The Cost of Regulation; The Effect of Municipal Land Use Regulations on Housing Affordability.

By Richard N. Maier

One of my professors at the University of Chicago told the class on the first day, “I don’t expect you to remember everything I talk about here, so my suggestion is for you to walk out of here with one takeaway from each class.” I can’t really say I did that every time, but sitting at convocation at Rockefeller Cathedral, I decided the *one* takeaway that trumped all others was, “*There is no free lunch*.”

Throughout my career it has intrigued me how many of us travel through our careers and personal lives thinking otherwise.

A discussion of “affordable housing” is a perfect platform for testing this statement. While attending the University of Pittsburgh as an undergraduate, I worked for the Allegheny County Housing Authority in Pittsburgh. Our mission was affordable housing. The Authority constructed, rehabilitated and managed thousands of housing units around the county. This program was provided courtesy of the Federal government (a/k/a the American taxpayer). After getting my Bachelor's degree, I entered the private sector and began my lessons in the practicalities of how such programs become retitled as “exactions”, “incentives”, “impact fees”, “water quality preservation” and so forth. While I understand that various governments believe their regulations, laws and ordinances serve a variety of purposes that are in the public interest (neighborhood and historical preservation, safeguarding public safety and the environment, “saving” resources, and so forth), the cost of that menu of delicacies can be expensive to the homebuyer and therefore a tax on the economy.

Inasmuch as my career the last twenty-five years or so has centered around Austin and Central Texas, my examples will be drawn from that experience.

If life in the development/homebuilding business were simple, we could find a property, get it properly zoned, develop the lots or building sites, and construct the homes. But then, it’s not, in fact, simple.

Let’s start with an actual example of building on a single lot in a central city residential neighborhood in Austin. A few years ago we contracted to purchase a lot in an area known as North Hyde Park. This example is utilized to illustrate the extreme costs incurred when developing in the central city, an area of high demand and low supply. The various regulations that overlaid this property were the zoning code, a residential design compatibility ordinance known as the “McMansion Ordinance” (all twenty-six pages of it), impervious cover limitations, “Neighborhood Conservation Combining District” regulations (a twenty-eight page ordinance that supplements the zoning ordinance), handicapped accessibility requirements, sidewalk construction ordinances, a tree protection ordinance and an historic preservation overlay (which threatens even the simplest of structures with the prospect of being labeled “historic” or “significant”.) While each of these eight regulation categories (which I consider to be menu

items on the free lunch menu) have what the municipalities or jurisdictions consider to be public purposes, in many instances they are very costly to the ultimate homebuyer and contribute to the reduction in home affordability. As such, they are certainly not free. The following addresses a few of these categories and their impact on development.

Menu Item #1: Historic Preservation

The building lot in this real example in the City of Austin, Texas, was 80' x 130'; approximately 10,400 square feet in total area. Situated thereon was a bungalow constructed in the early 40's. It was about nine hundred square feet in size, had no particular architectural significance (there are probably a hundred similar structures within a mile and a half), was generally rented to students at the University of Texas and was acquired for the value of the land ($266,000) for new home construction. Despite the builder's determination that the structure was beyond its useful life, the demolition permit was opposed by a neighbor (a renter, in fact; it should be noted that none of the neighbors who owned their homes opposed the demolition). This neighbor posited to the municipality that the structure to be demolished was historically significant and should be preserved. This declaration launched the seller of the house into an entirely new and unanticipated process of having to fight historic designation of the structure. The process from start to finish took approximately nine months during which time the property was left empty.

Cost of having historic preservation on the "Menu":

Carry cost on house at market value: $8,866.00 ($266,000 x 5% P.A. for 8 months)

Property taxes: $4,610.00 (8 months at current city tax rate)

Insurance and maintenance: $1,200 (Estimated)

Legal fees: $1.550.00

TOTAL COST TO SELLER: **$16,226.00** (6.1% of the value of the property)

Menu Item #2: "Protect the Environment": Heritage Tree Ordinance

Once the land was acquired by the builder and the existing structure was demolished, it was determined that the pecan tree in the front yard was a "Heritage Tree" in accordance with the city's tree protection ordinance. Application was made to the city to remove the tree (application fee: $50.00) and the application was rejected. The city stated that a tree preservation or mitigation program was required and a second application was required for preservation/mitigation (another $50.00 fee). Although the city agreed to allow mitigation for the tree removal, this was not financially viable for the builder. The mitigation "fee" is based on caliper inches for the tree. The normal charge is $150.00 per caliper inch but since this was characterized as Heritage, the fee was tripled to $450.00 per caliper inch. The tree was 32" and therefore the fee would have been $14,400.00. Thus, an arborist was engaged by the builder to create a preservation plan. Although even the arborist recommended removing the tree due to its age and condition, the builder chose to follow the arborist's recommendation which included trimming the dead branches and undertaking a tree preservation plan and an agreement to not

construct any impervious improvements (such as walkways) under the tree canopy. This work was despite the fact that the existing driveway (which had to be removed because the Neighborhood Conservation Combining District no longer permitted street-facing garages where alleys exist) was located *under the tree canopy* (despite the fact that the driveway had been there since the 40's.) The cost of the arborist-recommended deep root and systemic tree fertilization, the tree protection (chain link fence surrounding at the drip line and wrapping the tree in 2x4's) and the post construction inspection and fertilization cost the builder an additional $2,642.00.

Most unusual were the events of the Saturday morning when the tree trimming began. The same neighbor called the City of Austin Police, and an officer came to the site, shut down the job, downloaded the Tree Ordinance on the squad car computer and began trying to measure the size of the trees on the site to see if they complied with the tree preservation ordinance. (This occurred even though the builder showed the officer a recent surveyor-certified tree survey which specified the sizes and types of trees) Forty-five minutes later the job was restarted.

Cost of having this "environmental protection" ordinance on the "Menu": **$2,742.00** (includes two $50.00 application fees but *does not* include time delay costs relating to visits from the City Arborist who held up the inspections several times.) Had the builder chosen the mitigation option, the affordability impact would have been $14,400.00, or 5.4% of the property's value.

Menu Item #3: More "Protect the Environment": Impervious Cover

In the name of environmental protection and maintaining water quality, the City of Austin has imposed maximum impervious cover restrictions on all properties being developed, with the maximums varying depending on the type of use and location of the particular land tract. Given the anti-development sentiment in Austin, one can only speculate that the *real purpose* of this ordinance is not environmental protection but restriction on density. Impervious cover limitations restricted this particular property to a maximum of 45% "impervious" coverage. That restriction immediately eliminated 5,720 square feet of land that would have otherwise been buildable. On a pure land basis, the cost of this restriction on this particular tract was $146,300.00 ($266,000 land price x 55%).

What was most interesting about this situation was that the soil at this site was primarily *clay*, which does not absorb much rainwater, so one could consider the soil itself as substantially impervious. Although it could be argued that no builder would cover 100% of a similar site with impervious cover absent restrictions because such a tract would not be marketable, a blanket restriction of 45% is too little for a central city site. Assuming 75% impervious cover would yield a marketable home, the effect of the 45% maximum was the elimination of at least 3,120 square feet of otherwise usable land. Thus, the calculation is as follows: Land cost: $266,000.00 x 30% = $79,800. Unfortunately, there is an additional cost that results from a regulation such as this one. What the authors of this ordinance also failed to measure was the real cost to the environment and the public of unnecessarily and excessively reducing density. Less density = more suburban sprawl = more roads, infrastructure, city services, gasoline and auto usage required. Reduced central city density also pushes up prices in the central-city (at least in the

case of many cities) due to high demand and inadequate supply. (See "Demand and Supply section.)

Cost of having this "environmental protection" (impervious cover) ordinance on the "Menu": **$79,800.00**.

Menu Item #4: Even More "Protect the Environment": Storm Water Pollution Protection.

The State of Texas requires a SWPPP (Storm Water Pollution Protection Plan) to be filed prior to commencement of any construction. The cost of a typical plan for a single house is approximately $500.00 and the plan/and/or the City of Austin regulations require inspections after each significant rain event, installation of silt fencing, routine street and site cleaning and installation of all-weather construction accesses to prevent mud from entering the street. With respect to the case study tract, the cost of complying with SWPPP was $500.00 for the plan, $250.00 for post-rain inspections (fortunately the construction took place in the dry Austin summer), and $813.00 for silt fencing installation, silt fencing repair, street cleaning and an all-weather construction entrance.

Cost of having this "environmental protection" (impervious cover) ordinance on the "Menu": **$1,563.00**.

Menu Item #5: Preserve our Neighborhoods! The "McMansion" Ordinance.

This ordinance is perhaps the most impactful to housing affordability. It was originally proposed (and the City Council used this reason to enact this "emergency ordinance" with no waiting period) as a method to control flooding in the central city. In reality, it is a way for the central city neighborhood activists to keep the sizes of new homes small so as to be "compatible" (their word) with the existing structures. What it misses, however, is the fact that much of the central city is improved with very small structures built in the 30's, 40's and 50's, many of which are less than 1,200 square feet on city lots, many of which are forty feet wide (or less). With the impervious cover limitation discussed above, the purchasers of these lots (assuming a teardown) are forced to employ vertical construction rather than horizontal to realize a great enough amount of living space. However, the McMansion Ordinance further restricts height to generally thirty-five feet and it requires stepped setbacks from the property line as height increases. These restrictions negate the architect's ability to design a more vertical structure.

In general, the McMansion ordinance limits new development on most central city tracts (a very large geographic area encompassing approximately eighteen square miles!) to maximum of .4 F.A.R. (floor to area ratio) or 2,300 square feet, whichever is larger. This means on a typical 40 x 120 city lot, a new house can't exceed 1,920 square feet. Whereas in some circumstances 1,920 square feet may sound reasonably adequate, when the central city lot sells for about $7,000 per front foot (or more, depending on the particular neighborhood), that means that the land alone is $145 per *house* square foot! That's more than the house costs to build! The land cost is not justified by the house size limitation which ultimately limits affordable development within the McMansion area.

Another element that makes the McMansion rules (and there is a lot more to it than simply the F.A.R. limitations) even more onerous and expensive is the inability to use any sort of a "stock" floor plan. If the lot has a protected tree and is subject to McMansion rules (or either/or), a custom house designed specifically and solely for a certain lot is a necessity. Whereas a stock floor plan and permit set for a forty foot lot could cost less than $2,500.00, a custom design to meet McMansion requirements would typically cost in excess of $15,000.

Cost of having this "Neighborhood Preservation" (McMansion) ordinance on the "Menu": **$12,500.00** (Not including loss of use of the property.)

The foregoing example was presented as a real-world example of one particular project.

A summary of costs is as follows:

Menu Item #1: Historic preservation:	**$16,226.00**
Menu Item #2: Protect the environment	**$2,742.00**
Menu Item #3: More protect the environment	**$79,800.00**
Menu Item #4: Yet even more protect the environment	**$1,563.00**
Menu Item #5: Preserve our neighborhoods	**$12,500.00**
This is a total of:	**$112,831.00**

Further, if a builder works on an 18% gross margin (which means all costs are "grossed up" by the margin requirement), the real cost to the homebuyer was **$137,598.00**!

In fact, this lunch was *not* free and housing affordability suffers.

New development in suburban areas.

But wait, there is more! The preceding example was an existing central city lot and did not include the fees typically encountered in the construction of a home and the infrastructure development of a subdivision. The example did not include water meter fees, building inspection fees, building permit fees, and so forth as described in Appendix A. This appendix summarizes those costs encountered relating to the development of a typical 250-lot subdivision and the construction of the houses within that property.

This particular builder's average sales price for a home within the Austin market area is about $187,000.00, so the total costs of regulation at a builder's 18% gross margin equal $24,492.00, or 13% of the total cost of the house. What is even more telling is the total cost of this increase to the homeowner. The regulation cost increases the property tax (using a typical central Texas city) by $576.00 per year and the annual insurance by some additional amount (not calculated in the example for simplicity.) At a 4.2% interest rate and a 95% loan, the "fully loaded" regulation costs add $1,914.00 to the annual house payment. Because qualifying for a mortgage is primarily dependent on income to debt ratios, the regulation costs only serve to raise the income limit for qualifying for a mortgage and therefore reduce the number of potential

homeowners. Moreover, assuming the homeowner stays in the home for about seven years, the cost of these regulations is $24,482.00 (per Appendix A) plus $13,398.00.00 = $37,880.00.

So what effect does this $24,482.00 increase have on the number of families who can afford to purchase a home? The answer for a city like Austin, Texas is removing 18,000 households out of that price range buying pool, or 5.6% of the total existing households. Appendix C presents an analysis of this calculation.

Affordable Housing Exactions

Yet another governmental regulation that affects housing affordability is the one that at the same time makes housing more affordable for the low and middle income homebuyers, but may dramatically increase the cost of housing for those who are at an income level above median. Specifically, I refer to those regulations that mandate a certain level of "affordable housing" in exchange for granting entitlements (and not necessarily "special" entitlements) or participation in certain planned communities. These regulations are effective in areas from Orange County California to Austin, Texas and beyond.

They work like this: A municipality or jurisdiction tells a developer or builder, "We will grant you your building permit or approve your zoning or entitlements, but you must have a certain percentage of the homes built for sale or lease to be priced at a level wherein a person or family whose annual income falls within a certain range." One example is the requirement that 25% of the homes must be sold to individuals or families whose income is less than, say 50% of median family income (MFI) for the particular jurisdiction.

The homebuilder can achieve this target several ways: (1) Reduce the size of the home. Whereas a "market rate" (i.e., home being sold to a person or family whose income does not qualify them as needing "affordable housing") homebuyer may typically require an 1,800 square foot home for a family of four, the builder can construct a home for the affordable housing family that is 1,500 square feet and has an equal number of bedrooms. The reduction in the size of the house may be enough to achieve the target sales price. (2) "De-feature" the house. Using plastic laminate countertops instead of granite, eight foot ceilings instead of nine foot, and fiberglass tub and shower enclosures instead of tile, are a few of the ways cost can be cut out of the sales price. (3) Raise the price of the "market rate" units to offset the margin lost on the "affordable units". (4) Jurisdiction-provided incentives (such as jurisdictional-paid utilities or infrastructure, density bonuses, etc.) (5) Some combination of the above (which is more typical).

Item number one is a tactic with diminishing returns. Builders know that simply reducing the size of a home does not necessarily cut much cost out. The cost of expensive construction items such as kitchens, baths, mechanical systems, etc. are not significantly lowered by reducing the size of a three bedroom two bath house to 1,500 square feet from 1,800 square feet. De-featuring can contribute to the price reduction, but whether it is enough to move the price of the house into the required levels depends on the builder's standard market rate homes' level of "featuring" versus the level of de-featuring on the "affordable" unit. In other words, if the market-rate unit has granite countertops and the "affordable" unit is de-featured to plastic

laminate, the price reduction will be more than if the market-rate unit is featured with plastic laminate.

Adjusting market rate unit pricing upward is only successful if the area demand levels and appraisals will permit an upward pricing adjustment and comparable existing homes are priced at a level similar to the positive pricing adjustment on the new home to allow appraisal levels to support financing and to be competitive. Often this price increase is not possible to a great enough extent to offset the builder's loss of margin on the "affordable units." In other words, if the builder's margin expectations are 18% and the "affordable units" net a 5% margin (even after the de-featuring adjustments), then the margin requirements on the market rate units may dictate a sales price that is not achievable in the marketplace. In areas of very high demand, this adjustment has been achieved in some instances but those situations are not typical or normal.

Even if option number three is possible, this can only be viewed as a *tax* on the market rate homebuyer. Charging a market-rate buyer thousands if not tens of thousands of dollars more in sales price so a lower income buyer can purchase a not dissimilar home in the same community as an "affordable unit" buyer amounts to a tax of those thousands of dollars on the market-rate homebuyer. Moreover, the continuing lower ad valorem taxes on the "affordable" unit place an additional burden on the jurisdiction and school districts.

As to the jurisdiction-provided "incentives", sometimes they can have an effect on offsetting the margin loss to the builder. However, if these incentives are funded by the jurisdiction, they amount to a tax on *all* property taxpayers and therefore once again this is *not* a free lunch, even though it is camouflaged as such.

The Cost of Demand and Supply Restricted by Regulation

In addition to the definable regulation costs, the costs of constraining supply should not be overlooked. A very good article on this subject entitled was written by Virginia Postrel in 2007. [The Atlantic Online, November, 2007, *A Tale of Two Town Houses*, Virginia Postrel]. Ms. Postrel explores the effects of overly restrictive land use regulations which can result in either "cheap plentiful housing" or "expensive scarce housing". While land availability is a significant factor affecting the ability to construct new housing in high-demand areas, the existence of overly restrictive regulations which constrain density (as demonstrated by the example in this paper) can have a huge impact on housing pricing and therefore affordability. In fact, in the foregoing Austin, Texas example, a seventy-year old central city bungalow with antiquated wiring, single pane windows, questionable plumbing and window unit air conditioners will sell for around $215.00 per square foot (average), while a new home with contemporary amenities (and often on a larger than central city lot) in a suburban municipality that is homebuilder-friendly will sell for $60.00 per square foot or less. (See Appendix B.) We have found that many homebuyers will trade off size of home (square footage) and condition in exchange for location. Therefore the $115 per square foot differential referred to above may not translate into an exact home price differential. In other words, a family may choose a 1,300 square foot 50-year old home in the central city at $215 per square foot versus an 1,800 square foot home in a different jurisdiction only fourteen miles away. (In this example: zip code 78751 versus zip code 78653).

Still, the differential will be $202,000.00 ($280,000.00 [$215.00 x 1,300] less $78,000.00 [1,800 x $60.00]), which makes the central city home unaffordable for a large portion of the population. Additionally, the maintenance costs and utility costs of a fifty year-old home in the central city will be much higher than a newer home in the suburbs. (Offset, perhaps, by some savings in transportation costs.) The number of potential homebuyers that are eliminated from the potential buyer pool due to this differential is staggering.

The demand for central city or close-in home sites will expand as travel times to the suburbs and the cost of gasoline continues to increase. Restrictive development regulations that claim to be promoting environmental protections may actually be doing the opposite. Densifying the central cities reduces the need for fossil fuels burned by commuters and delivering of goods and services. Along with an affordability analysis, an analysis of "greenprint" impact should be considered by municipalities when considering any new ordinance that restricts or limits development.

Summary

I am *not* advocating a complete abandonment of regulation; many regulations especially with respect to health and safety are absolutely necessary. In fact, the irresponsible actions of builders and developers have often *precipitated* many of the regulations that burden the more responsible businesses.

However, the passage of new rules without a thorough vetting of the reason for the rule (e.g., was the precipitating action a unique case?), and an unbiased "affordability assessment" *prior to* the passage of the ordinances is counterproductive to a stated goal of affordable housing. Often the jurisdictions consider these regulations without either consulting or giving legitimate credibility to the input from the homebuilding and development community whose real stakeholders are the homebuyers.

Further, jurisdictions may use the excuse, "It only adds $150.00 to the house price." That may the case for a single rule but piling ordinance upon ordinance amounts to death by a thousand cuts. One hundred and fifty dollars or even fifty dollars quickly adds up to thousands of dollars and has a serious impact on affordability. The business community can not only provide legitimate and quality input into the process but also can suggest alternative (and perhaps less expensive or more efficient) methods of attaining certain goals such as environmental protection or historical preservation.

My experience has been even though jurisdictions may have public hearings (although many do not, especially if they are Federal regulations which are *not* included in any of the analyses in this paper) when considering implementing rules, ordinances, or legislation that affects the homebuilding industry, often the jurisdiction decision-makers have their minds made up before the process begins. That is counterproductive and results in a poor outcome; one that robs many Americans of the ability to own their own home.

APPENDIX A

Typical Regulation Costs (per house or per unit; single family and condominium <u>not</u> CBD), Travis County, Texas.

The following amounts are average. These vary greatly depending on municipality.

Preliminary Plat Fees	$60	
Final Plat Fees	$75	
Review & Inspection Fees	$720	
Bond premiums (in lieu of cash fiscal)	$100	
Preliminary Plan Engineering	$250	
Final Plat Engineering	$300	
Construction Plan engineering for permits	$300	
Zoning and platting legal	$175	
Erosion Controls	$300	
Misc. exactions	$125	Note 1
Detention/Filtration ponds	$400	Note 2
Special consultants (zoning, environmental, etc.)	$100	
Street Extras (incl. ADA and special sidewalks)	$300	
Environmental Inspections	$100	
2008 Code Changes - local	$1,800	
NEC 2008 Code changes	$350	
Additional architectural services for periodic code changes	$85	
Building permit	$303	
Electrical Permit	$173	
Energy Check	$225	
HVAC (mechanical) Permit	$93	
Plumbing Permit	$99	
Other Permits	$4,100	
Driveway curb cut	$185	
Impervious Cover Verification	$85	
Inspection fees	$315	
Silt Fence	$200	
SWPP permits and rain inspections	$75	
Utility Call Outs	$50	
"Hotwall" insulation	$65	
Lawn irrigation (sensor and drip at ROW)	$300	
Fire sprinklers (attached units only)	$4,000	
Capital recovery fees	$2,225	
Impact fees (see “other permits”)		
Fire retardant overhangs	$55	
Land and soft cost interest during entitlement process	$700	Note 3
Visitability requirements	<u>$150</u>	
Subtotal	**$18,938**	**$18,938**

	Site Specific		
	Impervious Cover (land purchased and not utilized)	$1,200	Note 5
	Cave or CEF Setbacks and mitigation	$600	Note 6
	Tree Mitigation and tree setbacks	$1,350	Note 7
	Slope (land purchased and not utilized)	$800	Note 8
	Parkland or habitat dedication (land purchased and not used or fee in lieu)	$20	Note 9
	Subtotal	$3,970	$3,970
	GRAND TOTAL		**$22,908**
	At 18% Gross Margin		**$24,492**

Notes

1	Has been as high as $2,600. This includes donating money to park improvements, neighborhood programs, affordable housing funds, etc.
2	Has been as high as $1745. Higher cost includes municipality-mandated specialty drainage systems in "environmentally sensitive" areas. This DOES NOT include substantial ongoing maintenance costs for the residents of the subdivision.
3	Has been as high as $1,400, where inordinate approval delays are encountered
4	N/A
5	Has been as high as $2950 where property is restricted to as low as 15% impervious cover
6	Has been as high as $945 where an entire lot or lot group area is rendered undevelopable
7	Average; Has been as high as $3,350 and loss of use of an entire $40,000 lot (or more).
8	Has been as high as $1900 where construction on slopes renders property purchased unusable
9	Has been as high as $3600 where large portions of a purchased tract are deemed "protected habitat"
10	Possibly much higher depending on size or number of trees
11	Window revision in 2006 IRC implementation was the single most expensive and sweeping cost item (changes were required to 60% ALL floor plans.) Architectural services expenses on this item only: $150,000, re-bid, re-catalogue all product and information.

APPENDIX B

Sales prices in suburban zip code (78653) vs. urban zip code (78751)

Actual sales and listings (Trailing six month period ending March, 2012)

Source: Austin MLS data

Recent Sales and Listings 78751 (Central City)

Address	YrBlt	SqFt	S$/SF	Sold Price
932 E 56th ST	1949	572	222	127,000
917 E 48th ST	1949	640	227	145,000
909 E 56th ST	1951	720	228	163,875
921 E 53rd ST	1953	720	304	219,000
929 E 55th ST	1946	742	243	180,250
5207 Eilers	1949	754	265	200,000
5515 Avenue F	1948	808	274	221,000
304 W North Loop	1946	840	174	146,000
1002 E 43rd ST	1947	840	248	208,500
704 W North Loop BLVD	1933	884	153	135,000
902 E 53rd ST	1940	888	159	141,000
5205 Avenue H	1940	922	194	178,600
5509 Bennett AVE	1949	1012	119	120,000
3908 Becker AVE	1938	1020	284	290,000
904 E 44th ST	1937	1034	243	251,000
610 Fairfield LN	1947	1058	266	281,000
708 E 47th ST	1949	1088	253	275,000
607 W North Loop BLVD	1953	1092	192	210,000
106 W 55th ST	1952	1120	207	232,000
5001 Rowena AVE	1935	1134	231	262,000
4206 Avenue B	1925	1140	323	368,000
4806 Avenue H	1925	1180	236	278,000
4707 Avenue H	1934	1210	250	302,000
4109 Peck AVE	1948	1218	315	383,500
4407 Avenue D	1947	1228	195	240,000
1017 E 45th ST	1950	1230	152	187,000
4007 Speedway	1925	1256	255	320,000
4700 Eilers AVE	1950	1280	257	329,000
306 Franklin BLVD	1947	1288	106	136,000
4502 Avenue F	1920	1308	278	363,000
907 E 40th St	1947	1334	154	205,500
800 E 44th ST	1941	1351	289	390,000
306 44th St # 1	1925	1372	200	274,000

929 E 54th ST	2011	1404	191	268,000
939 E 50th St	1948	1440	141	203,000
4313 Speedway	1929	1444	260	375,000
702 North Loop BLVD	1950	1490	210	313,500
4901 Caswell AVE	1937	1504	189	285,000
505 E 39th	1922	1568	265	416,000
701 E 46th ST	1953	1619	221	358,000
4703 Duval ST	1995	1738	222	385,000
501 W 55 1/2 ST	1950	1760	156	274,217
3902 Willbert	1940	1821	188	342,000
4016 Duval ST	1928	1844	217	400,000
610 W North Loop BLVD	1957	2007	187	375,000
5204 Avenue H	1938	2019	129	261,000
4309 Avenue H	1925	2188	207	454,000
5311 Duval ST	1910	2270	121	275,000
4714 Evans	1946	2274	204	465,000
3909 Avenue G	1902	2284	276	630,000
503 E 41st ST	1920	2492	233	580,000
4100 Speedway	2003	2597	250	650,000
716 Park BLVD	1950	2624	206	540,000
TOTAL OR AVG		**72,670**	**215**	**15,611,942**
TOTAL OR AVG		**1,371**		**294,565**

Recent Sales and Listings 787653 (Suburban location)

Address	YrBlt	SqFt	S$/SF	Sold Price
11307 Aus-Tex Acres LN	1975	860	100	86,000
12612 Saint Marys DR	2005	1036	56	58,000
12845 Chime DR	2006	1036	58	60,000
11908 Briarcreek LOOP	2002	1076	48	52,101
11816 Briarcreek LOOP	2003	1076	74	80,000
12316 Drummond DR	2006	1102	73	80,000
14408 Pebble Run PATH	2006	1114	67	75,000
17732 Golden Valley DR	2007	1140	44	50,000
12208 Briarcreek LOOP	2003	1140	79	89,500
14415 Pebble Run PATH	2006	1183	63	74,000
16409 Hamilton Point CIR	2005	1213	66	80,000
18201 Skysail DR	2003	1238	52	64,449
13200 Constellation DR	2005	1257	56	71,000
18208 Great Valley DR	2003	1300	46	60,205
11520 Melstone DR	2004	1300	46	60,000
11513 Hungry Horse DR	2004	1302	48	62,400
14300 Pebble Run PATH	2006	1304	64	83,900
17808 Powder Creek DR	2003	1324	49	65,007
12813 Doorbell	2006	1324	56	74,050
13520 Briarcreek LOOP	2005	1332	41	55,000
11400 Hungry Horse DR	2004	1332	43	56,700
18016 Belfry PASS	2007	1332	42	56,300
13524 Theodore Roosevelt ST	2005	1346	54	73,000
13517 Lyndon B Johnson ST	2006	1355	79	107,000
11602 Marshall ST	2004	1371	55	74,900
14308 Pebble Run	2006	1393	52	72,000
11829 Big Sky DR	2010	1397	54	75,000
12216 Briarcreek LOOP	2002	1398	37	51,500
12413 Briarcreek LOOP	2003	1398	54	75,000
13433 Briarcreek LOOP	2005	1398	57	79,000
18224 Belfry PASS	2007	1403	49	68,681
12709 Bella PKWY	2006	1417	59	83,000
12945 White House ST	2005	1422	58	82,000
12821 White House ST	2004	1422	56	80,199
5640 Colinton AVE	2006	1429	60	86,300
11809 Athens	2003	1436	48	69,000
14401 Joy Lee LN	2007	1443	67	97,000
11601 Hereford ST	2005	1449	53	77,000
12011 Bastrop ST	2004	1449	52	75,200
00 MURRAY-LEXINGTON AVE	1965	1550	99	153,000

11808 Briarcreek LOOP	2002	1567	50	78,250
17716 Powder Creek	2002	1567	66	103,000
11508 Murchison ST	2002	1574	51	79,900
11403 Hereford ST	2005	1574	52	81,099
11501 Morgans Point ST	2002	1574	49	76,865
11411 Hereford ST	2005	1574	63	99,500
11401 Morgans Point ST	2003	1574	63	99,900
11309 Brownsboro CT	2005	1574	78	122,500
18113 Belfry PASS	2006	1579	44	70,000
11501 Burton ST	2007	1579	54	85,000
14413 Pebble Run PATH	2006	1590	51	80,350
16305 Hamilton Point CIR	2004	1590	49	77,900
13416 Mizzen ST	2004	1595	49	78,000
18221 Maxa DR	2006	1595	50	80,000
13520 Theodore Roosevelt ST	2005	1597	54	86,000
18201 Canopy LN	2004	1610	66	107,000
18008 Canopy LN	2004	1619	51	81,777
12829 Carillon WAY	2007	1634	44	72,565
11533 Shady Meadow WAY	2004	1640	76	124,900
11505 Burton ST	2007	1644	52	85,000
11407 Lapoynor ST	2004	1653	48	80,100
11932 Kilmartin LN	2003	1699	65	109,900
13609 John F Kennedy ST	2006	1708	52	89,000
13500 James Garfield ST	2008	1708	61	105,000
12213 Dwight Eisenhower	2007	1708	70	120,000
13405 John Tyler ST	2005	1711	53	90,000
14417 Pebble Run PATH	2006	1718	44	75,500
13624 John F Kennedy ST	2006	1718	54	93,000
16009 Hamilton Point CIR	2004	1718	54	92,500
13509 Lyndon B Johnson ST	2006	1722	63	108,000
11408 Brenham ST	2009	1762	48	85,000
16800 Hamilton Point CIR	2004	1781	41	73,000
12125 Bastrop	2006	1813	49	89,000
18201 Flathead DR	2006	1818	41	74,719
16101 Hamilton Point CIR	2005	1835	41	74,500
5624 Broughham WAY	2006	1856	57	105,000
12820 James Madison ST	2005	1909	56	107,500
11406 Dimmit	2006	1910	47	88,849
18012 Belfry PASS	2006	1962	35	68,150
12628 Saint Marys DR	2005	1992	49	98,000
13841 Fallsprings WAY	2006	2047	66	135,000
18115 Gallant	2004	2051	45	92,000

12804 Saint Marys DR	2007	2066	39	80,107
13600 Glen Mark DR	2004	2085	71	148,400
5709 Clyde LN	2006	2088	45	95,000
11608 Prince Phillip WAY	2004	2096	60	124,900
12301 Granton CV	2006	2160	44	94,900
13316 Prairie Sage CV	2007	2161	56	122,000
13416 Holly Crest TER	2003	2192	55	120,000
11508 Knapple CV	2003	2193	52	115,001
11605 Sunny Creek LN	2006	2198	59	130,000
12704 Saint Marys DR	2005	2322	41	96,158
11501 Marshall ST	2004	2350	45	104,999
16101 ANDERSON RD	1910	2400	100	239,781
18701 Lockwood RD # a	1980	2401	112	268,000
18220 Skysail DR	2004	2406	41	99,000
11513 Shadow Creek	2006	2421	48	116,000
12917 Carillon WAY	2007	2466	35	87,500
13605 John F Kennedy ST	2006	2482	34	83,420
13620 John F Kennedy ST	2006	2482	41	102,999
13809 Tercel TRCE	2007	2591	74	193,000
11601 Falcon Trail CT	2008	2800	68	189,500
13805 Shadowlawn TRCE	2004	2896	54	156,250
13717 Shady RDG	2005	2897	62	179,589
13708 Long Shadow DR	2007	3004	60	180,000
13825 Field Stream LN	2007	3004	68	205,000
13700 Shadowglade PL	2004	3028	54	164,500
13708 Shadowglade	2004	3028	54	165,000
16116 Voelker LN	2004	3071	70	214,500
13712 Shadowglade PL	2005	3187	56	180,000
11212 Terrace Meadow WAY	2007	3313	86	285,000
14425 Bois D Arc LN	1998	3523	108	380,000
13716 Shadowglade PL	2005	3815	50	190,000
TOTAL OR AVG		**204,572**	**57**	**11,706,120**
TOTAL OR AVG		**1,810**		**103,594**

APPENDIX C

Fianancial Analysis of Impact of Regulation Costs on Potential Homebuyer Pool for the City of Austin, Texas.

Home with ALL Appendix A regulation costs included in sales price (differential: $24,000)	
Home Selling Price	$187,000
Downpayment %	5.0%
Downpayment $	$9,350
Mortgage Amount	$177,650
Mortgage Interest Rate	4.2%
Mortgage term (years)	30
Annual Mortgage Payment (P+I)	$10,425
Annual property taxes	$4,488
Annual homeowner's insurance	$1,200
Annual Mortgage Payment (PITI)	$16,113
Assumed payment to income ratio	33.0%
Qualifying annual income	$48,817

Home with NONE of the Appendix A regulation costs included in sales price	
Home Selling Price	$163,000
Downpayment %	5.0%
Downpayment $	$8,150
Mortgage Amount	$154,850
Mortgage Interest Rate	4.2%
Mortgage term (years)	30
Annual Mortgage Payment (P+I)	$9,087
Annual property taxes	$3,912
Annual homeowner's insurance	$1,200
Annual Mortgage Payment (PITI)	$14,199
Assumed payment to income ratio	33.0%
Qualifying annual income	$43,027

Number of additional households that could qualify (utilizing Census bureau income distribution data for Austin): approximately 18,000 additional households would qualify; an additional 5.6% of the households in Austin, Texas.