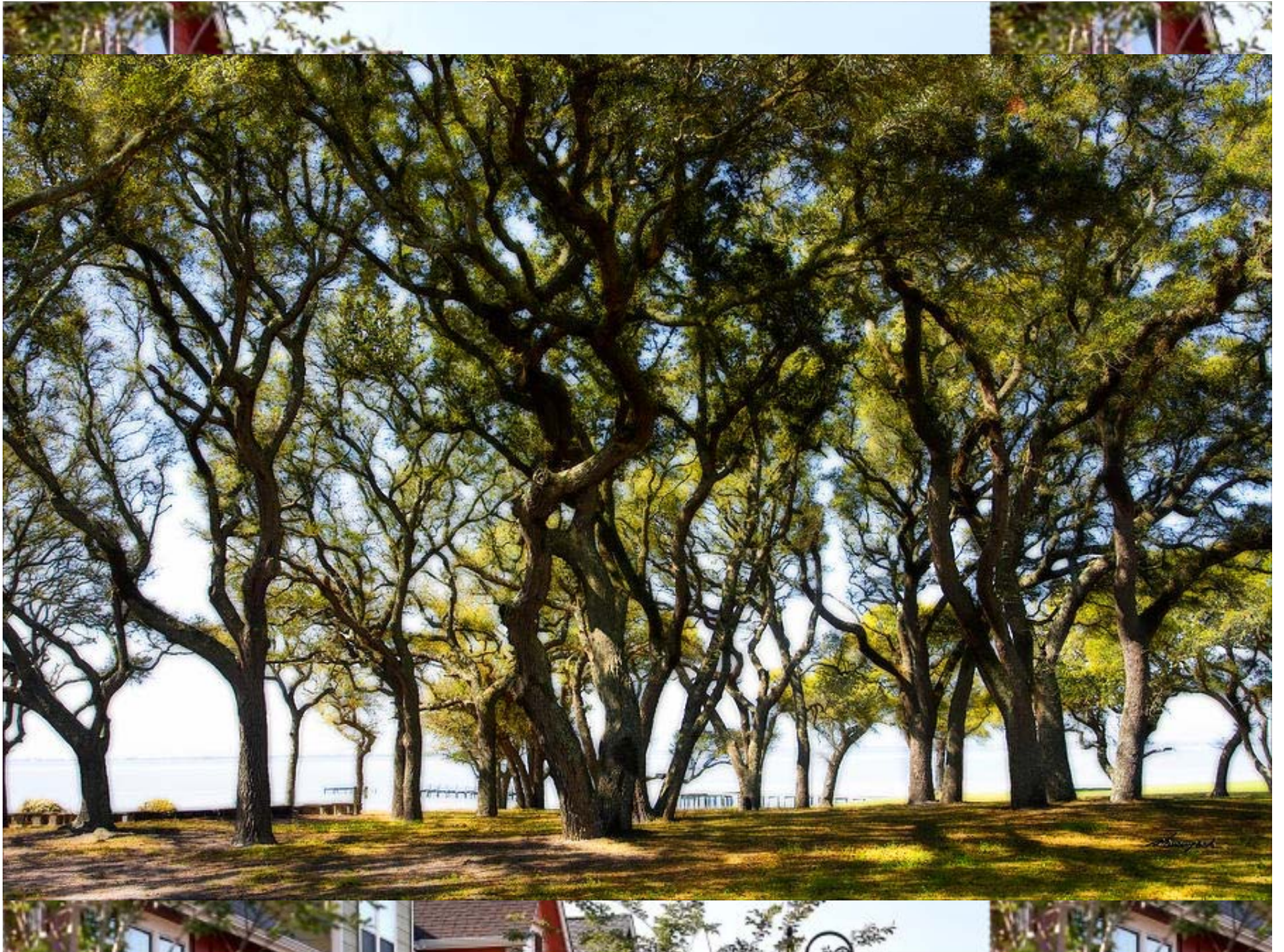


# Transportation, Housing Affordability And Other Connected Issues

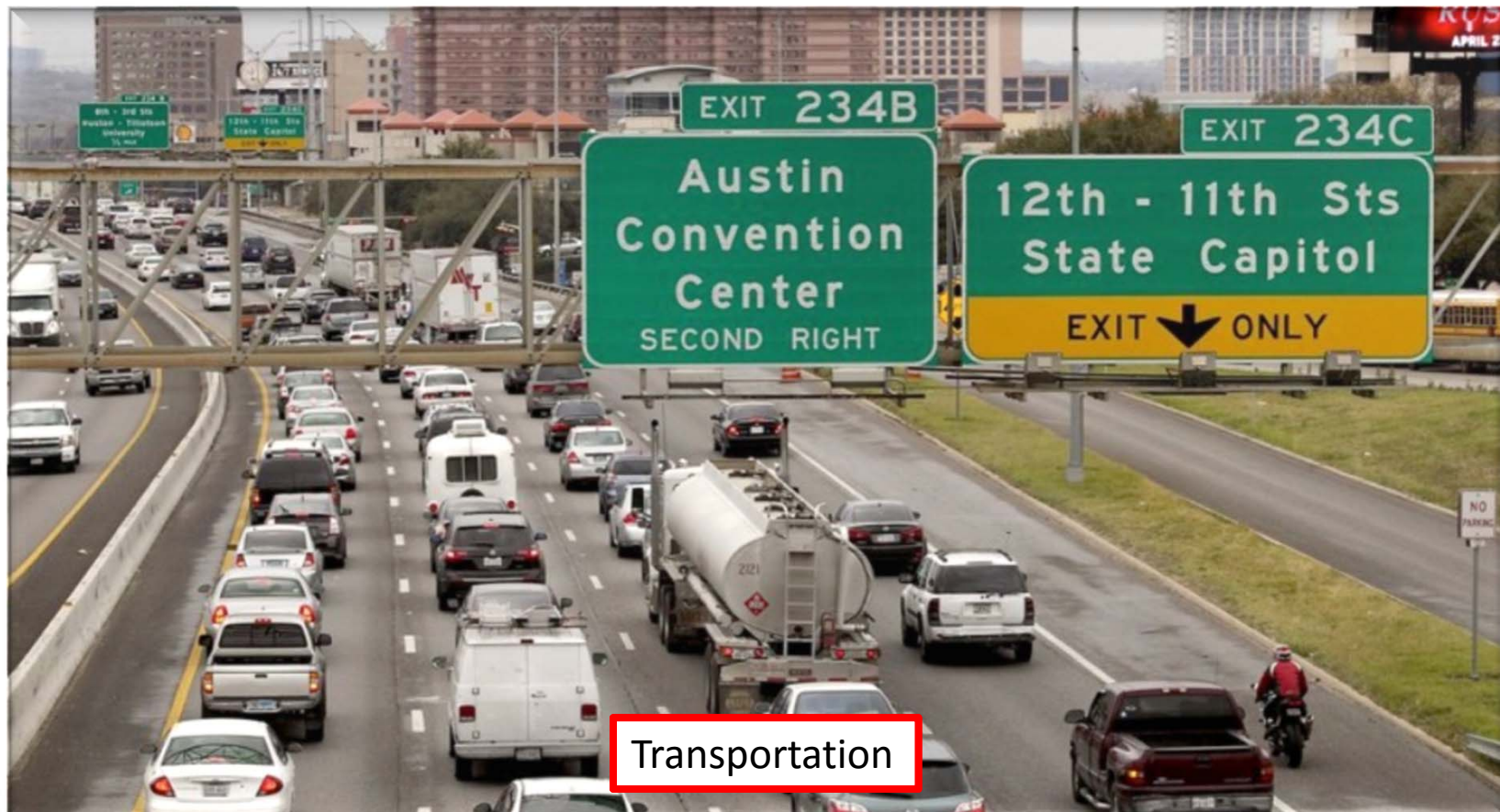
December, 2015

Terry Mitchell

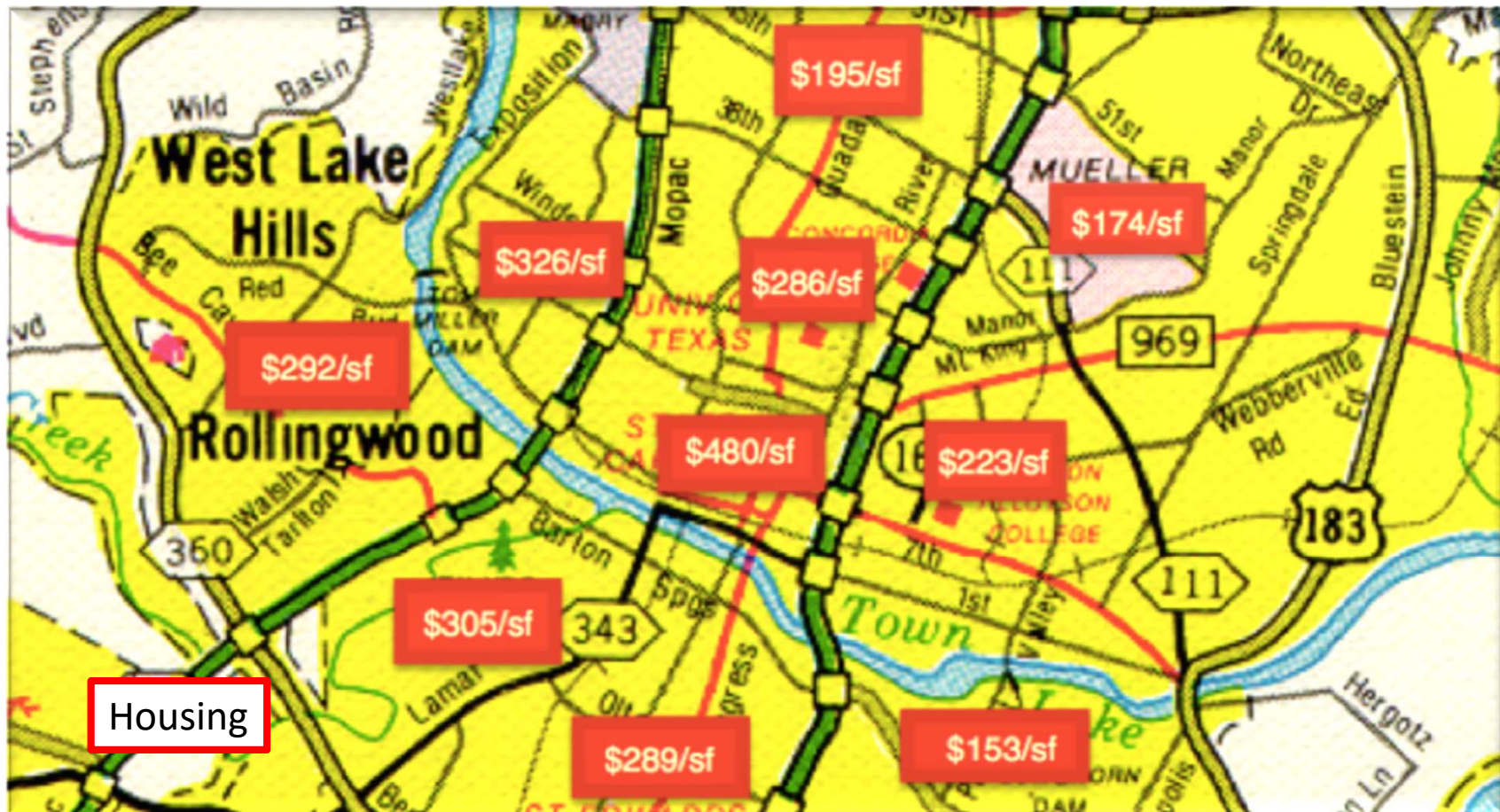




# What Are Some of the Big Issues Facing Austin?



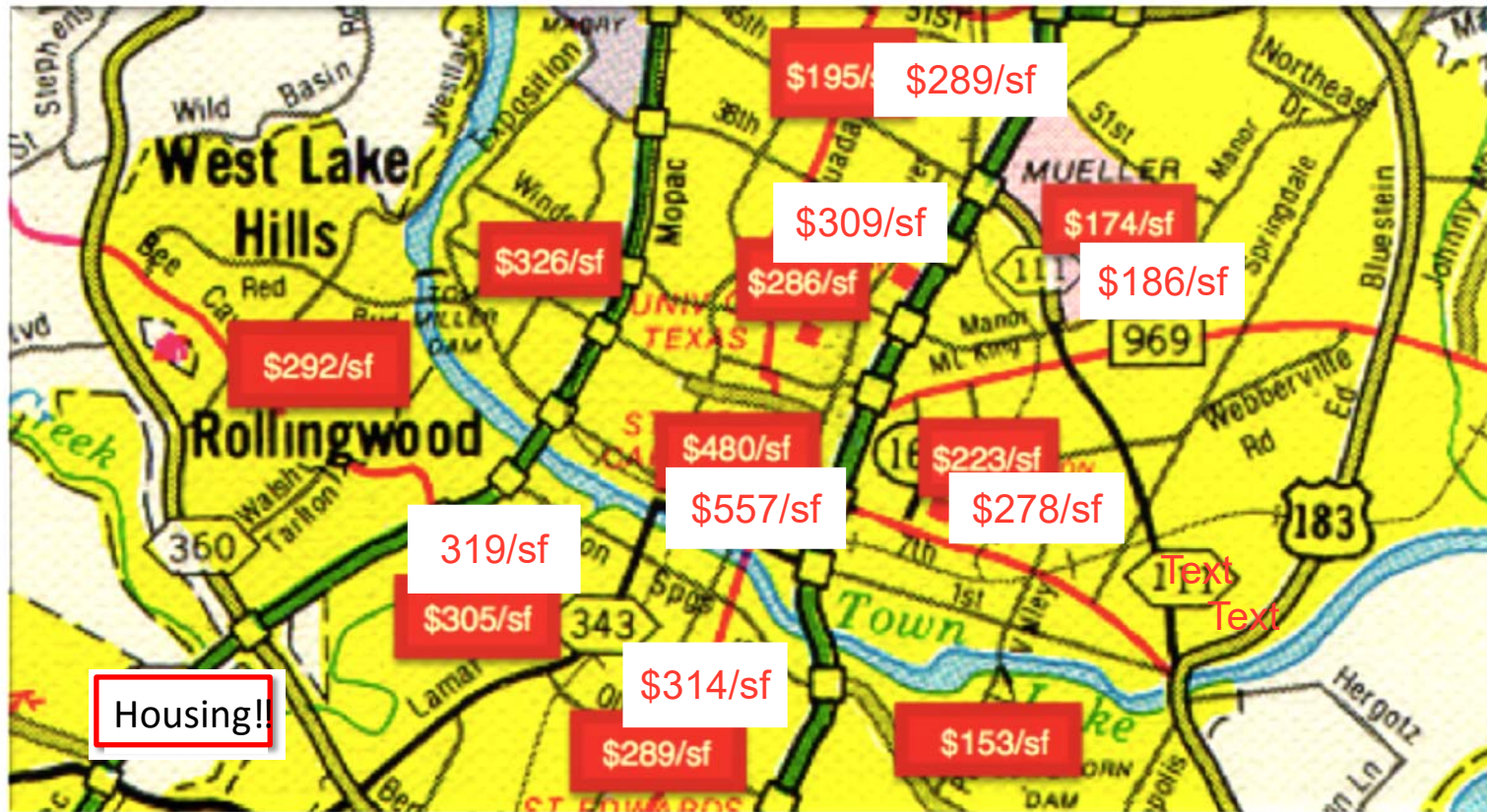
# What Are Some of the Big Issues Facing Austin?



Housing

MLS Statistics for the month of March, 2014

# What!Are!Some!of!the!Big!Issues! Facing!AusDn?!

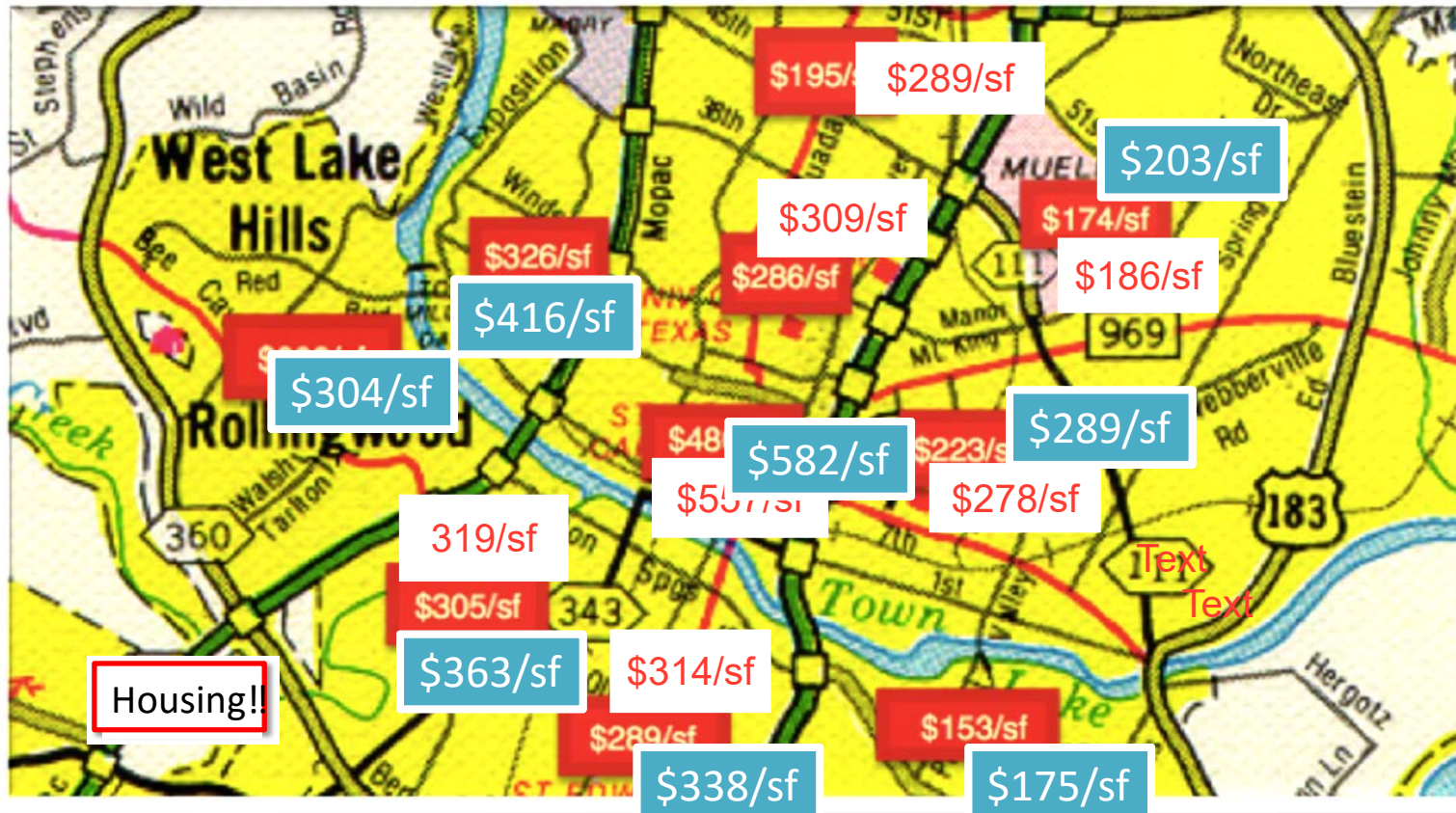


Housing!!

MLS!StaDsDcs!for!the!month!of!March,!2014!

And Feb. 2015

# What!Are!Some!of!the!Big!Issues! Facing!AusDn?!



Housing!!

Nov. 2015

MLS!StaDsDcs!for!the!month!of!March,!2014!

And Feb. 2015

# What are Some of the Big Issues Facing Austin?

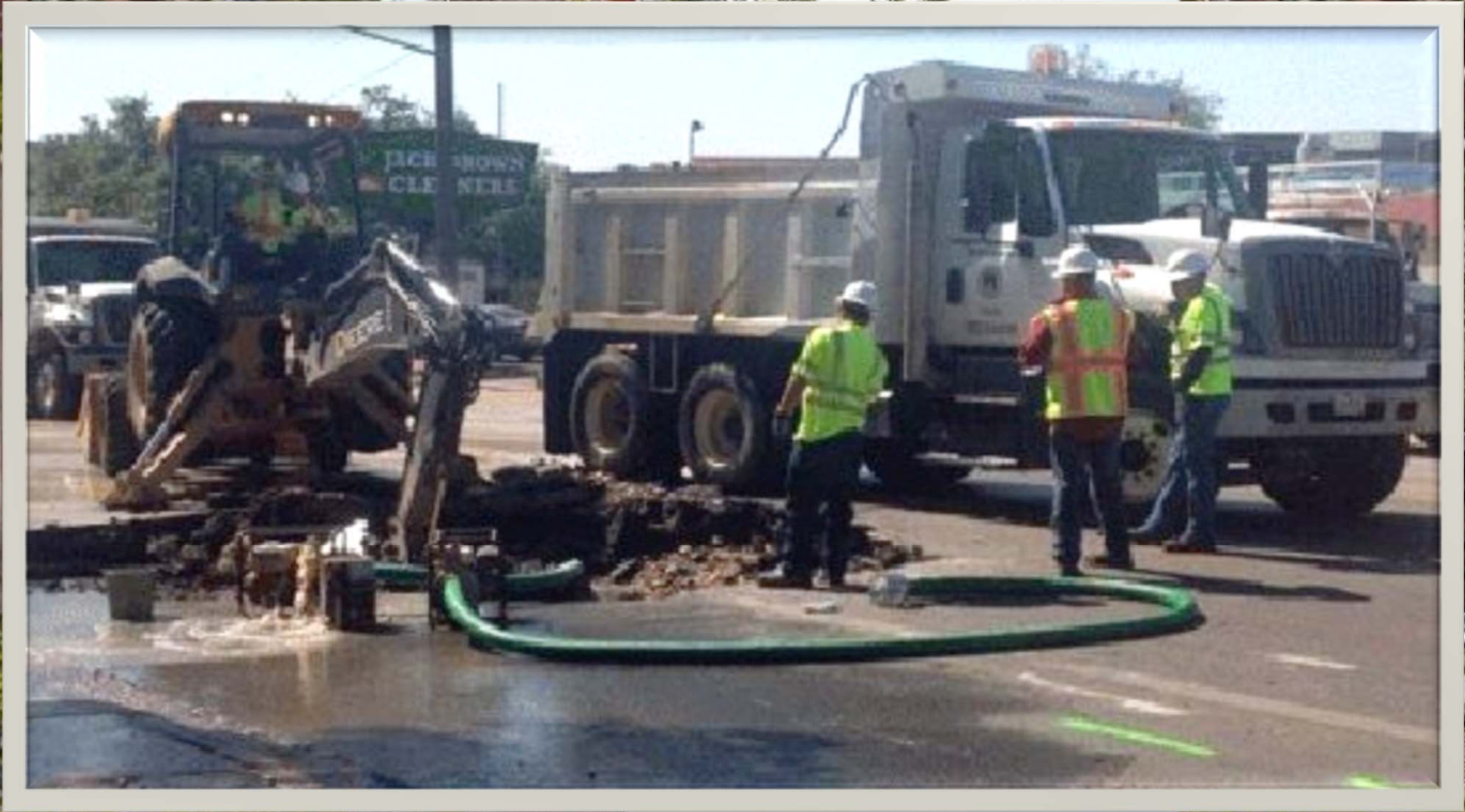


Our environment



Our natural resources

# What are Some of the Big Issues Facing Austin?



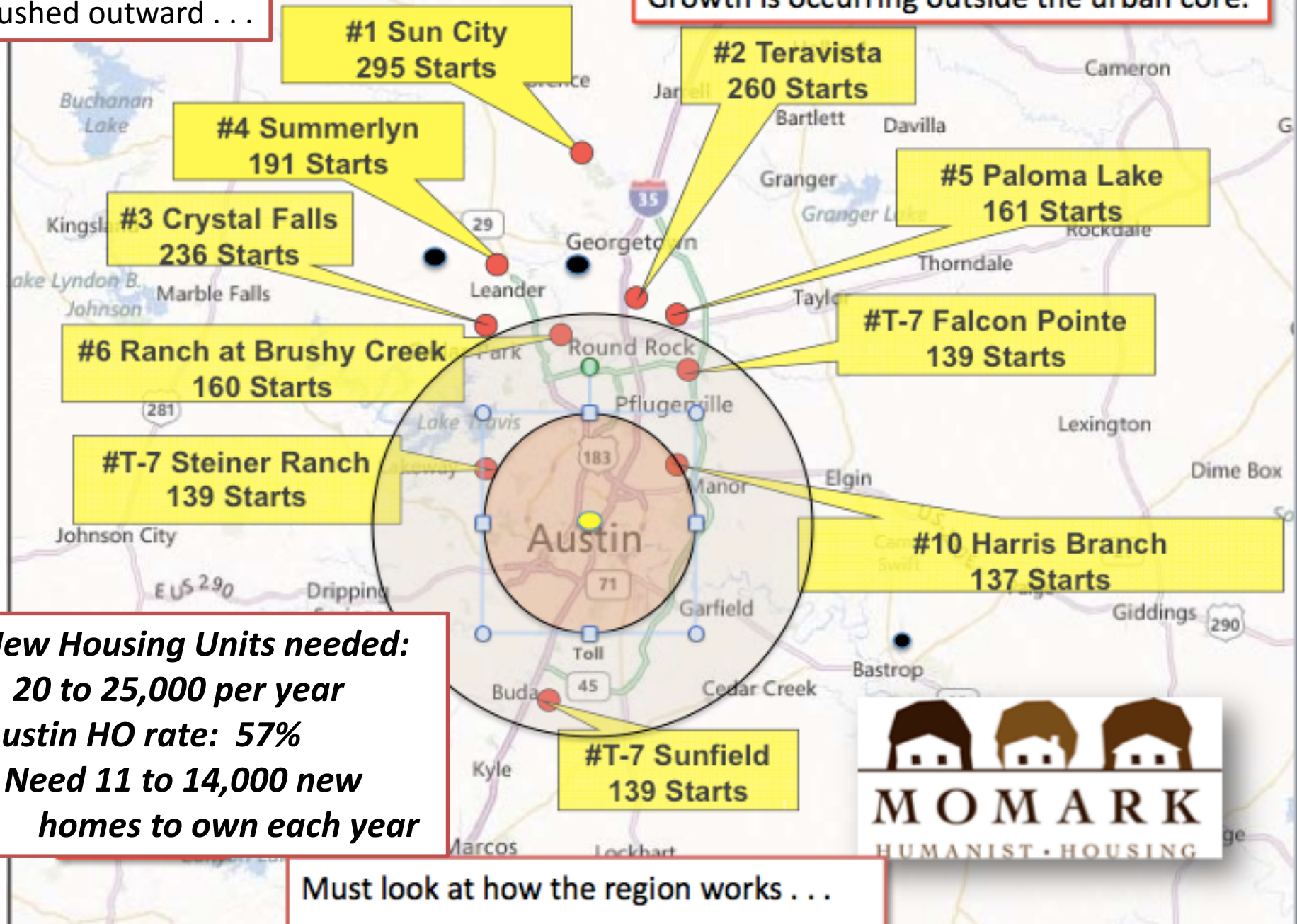
Our City's financial obligations

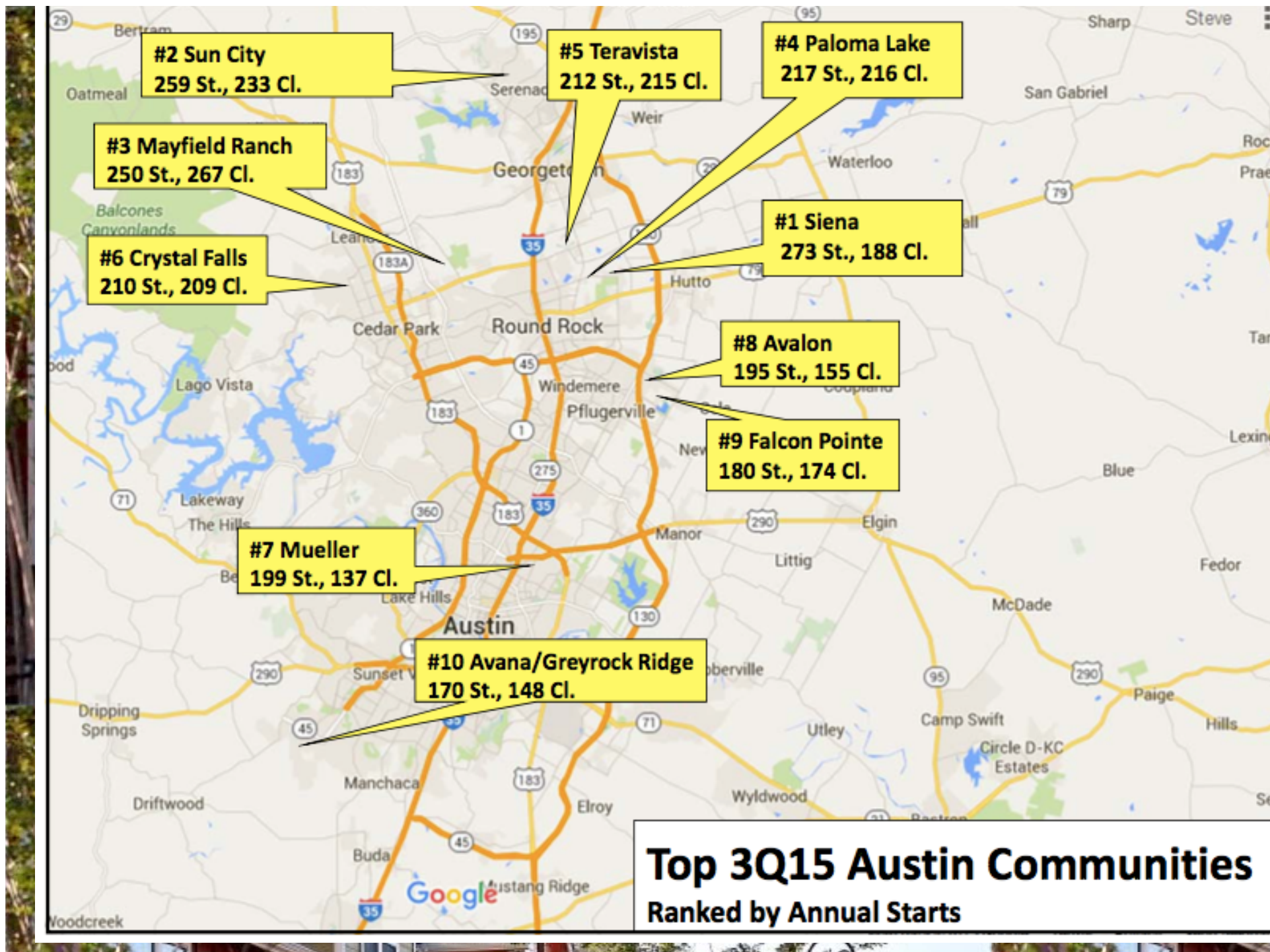


# Some Transportation Thoughts . . .

Homeownership is pushed outward . . .

Majority of New Home Ownership Growth is occurring outside the urban core.





## 75-Mile No.-So. Metro Area

GT

Substantial majority of  
People in urban core  
live outside urban  
Areas.

Somewhere between  
145k to 200k of All Metro "Jobs"  
located in 4 urban zip  
codes – 01,03,04,05

Austin, TX, USA

44% of 01 workers  
earn less than \$20  
per hour (2010)

78701 has 123k jobs  
12,000 residents

SM

183A

59

130

45

290

71

1

75-Mile No.-So.  
Metro Area

Austin, TX, USA

183A

69

130

290

1

71

45



75-Mile No.-So.  
Metro Area

Austin, TX, US

183A

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75-Mile No.-So.  
Metro Area

Austin, TX, US

183A

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75-Mile No.-So.  
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Austin, TX, US

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75-Mile No.-So.  
Metro Area

Austin, TX, US

183A

62

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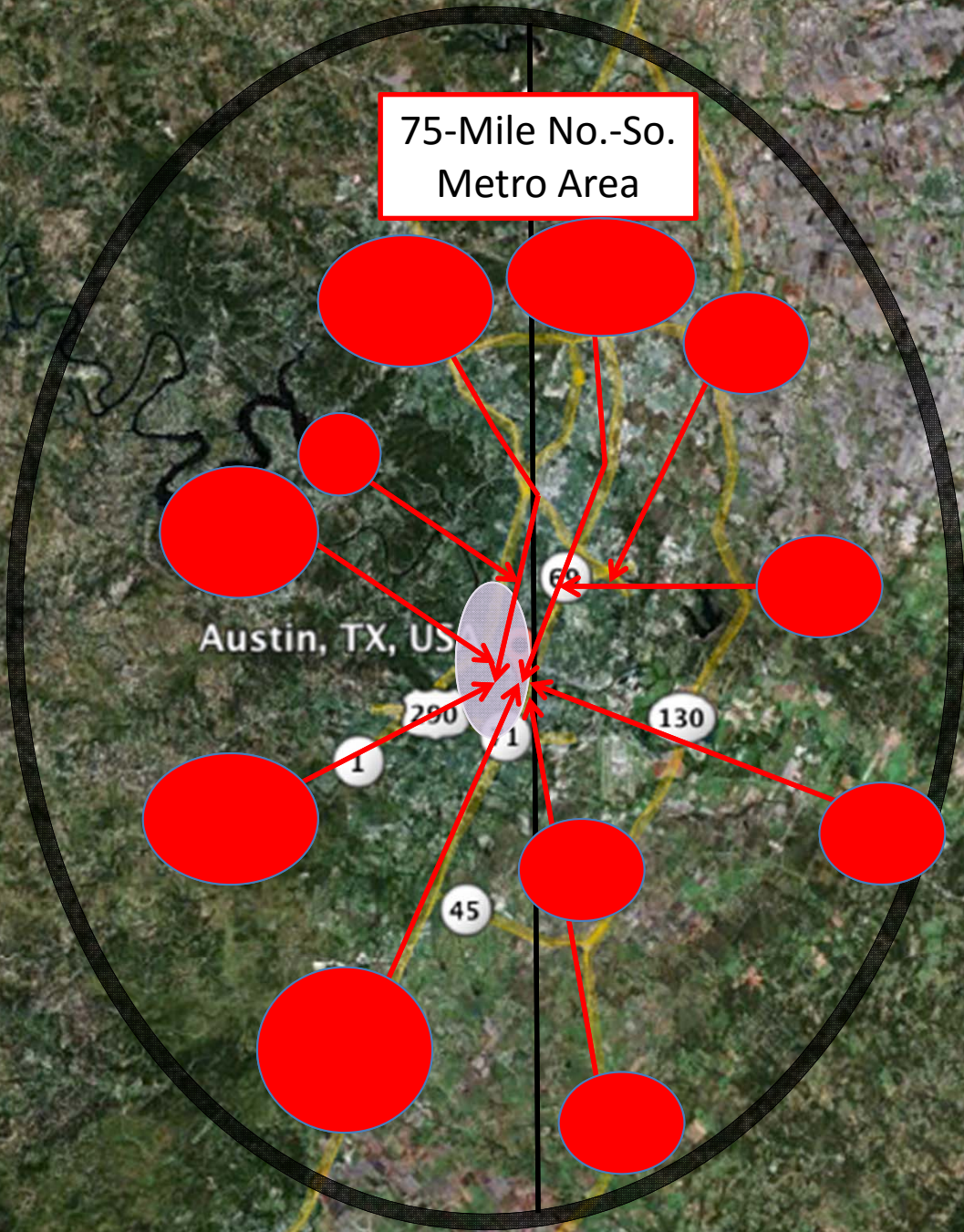
45

1

1

75-Mile No.-So.  
Metro Area

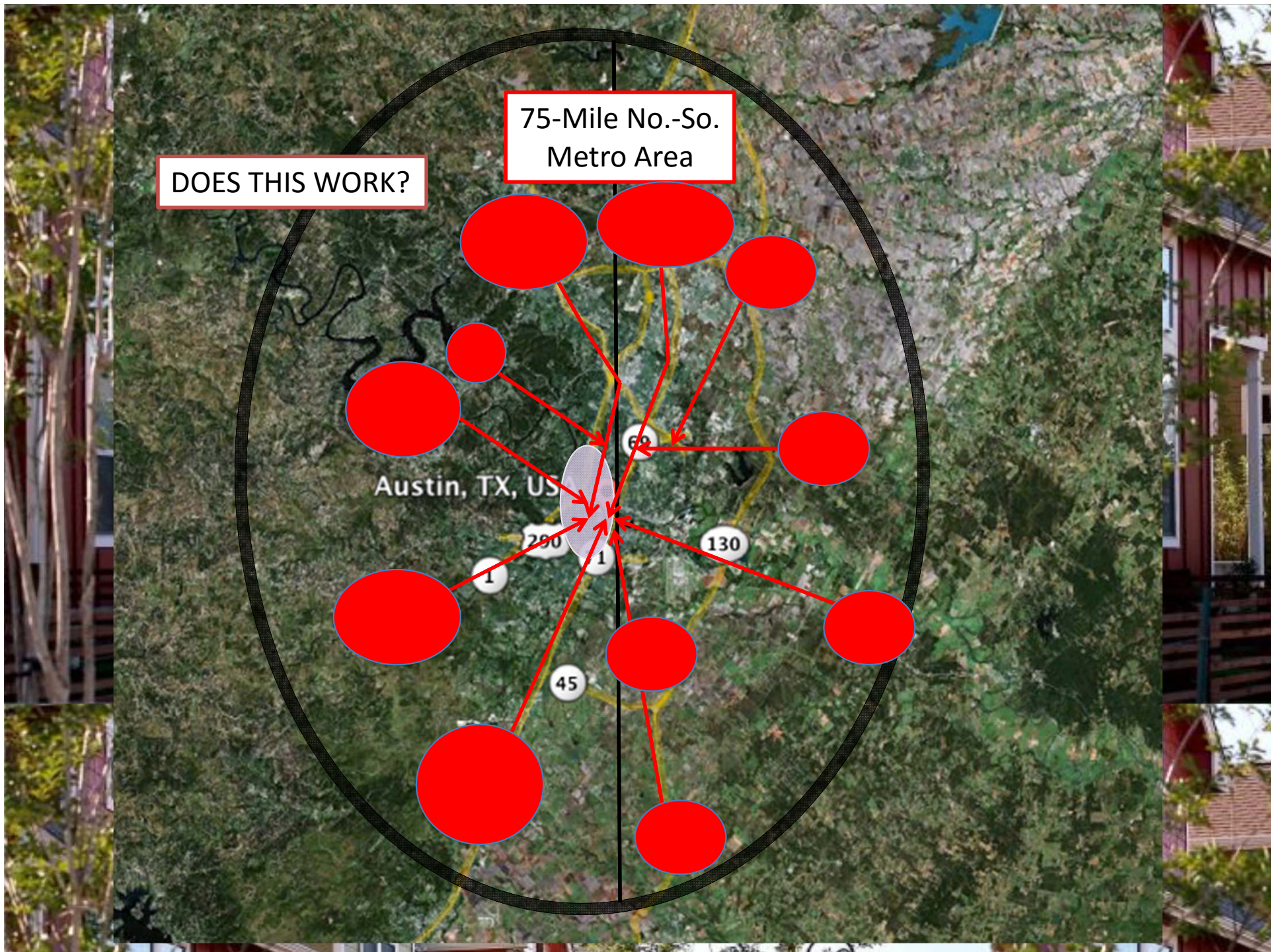
Austin, TX, US



DOES THIS WORK?

75-Mile No.-So.  
Metro Area

Austin, TX, US



DOES THIS WORK?

75-Mile No.-So.  
Metro Area

Austin, TX, US

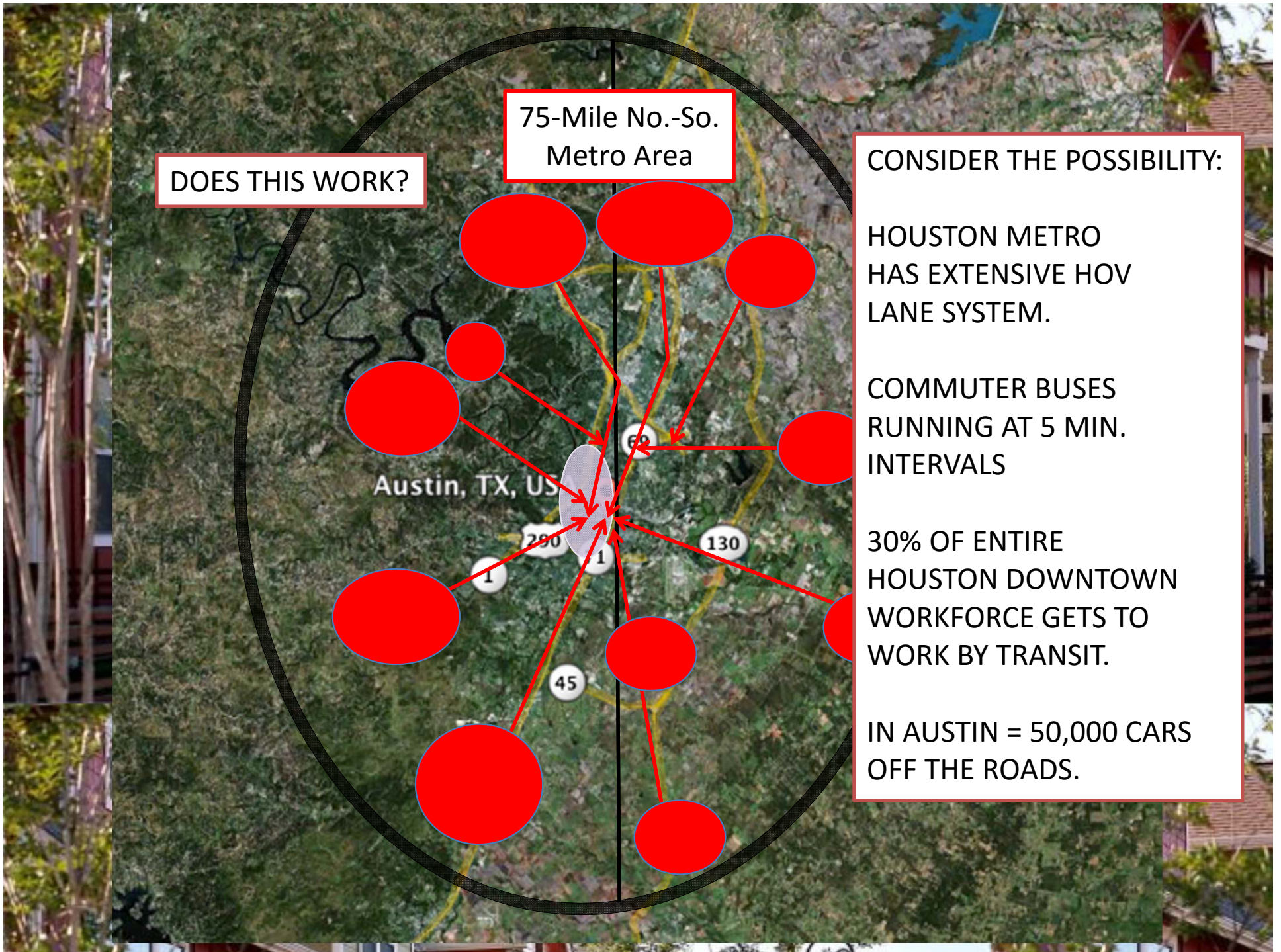
CONSIDER THE POSSIBILITY:

HOUSTON METRO  
HAS EXTENSIVE HOV  
LANE SYSTEM.

COMMUTER BUSES  
RUNNING AT 5 MIN.  
INTERVALS

30% OF ENTIRE  
HOUSTON DOWNTOWN  
WORKFORCE GETS TO  
WORK BY TRANSIT.

IN AUSTIN = 50,000 CARS  
OFF THE ROADS.



DOES THIS WORK?

75-Mile No.-So.  
Metro Area

A FEW OTHER TOOLS:  
  
REQUIRED CARPOOLING.  
  
DENSITY NODES WITH  
LIVE, WORK, PLAY EMPHASIS  
  
CONGESTION FEES

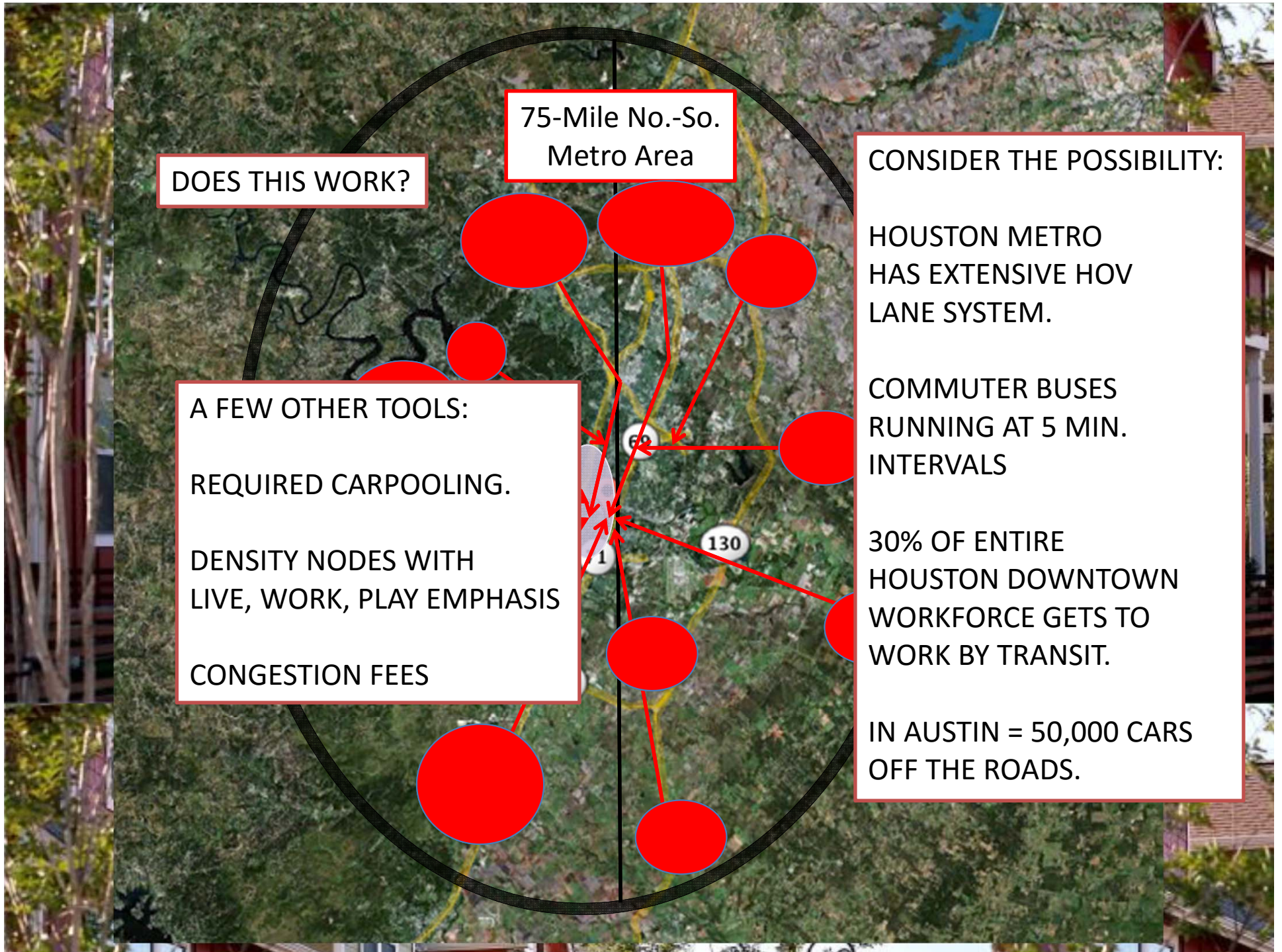
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# What's More Important to Non-Car Commuters: Living or Working Near Transit?

A FEW OTHER TOOLS:

COMMUTER BUSES  
RUNNING AT 5 MIN.  
INTERVALS

REQUIRED CARPOOLING

As expected, people who both lived and worked near a light rail station had the highest transit commute shares. At one mile away, 35 percent made a non-car commute; at a half mile that figure hit 50 percent, and at a 15-minute walk it reached 62 percent. All three figures easily topped the regional transit commute share of 16 percent (which included employed locals who did not live or work, or live and work, near transit).

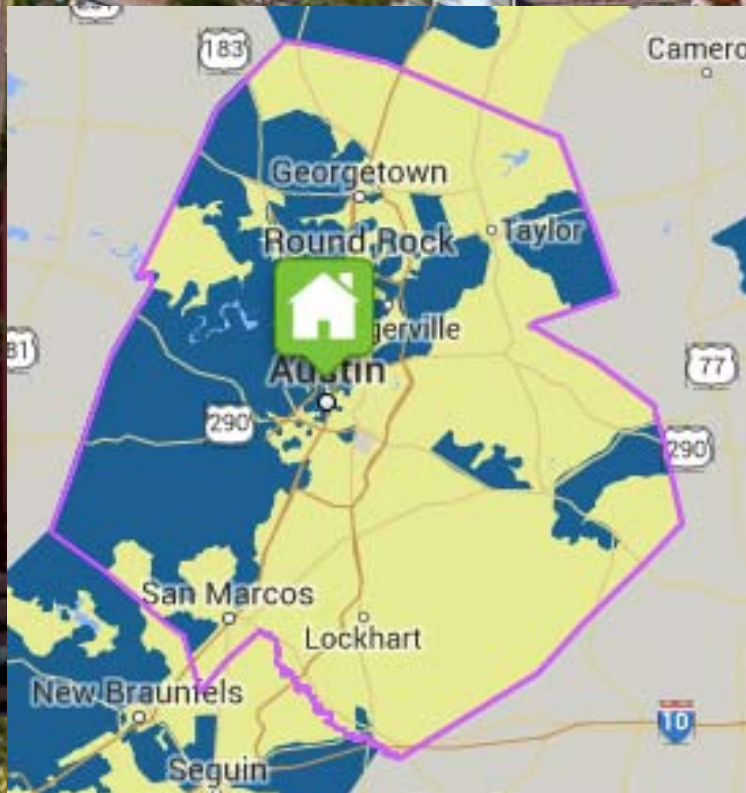
OFF THE ROADS

<http://www.citylab.com/commute/2015/09/whats-more-important-to-non-car-commuters-living-or-working-near-transit/405592/>



# Some Housing Thoughts . . .

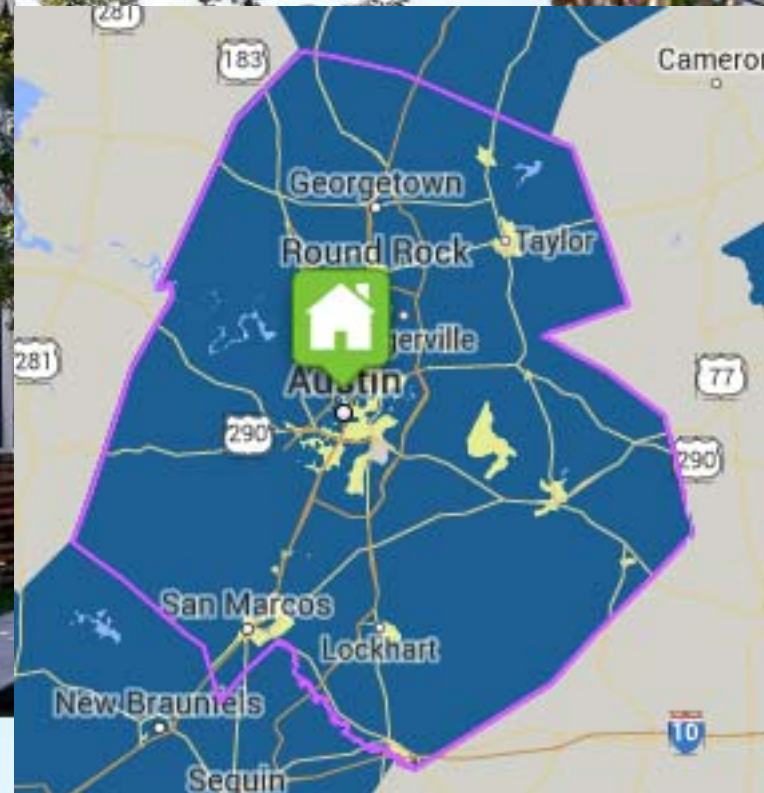
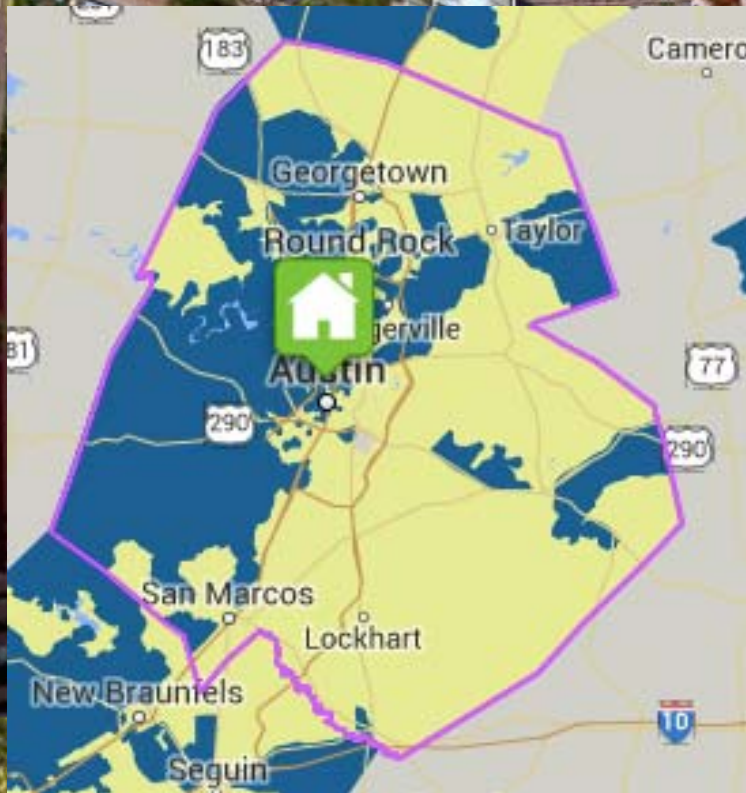
## Housing + Transportation Affordability Index – Austin Metro



Implications? . . . Sprawl? Traffic Congestion? Environment? . . . But, the “status quo” is what our system promotes . . . Is that the right direction?

<http://htaindex.cnt.org/compare-affordability/>

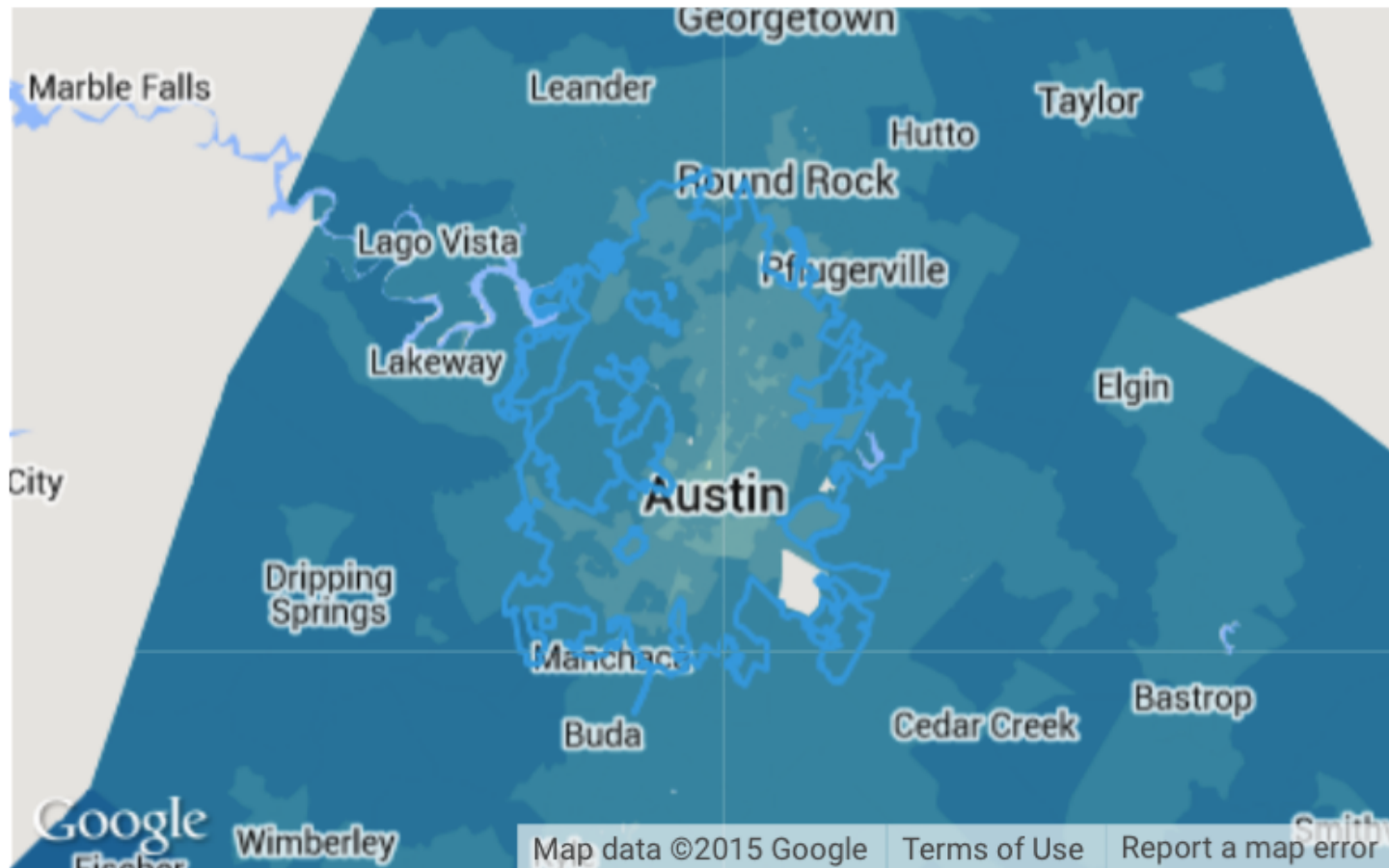
## Housing + Transportation Affordability Index – Austin Metro



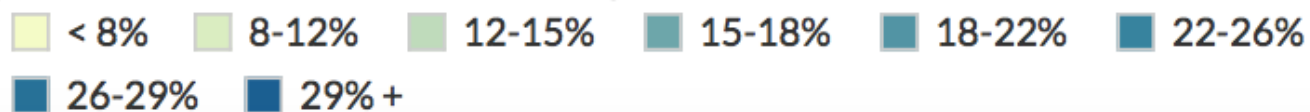
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## Map of Transportation Costs % Income



### Location Efficient Areas



<http://htaindex.cnt.org/fact-sheets/>

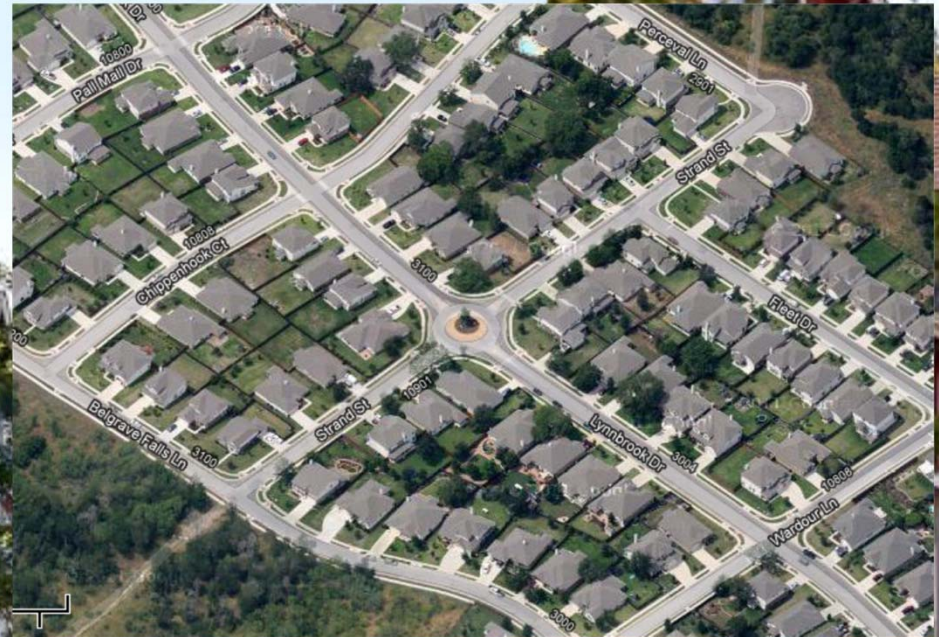


# Other Ways to Look at Housing Issues

- If we are putting most of our reasonably-priced housing in the outlying areas of the Austin SMA – *and that adds to our transportation costs* – what do we do?
- To lower the cost of housing:
  - Cheapen the product (often bad implications)
  - Increase the density
  - Make the units smaller

**FOR-SALE URBAN  
HOUSING . . .**

**ABOUT 3 UNITS PER ACRE**



**FOR-RENT APARTMENTS . .**

**600 Units**

**BETWEEN 20 AND 100  
UNITS PER ACRE**

**300 Park Acres**

# Density Helps Affordability

## Austin Affordability Analysis

Property:	10 Acres	
Land Price:	\$5,000,000	
Austin Median MFI (family of 4)	\$69,300	
Mortgage Affordability for Austin MFI (@ 6.75%)	185000*	
Sales Price of MFI Home	\$205,000	
Income Assumptions:		
2001 Median Family Income (four person family)	= \$71,100	
2001 Austin METRO Median NEW Home Price app.	= \$155,000	
2007 Median Family Income (four person family)	= \$69,300	
2007 Austin METRO Median NEW Home Price app.	= \$202,000	
		Assume reasonable credit, modest debt and 10% down.

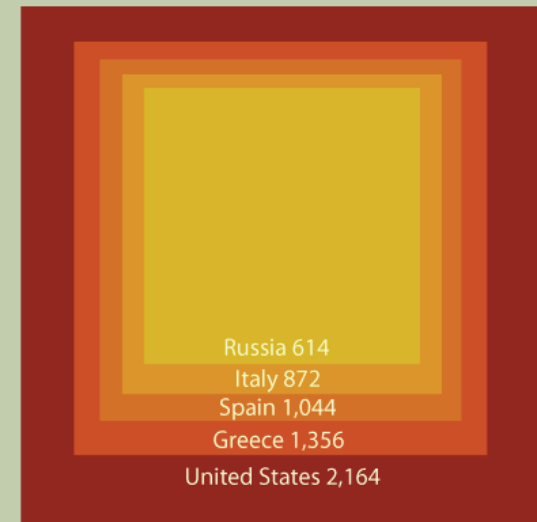
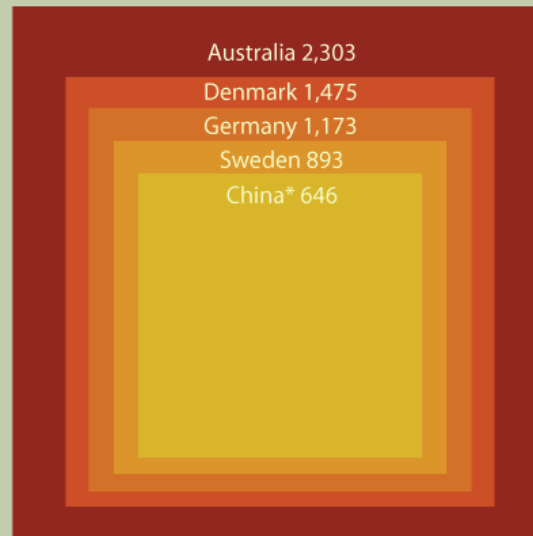
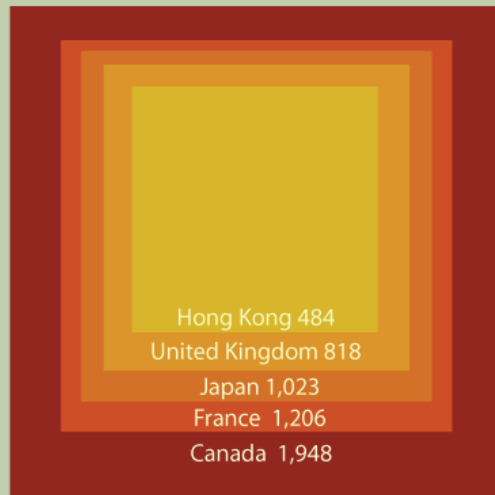
\* For purposes of determining affordability for a "median family income family of four" we made the following assumptions: Reasonable credit standards; \$600 per month in outside fixed payments such as car payments, day care, credit cards, etc.



Product Type	SF-3 Single Family	SF-3 Duplex	SF-6 Condo	MF-1/MF-2 Condo	MF-3 Condo	MF-6 Condo
Units	54 Units	88 Units	123 Units	145 Units	300 Units	800 Units
Units per Acre	5.4 Units per Acre	8.8 Units per Acre	12.3 Units per Acre	14.5 Units per Acre	30.0 Units per Acre	80.0 Units per Acre
Ground Improvement Cost	\$160,000	\$120,000	\$87,000	\$74,000	\$35,000	\$15,000
Sale Price	\$475,000	\$360,000	\$240,000	\$225,000	\$166,000	\$166,000
Income Required for Purchase						
Down Payment	\$47,500	\$36,000	\$24,000	\$22,500	\$16,600	\$16,600
Loan Amount	\$427,500	\$324,000	\$216,000	\$202,500	\$149,400	\$149,400
Monthly P/I	\$3,765	\$2,906	\$1,949	\$1,832	\$1,373	\$1,373
Total Monthly Debt Payment	\$4,265	\$3,406	\$2,349	\$2,232	\$1,773	\$1,773
Total Monthly PMI Payment	\$278	\$211	\$140	\$132	\$97	\$97
Minimum Qualifying Annual Income	\$173,249	\$133,579	\$89,529	\$84,156	\$63,025	\$63,025

# How big is a house?

Average new home size around the globe in ft<sup>2</sup>



Note: data for 2009 builds, \* China figures urban only

Sources: CommSec, RBA, UN, US Census  
[shrinkthatfootprint.com](http://shrinkthatfootprint.com)

## SIZE IS A GREAT TOOL TO LOWER HOUSING COSTS

- People around the world live small.
- Small = less natural resources; less energy; less footprint; better transportation (closer to core).
- Must compensate: People will live more “out of unit” – in community, in open space, along the street.

## WHAT IS AFFORDABLE?

ACTUAL CURRENT LAND PRICING IN 78702 AS OF SUMMER 2013	EXAMPLE ONE	EXAMPLE TWO	EXAMPLE THREE	EXAMPLE FOUR	EXAMPLE FIVE
Compare Pricing (acreage times Square Feet of Property) . . . Which one is affordable?					
Acreage	8.8	3.8	1.88	7	1.64
Price Per Square Foot	\$35	\$30	\$87	\$30	\$57
Total Price	\$13,416,480	\$4,965,840	\$7,124,674	\$9,147,600	\$4,071,989

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Density Approvals -- Units per Acre (not incl. any mixed use units)	39	40	140	120	110

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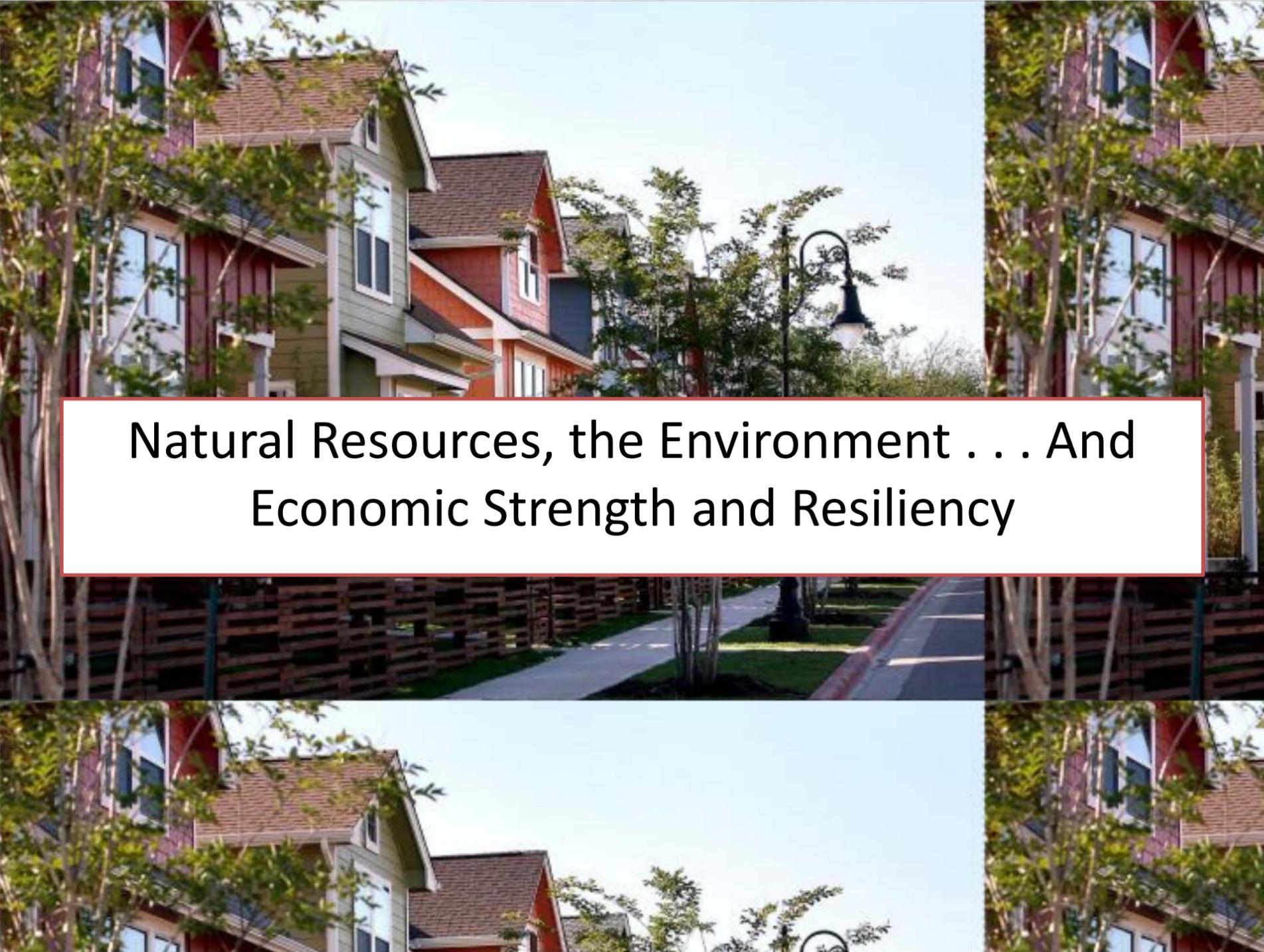
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### Consider How to Lower Rents

SQUARE FOOTAGE	AVERAGE RENT
1,000	\$2,000
750	\$1,500
588	\$1,176
375	\$750
200	\$400

# Other Factors Increasing Housing Costs

- Demand exceeding supply . . . . Price goes up.
  - Housing stopped for three years. Growth did not.
- Delays cost big money.
  - The capital stack gets paid. Period. Costs passed along to consumer.
- Lack of a common goal.
  - Development is a series of compromises.
  - Do we have a single vision for our City?



Natural Resources, the Environment . . . And  
Economic Strength and Resiliency

# Let's have a "Curbside Chat" . . .

On our ability to grow by taking on more debt....

*During the first years of the third generation of suburban expansion, lending standards were gradually abandoned in the quest for more growth. By the end of the housing bubble, lending practices became predatory, involving exotic terms and conditions, before housing flamed out altogether. Today, our ability to continue to grow by taking on more debt is very limited.*

On the likelihood of continued support for local growth initiatives from the federal and state governments....

*From the perspective of a local government, the federal and state governments are unreliable partners over the long term. It is far more likely that they will continue to cut programs that aid cities rather than shift resources to fund local growth initiatives.*

From STRONGTOWNS.ORG  
<http://www.strongtowns.org/program-overview/>

# Let's have a "Curbside Chat" . . .

On the current productivity of our places....

*Swapping long-term obligations for near-term cash works for a while, but as with any [Ponzi scheme](#), it ultimately collapses under its own weight. We have grown in a pattern that is inefficient, making poor use of our resources and investments. The lack of productivity in our development pattern means that we can no longer afford to maintain all of the underutilized roads, streets, sewer systems, water systems and sidewalks we have built. This is the financial reality we must now confront.*

On solutions to the current economic downturn....

*The answer is not to continue to pour America's remaining wealth into suburban development which is not financially sustainable. The answer is another spatial shift; a change in the pattern of development moving away from mass-suburbanization and towards an arrangement with a higher public return on investment.*

From STRONGTOWNS.ORG  
<http://www.strongtowns.org/program-overview/>

# “Curbside Chat” Conclusions . . .

- *Our ability to grow with debt is limited . . .*
- *Federal and state governments do not have funds to grow programs – more likely to cut programs.*
- *Using long term obligations to address short-term needs will eventually fail. When growth stops, so will the needed funds.*
- *Cities MUST change their focus to investment that provides sustainable returns -- the taxes generated must pay for the costs to operate and maintain.*

# How does Austin Stack Up?

City	Population	Square Miles	People Per Square Mile
New York	8,337,697	303	27,550
San Francisco	805,235	47	17,169
Houston	2,100,263	600	3,623
Phoenix	1,469,471	517	2,798
Dallas	1,197,816	341	3,518
Seattle	620,778	84	7,402
Portland	583,776	133	4,375
Austin	820,611	297	3,263

# Consider our Growth

- Austin (metro) is expected to grow **580,000** people over the next **10** years . . .
- Austin grew **66,000** in 2011, **54,000** in 2012, **50,000** in 2013 and **57,000** in 2014. (56k ave.)
- How we grow has implications forever . . .

# What will Austin look like in 10 years?

- **580,000** new residents . . . At **2.6** people per housing unit, means **223,077** new housing units will be needed . . .

# Suburban Density of 3 Units/Acre



- At a suburban density of **3** units per acre, we will need **74,359** acres of land to house just our population growth over the next 10 years.
- . . . or **116** square miles. . . .

## Townhome Density of 10 Units/Acre



- At a townhome density of **10** units per acre, we will need **22,308** acres of land to house just our population growth over the next 10 years.
- . . . Or **35** square miles. . . .

# Downtown Density of 200 Units/Acre



- At a downtown density of **200** units per acre, we will need **1,115** acres of land to house just our population growth over the next 10 years.
- . . . Or **1.7** square miles. . . .

# What Differing Densities Look Like



114.26 Square Miles

81 Square Miles

116 Square Miles

35 Square Miles

116 Total Square Miles

1.74 Square Miles

116 Total Square Miles

116 Total Square Miles



A map of the United States with several callouts indicating distances. A line from the top left points to a box labeled '2500 Miles'. A line from the center points to a box labeled '40 Miles'. A line from the bottom right points to a box labeled '700 Miles'.

Approximate Lengths of Roads/Utilities Associated with Austin's Expected 10-Year Growth at Suburban, Townhome and Urban Densities

How Austin Grows Affects Our City:

- Costs of Long-Term Maintenance of Streets and Utilities
- The Number of Police Stations, Fire Stations, Libraries
- The Types and Alternatives for Transportation
- The Consumption of Our Open Space
- The Use of our Natural Resources

2500 Miles

40 Miles

700 Miles

So, just maybe, it is a good idea to add density?

# Density may be a good idea, but . . .

- I did NOT say density should go every where.
- I did NOT say density should go in the backyard of a single family home.
- I did NOT say you have to live in a dense apartment project NOR did I say you have to live in a small home.
- I DID say that density IS critical to address transportation, housing, environmental and economic stability issues.
- I DID say that density must happen. We have to find areas all over town where density can help our City.

# Sustainability

## Comparison of Downtown High Rise And Suburban Development

\*This Chart compares the "environmental footprint" of a downtown high rise community with (i) a similarly priced luxury suburban community, (ii) a typical suburban single family community, and (iii) a lower density condominium project, all with a similar number of units.

Consumption of Open Space

	Urban Condo Project	Urban/Suburban Condo Project	Typical Suburban Single Family Project	Similarly Priced One Acre Lot Project
Number of Units	200	200	200	200
Acreage consumed for project	Under 3/4 of an acre	approximately 20 acres (approximately 10 units per acre with roads and drainage)	Between 57 and 70 acres (between app. 3 and 3.5 units per acre with roads and drainage)	220 to 230 acres (approximately one acre lots with roads and drainage)
Impervious Coverage Percentage of Total Project Total Acres of IC	100% 3/4 of an acre	55 to 60% 11 to 12 acres	45% 26 to 32 acres	15 to 45% 29 to 87 acres
Length of Streets and Utility Lines Internal to the Project	334 feet	app. 1900 feet	1.5 to 2 miles	4 to 5 miles

Consumption of Natural Resources

	Zero landscaping irrigated with rain water collection system and A/C condensation collection system.)	6,800,000 gal/year (Based on actual 10 unit per acre condo project, including initial establishment of landscaping. 2,833 gal/mo. Or 34,000 gal/yr.)	15,600,000 gal/year (Typical standard lot irrigates approximately 6,500 gallons or 78,000 gallons per year of potable water for irrigation.)	40,000,000 gal/year (Typical one acre lot irrigates at least 10,000 s.f. resulting in 200,000 per year of potable water used to irrigate landscaping.)
Electricity Usage	\$10 to \$60 per month (Energy efficient design; green building, smaller size; using City chilled water system for A/C.)	app. \$50 to \$200 or more (Usage is less with smaller size homes and common walls. Typically less than single family.)	app. \$100 to \$300/mo. or more (This usage will vary greatly depending on the size of the home and multiple A/C units per home.)	\$250 to \$450 per month (Typical higher usage with larger size housing and separate and multiple A/C units per home.)
Taxable Value Per Acre	Over \$80 million to \$150 million per acre, depending on value of units.)	Depends on location and value of units. Range is from app. \$2,000,000 per acre to (unit values from \$200k/unit)	Approximately \$700,000 to \$1,225,000 per acre (assuming an average home value of approximately \$200,000 per home)	Approximately \$1 million per acre (assuming an average home value of approximately \$1 million per home)
Percentage of Taxes Used to Provide City Services to Community	about 10% to 20% (Mayor's Will Wynn statement that downtown buildings need only 20% of taxes to provide City Services)	Taxes <i>may</i> pay for services needed for Community as tax base is higher and maintenance obligations are much lower.	Taxes <i>do not</i> pay for services needed for Community	Taxes <i>do not</i> pay for services needed for Community

Tax basis per acre and growing obligations. . . Hurting City Finances



Thank You!

