

Understanding Housing Costs: Past, Present, and Future

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***“A Call to Action Step 1: Forging Regional Solutions for
Affordable Housing in Pima County”***



Summary:

In order to plan a creative and effective strategy for affordable housing, one must understand the real components of housing cost.

In the past, we calculated the gap between construction cost and ability to pay and subsidized the difference for qualifying families.

Today, we are understanding that there are many elements of housing cost beside the cost of construction and these may give us a better opportunity to close the affordability gap.

As we plan for tomorrow, we will need to think holistically about housing cost. We need to include the related costs of energy, life-cycle, health, infrastructure, information, transportation, services, and employment. We need to figure out how to engage the private sector in this affordable housing production.

So let's look at some facts.

Yesterday



Minimum Construction Cost (1170 sf, 3 bedroom)

Site work	\$ 3,522	4.1%
Foundation/floors	\$ 7,834	9.2%
Exterior walls	\$10,684	14.2%
Interior framing	\$ 8,463	9.9%
Roof framing & roofing	\$ 6,867	8.1%
Cabinets and casework	\$ 2,727	3.2%
Finishes	\$11,799	14.1%
Insulation and sealants	\$ 2,225	2.6%
Doors/windows/hardware	\$ 6,770	8.0%
Specialties/equipment	\$ 2,514	2.9%
Mechanical	\$ 8,344	9.9%
Plumbing	\$ 6,826	8.1%
Electrical	\$ 4,876	5.7%
Subtotal Construction	\$83,451	100.0%



(The calculation for each sub-contractors includes sub-contractor profit and overhead.
Approximately 88% of the costs above are material and labor, 12% are profit and overhead)

Minimum Construction Cost **(1170 sf, 3 bedroom) (continued)**

- **Subtotal Construction** \$ 83,451 78.7%
- **General Conditions** \$ 7,531 7.1%
- **Overhead @ 5%** \$ 4,549 4.3%
- **Profit @ 6%** \$ 5,732 5.4%
- **Tax @ 4.74%** \$ 4,799 4.5%

Grand Total Construction \$106,062

Lot Development Cost \$ 25,877

Sales price: \$131,939

Standard Procedure:

Benchmark affordability is defined as:

$$\frac{\text{(Rent / mortgage + utilities)}}{\text{Gross Income}} < 30\%$$

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Our sales price = \$132,000

90% Mortgage (30 yr @ 6.25%) = \$ 740

Ownership/utility costs = \$ 552

Monthly cost to owner = \$ 1,292

at 30% rule, income can be = \$51,680

Pima County \$51,680 = +/- median income

Rental 80% median = \$ 38,780

\$38,780 x .3 / 12 months = \$ 969

Ownership/utility costs = \$ 552

90% Mortgage (30 yr @ 6.25%) = \$ 417

Homeowner mortgage principal = \$ 68,500

Sales price must be / .9 = \$ 76,111

Minimum house = \$132,000

Subsidy (or reduce cost) \$ 55,889

80% median = \$ 38,780

\$38,780 x .3 / 12 months = \$ 969

Ownership/utility costs = \$ 552

90% Mortgage (30 yr @ 6.25%) = \$ 417

Homeowner mortgage principal= \$ 68,500

Sales price must be / .9 = \$ 76,111

Minimum house = \$132,000

Subsidy (or reduce cost) \$ 55,889

- **But all housing has to be located somewhere.**
- **Where housing is located has a real impact on transportation costs.**
- **So while transportation is not an actual cost of housing, there is a relationship between the two.**

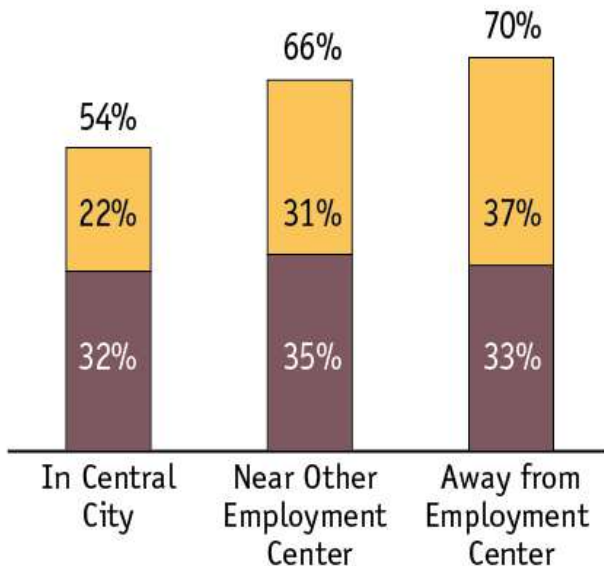


For working families across the nation, transportation varies by location and sometimes exceeds housing costs!

Share of Income Spent on Transportation

Transportation

Households \$20,000 – \$35,000

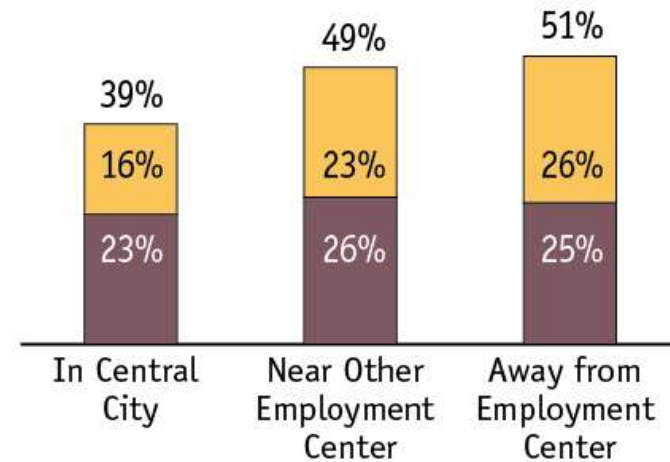


Location of Neighborhood
Where Working Families Live

Share of Income Spent on Housing

Housing

Households \$35,000 – \$50,000



Location of Neighborhood
Where Working Families Live



Source: Center for Neighborhood Technology calculations.

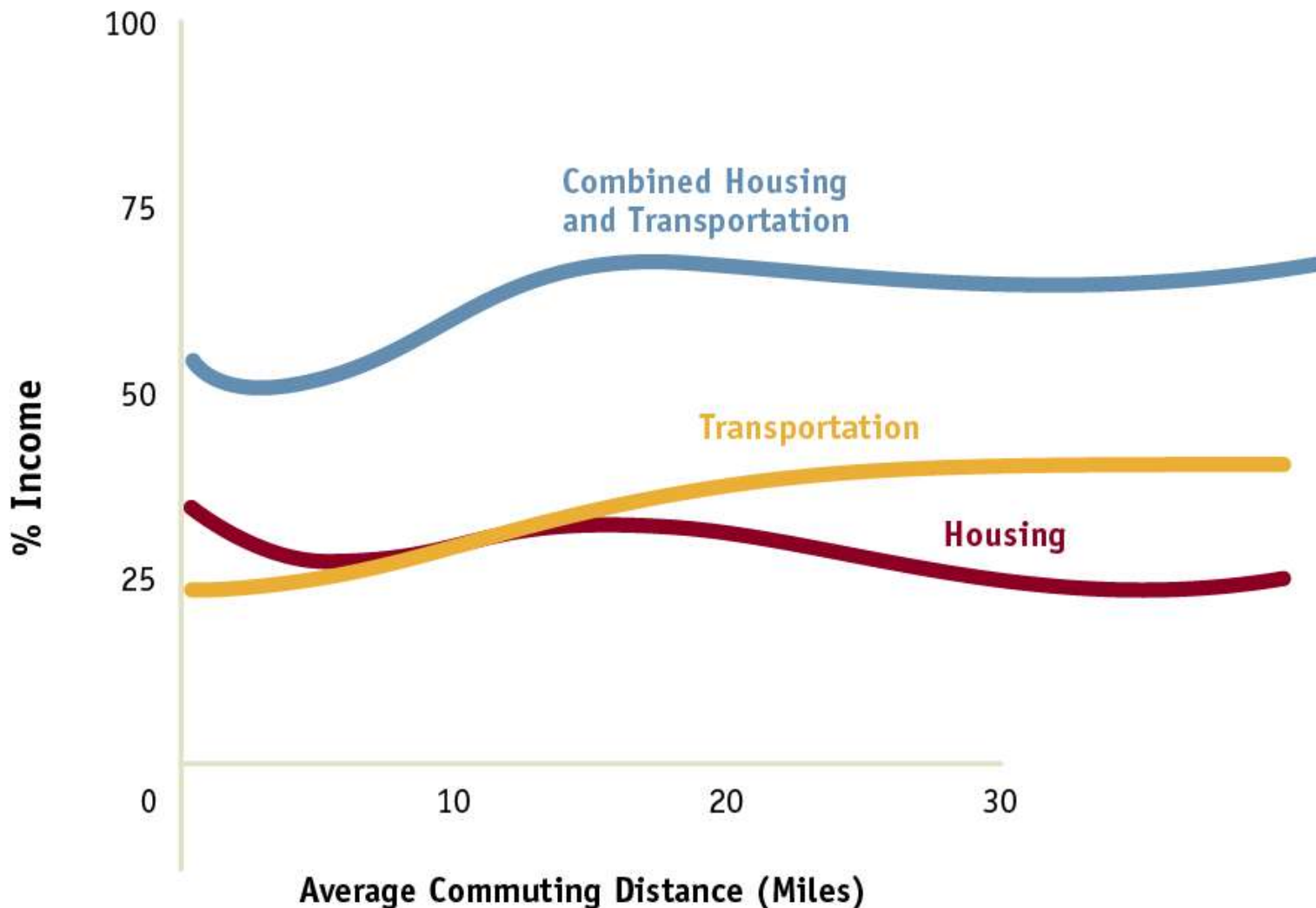
NOTE: Employment centers are job locations with a minimum of 5,000 employees.

Source: Center for Neighborhood Technology calculations.

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So what does this mean?

“Drive ‘til You Qualify”: Transportation costs exceeding housing costs for households earning \$20-\$50,000



Source: Center for Neighborhood Technology calculations.

The Center for Neighborhood Technology in partnership with the Brookings Institution proposes a:

Housing + Transportation Affordability Index

that takes into account the transportation costs associated with a particular housing choice.

What is the Housing + Transportation Affordability Index?

A tool to measure the 2 largest household costs – *housing and transportation* – by neighborhood.

H+T Affordability Index Equation

$$\text{H+T Index} = \frac{(\text{Housing Costs} + \text{Transportation Costs})}{\text{Gross Income}}$$

The Center for Neighborhood Technology recommends a H+ T Index < 45% – 48%

http://htaindex.cnt.org

Housing + Transportation : Center for Neighborhood Technology - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://htaindex.cnt.org/ Google

Most Visited Latest Headlines 02.22 - Not Pictured Getting Started Kerio MailServer 6.4...


Housing + Transportation Affordability Index

The Housing + Transportation Affordability Index, developed by CNT and its collaborative partners, the Center for Transit Oriented Development (CTOD), is an innovative tool that measures the true affordability of housing. Planners, lenders, and most consumers traditionally measure housing affordability as 30 percent or less of income. The Housing + Transportation Affordability Index, in contrast, takes into account not just the cost of housing, but also the intrinsic value of place, as quantified through transportation costs. [Click here](#) to explore how this looks in 52 metropolitan areas in the US.

This work is a project of the Brookings Institution's Urban Markets Initiative and is the most comprehensive study-to-date of the Housing + Transportation Affordability Index. The Index completed for the Brookings Institution has been released in two parts. The first phase was released in January 2006 and specifically examines the variables that inform Housing + Transportation costs in St Paul/ Minneapolis, MN. The key to this report is the finding that the three primary dependent variables in the household transportation model are auto ownership, auto use and transit ridership and that the two primary independent variables are residential density and household income. The Brookings Housing + Transportation Affordability Index Phase I paper can be found [here](#). The second phase of the Brookings project models neighborhood-level data for 52 different metropolitan areas with results available through an [interactive mapping website](#). The Index has received much attention from policy makers for its benefits to planners and TOD advocates and has already served as the basis for various other research projects. [For a general description of the methodology used to develop the H+T Index click here.](#)

[Click Here to See Effects of Recent Gas Prices](#)

Region:



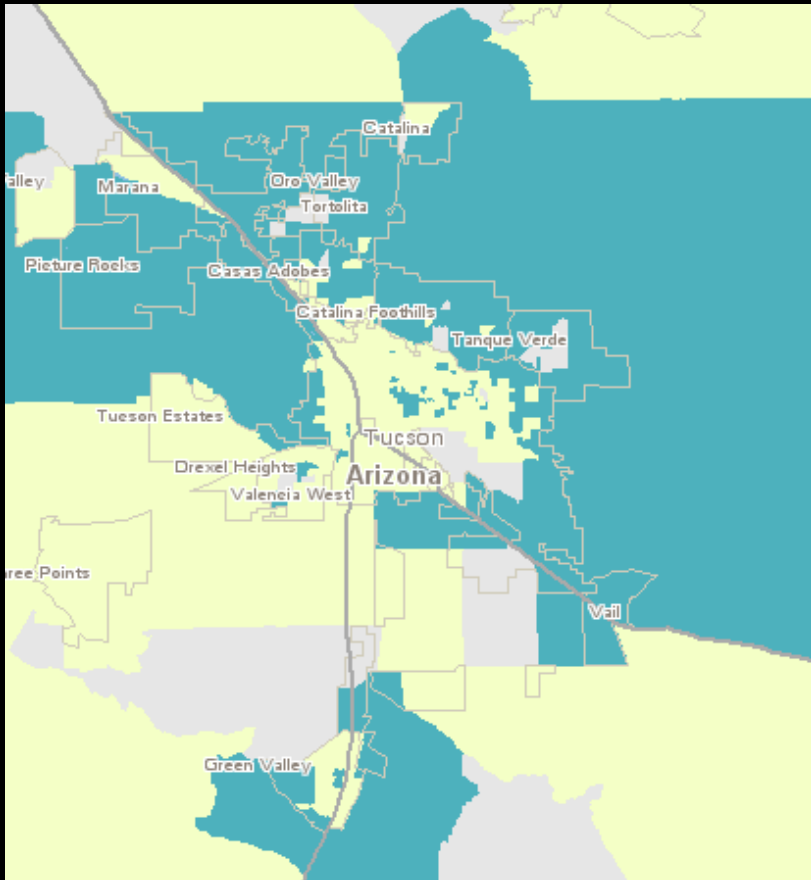
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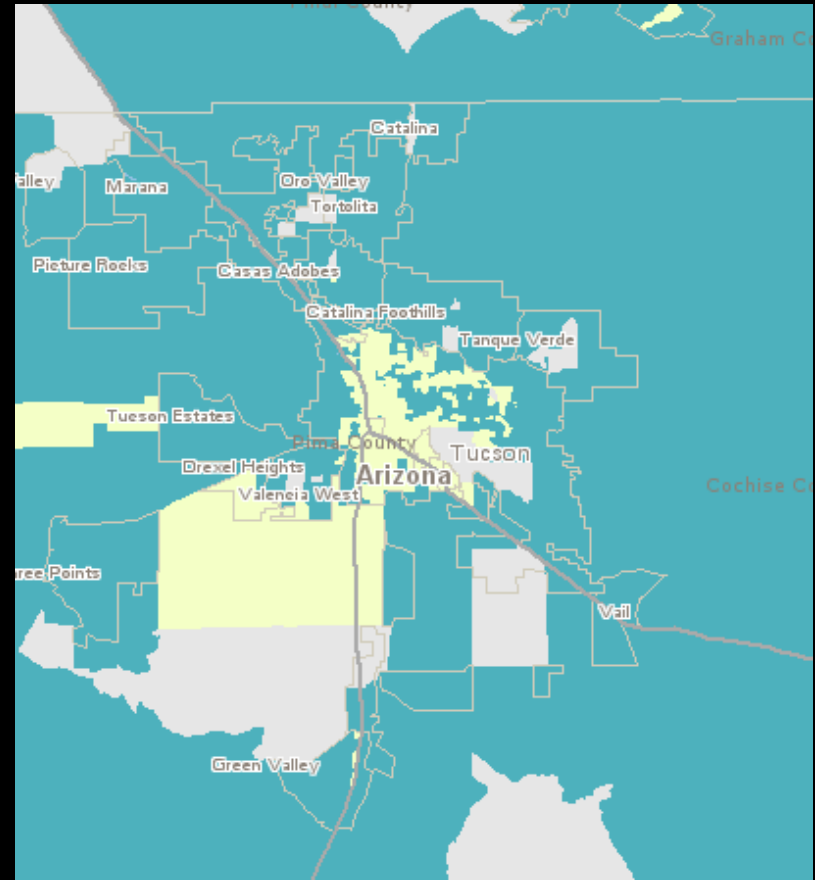
Tucson MSA

Housing Affordability at 30% vs. H + T at 45%

H-Only at 30%

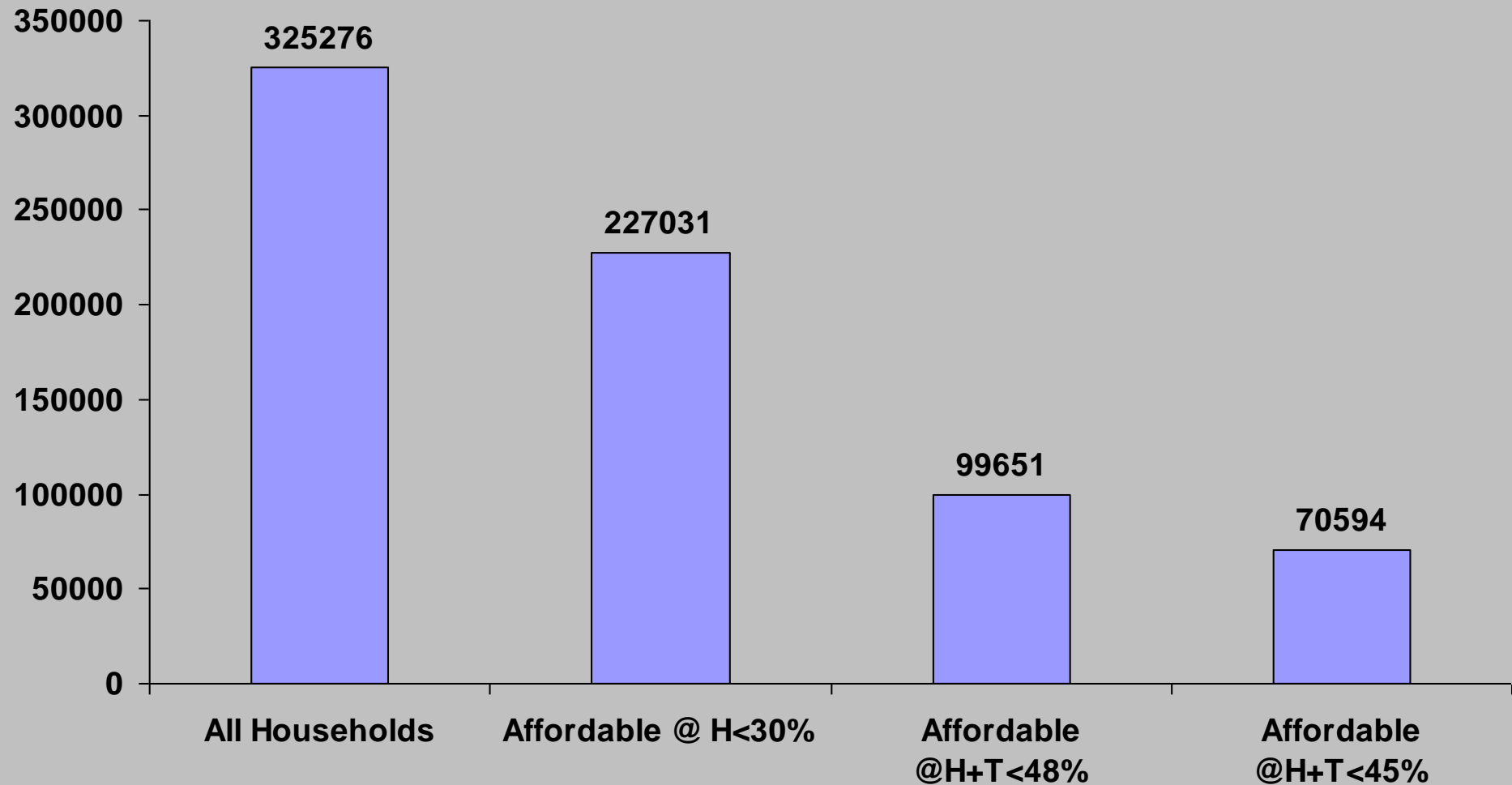


H+T at 45%



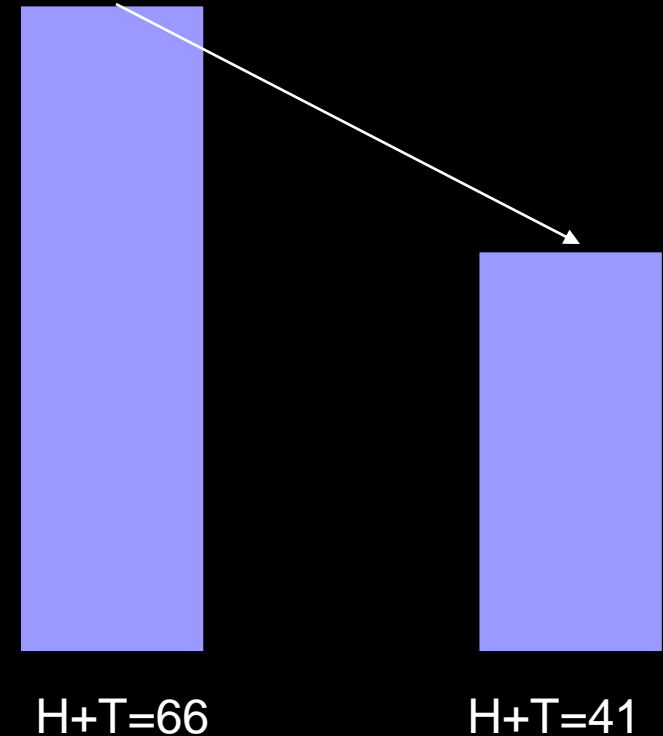
Tucson MSA

Loss of Affordability including Transportation Costs



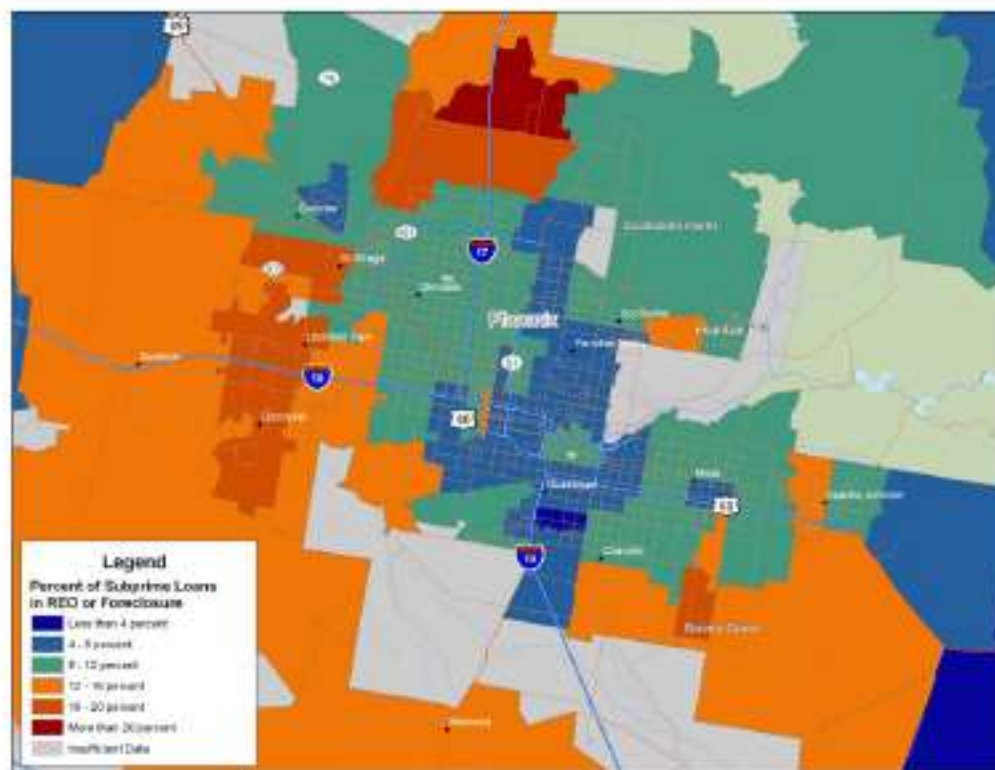
What it's worth?

- Tucson households (2 cars) spend **\$15,200 on transportation**
\$14,850 on housing
\$30,050, 2/3 of income (H+T = 66%)
- Household with 1 car, 15,000 miles/yr spends **\$8,300 on transportation**, saving **\$6,900** or **15%** of income
- Reduces H+T to 41%
- Increases disposable income 15%
- Region of 500,000 households saves \$3.3 billion per year



Implications for affordability

Foreclosures Concentrated in Suburban Fringe



Source: Analysis by Federal Reserve Board of Governors, First American LoanPerformance Data, December 2007. Data represent a sample of subprime loans, approximating 70 percent of subprime loan volume. Data aggregated at the zip code level.

Policy Implications

1. The data show that Tucson's affordable housing problem is in large part a location, land use, and transportation problem.

Policy Implications

2. Affordable housing policy should consider the location of that housing in relation to jobs, services, and transportation.

Policy Implications

3. Affordable housing policy needs to be coordinated with our transportation policy.

Policy Implications

4. Investments in alternate modes can have a positive effect on housing affordability.

Policy Implications

5. The 2008 Arizona Town Hall recommended a H+T Index be adopted by Arizona's communities.

Within the next month

**the Drachman Institute and
the Center for Neighborhood Technology
with be issuing a report:**

***“Housing + Transportation Affordability in
Tucson, Pima, and Pinal Counties”***

and the data will be on the website:

<http://htaindex.cnt.org>