

# Thinking Outside the Bus

The Housing and Transportation (H+T<sup>SM</sup>) Affordability  
Index

Connecting Communities Transit Seminar  
Bus Rapid Transit & Transit Oriented Development

Madison, WI  
October 1, 2009

# Affordability & Conventional Wisdom

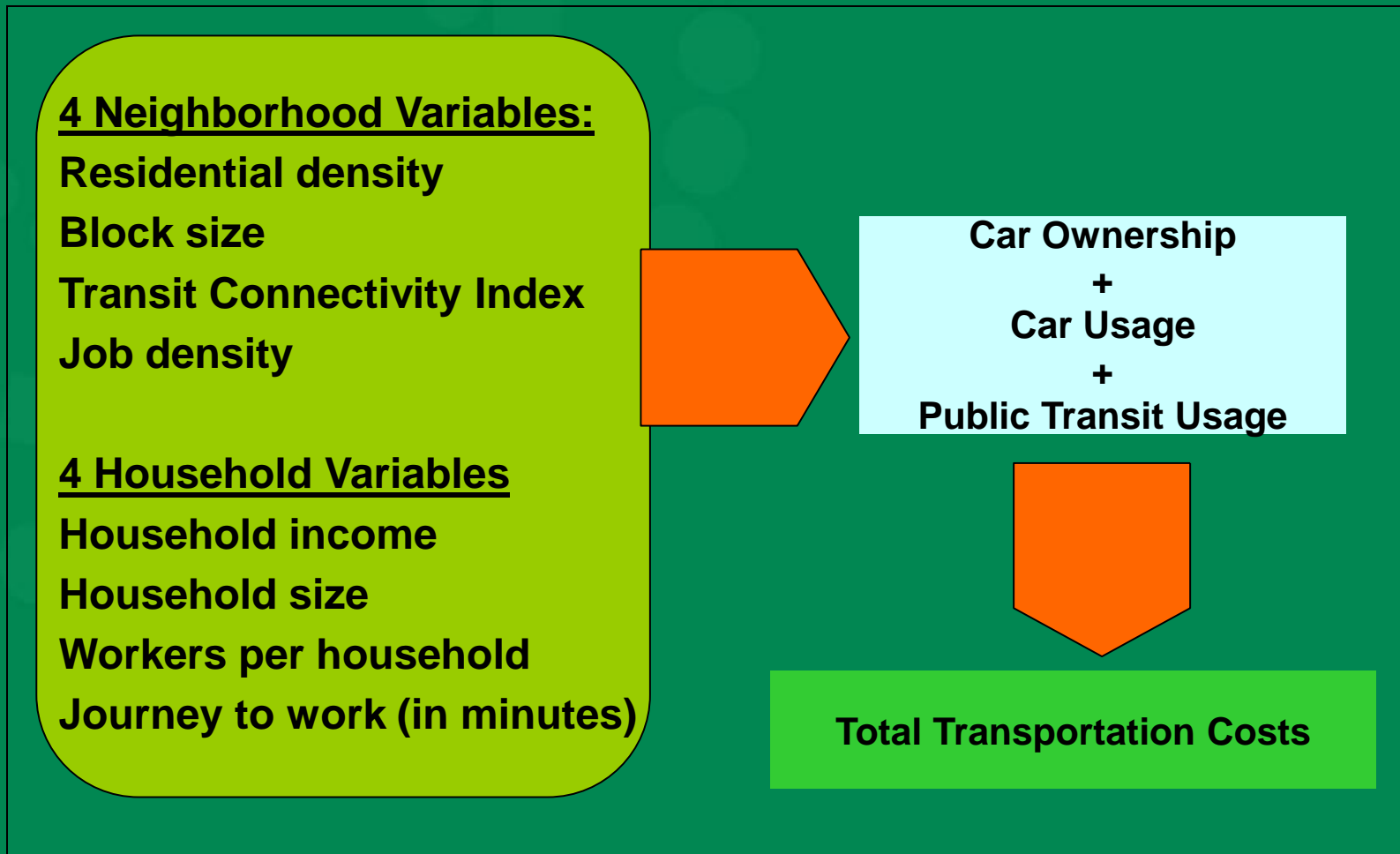
- Housing should not exceed 30% of household income
- Used by lenders, landlords, consumers, and government
- Drives search for lowest-cost land/housing, regardless of location


# Factoring transportation into the affordability equation




- Transportation costs are second largest expense in household budget = typically 18% of income
- H+T Affordability Index calculates transportation costs at the neighborhood level
- 30% housing + 18% transportation suggest affordable H+T costs should consume no more than 48% of household income

$$\text{Affordability} = \frac{\text{Housing Costs} + \text{Transportation Costs}}{\text{Income}}$$

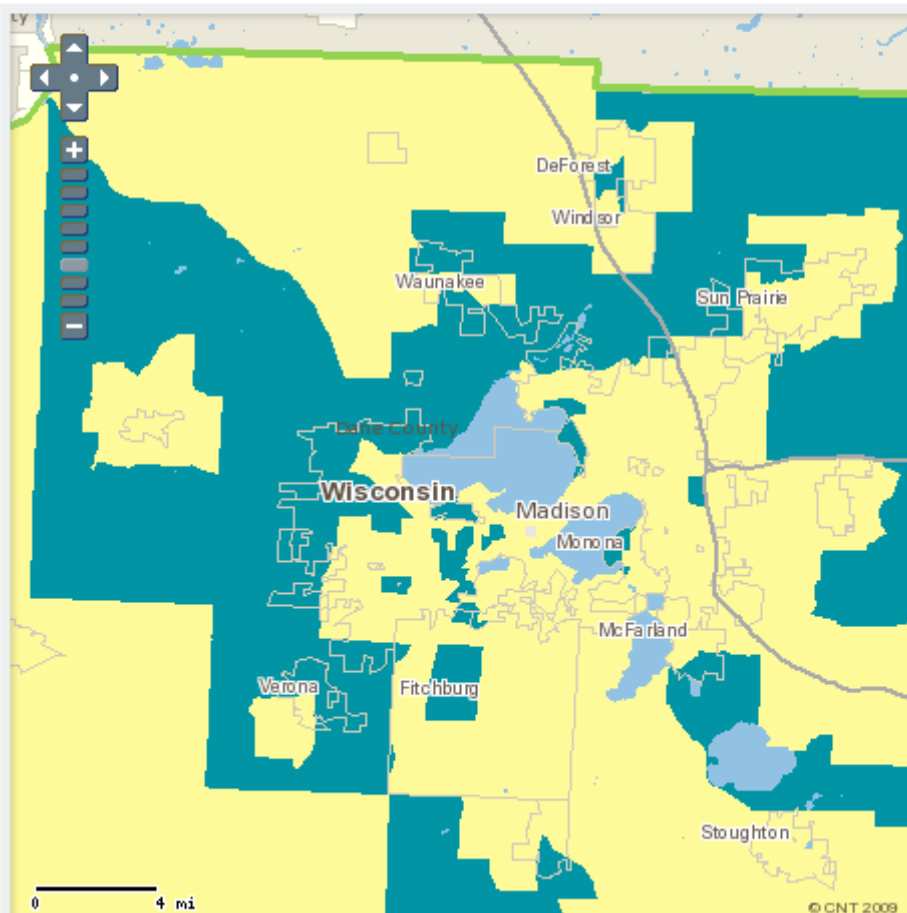
# Modeling Transportation Costs



Housing Costs - % Income  CHANGE

-  Data not available
-  0 to 30%
-  30+%

Housing Costs factored as a percent of the Area Median Income has widely been utilized as a measure of affordability. Traditionally, a home is considered affordable when the costs consume no more than 30% of household income.



What does H+T tell us that conventional wisdom doesn't?

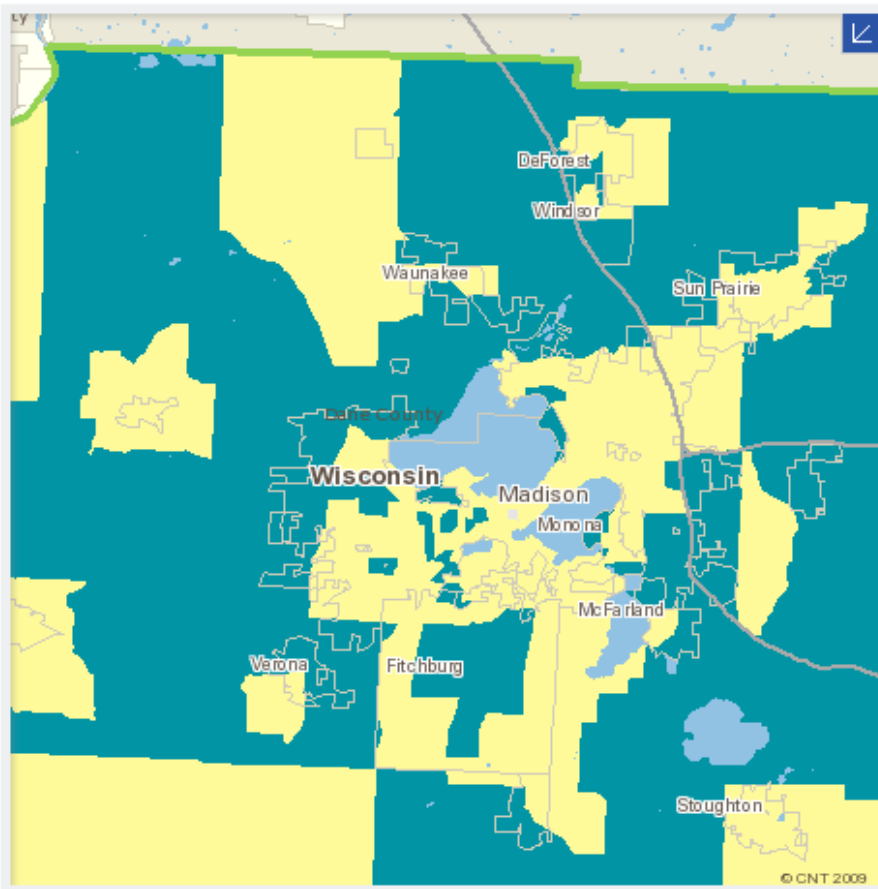
Madison and Dane County look fairly affordable under conventional housing-only definition . . .

Housing Costs at 30% of Income for Households earning Area Median

## Housing and Transportation Costs - % Income CHANGE

- Data not available
- 0 to 48%
- 48+%

H+T has been developed as a more complete measure of affordability beyond the standard method of assessing only housing costs. By taking into account both the cost of housing as well as the cost of transportation associated with the location of the home, H+T provides the true cost of housing decisions. Dividing these costs by the Area Median Income illustrates the Cost Burden placed on the



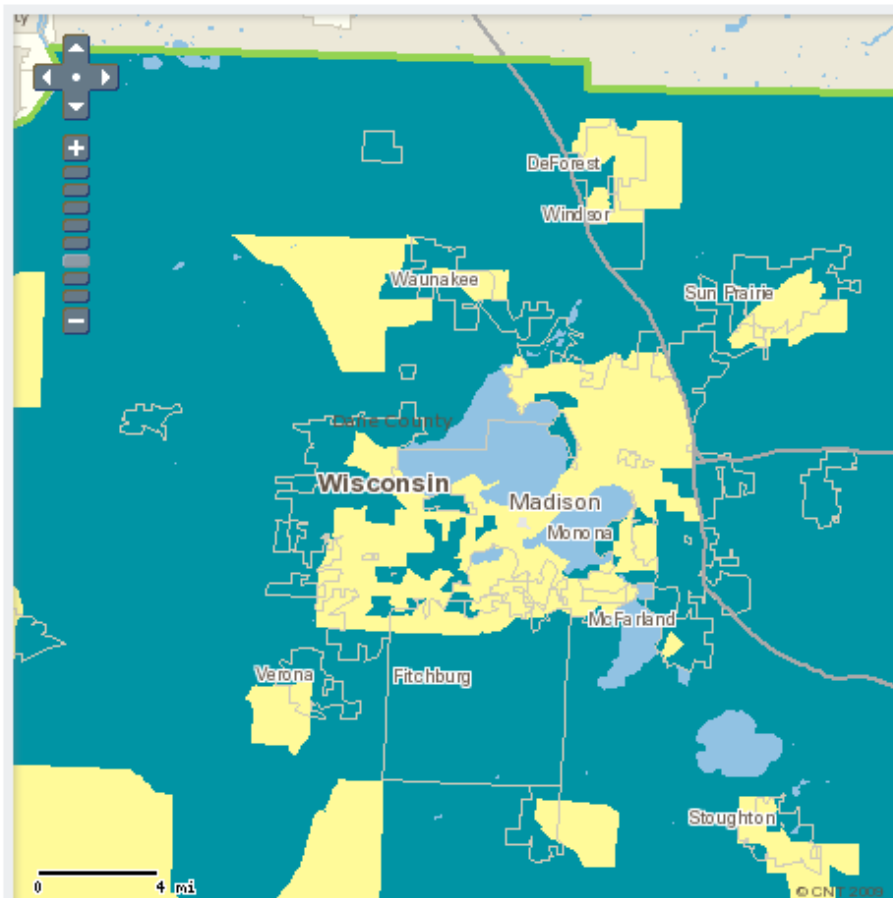
... but less so  
through the H+T  
lens

H+T Costs as  
% of Income for  
Households Earning  
Area Median

## Housing and Transportation Costs - % Income CHANGE

- Data not available
- 0 to 45%
- 45+%

H+T has been developed as a more complete measure of affordability beyond the standard method of assessing only housing costs. By taking into account both the cost of housing as well as the cost of transportation associated with the location of the home, H+T provides the true cost of housing decisions. Dividing these costs by the Area Median Income illustrates the Cost Burden placed on the



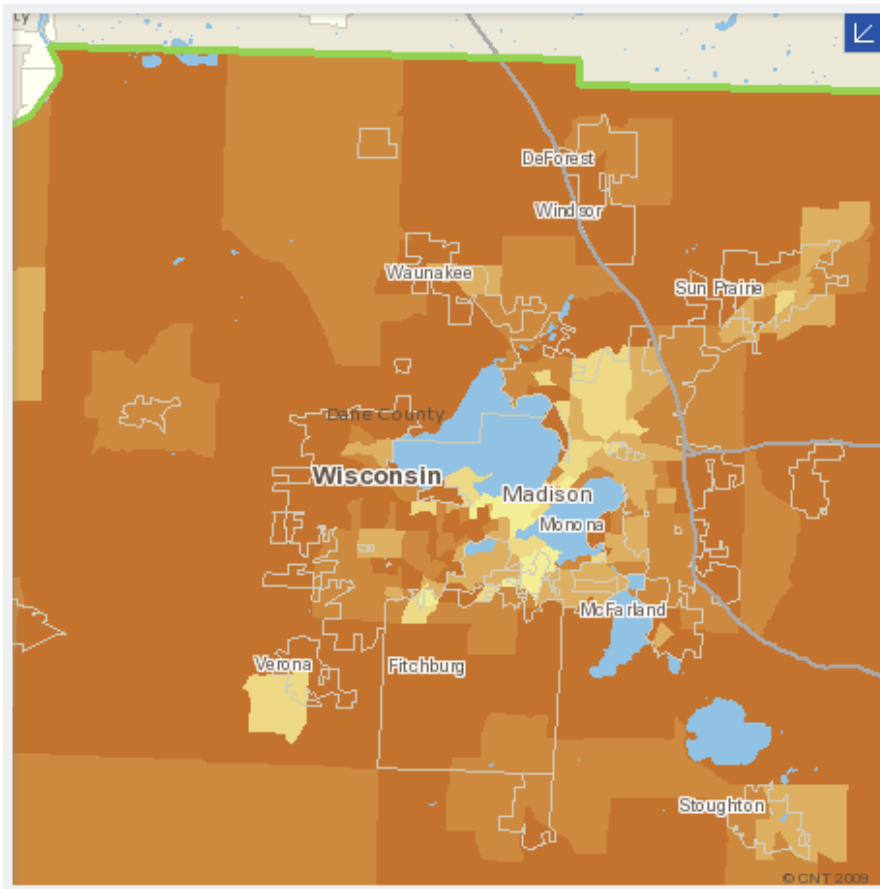
Achieving a goal of 45% H+T affordability further reduces the area that remains affordable

H+T Costs as % of Income for Households Earning Area Median

## Average Household Income CHANGE

- Data not available
- 0 to 32,000 \$/Year
- 32,000 to 42,000 \$/Year
- 42,000 to 53,000 \$/Year
- 53,000 to 69,000 \$/Year
- 69,000+ \$/Year

Average Household Income includes the income of the householder and all other individuals 15 years old and over in the household, whether they are related to the householder or not. This value represents the median at the **Block Group** level. Household income has been determined to be one of the largest determining factors of household Transportation Costs.



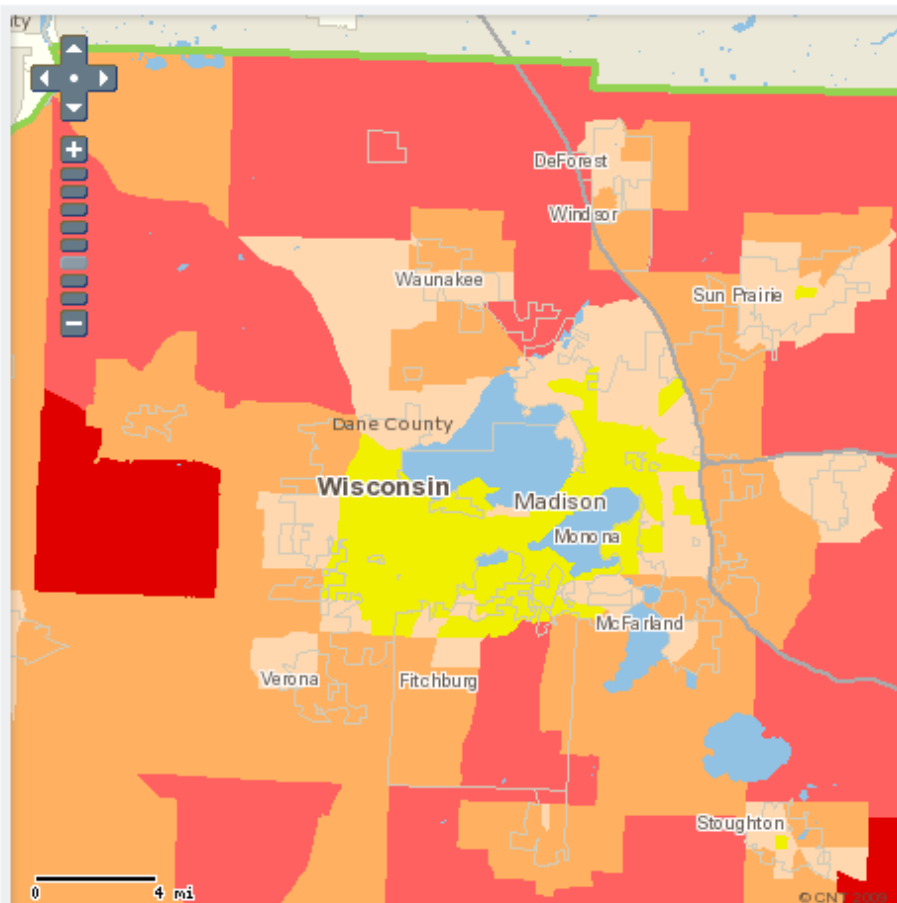
Low and moderate income households concentrated in parts of the city where H+T is most affordable



### Monthly Transportation Expenses - 2000 gas CHANGE

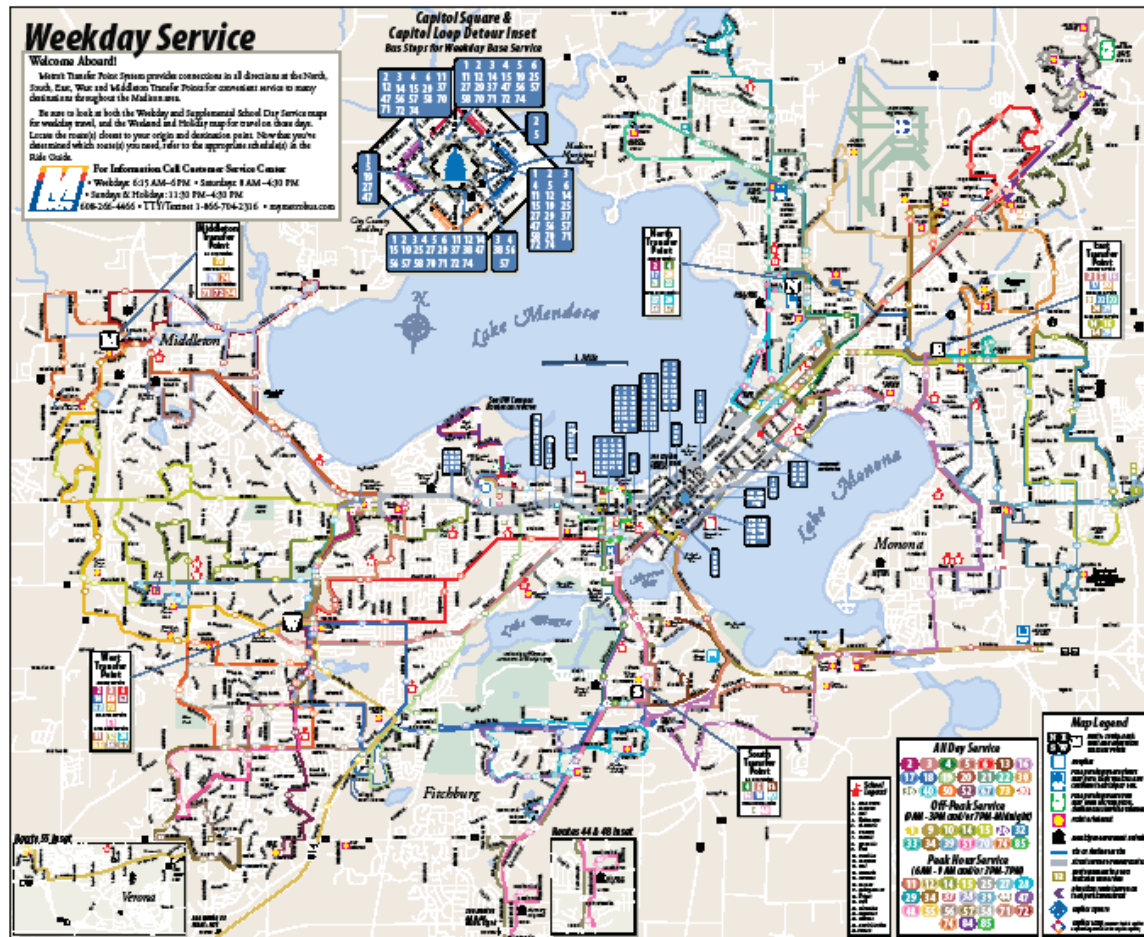
- Data not available
- 0 to 730 \$/Month
- 730 to 800 \$/Month
- 800 to 860 \$/Month
- 860 to 930 \$/Month
- 930+ \$/Month

Household Monthly Transportation Costs are calculated as the sum of Auto Ownership Costs, Auto Use Costs and Public Transit Costs. All values utilized for this calculation are based on 2000 data, including an average gas price of \$1.58



Transportation costs are most affordable in the central part of Madison

# Extensive bus service along with compact design lowers T costs



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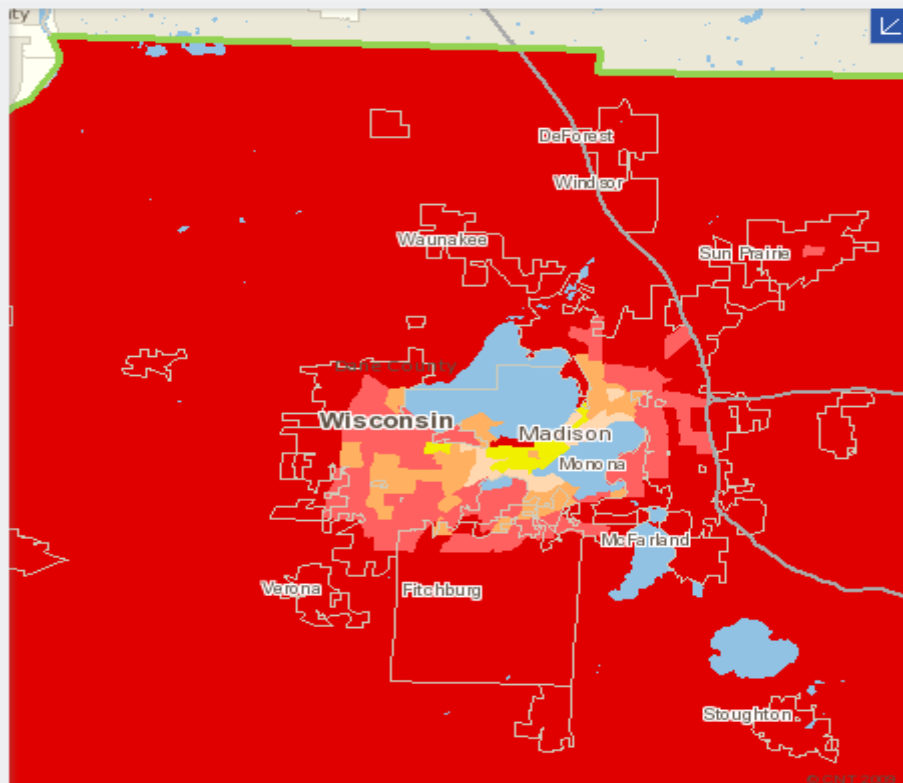
[www.metrotransit.com](http://www.metrotransit.com)

LEGENDS: [Icons]

### Monthly Transportation Expenses - 2008 gas CHANGE

- Data not available
- 0 to 730 \$/Month
- 730 to 800 \$/Month
- 800 to 860 \$/Month
- 860 to 930 \$/Month
- 930+ \$/Month

Household Monthly Transportation Costs are calculated as the sum of Auto Ownership Costs, Auto Use Costs and Public Transit Costs. All values utilized for this calculation are based on 2000 data with the exception of the gas price, for which a 2008 average price of \$4.08 was used. Therefore, comparing this figure to Household Monthly Transportation Costs 2000 illustrates the significant



BRT and TOD  
as options for  
expanding  
affordability

# Cleveland's Euclid Corridor

## REBIRTH ON EUCLID AVENUE

STEVEN LITT | THE PLAIN DEALER

Over the past century, Euclid Avenue has gone from being Cleveland's most prestigious address to a Main Street riddled by blight. Now, thanks in part to the Greater Cleveland Regional Transit Authority's Euclid Corridor bus rapid transit project, the avenue is rebounding as the backbone of the city's new economy. But while a transformation is in the works, nothing is guaranteed. The national economy, the location of the much-discussed Medical Mart and disruptive highway work by the Ohio Department of Transportation could blunt the multibillion-dollar reinvestment now gathering momentum. Shown below is an overview — by no means exhaustive — of construction projects in the Euclid Corridor zone.

### What's driving the development?

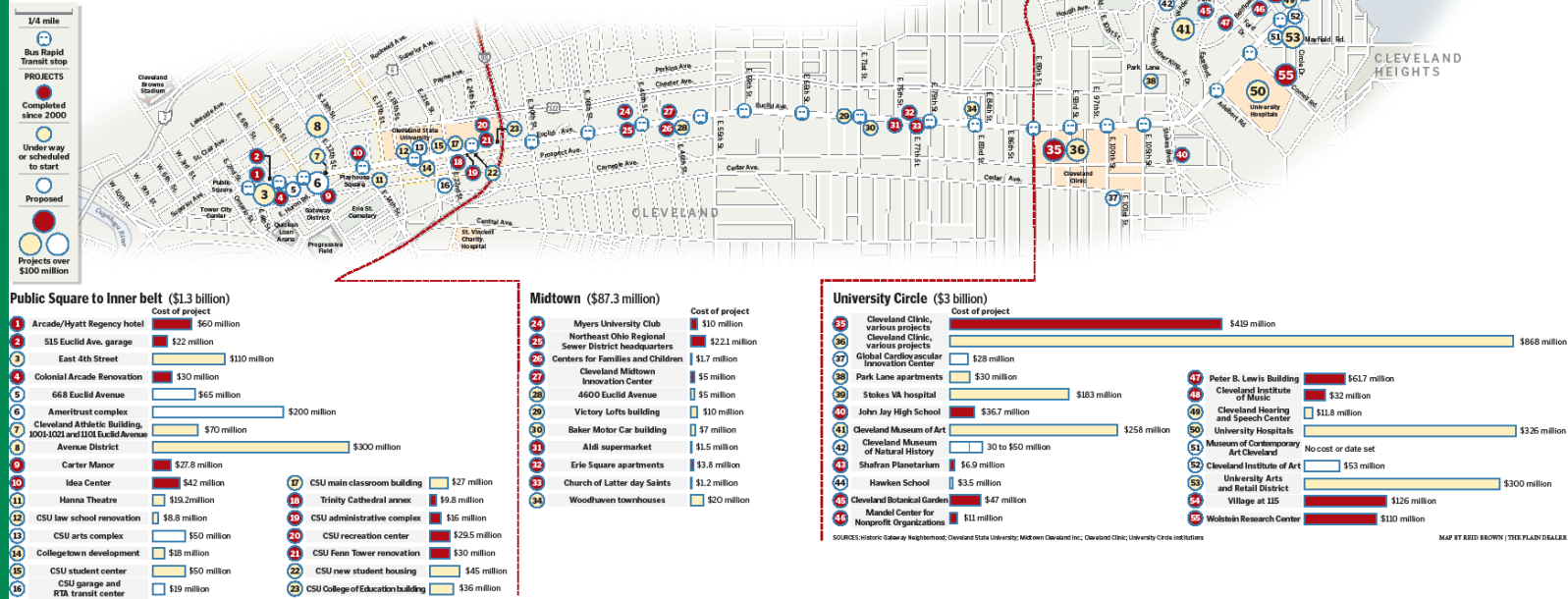
Observers say Euclid Avenue and adjacent blocks are benefiting from a "perfect storm" of positive factors including:

- The rising price of gasoline, which is encouraging dense, pedestrian-oriented development around the RTA bus line.
- Federal and state historic-preservation tax credits have made it viable for developers to renovate dozens of early 20th-century buildings downtown.
- Continued growth at the city's big medical centers and at Cleveland State and Case Western Reserve universities.
- The bottoming-out of local real estate prices, now viewed by lenders and developers as a bargain in comparison with prices in more expensive cities.
- Demand for new, in-town housing, driven by the steady influx of hospital employees and spin-off industries, plus the growing back-to-the-city movement among retirees and empty-nesters.

### What are the possible roadblocks?

Despite the proven investments under way, the rebirth of Euclid Avenue could be hampered by other factors:

- A looming recession and tightening of credit among lenders could slow the recovery along Euclid, but won't stop it, developers say. Housing developers say they're optimistic they will find the capital they need.
- The Ohio Department of Transportation's \$1.5 billion reconstruction of the downtown Inner Belt could impose a 15-year touriquet on the city's main traffic artery and strangle property values. Developers say there's a critical need to maintain the flow of traffic. "Our politicians have to be all over this," said Doug Price II, chief executive of the K&D Group.
- The proposed Medical Mart and new convention center could damage the city for decades if located in Midtown near the Cleveland Clinic. The projects would bleed energy from the existing business district and undercut decades of investment there, developers and planners say.



# H+T around the US



Urban Markets Initiative

METROPOLITAN POLICY PROGRAM

## The Affordability Index: A New Tool for Measuring the True Affordability of a Housing Choice

By Center for Transit-Oriented Development and Center for Neighborhood Technology

This brief describes a new index that quantifies, for the first time, the true affordability of housing choices. This brief explains how the first section provides a methodology to create the Affordability Index and the second section discusses the usefulness of this tool at the neighborhood and housing choice level for families in each of four different types of neighborhoods with suggested policy recommendations in the housing market and land use areas at a

The Housing and Transportation Burden Index because it prices the trade-offs between housing costs and the savings that are available for every transit mode in neighborhoods in more than 100 cities. It is a tool for policymakers, leaders, and citizens to discuss about which neighborhoods are most affordable and invest in

### I. Housing and Transportation Burden

The cost of living for a family is largely understood as the expense of a home. However, the cost of transportation, has become increasingly central to family budgets, given their choices to live

## A HEAVY LOAD:

The Combined Housing and Transportation Burdens of Working Families



October 2006

## Bringing Bay Area Affordability into Sharper Focus

An H+T<sup>SM</sup> Analysis



Prepared for: Metropolitan Transportation Commission  
Submitted by: Center for Neighborhood Technology  
March 2009

## BELTWAY BURDEN

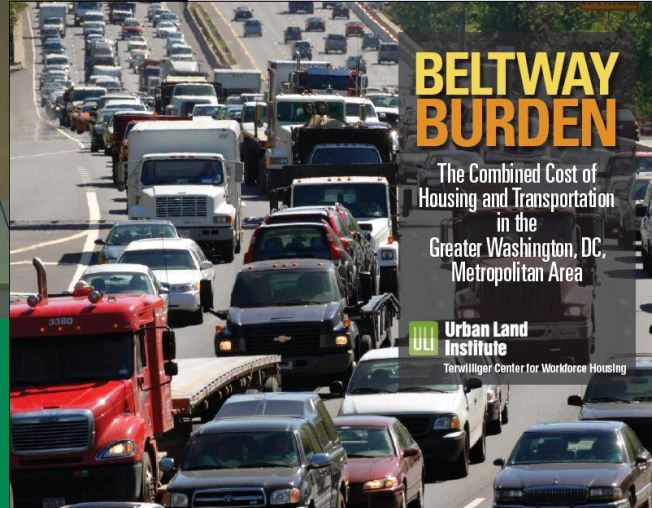
The Combined Cost of Housing and Transportation in the Greater Washington, DC, Metropolitan Area



Terrilliger Center for Workforce Housing

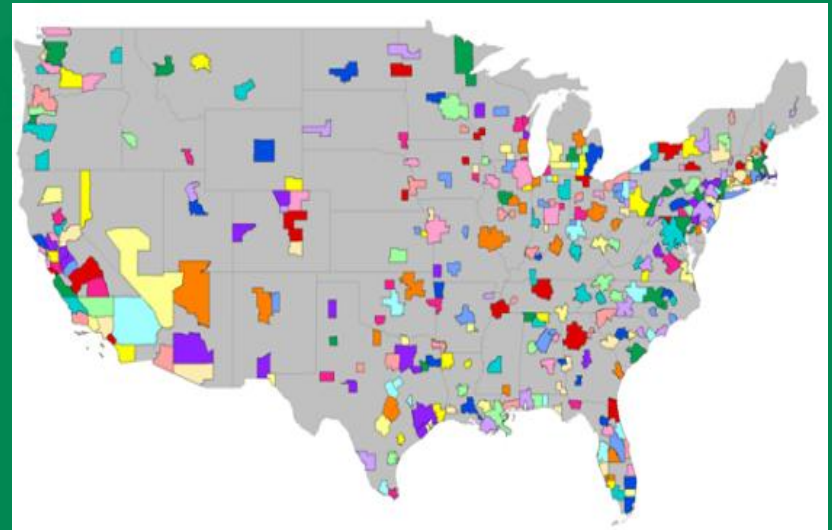


JANUARY 2006 • THE BROOKINGS INSTITUTION • URBAN MARKETS INITIATIVE • MARKET INNOVATION BRIEF



# Coming soon to a neighborhood near you

- H+T expanding from 54 to 337 metros: <http://htaindex.org>
- White paper synthesizing H+T with public investments in housing & transportation
- Individual calculator produced for Washington DC and in development for Bay Area

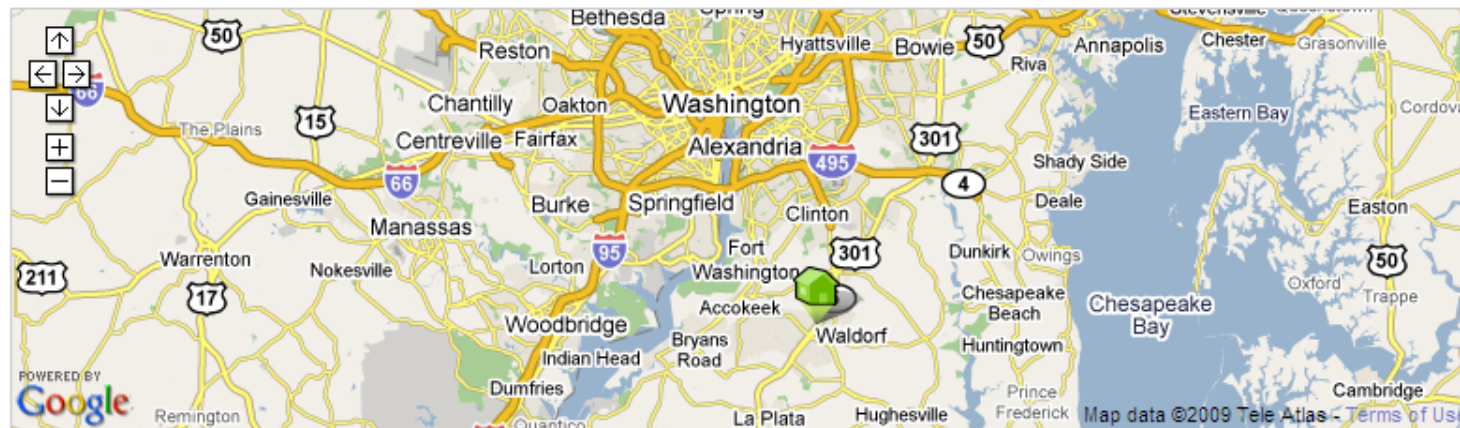


# DC Individual Calculator

## Housing + Transportation Calculator



[Introduction](#) | [Calculator](#) | [Help](#)



### Comparing Your Locations

[Show Comparison Columns](#)

Waldorf, MD, USA	Your Household
<a href="#">Default Profile</a>   <a href="#">Copy</a>   <a href="#">Delete</a>	<a href="#">SHOW MORE</a> ▼
Annual Transportation Costs:	\$13,649
Annual Housing Costs: (For Mix of Owners and Renters)	\$14,196
Annual Housing and Transportation Costs:	(53% of Inc.) \$27,845
Transit Connectivity:	Low
Residential Household Density:	Low
Job Accessibility:	Very Low
Average Block Size:	Large

# Housing + Transportation Calculator

[Introduction](#) | [Calculator](#) | [Help](#)



## Comparing Your Locations

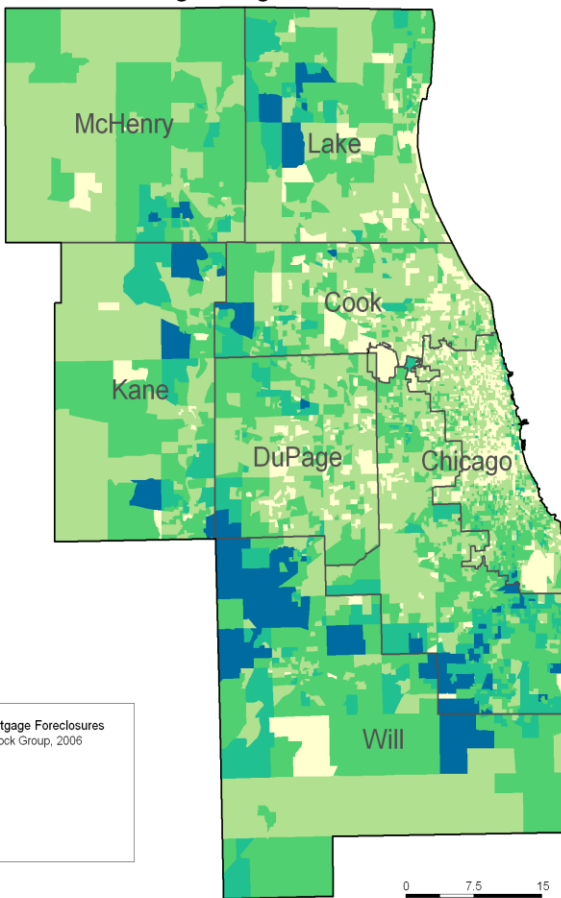
[Show Comparison Columns](#)

Anacostia, Washington, DC 20020, USA	Your Household
<a href="#">Alternate Profile</a>   <a href="#">Copy</a>   <a href="#">Delete</a>	<a href="#">SHOW MORE</a> ▼
Annual Transportation Costs:	\$9,581
Annual Housing Costs: (For Mix of Owners and Renters)	\$13,416
Annual Housing and Transportation Costs:	(61% of Inc.) \$22,997
<ul style="list-style-type: none"> <li>Transit Connectivity:</li> <li>Residential Household Density:</li> <li>Job Accessibility:</li> <li>Average Block Size:</li> </ul>	<ul style="list-style-type: none"> <li>High</li> <li>Medium</li> <li>High</li> <li>Very Small</li> </ul>

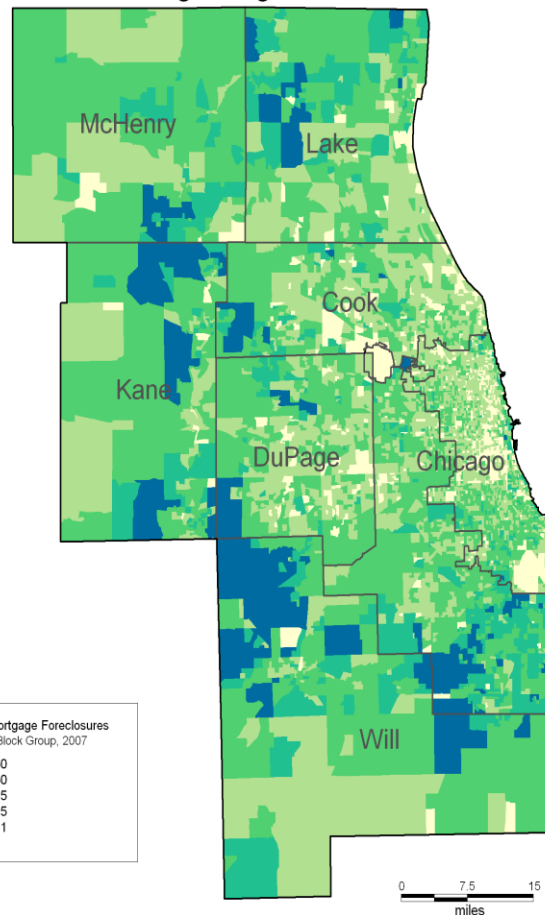


# Housing Affordability/Neighborhood Stabilization

Recent Residential Mortgage Foreclosures  
Chicago Region, 2006



Recent Residential Mortgage Foreclosures  
Chicago Region, 2007



# H+T Index applications

- Research
- Policy
- Planning for growth, transit, and affordability
- Advocacy
- Lending/mortgage qualification
- Individual households

# Summary

- H+T: a more complete picture of affordability
- Many places less affordable than they appear
- New avenues towards affordability—BRT and TOD
- Expanding coverage, greater visibility, increasing embrace of principles by policymakers

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