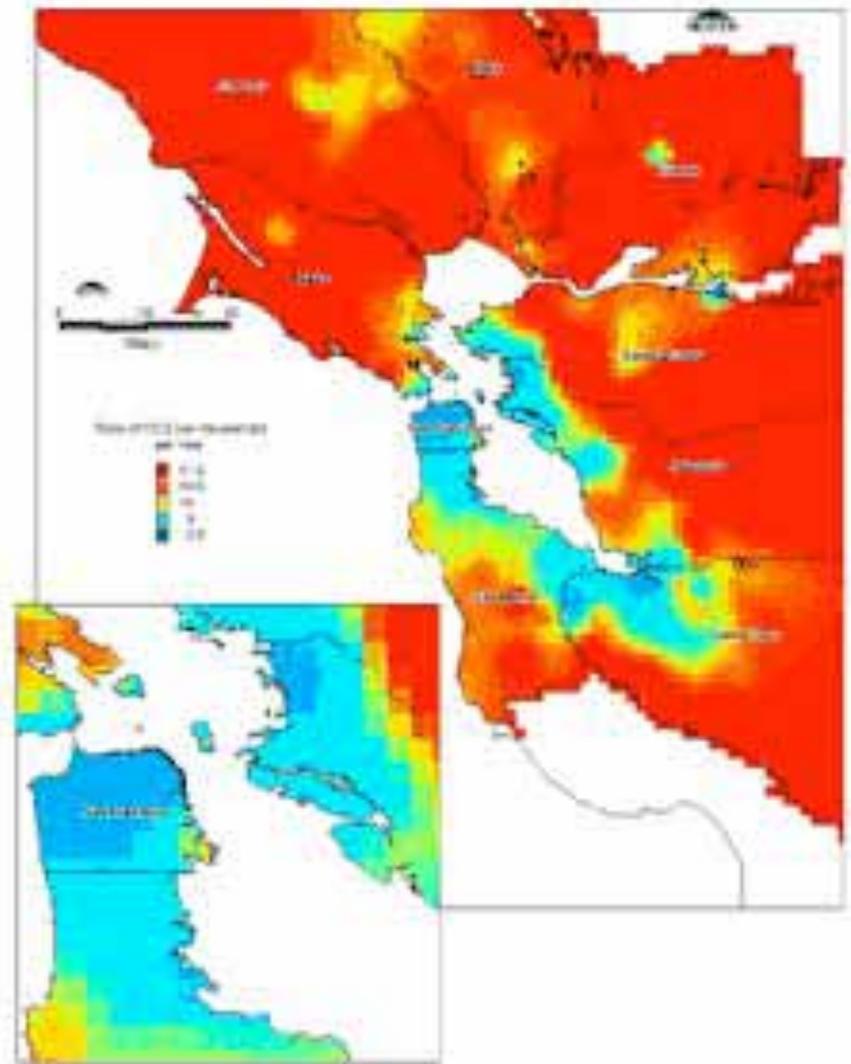
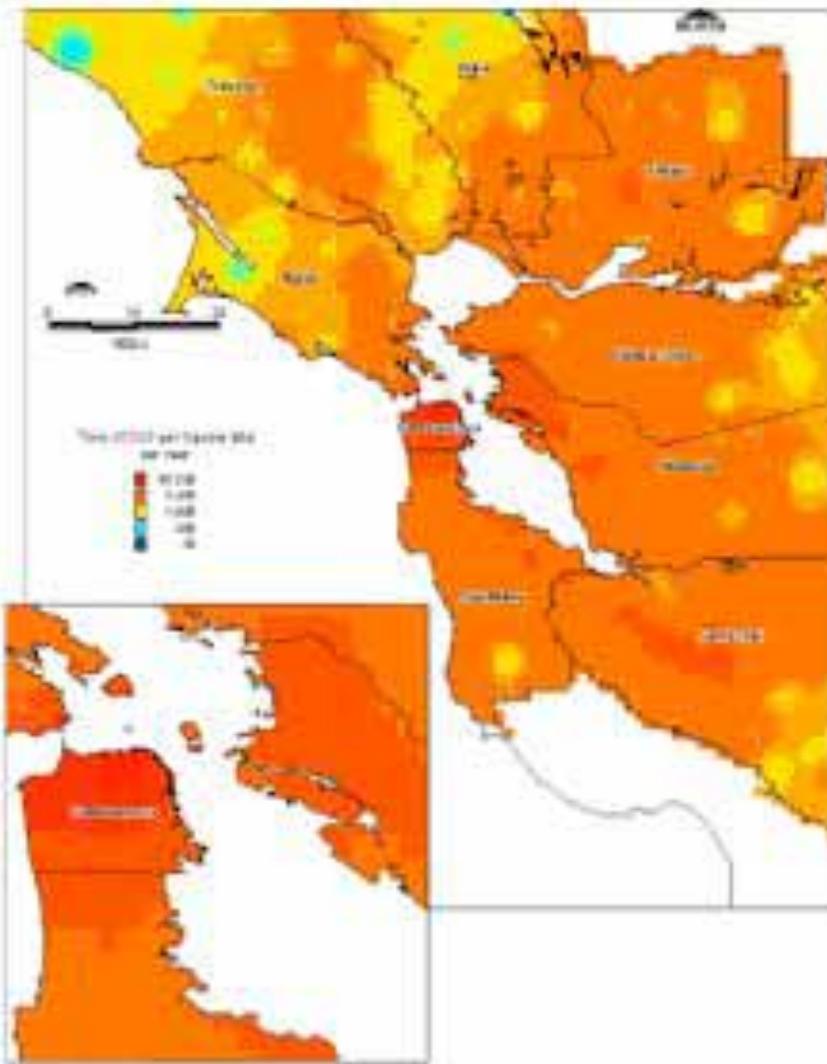
Showing the Benefits: Two Views of Cities and CO2



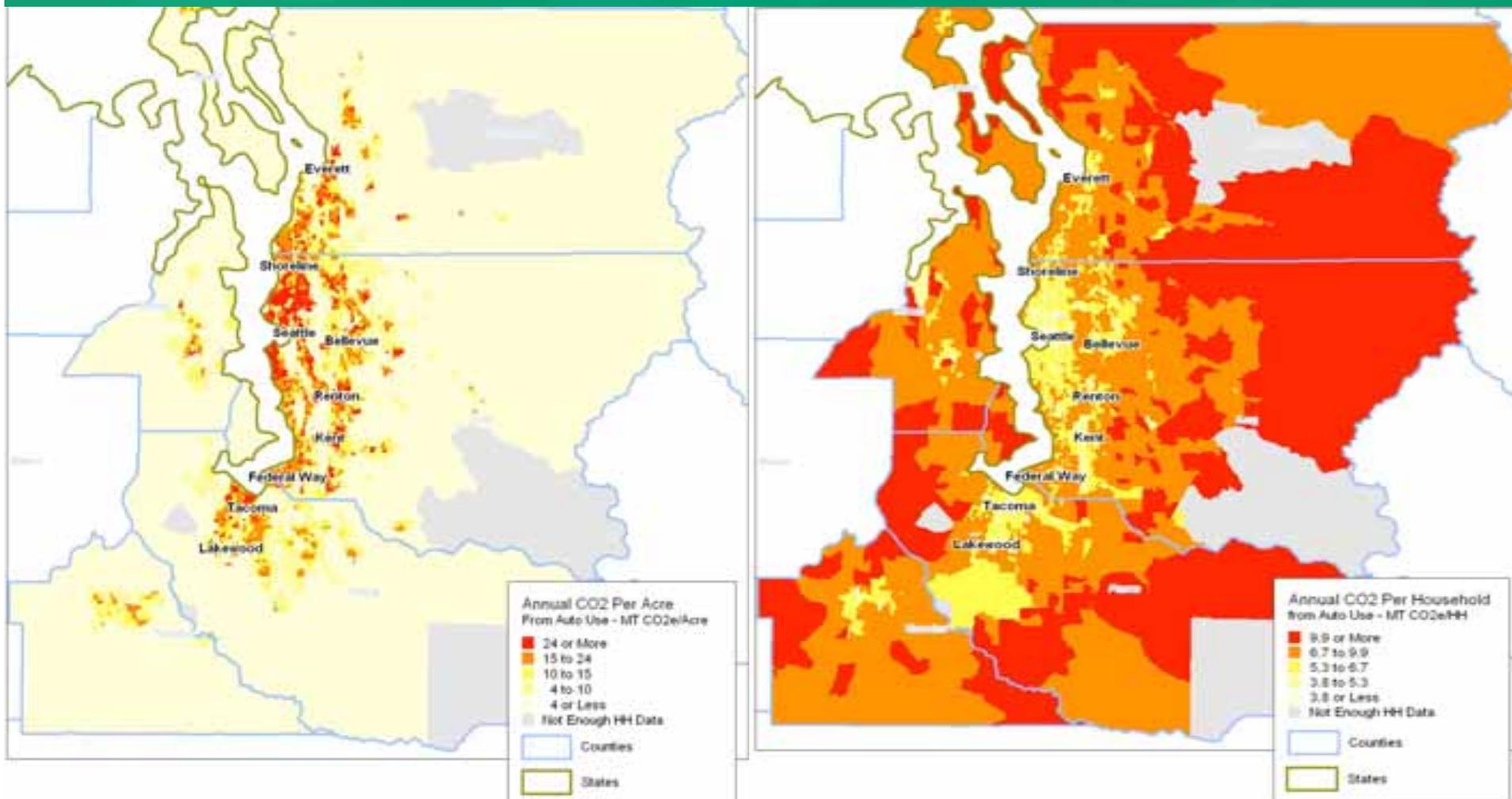
Same View: Southern California



Same View: Bay Area



Two Views of CO2 in Seattle



Categories of Options

- Energy
 - Demand Reduction
 - Conservation through Efficiency
- Transportation
 - Mobility Options
 - Freight Movement
- Food Supply
 - Community Supported Agriculture
- Waste
 - Re-Use
 - Composting

Categories of Options

- Built Environment
 - Cooperative housing
 - Green Buildings
 - Infrastructure Asset Mgt
- Water/Natural Resources
 - Green Infrastructure
 - Local foods
- Land Use
 - Transit Oriented Development
- Manufacturing
 - Eco-Industrial Parks

Climate Change Options

- Apply knowledge: place matters, VMT reduction worth as much as cleaner cars and fuels
- Protocols and Standards for Carbon Neutral Rating
- Municipalize and Standardize accounting for carbon
- Monetize and create trading and offsets

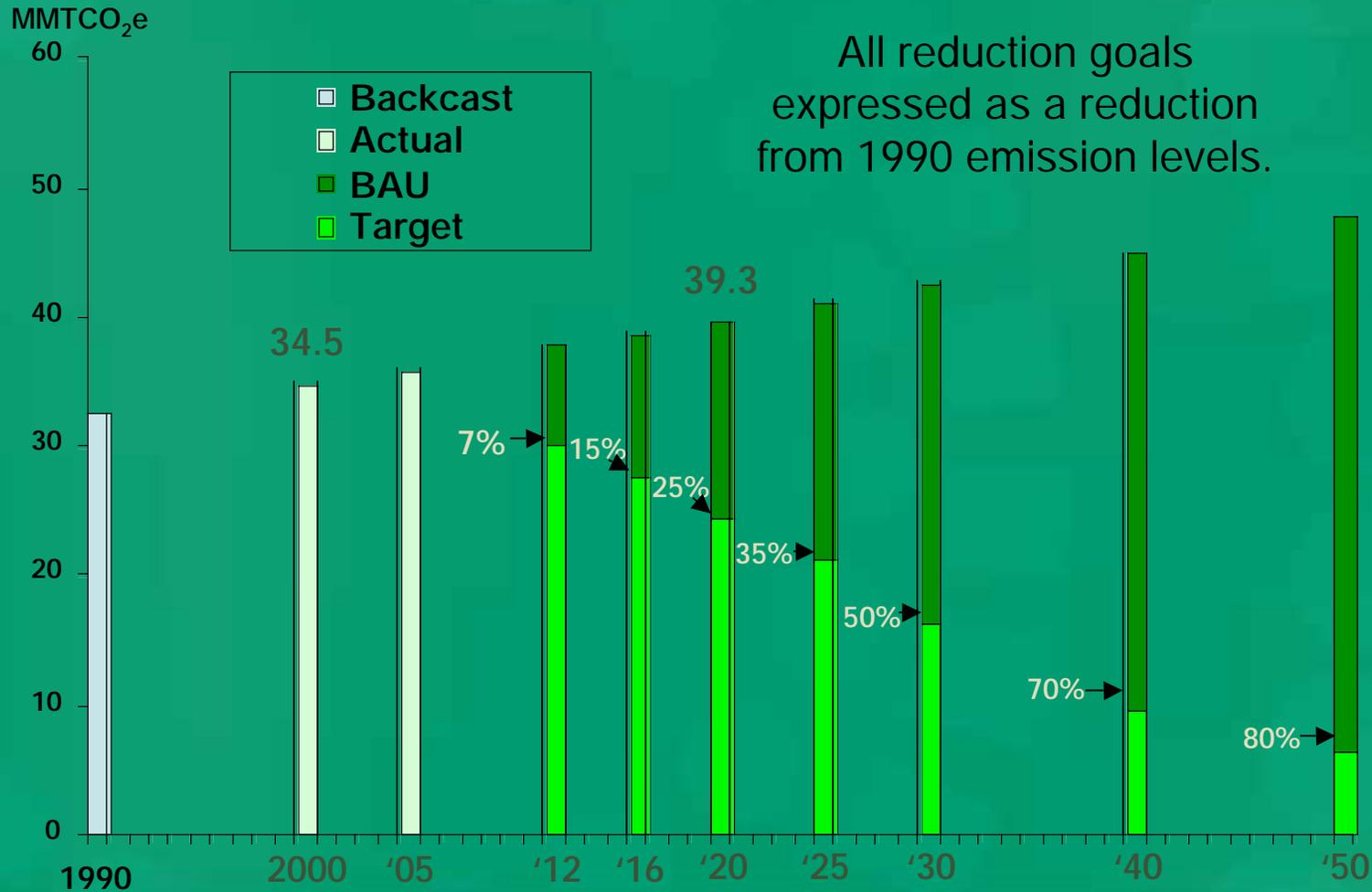


Climate Change Options

- Aggregate reductions
- Tax carbon with community downstream benefits
- Trade with downstream community benefits
- Raise the bar
- Use existing government policy-PCAP
- Change federal policy-2009 legislation



Chicago Reduction Goals



Getting to 2050: Stable and Clean

- Value of VMT reduction
- Approximately equal to the value of reductions from CAFÉ and better fuels
- “VMT reduction as significant as cleaner cars and fuels”—Socolow and Pacala, Science Magazine 2005

Recommendations

- Tie climate plans to a value proposition and use it to attract capital
- Use the value proposition to improve BAU—housing, zoning, transportation, planning
- Empower City employees to help lead the change, the market is looking for a few good partners everywhere
- Use new tools to keep score and keep improving

National Transportation Policy

Current Transportation Policy

What do we have now?

- Strategic vision?
- Focus on areas of economic competitiveness?
- Clear principles?
- Focus on environmental sustainability?
- Focus on social inclusivity?

Eddington Transportation Study

2006 Sir Rod Eddington's Report

- Study of UK economic competitiveness
- Link between transportation, economic growth and sustainable development

Found

- Transportation decisions should be linked to promoting UK competitiveness
- Transportation policy should follow clear national priorities and be modally agnostic

US Decision Making

- Funding by mode
- Encourages road building
- No enforceable performance standards
- Little acknowledgement of competitive units of US economy
- Ignores climate change

Next Authorization

- Not reauthorization
- New transportation agenda
 - Recognizes changing national economy
 - Globalization challenges
 - Advances prosperous growth
- National policy priorities and performance measures
 - “What question does your project answer?”

Performance Measures

To address:

- GHGs and Air quality emissions
- Inadequate transit alternatives
- Outmoded infrastructure
- Health and safety problems
- Increasing traffic congestion
- Increasing oil consumption
- Economic, environmental and social ills

What We Need to Do Nationally

- Align our transportation, energy, economic development, national security policies
- Get started with executive authority
- Use pending authorizations of all transportation bills
- Use federal authority to support better state, metro and local initiatives
- Create a climate of opportunity for the private sector—link to issues that build demand for the right solutions and deliver multiple benefits

Recommendation

US participants:

- Make this your issue!
- CNU's diverse membership needs to weigh in!
- Let me know if you want to make a difference, ITE manuals are not enough!!

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