

Housing and Transportation Affordability Study

METHODS & FINDINGS

June 4, 2011



Agenda

- Measuring Housing and Transportation Costs: What and Why
- Applications
- Methodology
- Results

The screenshot shows the website for the Housing + Transportation Affordability Index. At the top, there is a navigation bar with links for Maps, About, Press, Method, and Mailing List. The main header features a house and car icon, the text 'True Affordability and Location Efficiency', and the 'H+T Affordability Index' logo. Below this, a paragraph explains that the index is an innovative tool for measuring the true affordability of housing based on its location. A map of the United States is displayed, with a legend on the left listing 'Penny Wise, Pound Foolish', 'H+T community profiles', 'H+T metro reports', and 'Calculate Residential Density'. On the right, there are inset maps for Alaska, Hawaii, and Puerto Rico. At the bottom, there are two side-by-side maps labeled 'Traditional View' and 'New View (H+T)', along with a section titled 'Housing and Transportation Affordability' that includes a dropdown menu for 'Enter a Metropolitan Region:'.

<http://www.htaindex.org/>

H + T Index: Rethinking Affordability

- Standard measure of affordability is % of income spent on housing ALONE
 - e.g. Should be no more than 30% of income
- What about transportation expenditures?
 - Second largest expenditure after housing
 - Cost are largely unknown and households and planners make decisions based on inadequate information
 - Lack of reliable information fuelling sprawl and inefficient development patterns
- H+T Affordability Index calculates transportation costs and combines them with housing costs at the neighborhood level for a more complete picture of affordability

Applications

Metropolitan Transportation Commission

(San Francisco)

Transportation 2035: Change in Motion

Performance Objectives include:

“Decrease by 10 percent the combined share of low-income and lower-middle-income residents’ household income consumed by transportation and housing” (p.26)¹
ie 45% to 40.5% of income.

CNT provided customized H+T analysis to serve as baseline measure for this objective

¹http://www.mtc.ca.gov/planning/2035_plan/FINAL/T2035_Plan-Final.pdf

Applications

IL S.B. 374: The H+T Affordability Index Act

Requires adaption of the H+T Affordability Index for use in MPO areas by 5 state agencies:

- the Capital Development Board
- the Department of Commerce and Economic Opportunity
- the Department of Transportation
- the Illinois Finance Authority
- the Illinois Housing Development Authority

Call for H+T Index to be used as planning tool and criterion in the allocation of public funding for transit, highways, economic development, and housing projects

Passed unanimously (11-0-0) by the Senate Transportation Committee

Applications

Region Forward 2050

Goals:

- Transit-oriented mixed-use communities emerging in Regional Activity Centers that will capture new employment and household growth.
- A transportation system that maximizes community connectivity and walkability, and minimizes ecological harm to the region and world beyond.
- A variety of housing types and choices in diverse, vibrant, safe, healthy, and sustainable neighborhoods, affordable to persons at all income levels.
- A broad range of public and private transportation choices for our Region which maximizes accessibility and affordability to everyone and minimizes reliance upon single occupancy use of the automobile.

Target:

- By 2020, the housing and transportation costs in Regional Activity Centers will not exceed 45 percent of area median income
- Target: Increase the share of walk, bike, and transit trips

Transportation Costs Vary by Place

Transportation costs vary by place, from neighborhood to neighborhood depending on:

- Access to services
- Walkable destinations
- Extent and frequency of transit
- Access to jobs
- Housing Density



Places with these qualities:

- Own less autos per household
- Drive less miles annually
- Use public transit more

=> Lower Transportation Costs



Modeling Transportation Costs

6 Neighborhood Variables

Residential Density
Gross Density
Average Block Size in Acres
Transit Connectivity Index
Job Density
Average Time Journey to Work

3 Household Variables

Household Income
Household Size
Commuters per Household



Car Ownership
+
Car Usage
+
Public Transit Usage



**TOTAL
TRANSPORTATION
COSTS**

Customizing the H+T Index for DC

Updated Data

- 2006-2008 American Community Survey data at PUMA level
- MLS sales data will be used to represent ownership costs

Local Data

- Land Use Data collected from nearly all jurisdictions
 - Improved Residential Acres definition
 - Development of Land Use Diversity measure
- Transit Data
 - Additional regional bus routes
 - Addition of route frequency and improved access measure

Name	Type	State	Bus Transit Data
District of Columbia		DC	WMATA MTA Commuter Bus
Calvert	County	MD	MTA Commuter Bus Calvert County Transit
Charles	County	MD	MTA Commuter Bus
Frederick	County	MD	Frederick Co. Transit
Montgomery	County	MD	WMATA routes MTA Commuter Bus Ride On - Montgomery Co.
Prince George's	County	MD	WMATA routes MTA Commuter Bus Laurel Bus The Bus - Prince Georges Co.
Arlington	County	VA	WMATA Arlington Transit
Clarke	County	VA	
Culpeper	County	VA	
Fairfax	County	VA	WMATA Quick's Commuter Bus Service OmniRide Commuter Bus Service National Coach Inc Washington Flyer Fairfax Connector Reston Link
Alexandria	city	VA	WMATA Alexandria Dash
Fairfax	city	VA	City of Fairfax CUE Bus
Falls Church	city	VA	WMATA
Fauquier	County	VA	
King George	County	VA	Lee Coaches Inc. - Fredericksburg
Loudoun	County	VA	Loudoun Transit Loudoun Co. Commuter Service
Prince William	County	VA	Quick's Commuter Bus Service Omni-Link
Manassas	city	VA	Omni-Link
Manassas Park	city	VA	
Spotsylvania	County	VA	
Stafford	County	VA	Quick's Commuter Bus Service
Fredericksburg	city	VA	Quick's Commuter Bus Service
Warren	County	VA	

Customizing the H+T Index for DC

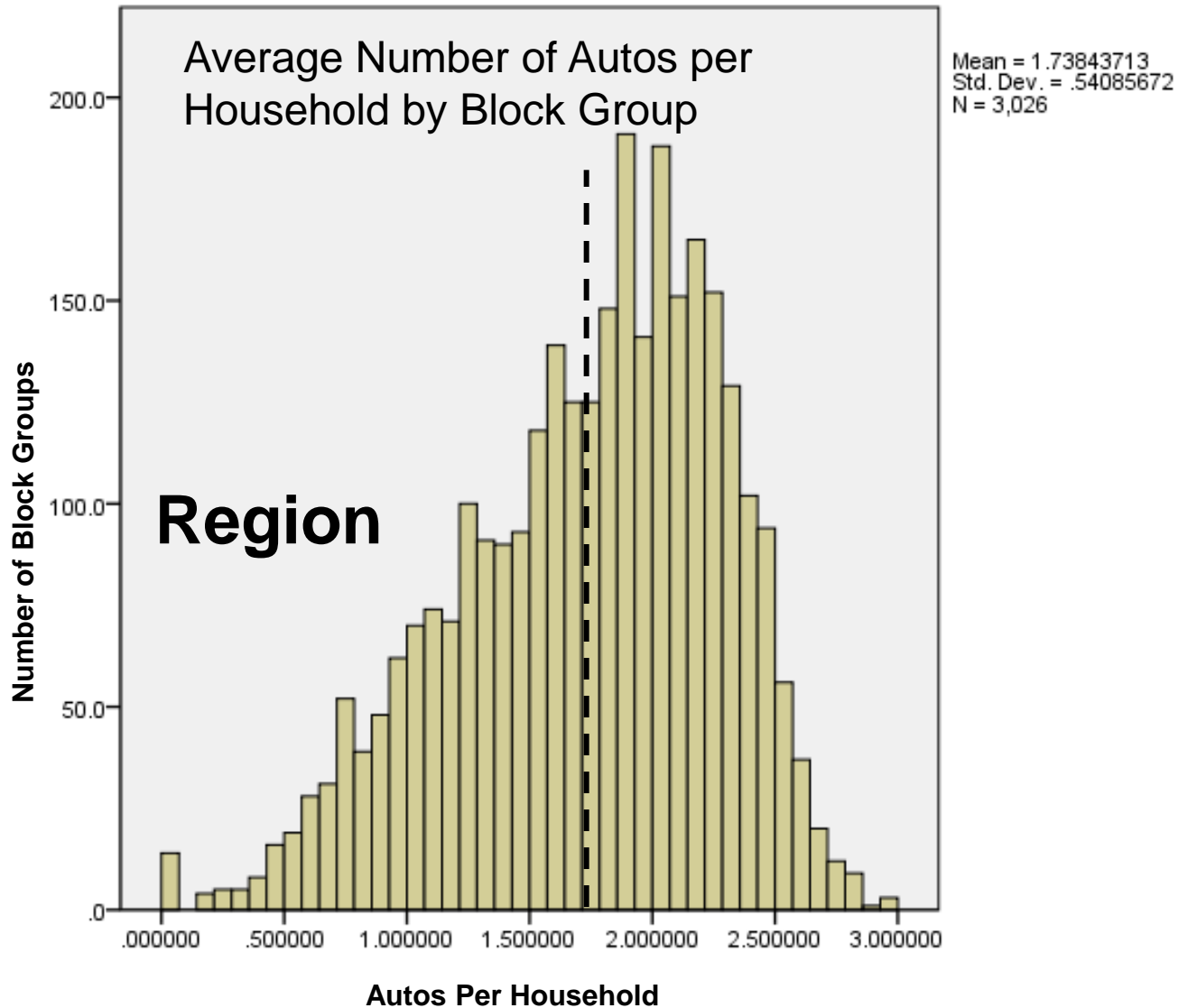
Neighborhood Characteristics

- Residential Density*
- Gross Density
- Land Use Diversity*
- Average Block Size
- Transit Connectivity Index*
- Employment Access
- Average Journey to Work Time

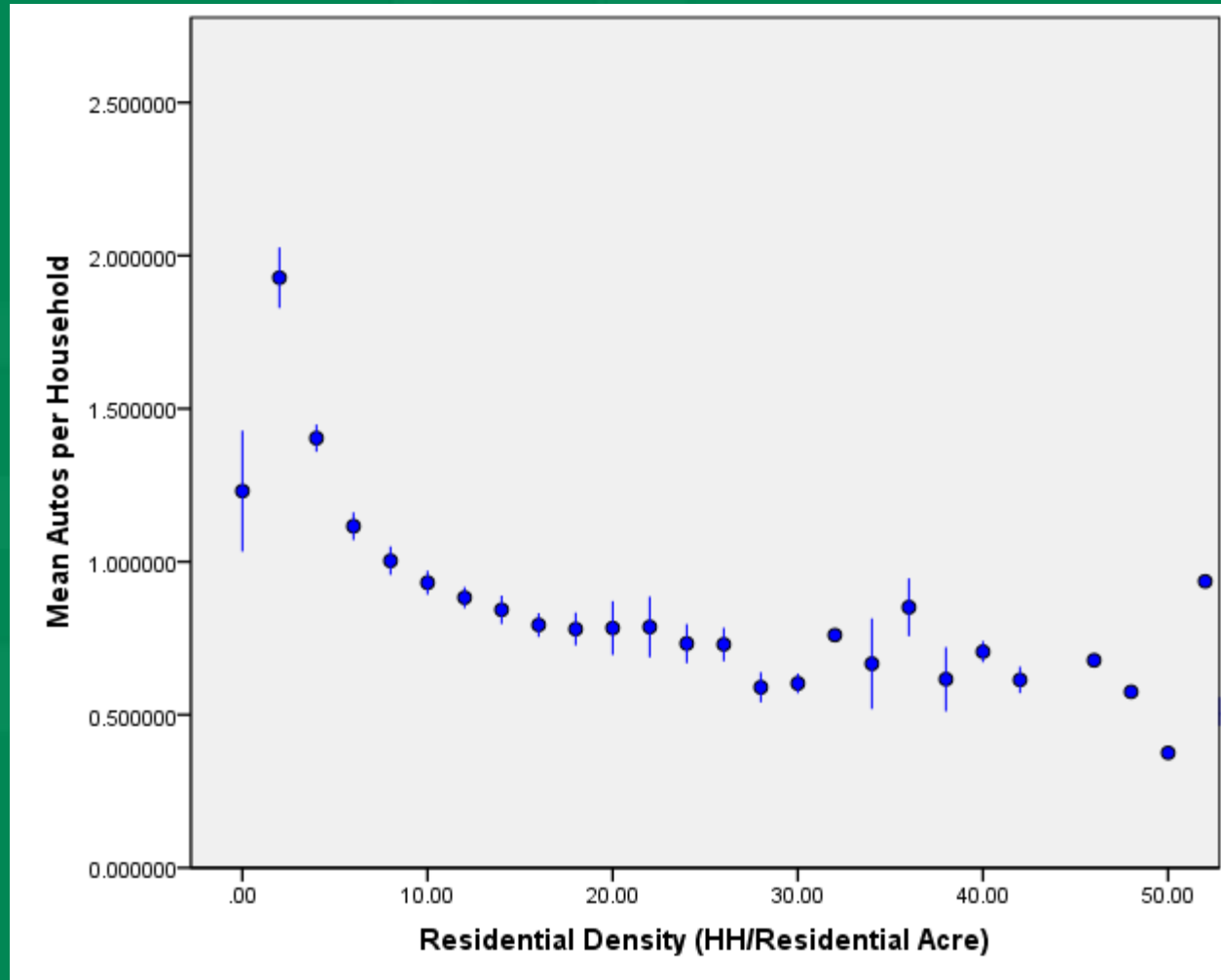
Household Characteristics

- Household Income
- Average Household Size
- Average Commuters per Household

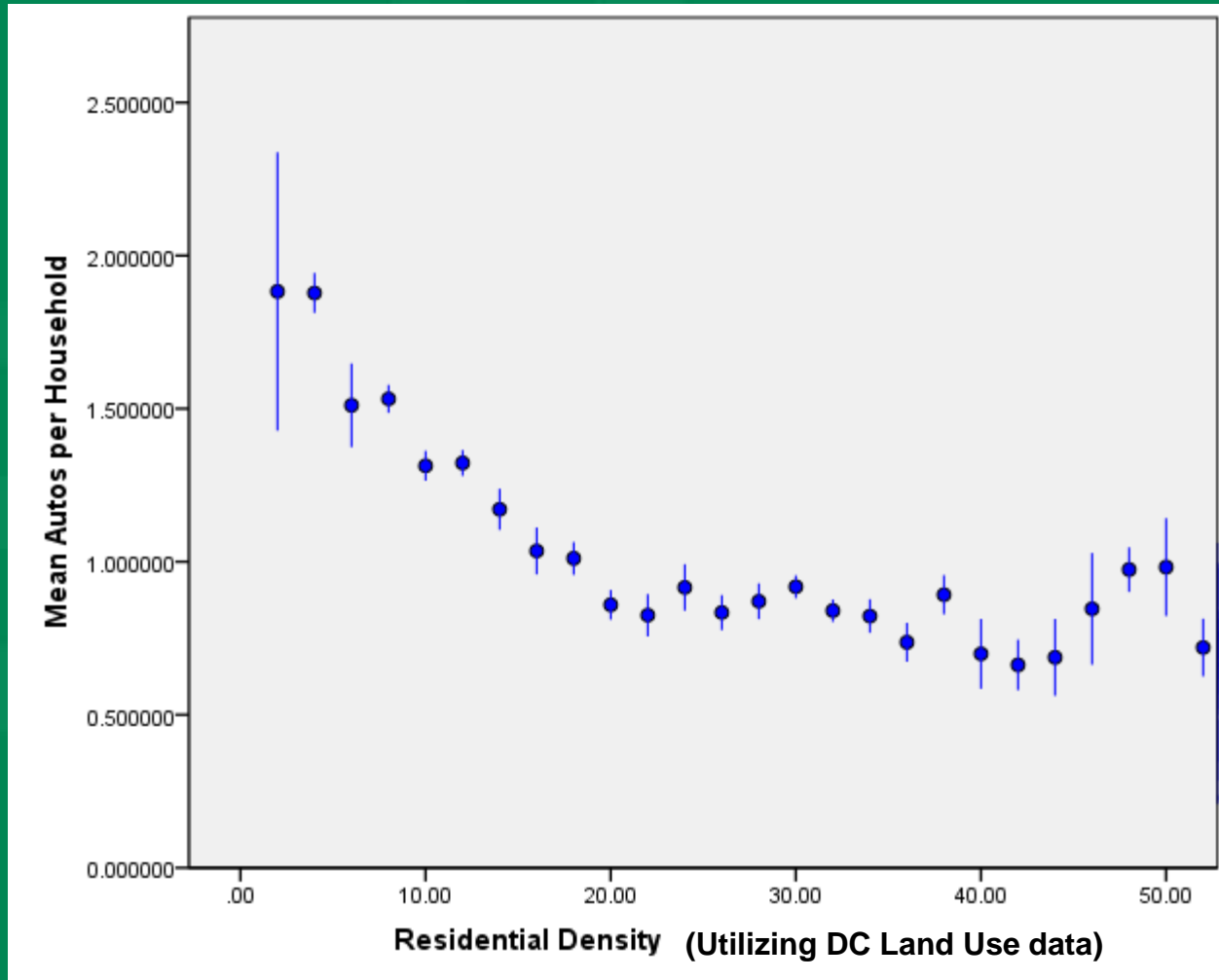
Input Analyses



Input Analyses



Input Analyses



Results

Average household transportation costs vary from a low of \$8,857 to a high of \$24,808

