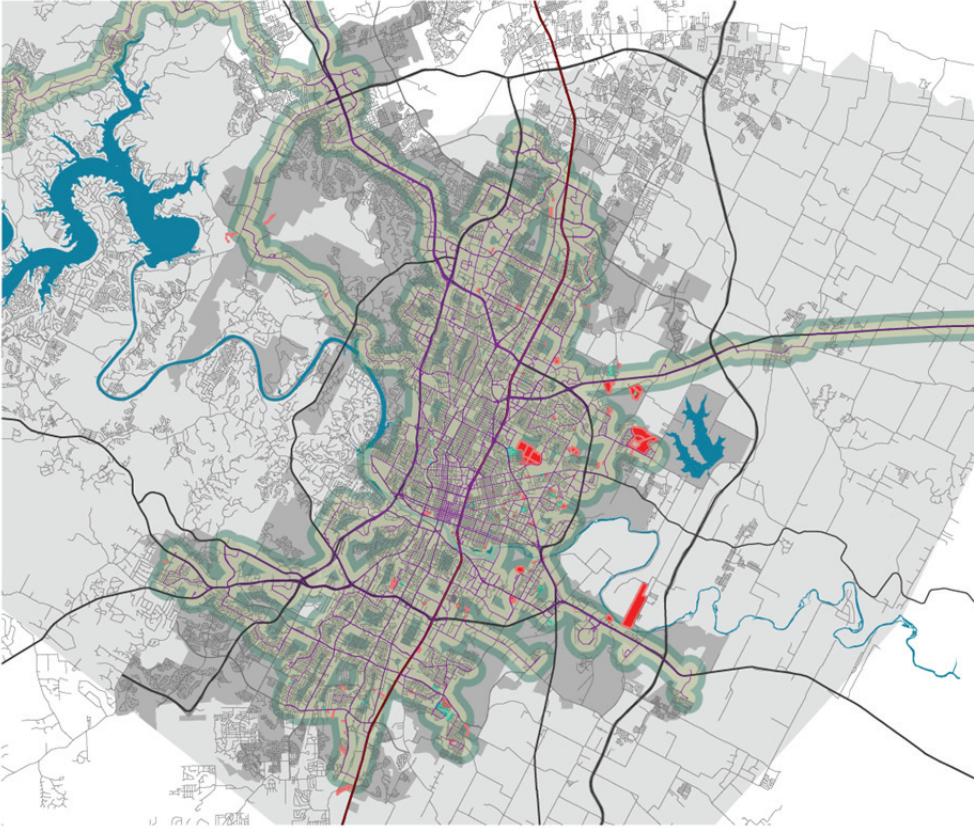


# S.M.A.R.T. Housing:

## A Review & Recommendations



## Topics in Sustainable Development

### 2011 Report

This report and related data are available online at:

<http://soa.utexas.edu/csd/outreach/classprojects>

# S.M.A.R.T. Housing

## A Review & Recommendations

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## Topics in Sustainable Development

## 2011 Report



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# Participants

The following individuals participated in a panel discussion series held at the University of Texas during the spring of 2011. These panel discussions provided a wealth of information from multiple, often conflicting perspectives. Participants were asked to discuss whether S.M.A.R.T. Housing should be revived as it was initially conceived, or if the knowledge gained in the process of implementation provided insights required to make changes in response to ever-changing conditions like the economy. The lessons learned from the panelists are stated in the **Diversity of Perspectives** portion of this report.

## Progenitors

<b>Stuart Hersh</b>	<i>Former Director</i> City of Austin S.M.A.R.T. Housing™
<b>Paul Hilgers</b>	<i>Former Director</i> Neighborhood Housing & Community Development City of Austin S.M.A.R.T. Housing™

## Affordable Housing Advocates

<b>Isabelle Headrick</b>	<i>Executive Director</i> Blackland Community Development Corporation
<b>Mark Rodgers</b>	<i>Executive Director</i> Guadalupe Neighborhood Development Corporation
<b>Javier Delgado</b>	<i>Project Coordinator</i> City of Austin Neighborhood Housing & Community Development
<b>Michael Gatto</b>	<i>Executive Director</i> Austin Community Design & Development Center



#### *Users*

**Jennifer McPhail**     *Austin Organizer*  
ADAPT of Texas

**Susana Almanza**     *Executive Director*  
PODER

#### *City*

**Garner Stoll**     *Chief Planner*  
City of Austin

**Fritz Steiner**     Imagine Austin,  
Comprehensive Plan  
Committee Member  
*Dean*  
UT School of Architecture

#### *Citizen Commissioners*

**Dave Sullivan**     *Chair*  
Austin Planning  
Commission

**Melissa  
Whaley-Hawthorne**     *Vice President*  
Austin Permit Service

**John Limon**     *Member*  
Community Development  
Commission

#### *Utilities*

**Daryl Slusher**     *Assistant Director of*  
*Environmental Affairs*  
Austin Water Utility

**Richard Morgan**     *Manager*  
Austin Energy Green  
Building

#### *Developer/Realtor/Builder*

**Charles Betts**     *Executive Director*  
Downtown Alliance

**Julie Fitch**     *Director of Policy*  
Downtown Alliance

**Beth Gatlin**     *Executive Director*  
Austin Board of Realtors

<b>Christina Ortiz</b>	<i>Government Affairs</i> Austin Board of Realtors
<b>Harry Savio</b>	<i>Executive Vice President</i> Capital Area Home Builders Association
<b>Roger Arriaga</b>	<i>Dir. of Government Affairs</i> KB Homes
<b>Terry Mitchell</b>	<i>President</i> Momark Development
<i>Neighborhoods</i>	
<b>Steven Aleman</b>	<i>President</i> Austin Neighborhoods Council
<b>Laura Morrison</b>	<i>Councilperson</i> City of Austin

## About the Researchers

Each spring semester at the University of Texas, graduate students from Law, Architecture, Planning, Business and Public Policy participate in Participatory Action Research (PAR) of a pressing problem in the city of Austin. As stated in a previous report, “PAR refers to research, done in collaboration with local communities, which hopes to produce not only new knowledge in (and for) the academy, but also social and environmental change in (and for) the community.”<sup>1</sup>

As in years past students read a great deal of theoretical literature while simultaneously testing the applicability of such through specific local situations. Previous reports have included:

Alley Flat Initiative (2008)<sup>2</sup>

East Austin House Farm (2009)<sup>3</sup>

Without exception students in the spring 2011 semester were engaged and challenged by the complexity of the S.M.A.R.T. Housing Initiative.

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1 Wilson, Barbara (ed.). The East Austin House Farm: Topics in Sustainable Development 2009 Report. Available at [http://soa.utexas.edu/files/csd/AFI\\_2009.pdf](http://soa.utexas.edu/files/csd/AFI_2009.pdf)

2 Available at: <http://soa.utexas.edu/files/csd/AFI.pdf>

3 Ibid, Wilson.



# Executive Summary

In this report, graduate student researchers at the University of Texas share their findings on Austin’s waning S.M.A.R.T. Housing Initiative. Our recommendation to revise and expand the original initiative is based on the synthesis of multiple perspectives gleaned from a series of panel discussions, follow-up interviews, data collection, and analysis. By “synthesis,” we mean that we have found enough common ground between stakeholders to catalyze the recreation of a coherent, successful policy for S.M.A.R.T. Homes. In sum, our six general recommendations are:

1. Through regulation the city should provide preferred treatment for preferred types of homes.
2. The city will benefit by encouraging, through regulation, all kinds of homes in all parts of town.
3. In order to meet the 2020 Climate Protection Plan, all new affordable homes sponsored by the city should be S.M.A.R.T.
4. Just like roads, electrical systems and water systems, the city should understand and develop affordable homes as necessary infrastructure that will contribute significantly to related public “goods.”
5. As recommended by the city Housing Commission, the 2012 bond issue should include \$100 Million for affordable/S.M.A.R.T. homes.
6. In order to implement the above recommendations, the city should adopt a simplified process, similar to that articulated in the **Accredited Professionals** portion of this report.

In the following sections we first discuss the **Existing Conditions and Lessons Learned** from speaking to representatives of the city and its utilities, business interests, various advocacy groups and others who participated in the program. We then demonstrate the continued need for such a program and outline possible **Choices** regarding the program’s future. From this analysis we suggest a **Preferred Choice**.

# Existing Conditions & Lessons Learned

## S.M.A.R.T. Housing

**S.M.A.R.T.** stands for **Safe, Mixed-income, Accessible, Reasonably-priced, and Transit-oriented.**

**Safe** means housing that complies with the City of Austin Land Development Code and meets the building codes adopted by the City of Austin.

**Mixed-income and Reasonably-priced** means that at least 10% of the units in a project meet the reasonably-priced standards.<sup>4</sup>

**Accessible** means that 10% of multifamily units in a project must be accessible, but all units must be *visitable* as described in the City of Austin's visitability ordinance.

**Transit-oriented** multifamily units must be located within ¼ mile of a Capital Metro transit route that runs every 20 minutes or less during peak hours. No requirements exist currently as to walkability or bikeability, although these are important aspects of transit friendly development.

Additionally, all S.M.A.R.T. Housing must achieve, at a minimum, a one-star Austin Energy Green Building rating.<sup>5</sup>

In exchange for achieving or exceeding all of the above, developers receive up to 100% fee waivers,<sup>6</sup> expedited permit review, and in-house city staff available to advocate for and troubleshoot potential projects. Renovations are not specifically addressed in the current code, and it is widely accepted that S.M.A.R.T. Housing is geared toward new construction.

When the Austin City Council passed **the S.M.A.R.T. Housing Initiative** in April of 2000, it **signaled an**

4 See: <http://www.ci.austin.tx.us/ahfc/smart.htm>

5 Neighborhood Housing and Community Development, S.M.A.R.T. Housing Policy Resource Guide, Austin, Texas: City of Austin, March 2007.

6 Fee waivers equal about \$1500 for single-family construction and an average of about \$580 per unit for multifamily.

Safe  
Mixed-income  
Accessible  
Reasonably-  
Priced  
Transit-  
oriented  
&  
Green

**important shift from a prescriptive to an incentive-based development model.** In reaction to the rising costs of local housing, the S.M.A.R.T. Housing Initiative recognized that the City's Land Development Code could encourage preferred types of development and levels of affordability by providing incentives such as streamlined review, fee waivers, and staff liaisons to help shepherd projects through the permitting process.<sup>7</sup> S.M.A.R.T. Housing was successful, building more than a thousand units in its first year and over 10,000 total units the first eight years of the program.<sup>8</sup> Ten years later, the development of new homes under this program must meet even greater needs.

Currently, the development of S.M.A.R.T. Housing is experiencing an extreme lag in comparison to its heyday. Advocates, such as non-profit organizations, are working in collaboration with the City and neighbors to successfully develop units, but at a rate of only several per year.

In addition to the economic recession other factors have led to this decline. We heard from several participants that there is a lack of communication between pertinent agencies that stifles the potential to realize the level of S.M.A.R.T. Housing production at the level we saw during its peak. As reported by stakeholders, an internal push from within the City encouraged City Council to support the initiative and hold City staff accountable. As a result, effective facilitation between developers and citizens took place. City Council held City stakeholders accountable to ensure delivery of incentives and other promises, i.e. S.M.A.R.T. Housing development applications truly were being placed on the top of the stack for review and a quick turnover rate was honored. Current City processes do not connect the groups of stakeholders that need to be connected in order for S.M.A.R.T. Housing to reach its potential.

The S.M.A.R.T. Housing Initiative signaled an important shift from a prescriptive to an incentive-based development model

## S.M.A.R.T. Housing & Imagine Austin

Austin is currently undergoing a major comprehensive planning effort called *Imagine Austin*. A crucial step in this process involves Austin's diverse neighborhood associations. Following the recommendations of the 1979

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7 "S.M.A.R.T. Housing™: A strategy for Producing Affordable Housing at the Local Level, Austin, Texas," ICMA Best Practices 2005.

8 City of Austin Audit.

*Austin Tomorrow* comprehensive plan, the current neighborhood planning process aims to “develop and implement detailed plans tailored to the needs of each neighborhood.”<sup>9</sup> As we discuss in a later section entitled **Neighborhood Planning Perspective** each neighborhood has identified their strengths and assets, needs and concerns and established goals for enhancing their long-term livability. The City identified several focal issues to be addressed during this planning process. Unfortunately there was little explicit information about new home development, and even less about S.M.A.R.T. housing specifically, provided by the city or addressed by these neighborhood groups. **The absence of specific attention to affordable and S.M.A.R.T. Housing in the Neighborhood Plans is, then, a significant problem.**

The absence of specific attention to affordable and S.M.A.R.T. Housing in the Neighborhood Plans is, then, a significant problem

## S.M.A.R.T. Housing & Austin Energy Green Building Program

Since its inception in 2000, all qualified S.M.A.R.T. Housing units have been required to receive at least a “one-star” rating from the award-winning<sup>10</sup> Austin Energy Green Building (AEGB) program.<sup>11</sup> This minimum standard has helped S.M.A.R.T. Housing fulfill its foundational goals of safe, transit-oriented housing that incorporates green building features. While the specific AEGB requirements for S.M.A.R.T. Housing are different for the AEGB single and multi-family<sup>12</sup> rating systems, they both address the

9 See: [http://www.ci.austin.tx.us/planning/neighborhood/planning\\_history.htm](http://www.ci.austin.tx.us/planning/neighborhood/planning_history.htm)

10 The AEGB program has, “received awards from the National Association of Homebuilders and the U.S. Green Building Council; and, is the only U.S. program to receive a Local Government Honor Award at the United Nations Earth Summit Rio Conference on Sustainable Development in 1992.”

11 S.M.A.R.T. Housing Resolution 040115-44, pg. 3 states that S.M.A.R.T. projects must comply with “Level One Standards of the AEGB program. AEGB awards points for the achievement of green building measures outlined in their rating systems. The total points earned for each project determines its corresponding “star” level, which can range from “one star” as the entry level, to “five star” as the highest level. AEGB Multifamily Guide Book, v2010, pg. 1. Available at <https://my.austinenenergy.com/wps/portal/aegb>

12 The AEGB Multifamily Program is available to “residential and mixed-use developments up to six stories above grade in the Austin Energy service area.” AEGB, Multifamily Rating Guidebook v2010\_01, pg. 1



issues of transportation, building energy performance, water use reduction, indoor air quality, construction waste management, and environmental education and recycling opportunities for residents.<sup>13</sup> Regardless of the awarded star level, “achieving an Austin Energy Green Building Rating confirms that the buildings will have:

- Lower utility bills and reduced energy and water use
- Improved indoor air quality and occupant health
- Reduced operation and maintenance costs
- Increased durability
- Lasting value and benefits for our community and planet.”<sup>14</sup>

Over the past decade **AEGB and S.M.A.R.T. Housing have complemented each other**. Feedback from various S.M.A.R.T. Housing stakeholders has confirmed that the collaboration between these programs has directly served the interests of S.M.A.R.T. housing residents, who have benefited from safe, healthy living environments with lower utility costs and access to transit options. Additionally, from Austin Energy’s perspective, the S.M.A.R.T. Housing program has helped the Multifamily AEGB program grow. As stated in the 2009 AEGB Annual Report, “Thanks to programs like [S.M.A.R.T. Housing], AEGB-rated units made up 76 % of all multifamily units completed in Austin in 2009.”<sup>15</sup> In addition to these qualitative benefits, AEGB-rated S.M.A.R.T. Housing units have resulted in reductions in energy and water consumption, which we quantify in a following section.

Over the past decade AEGB and S.M.A.R.T. Housing have complemented each other

The successful union of these environmental and social objectives has garnered national and international attention<sup>16</sup> and helped establish Austin as a city with engaged citizens who are committed to making “Austin the most livable city in the country.”<sup>17</sup> Thus, a decade after the green affordable housing concept was initiated, the partnership between S.M.A.R.T. Housing and AEGB has proven mutually

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13 AEGB Single and Multifamily Rating Guidebooks

14 AEGB, Multifamily Rating Guidebook, pg. 1. Available at <https://my.austinenergy.com/wps/portal/aegb>

15 AEGB 2009 Annual Report, pg. 10. Available at <https://my.austinenergy.com/wps/portal/aegb>

16 Over the years, S.M.A.R.T. Housing has received many accolades which can be found under the “S.M.A.R.T. Housing Recognition” link at <http://www.ci.austin.tx.us/ahfc/smart.htm>

17 Austin Climate Protection Plan Ordinance, Resolution No. 20070215-023. Available at <http://www.ci.austin.tx.us/acpp/acpp.htm>

beneficial to the organizations, individuals, and communities each seek to serve.

## S.M.A.R.T. Housing & the 2020 Climate (& Community) Protection Plan

In 2007, the City of Austin broadened its livability commitment by resolving to take local action to address the impacts of climate change. In response to the federal government's failure to "enact meaningful responses to reverse the threat of global warming,"<sup>18</sup> Austin developed its CPP and committed itself to a series of actions aimed at reducing local contributions to greenhouse gas emissions. As it stands today, the CPP is comprised of the following five main components, which are scheduled to be completed by either 2015 or 2020:

- Municipal Plan: to "make all City of Austin facilities, fleets, and operations totally carbon neutral by 2020"
- Utility Plan: to "Expand conservation, energy efficiency, and renewable energy programs to reduce Austin Energy's carbon footprint; cap carbon dioxide emissions from existing power plants; and make any new electricity generation carbon-neutral."
- Community Plan: to "Engage Austin citizens, community groups, and businesses to reduce greenhouse gas emissions throughout the community."
- "Go Neutral" Plan: to "provide tools and resources for citizens, businesses, organizations, and visitors to measure and reduce their carbon footprint."
- Homes and Buildings Plan: to "Update building codes for new buildings to be the most energy-efficient in the nation, pursue energy efficiency upgrades for existing buildings, and enhance Austin Energy's Green Building program."<sup>19</sup>

While the CPP outlines wide-ranging and long-term objectives, it also includes short-term and specific strategies for achieving the ambitious goal of making Austin "the

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18 Ibid.

19 Ibid..

leading city in the nation in the fight against climate change.”<sup>20</sup> Although some tactics are underway and progress<sup>21</sup> has been made, it is evident that **meeting the bold objectives of the CPP will require ongoing collective action and creative problem solving of Austin’s citizens, businesses, leadership, and regional neighbors.**

To this end, the Homes and Buildings Plan of the CPP contains four specific action items that not only require compliance by future S.M.A.R.T. Housing developments, but more importantly, provide opportunities for the City of Austin to continue its historical trend of taking the lead in developing innovative, “uniquely Austin” solutions for the long-term social and environmental stability of its community.

For example, the CPP states that by 2015, Austin’s building code will require that “all new single family homes...be zero net energy capable,”<sup>22</sup> defined as “approximately 65 percent more efficient than the 2001 City of Austin energy code.”<sup>23</sup> While design and construction techniques are critical for meeting this objective, alternative energy sources have also been identified as an integral component of this plan. As stated on the CPP website, by 2015 “all new single-family homes [should be] capable of meeting 100% of their energy needs with on-site generation of renewable energy.”<sup>24</sup> To guide the implementation of this objective, the Austin City Council established a Zero Energy Capable Homes Task Force (ZECH) to assess the, “cost-benefit ... goals, timelines, benchmarks and implementation strategies for making all new single-family home construction in Austin zero energy capable by 2015.”<sup>25</sup> The Task Force, comprised of a variety of stakeholders<sup>26</sup> including

Meeting the bold objectives of the CPP will require ongoing collective action and creative problem solving of Austin’s citizens, businesses, leadership, and regional neighbors

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20 Ibid.

21 Austin Climate Protection Plan, 2010 Annual Report.  
Available at: [http://www.ci.austin.tx.us/acpp/acpp\\_progress.htm](http://www.ci.austin.tx.us/acpp/acpp_progress.htm)

22 Austin Climate Protection Plan Ordinance, Resolution No. 20070215-023. Available at:  
<http://www.ci.austin.tx.us/acpp/acpp.htm>

23 Austin Energy Green Building, 2009 Annual Report, pg. 23.  
Available at: <https://my.austinenenergy.com/wps/portal/aegb>

24 City of Austin Climate Protection Program. “About the Program.” Accessed May 1 2011.  
[http://www.ci.austin.tx.us/acpp/homesbldgs\\_plan.htm](http://www.ci.austin.tx.us/acpp/homesbldgs_plan.htm)

25 Austin Zero Energy Capable Homes Ordinance, Resolution No. 20071018-036. Available at  
[www.ci.austin.tx.us/edims/document.cfm?id=110477](http://www.ci.austin.tx.us/edims/document.cfm?id=110477)

26 Appendix One of the Zero Energy Capable Homes Task Force Report lists the specific Task Force members, described as representing the, “local construction industry trade associations (including builders, HVAC, and other trades), affordable housing providers, energy efficiency advocates, the City

affordable housing providers, determined that incremental advancements to the City’s Energy Code provided a “possible and practical”<sup>27</sup> means for meeting the objectives of the zero energy homes goal while also serving the public good through lower utility bills, a reduced need for new power generation capacity, and increased air standards through lower carbon dioxide emissions.

Additionally, in accordance with the Task Force findings, the CPP stipulates that “all other new private and public sector buildings” will be required to meet building codes that “increase energy efficiency by at least 75% by 2015.”<sup>28</sup> In support of the zero energy homes and increased efficiency targets, the City of Austin has adopted and implemented<sup>29</sup> the latest version (2009) of the International Energy Conservation Code (IECC) with substantial local amendments that are intended to help the City reach its goal of 700 megawatts (MW) of utility energy savings by 2020.<sup>30</sup>

Moreover, the CPP also stipulates that the City of Austin implement “policies identifying opportunities for energy efficiency retrofits and upgrades, and [require] all cost-effective retrofits and upgrades for all properties at the point of sale.”<sup>31</sup> With the passing of the Energy Conservation Audit and Disclosure Ordinance (ECAD),<sup>32</sup> the City of Austin is actively working to educate potential homebuyers on the long-term implications of operational building costs

- 
- Resource Management Commission, the Electric Utility Commission, Texas Gas Service, and City staff.”
- 27 Zero Energy Capable Homes Task Force, “Memorandum: Final Report to Council,” September 5, 2007, pg. 12.
- 28 Austin Climate Protection Plan Ordinance, Resolution No. 20070215-023. Available at <http://www.ci.austin.tx.us/acpp/acpp.htm>
- 29 “Austin City Council Approves 2009 IECC, Effective October 1” Available at <http://bcap-ocean.org/news/2010/july/07/austin-city-council-approves-2009-iecc-effective-october-1>. The scope of the 2009 IECC includes, “residential single-family housing and multifamily housing three stories or less ... and applies to new buildings and additions/alterations/renovations/ repairs.” IECC 2009 Residential Nationwide Analysis, pg. 171. Available at <http://bcap-ocean.org/resource/impacts-2009-iecc-residential-buildings-state-level>
- 30 Austin Climate Protection Plan Ordinance, Resolution No. 20070215-023. Available at <http://www.ci.austin.tx.us/acpp/acpp.htm>
- 31 Ibid.
- 32 The City of Austin, Energy Conservation Audit and Disclosure Ordinance was passed in November of 2008 and took effect on June 1, 2009. The City of Austin, Energy Conservation Audit and Disclosure Ordinance, Austin City Code Chapter 6-7. Available at <http://www.austinenergy.com/About%20Us/Environmental%20Initiatives/ordinance/index.htm>

while simultaneously attempting to improve the energy-efficiency of Austin's housing stock.

Finally, the Home and Buildings Plan of the CPP specifies that the City of Austin develop, "policies requiring achievement of upper-tier ratings [in the AEGB rating system] in cases where green building is mandated as a product of City programs or negotiations."<sup>33</sup>

Through all of these policies, the City of Austin has expressed that **energy-efficient building practices and improvements are both a private and public good** because renters and homeowners benefit from lower energy bills, and the City achieves lower peak power demand and a reduced carbon footprint. The prior success of S.M.A.R.T. Housing to support and implement the AEGB program suggests that there may be a significant opportunity for S.M.A.R.T. Housing to be expanded and re-energized to bolster the City of Austin's CPP goals while reaping the many other benefits that S.M.A.R.T. Housing provides.

Discussions between Austin Energy (AE) and advocates for both affordable housing and business interests began meeting in 2009 to discuss the consequences of Austin's Climate Protection Plan. One result of those ongoing discussions has been the proposal to rename the initiative, the *Community* Protection Plan, thus reflecting concern for citizens who are disproportionately affected by increased energy costs. Discussions are ongoing as AE continues to develop a business model that can decrease energy production and maintain income flows to the city without also burdening our most vulnerable citizens.<sup>34</sup>

Energy-efficient building practices and improvements are both a private and public good

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33 Austin Climate Protection Plan Ordinance, Resolution No. 20070215-023. Available at <http://www.ci.austin.tx.us/acpp/acpp.htm>

34 See Toohey, M. (2009). "Will Clean Power Hurt Poor?" in Austin American Statesman; Austin, TX; Oct. 12, B1-B4.

## A Diversity of Perspectives

Through a series of themed panel discussions, we were able to gain valuable insights from representatives of the following diverse perspectives: progenitor, advocates, business, city, user, utility and neighborhoods. While these categories do not encompass every view that exists in Austin, they did highlight important points of agreement and disagreement among the different kinds of people directly invested in and/or affected by decisions associated with S.M.A.R.T. housing.

Among these diverse stakeholders, there are several themes that different categories of stakeholders have in common: Facilitated public processes, public perception, a diverse housing stock and effective incentives for market-rate developers are key aspects shared by multiple groups. Based on what we have heard from our panelists, there does not seem to be opposition to any of these by any of the groups with the sole exception of implementing diverse housing stock in all neighborhoods. Stakeholders from the City perspective and from the neighborhood association perspective could not, implicitly or explicitly, completely agree on supporting a diverse housing stock in all neighborhoods. They are not able to agree with this aspect because of the desires and attitudes expressed by citizen groups. Neighbors and citizens who inform these groups either have perceptions about affordable housing and/or are concerned with issues such as traffic and density. However, since the neighborhood planning groups are proponents of improved public processes and the City recognizes the need to address public perception, a significant opportunity exists. That opportunity can be surmised in Table 1, which summarizes the key concerns of each perspective.

Table 1: Summary of Perspectives

Stakeholder perspective	Summary of Key Concerns from Each Perspective
Progenitor	Generate political will among citizens; provide incentives for market-rate developers; regain support from City Council; and address concerns from facilitated public processes.
Advocates	Create affordable utilities, transportation, education and social services for clients; develop flexible codes for rehabilitation; increase diversity of housing stock; and improve public perception of affordable homes.
Business	Facilitate processes to connect with qualified buyers and renters; expand fee mitigation, incentives and certainty; and guarantee responsiveness from City.
City	Balance city and neighborhood needs; improve perceptions and attitudes; and create zoning that balances prescription, incentive and creativity.
User	Document and advertise the lack of affordable housing for multiple population types; manage public perception; develop model projects; and increase the diversity of housing stock.
Utility	Increase measures for resource conservation; advertise utilities as public goods; maintain affordable utilities; incentivize measures to make high production affordable possible for developers; and increase diversity of housing stock.
Neighborhoods	Guard livability; maintain safe and permanent affordable housing; mitigate traffic and density concerns; and facilitate public processes.

Below we discuss each stakeholder perspective and provide a table summarizing key points of agreement for each type of stakeholder at the end of each sub-section.

***The Progenitor Perspective***

We heard from two panelists representing the progenitors’ perspective of S.M.A.R.T. Housing, Stuart Hersh and Paul Hilgers. Both worked intimately with the writing and implementation of the S.M.A.R.T Housing code at the City of Austin and have also served independently as housing advocates. From the progenitors’ perspective, Austin’s

original declaration to make housing in Austin safe and affordable by adopting a S.M.A.R.T. Housing Policy Initiative on April 20, 2000 was commendable. However, while over 10,000 S.M.A.R.T. units were realized from 2002 to 2010, today's needs of Austin's citizens are not being met. Stuart Hersh, recently wrote, *DUH: Designing Unaffordable Housing*. In this document, Hersh notes:

More than a decade after the Austin City Council adopted the S.M.A.R.T. Housing Policy, too many families and individuals in Austin and throughout the country still have to choose between housing they can afford and housing that is safe. The housing they can afford is often located in either income-segregated and/or racially-segregated neighborhoods rather than mixed-income neighborhoods. If an individual has a disability, they may not be able to access much of the housing they can afford because of architectural barriers. The housing that families and individuals can afford and is safe and sanitary is often located a long distance from public transportation. The housing they can afford to purchase or rent often does not meet Green Building standards and renters and homeowners often face higher utility bills than they would pay if the housing was built to Green Building standards.<sup>35</sup>

From the progenitor's perspective, a variety of factors, directly facilitated by the City, created an atmosphere where Austin witnessed the success of the implementation of S.M.A.R.T. Housing units from 2002–2010. There was an internal push from citizens. In response, support from City Council members was “dramatic.”<sup>36</sup> The City supported developers looking to do S.M.A.R.T. Housing by fast-tracking their development applications. The City funded a S.M.A.R.T. Housing review team, including an auditor, which held City staff accountable. City representatives offered support to facilitate conversations between developers and neighbors. City Council made decisions based on the results of these conversations, and approved all but one case in 7 years. Presently, however, progenitors note that the political will necessary to mobilize the issue is less visible. A lack of accountability and making the zoning process more flexible lacks the advocacy it once had.

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35 Hersh, Stuart. (2011). “DUH: Designing Unaffordable Housing,” unpublished manuscript.

36 Hersh, Stuart. “Panel Discussion.” University of Texas School of Architecture, February 10, 2011.



Paul Hilgers, stresses the importance of understanding affordable housing and S.M.A.R.T. Housing as public goods. In addition to issues associated with urban infrastructure and suburban sprawl, **it is a public good to offer housing people can afford for reasons of social stability.** For example, children who are forced to move several times during a school year, because parents cannot pay the rent, tend to require additional city services as they grow up. There are other public benefits to affordable housing related to many societal aspects, such as crime and health, just to name two.

it is a public good to offer housing people can afford for reasons of social stability

In order to revive S.M.A.R.T. Housing in Austin, progenitors assert two things are crucial in moving forward. First, potential renters or owners must be guided through the process. For example, one panelist notes, “It’s a nightmare of a system, and I helped write the codes.”<sup>37</sup> Second, progenitors assert that we must be careful not to assume that increased density always equates with increased affordability. If low-rise density is advocated, it must be coupled with offering density bonuses to developers. One progenitor purports, “density bonuses combined with other incentives change the economics of the housing development to make the builder more willing to include an affordability element.”<sup>38</sup> Above all, as one panelists claimed, “The City can do this; it is just about money and will.”<sup>39</sup>

Table 2: Points of Agreement for the Progenitors

Progenitor Perspective Summary	There was an internal push from citizens 2001-2010, when S.M.A.R.T. Housing was working (1,000+ units/ year from 2002-2010).
	There must be an incentive not otherwise available to market-rate developers (6,000 applicants the first year).
	Support from City Council was crucial when S.M.A.R.T. was successful.
	It is important to guide interested people through the process of S.M.A.R.T. Housing.

37 Ibid.  
38 Hersh, “DUH: Designing Unaffordable Housing.”  
39 Hersh, Stuart. “Panel Discussion.” University of Texas School of Architecture, February 10, 2011.

### ***The Advocate Perspective***

We heard from a number of affordable housing advocates in Austin who see the advantages and disadvantages to S.M.A.R.T. Housing as they work to serve their clients. Primarily, these advocates are organized through non-governmental organizations such as the Guadalupe Neighborhood Development Corporation (GNDC), Austin Community Design and Development Center (ACDDC), Housing Works, and Blackland Community Development Corporation.

These organizations vary in terms of the scale in which they serve clients and the type of support they provide. For example, Mark Rogers of GNDC works with people at the neighborhood scale. He reports that it is the neighbors who run the corporation, and people from the neighborhood are prioritized. Together, they focus on single-family home ownership in keeping with the character of the community. GNDC seeks strong partnerships with those looking to improve S.M.A.R.T. Housing. While they have also worked for changes in terms of converting existing housing to be S.M.A.R.T. Housing, those changes have been gradual.

Johnny Limon, a board member of GNDC as well as the city Housing Commission, specifies that he and other housing advocates are focused on serving families with a MFI of 50% or lower. He reports that the City is 39,000 units short of meeting the housing needs for people in this income bracket. There are significant indicators that children in the Austin Independent School District (AISD) suffer from forced relocation during the school year. Limon reports that one out of every four ISD children are homeless (which could include temporarily staying with relatives) and one out of every three are moving two to three times per year.

Advocates echo other stakeholders in recognizing that S.M.A.R.T. Housing was successful in the previous decade, but that, in the end, developers were not satisfied. He reports that developers were disillusioned with City processes when City staff no longer rewarded developers with the incentive of fast-track development.<sup>40</sup> Advocates from multiple agencies agree that expedited service helped a lot in the process and that waivers were also an effective incentive.

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“Panel Discussion.” University of Texas School of Architecture, February 17, 2011.

Additionally, advocates echo what other stakeholders have said about neighborhood attitudes and perceptions. From the advocate perspective, **Austin needs to work to overcome the biases associated with NIMBYism**. Advocates agree that model projects can help change perceptions and that a campaign of “citizen interdependence” would be helpful. To explain, one advocate asserts that all citizens of Austin are connected and that we are all affected by each other. If things continue as they are, soon enough, there will not be sufficient housing for many in Austin. And the people who will need housing will not all necessarily be low-income or homeless, but everyday citizens.

Austin needs to work to overcome the biases associated with NIMBYism

Advocates from Housing Works serve a smaller community and aid in the coordination of transitional housing for the homeless. Housing Works does not build housing, but buys properties. From this advocate perspective, transit-oriented development is a primary way to provide mobility to citizens. Additionally, these advocates strive to provide housing with low utility costs to clients. For these reasons, S.M.A.R.T. Housing is an obvious fit for the community that they serve. Since Housing Works mainly buys properties, rehabilitating buildings to be in line with regulations poses a challenge. There has to be a flexible compromise between the cost of green renovation and affordability.

Other advocates express this same concern in regards to the rehabilitation of older structures. One reports that it is more difficult to transform structures into S.M.A.R.T. Housing largely due to problems associated with accessibility. Moreover, for rehabilitation projects to achieve even a 1-Star AEGB rating is challenging. Overall, these stakeholders would like to see a diverse portfolio of housing in terms of new and old construction, including rehabilitated properties, with the flexibility to negotiate these challenges.

Table 3: Points of Agreement for Advocates

Advocate Perspective Summary	Advocates consider provision of affordable utilities, transportation, education and social services to clients along with affordable housing.
	“Green” rehabilitation of units is challenging due to accessibility issues.
	Advocates would like to see a diverse portfolio in terms of rehabilitation and new construction.
	Work must be done to overcome NIMBYism/ biases/ perceptions associated with affordable housing.

## *The Business Perspective*

The business perspective reflects the interests of those stakeholders involved in the production and/or sale of housing from the angle of real estate, construction and/or development. We heard from stakeholders invested in single-family and multi-family development.

In conversations with one not-for-profit housing provider, it was suggested that fee waivers are not a significant incentive for participating in S.M.A.R.T. Housing, and, without offering bigger incentives and savings, it would be difficult to require developers to build much more S.M.A.R.T. Housing.<sup>41</sup> Still, fee-waivers can be a modest savings, and, perhaps more importantly, are an important sign of the City's commitment to encouraging affordable housing.

Expedited permit review is the hallmark incentive of the S.M.A.R.T. Housing program. This is a sentiment heard over and over from a variety of stakeholders. City employee Javier Delgado, who handles S.M.A.R.T. Housing review on a daily basis, summed it up best by saying the “most important thing is the speed of getting through the system.”<sup>42</sup>

Moving through the approval and permitting system quickly and with predictability is attractive for all types of developers, because it reduces many risks. In an effort to explain the process the City provided the visual guides titled, “S.M.A.R.T. Housing Process Flowchart” and “S.M.A.R.T. Housing Zoning Process” (See Appendix A and Appendix B) to describe the processes for developers in order to obtain permits to build development projects and for going through the zoning change process.

**While plans are sitting in a city office, builders risk an economic downturn, a loss of market, a change in interest rates, the chance of rising labor and material costs, and a shift in political will.** The quicker approval is granted, the more certain developers can be that anticipated costs and market conditions will remain constant. Developers also incur significant holding costs during a permitting delay.

While plans are sitting in a city office, builders risk an economic downturn, a loss of market, a change in interest rates, the chance of rising labor and material costs, and a shift in political will.

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41 Rogers, Mark, “Panel Discussion,” University of Texas School of Architecture, February 17, 2011.

42 Delgado, Javier. “Panel Discussion,” University of Texas School of Architecture, February 17, 2011.

Likewise, permitting efficiency in general is beneficial to the City, particularly in a state such as Texas, which relies heavily on property taxes for government funding, as it brings completed buildings to the ad valorem rolls sooner. In addition to generating revenue through taxes, these building projects also benefit the City by providing employment and sales tax revenue. It is in the interest of the City's economic sustainability to permit preferred development as quickly as possible.

Multi-family project developers cited a perceived lack of expedited review as a disincentive to the current S.M.A.R.T. Housing program. This perception is not necessarily supported in a review of permit application data for multifamily projects.<sup>43</sup> On average from 2000 to 2010, S.M.A.R.T. Housing projects took 166 days to move through the system, while other multifamily projects took 277 days, a savings of 111 days. This difference was smallest in 2004, with S.M.A.R.T. Housing taking only 16 days less, but the average benefit has increased each year since 2004. See Figure 1. This data is extremely important, because it points out the difference between the perception and reality of expedited review. The fact that developers are unaware of the reality of expedited services is a huge missed opportunity. If this is the hallmark benefit, it should be easy to prove promote, and improve. The frustration voiced by developers is, then, an indication of both misinformation and that reducing the permitting process by 41% is still not enough.

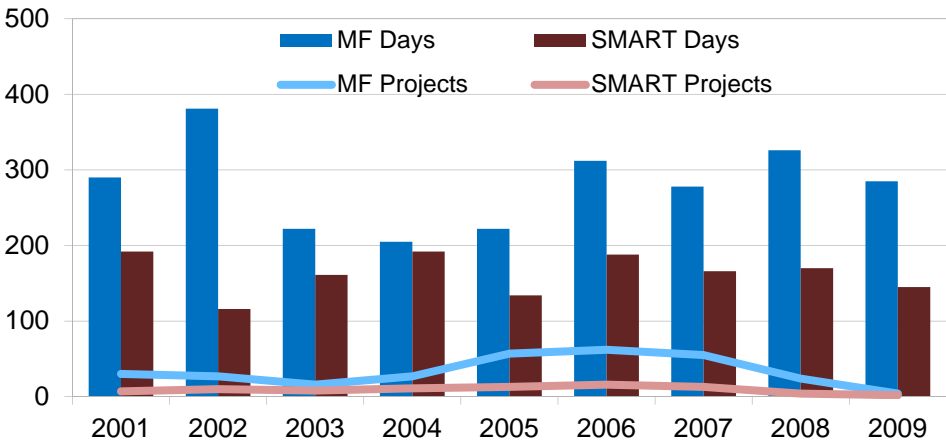


Figure 1: Number of Projects and Permitting Time Days for All Multi-family & S.M.A.R.T. Projects

43 For a detailed report from the city see: [www.ci.austin.tx.us/demographics/downloads/mfr2q10\\_pub.xls](http://www.ci.austin.tx.us/demographics/downloads/mfr2q10_pub.xls)

The expedited review process has become ineffective for encouraging the development of affordable housing.

Single-family permitting tells a different story. Lots with two or fewer dwelling units go through the residential review process rather than the multifamily route. According to the Land Development Code, action should be taken within seven days of the application being filed. From 2002 through 2004, the percentage of on-time initial site plan, subdivision, and residential plan reviews steadily decreased from 93% to 80%. Even so, residential reviews took only an average of 6.51 days in 2004.<sup>44</sup> In 2005, on time residential reviews decreased to 54% with an average of 8.35 days to complete.<sup>45</sup> In 2006, only 23% of residential reviews were completed timely, with an average of 20 days to complete.<sup>46</sup> City documents cite an increase in applications, new regulations, and significant staff turnover as the key reasons for this decline. Since 2006, the percentage of on-time residential reviews has been trending upward, hovering in the 65-75% range.<sup>47</sup> Regulatory complexity and staff shortages are consistently offered as barriers to quicker review.

On the point of plan review there are two important recommendations. First, the City should reinstate dedicated staff persons who work *only* on S.M.A.R.T. Housing review. This position could be funded by existing “payment in-lieu funds,” consisting of fees collected from previous projects in which for-profit developers opted to pay a fee in-lieu of providing affordable homes. Secondly, in times of increasing economic distress, city staff supervisors may believe it is in the best interest of employees to have plenty or even a backlog of work because it is an element of job security. There should be an incentive program in place within City departments to reward timely review so staff do not have to fear employee reductions due to efficient job performance.

A second reason for the decrease in S.M.A.R.T. Housing projects offered by a variety of stakeholders was a lack of political will on the part of the citizens. Our finding is that citizens from many constituencies remain committed to

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44 City of Austin, Texas Annual Performance Report (2004) City of Austin Budget Office.

45 City of Austin, Texas Annual Performance Report (2005) City of Austin Budget Office.

46 City of Austin, Texas Annual Performance Report (2006) City of Austin Budget Office.

47 City of Austin, Texas Annual Performance Report (2010) City of Austin Budget Office.

advocating for affordable homes, but the topic has been absorbed by public focus on the economy in general. Data collected through the *Imagine Austin* Neighborhoods and Housing Work Group supports this finding. Austinites do recognize a right to affordable housing and demand its inclusion in the City's priorities.

In its current form, the S.M.A.R.T. Housing code provides fee waivers and expedited review processes for qualifying projects. The program sets standards, which when met, are supposed to provide developer incentives. As the code was not given any specific time limit or periodic review schedule, it must be modified formally or retracted if any changes are to take place. If the incentives still worked as they were intended, the code would provide moderate, but real, incentives. Unfortunately, the review process is slow because of understaffing problems, and has become ineffective for encouraging the development of affordable housing.

Another issue with the S.M.A.R.T. code is that infill construction is not highlighted as an aspect of the S.M.A.R.T. housing initiative. Currently there is a lack of clear policies, initiatives, and incentives for affordable housing infill development. Austin's infill tools are available only through adoption by neighborhood plans, making infill such as Alley Flat construction contingent on advocacy and education.

One of the most sustainable and easily obtainable sources of affordable housing units is renovation of existing structures. These projects account for up to 70% of the affordable units constructed in the past five (5) years.<sup>48</sup> Specific exemptions and incentives should be developed in the S.M.A.R.T. Housing code for rehabilitation projects of all sizes.

Representatives from the Austin Board of Realtors say that housing policy decisions made by the City of Austin impact the property market. They assume the perspective of the homeowner and work to ensure public policies that advance private property rights. As realtors, they see that they do not just sell homes, but help build communities. They strive to meet community needs in terms of access to transportation, walkability and access to local retail.

**The realtors report that they are concerned with sustainability** as it relates to maintaining the housing market in several ways. **They are invested in sustainable**

Realtors and the real estate industry at large are invested in sustainable real property ownership.

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48 Delgado, Javier, "Panel Discussion," University of Texas School of Architecture, February 17, 2011.

**real property ownership, as is the real estate industry at-large.** Thus, they are naturally interested in affordability. Likewise, they are interested in S.M.A.R.T. Housing and how it relates to energy efficiency. Panelists from this perspective also shared that they are anticipating the release of new housing metrics from the EPA, such as forthcoming housing “Walkscores and Transitscores.”<sup>49</sup>

Overall, when it comes to the realtors’ stance on S.M.A.R.T. Housing policy in Austin, they naturally ask, “How would S.M.A.R.T. Housing have an impact on private property rights and affordability?”<sup>50</sup> However, they are generally in favor of increasing the housing stock and affordability through reliable regulations, provided there are incentives for builders.

We heard from people involved on the builder’s side and they agree. According to Harry Salvio, a representative from the Capitol Area Builder’s Association, they are advocates of S.M.A.R.T. Housing because it is a voluntary program that offers incentives. Due to a lack of adequate incentives in associated programs, he reports, “It’s easier to notice those builders who don’t participate in AEGB than those who do.”<sup>51</sup>

His sentiments were echoed by Roger Arriaga, a representative of KB Homes, a major developer of affordable homes. Arriaga reports that, in the initial stages of the S.M.A.R.T. Housing program, the incentive-based support on behalf of the City was making it possible to achieve S.M.A.R.T. Housing. KB Homes says they wanted to do S.M.A.R.T. Housing because it is line with what they believe in: quality standard, affordability, workforce center proximity, energy star adoption, and, most importantly, the program afforded regulation certainty.

For developers and builders, any amount of idle time translates into inflated project costs. It is very difficult to set aside land or units without certainty. Also, new code requirements must mitigate the cost of green building through fee waiver benefits. In conjunction with this, there must be assistance in connecting developers to buyers and to down payment assistance. Another local developer, Terry Mitchell, agrees and reports that they had trouble finding qualified buyers for S.M.A.R.T. Housing units.

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49 “Panel Discussion,” University of Texas School of Architecture, March 31, 2011.

50 Ibid.

51 Ibid.



Developers tend to agree that moderate density is the answer to making housing affordable. Specifically, one developer informs that what makes S.M.A.R.T. Housing feasible is creating a 20-30% density incentive. This, according to Mitchell, creates a situation where the developer is able to provide affordability by reducing infrastructure costs per home.

Table 4: Points of Agreement for Businesses

<b>Business Perspective Summary</b>	Currently there is no direct link between those who want affordable homes, those who build them, and those who finance them. Creating such links would enhance efficiency and investment certainty.
	The City is not able to guarantee responsiveness.
	New code requirement costs should be mitigated by additional fee waiver benefits.
	Incentives that create conditions where the developer is able to provide affordability (for example, add 20-30% to density) would be effective.

***The City Perspective***

From the perspective of the City we heard that City stakeholders are concerned with the longevity and viability of neighborhoods overall. One City of Austin Neighborhood Planner, Carol Haywood, argued that as a community, “We have conflicting expectations.”<sup>52</sup> While City officials recognize the benefits to things such as sustainability and diversity, they interact with a number of neighbors who would like things to stay as they are. Some citizens express they want neighbors comprised of people “like us.”<sup>53</sup> And by this, people are inferring that they desire neighbors that share the same types of families, incomes, and housing. Some citizens are hesitant about a diversity of housing stock in their own neighborhoods in fear that their property values will decrease.

52 Carol Haywood, “Panel Discussion,” University of Texas School of Architecture, March 3, 2011.

53 Ibid.

most people  
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to visualize  
alternatives to  
the status quo

Haywood notes that S.M.A.R.T. Housing and affordable housing pose a challenge in an era where citizens participate in “a culture of wanting more.”<sup>54</sup> Social homogeneity is related to social status. A home to many citizens is more than just shelter. There are also more stakeholders—such as developers, lenders, and the City—that benefit from the development of “expensive housing.” From the City perspective, increasingly, housing will necessarily become more expensive as the cost of city services increase. As a result, new bonds will not be enough to address the housing problem. It will be necessary for new homes to help reduce the cost of city services.

Garner Stoll, who represents *Imagine Austin*, agrees that the perceptions of citizens influence how people view development associated with S.M.A.R.T. Housing. From the City perspective, the public perception is that “low density is good”<sup>55</sup> and “high density is bad”<sup>56</sup> because **most people lack the tools to visualize alternatives to the status quo**. One suggestion is to change how citizens think about how incentivizing zoning could catalyze demonstration projects. Stoll suggests, for example, that we incentivize vertical mixed-use projects. Some advocates are proponents of vertical mixed-use (VMU), yet point out that prescriptive VMU has to meet too many different codes, and can therefore be expensive. Thus, his suggestion is to take broad view to mixed-use zoning.<sup>57</sup>

Some City officials think that City zoning is too discretionary currently. As City Councilperson Laura Morrison puts it, a developer might think: “Why would I pay for vertical rights if the City just gives it to me?”<sup>58</sup> Morrison claims that Austin is headed in the wrong direction and that the City has been complicit in creating its lack of affordable housing. She recognizes that developing all kinds of housing in all parts of town will be initially more expensive, but the resulting public good is worth it.

Some City officials do not actively associate advocacy for affordable housing with S.M.A.R.T. Housing because, we surmise, they do not yet recognize that energy efficiency for families is also good for the city. One, for example, thinks in terms of Austin having plenty of “healthy, sustainable

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54 Ibid.

55 Ibid.

56 Garner Stoll, “Panel Discussion,” University of Texas School of Architecture, March 3, 2011.

57 Ibid.

58 Laura Morrison, “Panel Discussion,” University of Texas School of Architecture, April 14, 2011.

housing,”<sup>59</sup> which is equated with “deep affordability, long-term and geographic dispersion.”<sup>60</sup>

From the City perspective, not all neighborhoods are against affordable housing. One City official reports having witnessed “very successful processes where deep affordability moved into the neighborhood.”<sup>61</sup> Overall, City officials support “All Kinds of Housing in All Parts of Town,” but recognize that advocating for such comes with certain challenges.

Table 5: Points of Agreement for the City

City Perspective Summary	It is a challenge to balance neighborhood needs with what may be best for the city overall.
	Some neighborhoods support affordable housing and some neighborhoods are against it.
	There are some negative neighborhood attitudes and perceptions in regards to conditions associated with affordable housing.
	New zoning must be allocated carefully, somehow not being too prescriptive or discretionary.

**The User Perspective**

We heard from people who personally voice the need for affordable housing and who are proponents of S.M.A.R.T. Housing, if it is delivered in such a way that meets their needs. We heard from Susana Almanza, an east Austin native, who represents a non-governmental organization called PODER (People Organized in Defense of Earth and her Resources). PODER is a group of citizens committed to environmental justice and affordable housing is one of their main concerns. People from the user perspective have witnessed property taxes in their neighborhood increase by nearly 400% in the face of gentrification.

Panelists representing the user perspective admit that, at first, they were not necessarily in favor of S.M.A.R.T. Housing for two reasons. First of all, many potential users

59 “Panel Discussion,” University of Texas School of Architecture, March 3, 2011.  
60 Ibid.  
61 Ibid.

have an MFI<sup>62</sup> of 0-40%, a big discrepancy from S.M.A.R.T. code's current baseline of 80% MFI. Secondly, the affordability of the units was not guaranteed. Under certain policy changes, units guaranteed to be affordable for five years went to being affordable for only one year. This does not allow people to stay in their homes for many years, which does not encourage neighborhood preservation. Low-income people are continually pushed out of the neighborhood.

We also heard from Jennifer McPhail, who is affiliated with ADAPT Texas, a grassroots disability rights group. Jennifer reports that she hears a lot of talk about the affordable housing needs for the people of the civic workforce such as teachers, firefighters, and nurses, but she asks, "What about housing for the elderly, disabled and people with fixed incomes?"<sup>63</sup> Users who are people with disabilities know first-hand how challenging it is to secure access to affordable and accessible housing, which directly dictates quality of life. Housing is the main concern for people with disabilities, who largely fall well below an MFI of 80%, on fixed incomes closer to a 15% MFI.

"If there is not enough [affordable housing] to cover the need now, what are we going to do in 20 years when the population doubles?"

Another important aspect from the user perspective is thoughtful consideration given in regards to housing that is linked with social services. In some cases, such as with transitional or "supportive housing," services are naturally linked to living units. However, one user points out that not all people, such as independent elderly or disabled people, need housing that is linked to services. In fact, some report that it is preferred that social services not be tied to a housing provider. When this is the case, several serious issues that affect one's quality of life, comfort and security are threatened. For example, when institutional housing is linked to services, many times one is being housed based on a medical diagnosis. This can cause an unfair assessment and placement of a person who may want to live elsewhere. Moreover, the situation can be a conflict of interest. To paraphrase McPhail, "It's not a good idea because it's like having your doctor as your landlord."<sup>64</sup>

Panelists from the user perspective agree on several significant aspects related to affordable housing. They see

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62 The Mean Family Income (MFI) for Austin in 2010 was \$73,800. However, MFI is based on household income and the number people in the household. For a complete breakdown see: [http://www.ci.austin.tx.us/housing/downloads/mfi\\_chart\\_051410\\_final.pdf](http://www.ci.austin.tx.us/housing/downloads/mfi_chart_051410_final.pdf)

63 Jennifer McPhail, "Panel Discussion," University of Texas School of Architecture, February 24, 2011.

64 Ibid.

that there is not enough access to affordable or supportive housing. There is not enough housing for low-income people. One user asks, **“If there is not enough to cover the need now, what are we going to do in 20 years when the population doubles?”**<sup>65</sup> Users also concur that the general perception of affordable housing and supportive housing are a challenge. They see that providing services for low-income people is stigmatized, and that something must be done to change this. Stakeholders from the user perspective think that successful model projects help change perceptions. As for their views on policy, users would generally like to see “policies that encourage all different types of housing for all different kinds of people.”<sup>66</sup>

Table 6: Points of Agreement for Users

User Perspective Summary	There is a serious deficiency of affordable and accessible housing for Austin’s citizenry, particularly for the elderly, disabled and low-income populations.
	There are negative perceptions about affordable and supportive housing.
	Careful consideration must be given when allocating services associated with affordable and supportive housing.
	Model developments help change perceptions.
	Users would like to see a diverse housing stock- all types of housing for all different types of people, in all parts of town.

**The Utility Perspective**

We heard from stakeholders who represent city-owned utilities. Panelists informed us about Austin’s municipal water and energy provisions. It was reported that Austin used to focus on providing services to consumers using the largest amounts of water. That practice is being reconsidered. Austin is now also paying attention to users using smaller amounts, including low-income users. The biggest concern from the water utility perspective is water conservation. The less water people use means the less they have to treat and distribute, which translates into less energy

65 Ibid.  
66 Ibid.

Linking  
S.M.A.R.T.  
Housing to  
AEGB ...helped  
make  
S.M.A.R.T.  
homes “not  
only  
affordable to  
buy, but also  
affordable to  
operate.”

used to pump water and waste around the city. Along with that, the biggest savings are in water conservation policies. Darryl Slusher, who works in the City of Austin water utility, reports that Austin is open to policy changes associated with water because, “a public utility can have priorities beyond the bottom line and that means we can pursue community values like conservation and reducing energy use...The utility carries out City Council policies.”<sup>67</sup>

In order to achieve water conservation, Slusher’s view is that, “It’s not about efficient systems or machinery, it’s about efficient design.”<sup>68</sup> He encourages the application of systems thinking when it comes to housing in Austin and water delivery and conservation. From a water utility perspective, smaller lots mean more water conservation.

Stakeholders from the water utility perspective are proponents of S.M.A.R.T. Housing since it means water sustainability. The Mueller Development is a model in terms of a development that is using recycled water to flush toilets. There is potential in reclaimed water being used for things such as chilling systems and irrigation. Currently, Slusher reports that Austin is addressing some of the needs of the community. For the low-income population, they waive minimum fees. They offer education programs about water conservation, free low-flow toilets and rebate programs. For example, two of these programs are rebates for rainwater catchment systems, up to \$5,000 and rebates for citizens who landscape their yards with native plants.

We also heard from Richard Morgan, Manager of Austin Energy Green Building (AEGB), who was instrumental in **linking S.M.A.R.T. Housing to AEGB**. This partnership **helped make S.M.A.R.T. homes “not only affordable to buy, but also affordable to operate.”**<sup>69</sup>

Morgan pointed out that several non-profit organizations, like Habitat for Humanity and some neighborhood development corporations have also been working towards these goals but currently do not have the production capacity to provide the number of affordable homes needed. One of the major goals of S.M.A.R.T. Housing, therefore, was to expand the production of affordable housing to include for-profit developers. It is very challenging for for-profit developers to make green, affordable housing

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67 Darryl Slusher, “Panel Discussion,” University of Texas School of Architecture, March 24, 2011.

68 Ibid.

69 Richard Morgan, “Panel Discussion,” University of Texas School of Architecture, March 24, 2011.

economically viable but some forward-thinking developers were able to do so with modest incentives offered by the city.

Morgan also noted two other important challenges to affordable housing-the rapid increase in lot prices and the need to broaden the definition of affordable housing beyond that which is priced for families at 80% of MFI. He suggests that single-family housing is not the only solution and that a wide variety of housing options and incentive programs are necessary. In order to develop a substantial number of widely affordable homes, S.M.A.R.T. Housing must, therefore, encourage single-family and multi-family development through a coordinated effort between for-profit developers and non-profits to make the best use of limited government support.

Table 7: Points of Agreement for Utilities

Utility Perspective Summary	Conservation of energy resources is the priority, Austin-wide. This can be said for small-scale and large-scale energy consumption.
	Energy in Austin is a public good and citizens have a say.
	The linkage between affordable homes and affordable utilities is recognized by utility providers.
	High production of affordable housing needs to occur to meet demand, but measures must be made to make it possible for high production developers to do so.
	There needs to be a wide variety of housing options to meet citizen demands.

**Neighborhood Planning Perspective**

From the perspective of the neighborhood planning groups, aspects such as livability and maintaining affordability are most important. One stakeholder defines livability as, “having places to live that are safe, affordable, and that have services.”<sup>70</sup> Stakeholders who are members of neighborhood associations are often active in voicing neighborhood concerns to City officials and developers. They are generally politically active and get involved in Austin

70 “Panel Discussion,” University of Texas School of Architecture, April 14, 2011.

Avoiding  
conflict about  
S.M.A.R.T.  
Homes requires  
that we  
“communicate  
with the  
neighbors.”

elections. Stakeholders from this perspective say that they often have to battle with the City and private developers on issues that relate to livability as they see it in their neighborhood.

From the perspective of the neighborhood planning groups, issues that concern the people in *their* neighborhoods are a priority. One stakeholder reports that traffic is a concern, that neighbors desire fewer cars on the road.

Stakeholders understand density in terms of people and potential for conflict. Neighborhood advocates say that this perception has an impact on where people live, where they want to live, or where they can live.

The Austin Neighborhoods Council (ANC) is the umbrella group for the neighborhood planning groups in Austin. We heard from its president, Steve Aleman, who reports that the ANC concerns itself with “all kinds of the City’s affairs.”<sup>71</sup> Aleman says that the council was involved in Austin’s Comprehensive Plan, *Austin Tomorrow*, and reports that from his point of view, processes involving the neighborhoods have recently been re-initiated. An associated issue is urbanization versus suburbanization. Neighborhood planning groups recognize that more and more people are living outside of Austin than inside the city. From their perspective permanence of neighbors and supportive housing are important. To improve communication between neighborhoods and other stakeholders, Aleman specifically noted that “communicate with the neighbors”<sup>72</sup> needs to be specifically included in Austin’s S.M.A.R.T. Housing flow chart. Implicit in his advocacy for increased communication is that it defuses potential conflict.

Through an analysis of the Neighborhood Plans written by each of Austin’s Neighborhood Planning Areas (See Appendix C) we discovered a number of interesting findings. While we recognize that the Neighborhood Plans do not necessarily represent the opinions of the majority of residents of Austin, we consider them an important representation of the percentage of the population that gets actively involved in neighborhood planning. We analyzed the neighborhood plans with the aim of identifying citizens’ concerns and visions for the future in order to understand how S.M.A.R.T. Housing can fit into their plans and explore it as a potential match for neighborhood goals.

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71 Steve Aleman, “Panel Discussion,” University of Texas School of Architecture, April 14, 2011

72 Ibid.



Regarding the S.M.A.R.T Housing initiative, a few neighborhood plans refer specifically to the program, others consider affordable housing as a goal, but many more do not consider the issue of housing at all. A majority of the neighborhoods do, however, consider residential infill tools as options for increasing housing opportunities.

Common concerns are evidenced by neighborhood attitude to conditions such as change, density, historic preservation, community character, environmental protection, traffic, transportation, high cost of land, and financing options. See the Figure below and Appendix C. There is a need for a dissemination of information that deeply expressed the issues.

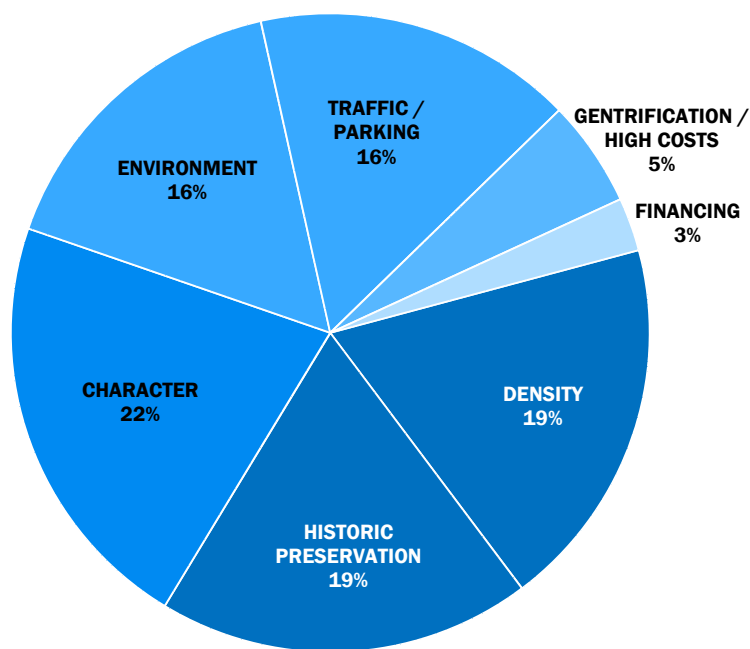


Figure 2: Primary Issues of Concern for Neighborhoods

Table 8: Points of Agreement for Neighborhoods

Neighborhood Perspective Summary	Livability and maintaining safe, permanent affordable housing with services is important.
	Neighborhood associations go to bat for their neighborhoods in dealing with developers and the City.
	Issues such as traffic and density are primary concerns of neighbors.
	Improved communication is needed among stakeholders in the S.M.A.R.T. Housing process.

In sum, the seven perspectives toward S.M.A.R.T. Housing we outlined above provide a framework for collaborative action. The following section demonstrates the continuing need for such action.

## The Continuing Need for S.M.A.R.T. Housing

The concept of gentrification is a controversial topic central to the protection of vulnerable communities in Austin. The City of Austin defines gentrification as “...the process by which higher income households displace lower income residents of a neighborhood, changing the essential character and flavor of that neighborhood.”<sup>73</sup> The definition of gentrification, however, has evolved over time and often has ideological and political implications. For the purpose of this report, we will use the definition stated above and hold that three conditions must be present for the process of gentrification to take place: 1) the displacement of long-term residents; 2) the physical improvement of the neighborhood; and 3) a change in neighborhood character.<sup>74</sup>

Displacement of long-term residents can result from higher property valuation, market demand for “fixer uppers” and developers who desire lots for new development. The gentrifying class, however, could integrate into existing communities and add new social capital rather than displace residents and existing social capital. Gentrification that leads to infill rather than displacement means a densification of neighborhoods resulting in added stress on existing infrastructure, but also might provide the economic capital to upgrade electric and water services. The construction of S.D.U.s, or Alley Flats, can also provide additional income to long-term residents that is greater than increased taxes if (and we stress “if”) development is linked to long-term affordability

Although the process of gentrification often has negative consequences, there are some notable positive effects that can take place in theory and in practice. This includes desegregation; the transition of higher income residents into low-income neighborhoods can create a mixed income community, if long-term residents are protected. It often leads to the rising affluence and level of home ownership in a given community as middle-income residents may be more able to afford to buy a home in low-income areas, which also increases the tax base for the city.<sup>75</sup>

S.M.A.R.T housing produced more than 10,000 units but the city still needs nearly 40,000 low-income apartment units.

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73 Staff Task Force on Gentrification in East Austin. City of Austin. “Findings and Recommendations”, March 13, 2003, pg. 6. Accessed online, March 25, 2011 from [http://www.ci.austin.tx.us/housing/downloads/gentrificationreport\\_eastaustin.pdf](http://www.ci.austin.tx.us/housing/downloads/gentrificationreport_eastaustin.pdf)

74 Ibid, pp. 6-7.

75 Ibid, p. 7.

Only 1 in 6  
renters with  
annual  
income less  
than \$20,000  
can find  
affordable  
housing in the  
city

The Gentrification Taskforce, commissioned by the City of Austin in 2003, determined that based on the above criteria, gentrification was indeed occurring in East Austin. The process of gentrification is only expected to progress more quickly as central city jobs experience continued growth, commuting becomes more expensive, and the housing market tightens, making urban neighborhoods more desirable. The areas affected by gentrification will likely spread to become a citywide affordability issue.<sup>76</sup> As stated in the Taskforce report, “unless there is some intervening force, housing values are likely to continue to increase until some equilibrium is reached with similarly situated properties in other parts of Austin.”<sup>77</sup> The city must take steps to mitigate the negative aspects of gentrification and to ensure equitable development across the city of Austin.

Any new development, especially development that is transit-oriented and incorporates energy efficient amenities, will likely contribute to gentrification. Therefore, it is possible that S.M.A.R.T. Housing could contribute to the negative effects of gentrification in vulnerable Austin communities. This fact reinforces the imperative to impose aggressive affordability requirements on S.M.A.R.T. Housing projects in order to protect stable, long-term Austin communities from displacement.

Affordable homes have become an extremely pressing issue in the United States, as there is an increasing gap between income and housing costs, as reported by the U.S. Department of Housing and Urban Development.<sup>78</sup> Although Austin has been known for its affordability in the past, the city faces a significant shortage of affordable housing of both rental and home ownership. It is estimated by the city that there is a need for an additional 39,000 affordable rental units; only 1 in 6 renters with annual income less than \$20,000 can find affordable housing in the city.<sup>79</sup> The availability of affordable housing has not been able to match Austin’s rapid growth and needs additional investment. According to the City of Austin Comprehensive Housing Market Study, housing costs in Austin have grown 85% over the past 10 years.<sup>80</sup> Due to this dramatic increase in the cost of housing, residents are increasingly choosing to

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76 Ibid, p. 27.

77 Ibid, p. 17.

78 Chatfield, Donald L., Et al. “The Challenges of Affordable Housing.” 2000 APA National Planning Conference. (2000): p. 2.

79 BBC Research & Consulting, “Comprehensive Housing Market Study.” City of Austin (2009): Executive Summary, p. 5.

80 Ibid, p. 3.

move to Austin's satellite cities, such as Pflugerville or Buda, where housing is more affordable and environmental regulation is more relaxed.

The affordability gap also has important social implications. As demographic statistics show, Austin today is much different than a decade ago. Over the last decade, Austin has seen an increase of more than 40% in the Hispanic population, and an increase nearing 60% in the Asian population.<sup>81</sup> It is estimated that by the year 2030, the Hispanic population will exceed the white population in Austin. Over the past decade the income gap between white families, African-American families and Hispanic families has deeply widened. In 2000, Anglo families had a MFI of \$69,989, while African-American families had an MFI of \$35,685, and Hispanic families, \$36,408. In 2009, Anglo families saw an MFI of \$91,534, African-American families, - \$39,473, and Hispanic families - \$34,061.<sup>82</sup> This data suggests that the affordability problem disproportionately affects minority groups.

Green building is directly linked to the issue of reasonably-priced homes. It is important to realize that the purchase price or rental rate is only one part of the equation. The cost of utilities, specifically energy, should be included in the overall evaluation of the affordability of a property. Mortgages and rent alone are not accurate indicators of affordability in regards to housing. Many "affordable" properties are poorly insulated, have old heating and cooling systems, and are generally inefficient in the use of energy, leading to unnecessarily high utility bills. Residents in need of affordable housing are often disproportionately plagued by high utility bills.

In response to concerns over their planned rate increases, Austin Energy released a study in November 2010 examining the "electricity burden" arising from monthly expenditures on electricity for households within its service area. Electricity burden is defined as a household's median monthly electricity bill divided by its median monthly income. Using American Community Survey Data from 2006-2008, the study concluded that for its Travis County service area:

The "electricity burden" falls disproportionately on families with the lowest income and who live in the least efficient homes.

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81 Robinson, Ryan. Presentation on Austin Demographics. University of Texas-Austin. 4 April 2011. Available online at <http://www.utexas.edu/law/centers/publicinterest/activities/programs.html>

82 Ibid.

- The electricity burden for households between 0-50% of the poverty level was 39.3% (meaning that roughly 39% of household income went towards electricity costs), compared to 2.7% for all households.<sup>83</sup>
- On average, renters experience a higher electricity burden than do owners, both for single and multi-family units. The authors suggest that this finding may be the result of “less than energy-efficient renter-occupied housing.”<sup>84</sup>
- Older homes constructed with less energy-efficient materials tend to produce a higher electricity burden. The study found that in Travis County, “nearly half of all homes at the lower end of the income distribution (from 0-15th percentile) were built before 1980.”<sup>85</sup>
- “Households which rely on fixed sources of income (e.g. no wage/salary income) experience electricity burdens up to 3 times the level of all households.”<sup>86</sup>

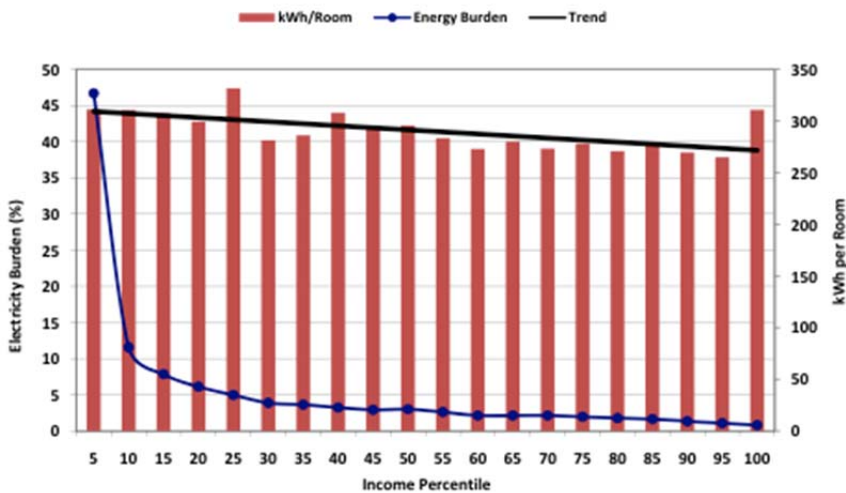


Figure 3: Electricity Burden in Travis County. Source: Austin Energy Residential Electricity Burden Report, 2010.

83 Austin Energy. (2010). “Residential Electricity Burden,” pg. 12. Available at: <http://www.austinenergy.com/About%20Us/Newsroom/Reports/affordabilityStudyPresentation.pdf>

84 Ibid., p. 13

85 Ibid., p. 16

86 Ibid, p. 17

The figure above<sup>87</sup> shows that lower income households, especially those that fall between the 0-30th percentiles MFI, experience a disproportionately high electricity burden. Also note that low income households tend to use more electricity per room, which is mainly due to older, less energy efficient housing stock.

**Because S.M.A.R.T. Housing requires AEGB program compliance, homes constructed under the program can expect significantly lower utility bills.**

Transportation costs also disproportionately affect low-income residents. If homes are conveniently located near reasonably-priced public transportation access this too can significantly reduce both the financial and environmental burden caused by longer commutes.

A similar analysis of what might be called the “transportation burden” suggests that families displaced from inner-city neighborhoods to ex-urban locations also suffer from the increased costs and time required to travel to both work and non-work activities.<sup>88</sup>

In addition to the seven stakeholder perspectives documented above there are three precedents derived from other communities that may prove to be of value to Austin decision-makers. We will briefly consider those before posing alternative choices to the reader.

## Other Important Precedents

### *Secondary Dwelling Units (SDUs)*

When considering revisions to S.M.A.R.T. Housing the potential of infill construction, such as secondary dwelling units (SDUs), should be considered as an important potential contributor to the overall aims of the program. In addition to the benefits provided by the Alley Flat

**Because  
S.M.A.R.T.  
Housing  
requires AEGB  
program  
compliance,  
homes  
constructed  
under the  
program can  
expect  
significantly  
lower utility  
bills.**

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87 Ibid, p. 15

88 See: Handy, S.L. (1996). “Understanding the Link between Urban Form and Non-work Travel Behavior,” in Journal of Planning Education and Research. (15) 3, pp. 183-198.

Initiative,<sup>89</sup> two other U.S. municipal programs that encourage SDUs, Santa Cruz and Seattle, were studied.

The City of Santa Cruz, California, provides seven prototype accessory dwelling unit (ADU) plans to homeowners at no cost, hosts frequent public workshops, and uses videos to train interested homeowners. It has a separate ADU zoning ordinance outlining siting and permit requirements, as well as qualifications for incentives. The goals of their program appear to be very similar to Austin's S.M.A.R.T. Housing goals, including encouraging infill development, ensuring affordability, and pursuing environmental goals. Santa Cruz also has a grant program to assist with financing these accessory dwellings.<sup>90</sup>

Seattle, Washington's secondary dwelling rules are contained in a separate building code section, apply to eligible lots across the entire city, and are detailed further in a website for easy reference. Seattle also created an easy-to-read table to allow quick determination of eligibility for those interested in building an SDU.<sup>91</sup> In an effort to stabilize neighborhoods, secondary units may only be built if the owner will occupy the front or back house. The lot cannot be subdivided, nor can the two dwellings be titled in separate names. All three provisions provide a model for our proposal below.

### ***Energy Benchmarking & Performance Verification***

In order to ensure the effectiveness of their Green Building Program, Seattle has adopted various progressive public policy initiatives.<sup>92</sup> The Building Energy Rating and Reporting Ordinance,<sup>93</sup> for example, requires large non-residential and multi-family property owners in Seattle to annually measure, or benchmark, energy use and provide the City with ratings to allow comparison across different

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89 See: <http://soa.utexas.edu/csd/research/alley-flat>

90 Executive Summary for Expanding Housing Options for the City of Santa Cruz, California (2002) Winter. Housing and Community Development Division, City of Santa Cruz, California, or see <http://www.cityofsantacruz.com/Modules/ShowDocument.aspx?documentid=2353>.

91 A Guide to Building a Backyard Cottage (2010 June), City of Seattle Planning Commission, Department of Planning and Development, or see <http://www.seattle.gov/dpd/Codes/BackyardCottages/Overview/>

92 See: <http://www.seattle.gov/dpd/GreenBuilding/OurProgram/PublicPolicyInitiatives/default.asp>

93 See: <http://www.seattle.gov/dpd/GreenBuilding/OurProgram/PublicPolicyInitiatives/DPDP018682.asp>



buildings. Building owners are then required to share energy usage and ratings with prospective buyers, tenants and lenders during the sale, lease, or financing of properties.

Seattle has also developed collaborative efforts like Built Green Portfolio,<sup>94</sup> which focuses on identifying and measuring the effectiveness of emerging approaches to sustainable development. This program is responsible for releasing a report<sup>95</sup> that analyzed and projected various strategies and resource savings for a handful of single-family green projects between 2008 and 2009.<sup>96</sup> The report contains a checklist of each credit included in the GBP, the number of units that earned each credit, and what star rating was acquired (see Figure 4). The report also compares actual resource usage with credits implemented in key categories like indoor water, storm water, energy, and construction waste, to an established baseline usage without the credits. This level of usage monitoring provides valuable insight into the effectiveness of Seattle's GBP and is something that the City of Austin should strongly consider in order to clearly convey the resource saving benefits from its current AEGB program.

### ***Fort Collins' Housing Awareness Campaign***

To mobilize the citizenry around the affordable homes issue, the City of Fort Collins, Colorado hosted a public awareness campaign designed by faculty and students of Colorado State University called "Faces and Places of Affordable Housing."<sup>97</sup> Advocates of the campaign thought of the idea as a result of brainstorming with a real estate agent and a planner. All were in agreement that something had to be done to address public perception in regards to affordable housing. They partnered with Colorado State's Tri-Ethnic Center for Prevention Research. Together, they created an outreach philosophy based on the following about affordable housing:

Managing energy use requires that we first begin to measure it.

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94 The Built Green program provides architects and builders with a checklist of strategies and actions that will make a home healthier, more efficient, and easier on the environment.

95 [http://www.builtgreen.net/http://www.seattle.gov/dpd/cms/groups/pan/@pan/@sustainablebldg/documents/web\\_informational/dpdp020290.pdf](http://www.builtgreen.net/http://www.seattle.gov/dpd/cms/groups/pan/@pan/@sustainablebldg/documents/web_informational/dpdp020290.pdf)

96 Access the report here:

97 <http://www.seattle.gov/dpd/greenbuilding/> "Faces & Places posters: City of Fort Collins." See: <http://www.fcgov.com/affordablehousing/faces-places-posters.php>

- 1) it is a problem.
- 2) it is a local problem
- 3) it is everyone's problem (at least to some extent or impact)<sup>98</sup>

Fort Collins created an outreach campaign consisting of specific steps to mobilize the community. They implemented community outreach on a personal level and a mass media campaign. The campaign has been very successful as evidenced by awards, community investment, and by more funds allocated towards affordable housing. There is much information available on the City of Fort Collins website, and they offer free access to many of the same resources they have employed.

In sum, these data provide background for articulating the possible choices Austinites might make regarding affordable homes.

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98 Ibid.

# Choices

There are essentially three choices for the future of S.M.A.R.T. Housing in Austin.

- 1. Status quo, allow S.M.A.R.T. Housing to end due to lack of city funding and support.
- 2. Renew S.M.A.R.T. Housing in its original form.
- 3. Revise and Renew S.M.A.R.T. Housing

We will briefly discuss the first two in this section. The third makes up the final section entitled **Preferred Choice: S.M.A.R.T./ S.M.A.R.T.er/ S.M.A.R.T.est Homes**

## Status Quo

If the S.M.A.R.T. Housing program is allowed to continue to deteriorate, affordable housing development will not be directly linked with the AEGB program, and the resulting housing stock would more closely resemble that of the average in Texas (which is significantly higher in energy use than the regional and national average, as shown in Table 9).<sup>99</sup>

Table 9: Average Electricity Consumption

	Texas	Region (TX, OK, AR, LA)	United States
Average Annual Electricity Consumption per Residence (kWh)	15,148	14,621	11,485

99 In our communications with AE, we were unable to obtain data for average residential energy consumption for Austin. Data are from the Energy Information Administration (EIA) Residential Energy Consumption Survey (RECS) 2005, “site” electricity consumption, converted from Btus by conversion factor of 3413 Btu/kWh. Data available at [http://www.eia.doe.gov/emeu/recs/recs2005/c&e/detailed\\_tables2005c&e.html](http://www.eia.doe.gov/emeu/recs/recs2005/c&e/detailed_tables2005c&e.html)

These figures provide a baseline for predicting the energy consumption consequences of not supporting inclusion of energy-efficient practices in affordable housing production. If S.M.A.R.T. Housing is allowed to further decline, affordable housing development in Austin would contribute toward the trend of Texas residences consuming more electricity than those in the surrounding region and the rest of the country.<sup>100</sup>

Although AEGB is focused on reducing electricity consumption, water consumption is another issue that is central to Austin’s resource politics. The City of Austin continues to negotiate with the Lower Colorado River Authority to secure a long-term supply of water.<sup>101</sup> Some predictions state that Travis County faces “high” risk of water shortage, exacerbated by climate change, by 2050.<sup>102</sup> Moreover, water conservation is tied to energy conservation due to the large amounts of energy that the City of Austin uses to treat and pump water for municipal use. **About 1.7% of all electricity generated by Austin Energy is used by the Austin Water Utility**, making it Austin Energy’s highest-consuming single customer.<sup>103</sup> Developing affordable homes without the water-saving benefits that AEGB provides is counter-productive to the CPP.

Simply put, a more vigorous development of S.M.A.R.T. Homes is a necessary part of creating the sustainable infrastructure required to meet the goals of the CPP.

About 1.7% of all electricity generated by Austin Energy is used by the Austin Water Utility

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100 While there are climatic and cultural differences among different areas within Texas and the surrounding region that account for different patterns of energy use, we assume that an approximate comparison is helpful.

101 <http://www.ci.austin.tx.us/water/waterpartnershipstakeholdercommittee.htm>: “The Lower Colorado River Authority (LCRA) and Austin have finalized an agreement to work together to plan a long-term water supply for the City of Austin—up to 250,000 acre-feet of additional water through 2100.”

102 Natural Resources Defense Council (2010), “Climate Change, Water, and Risk,” available at <http://www.nrdc.org/globalwarming/watersustainability>

103 Darryl Slusher, “Panel Discussion,” University of Texas School of Architecture, March 24, 2011. It is important to note that while this percentage is surprising it is below the national average of between 2-3%.

## Revive Original S.M.A.R.T. Housing

As described in previous sections, S.M.A.R.T. Housing saw its heyday from 2000 to 2008, producing an average of over 1,000 units per year. If Austin were to renew the political will from inside the City and provide the incentives necessary to developers, we could likely see this level of success again. Public processes would need to be renewed as well, in terms of the City providing services for developers, neighbors, lenders, and regulators to facilitate better communication.

While a renewal of S.M.A.R.T. Housing would potentially create a situation where Austin could build 1,000 or so units per year, this is insufficient for Austin's growing population of those in need of affordable housing. As has been pointed out by multiple stakeholders, high production is needed to meet Austin's needs. Thus, a renewal of what was working in the previous decade may not work for Austin now. Conditions have changed. Moreover, if the previous system was structured in such a way that it declined, then the system is not sustainable.

If S.M.A.R.T. Housing is implemented in its previous form, the inclusion of AEGB standards will result in energy savings comparable to those of prior S.M.A.R.T. projects. In this case, the historic energy savings that have resulted from the S.M.A.R.T. program, as estimated by Austin Energy,<sup>104</sup> provide a basis for predicting future energy savings that the S.M.A.R.T. program could provide.<sup>105</sup>

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104 AE estimates for energy savings from S.M.A.R.T. projects, and from GBP in general, are based on energy modeling and not actual, observed values. The model is based on a one-star rating, and so is a conservative estimate of the actual energy savings, given that many S.M.A.R.T. projects are rated as higher than one star.

105 These estimated savings are averages calculated from data provided by AE, which estimate the electricity savings for single- and multi-family S.M.A.R.T. projects from 1999-2011. The "percent of TX average" is calculated with the value from the Figure. "Equivalent tons of CO<sub>2</sub>" are calculated from a conversion factor of 1.11 pound CO<sub>2</sub> per kWh, given by Dylan Seigler in personal email correspondence April 2011. "Equivalent cars taken off road" is calculated from conversion factor of 7.17 MWh per car, taken from Zero Energy Capable Home Task Force report, City of Austin, 2007.

Table 10: Historic energy savings of S.M.A.R.T. Housing

	Per Unit Savings		Total Savings (All SMART Units)		
	Energy Savings (kWh)	Percent of TX Average	Energy Savings (kWh)	Equivalent Tons of CO <sub>2</sub>	Equivalent # of Cars
Single-family	1400	9%	4,942	2.7	689
Multi-family	1104	7%	4,792	2.6	661

A S.M.A.R.T. home “produces” a month’s worth of electricity each year through energy-efficiency.

From these estimates, S.M.A.R.T. projects demonstrate considerable energy savings compared to typical Texas homes. In essence, **a S.M.A.R.T. home “produces” a month’s worth of electricity each year through energy-efficiency.** This finding is supported by the success of the AEGB program more generally, which in 2009 rated, “712 single family homes, 1,721 multifamily units, and 2.3 million square feet of commercial space, saving 30.7 million kilowatt hours of electricity and preventing almost 20 million tons of associated carbon dioxide emissions from being released into the atmosphere.”<sup>106</sup>

In addition to these electricity reductions, the S.M.A.R.T. program has also demonstrated significant water savings. By Austin Energy estimates, multi-family and large residential<sup>107</sup> S.M.A.R.T. projects save over 9 million gallons per year.<sup>108</sup> This averages to about 6,500 gallons per unit per year, compared to the median Austin residential water usage of 7,900 gallons.<sup>109</sup> Each S.M.A.R.T. project therefore “produces” nearly a month’s worth of average residential water.

106 AEGBP 2009 report, p. 5.  
107 AE classifies large residential as “commercial” projects, but they are residences—an example is the Nueces Coop housing development.  
108 This estimate is calculated from data provided by AE, which provides water savings estimates for some projects only, the earliest being 2007. According to our communications with AE, they do not have water savings estimates for single-family S.M.A.R.T. projects.  
109 Audrey Tinker, Richard Burt, Sherry Bame, and Michael Speed (2004), “Austin Green Building Program Analysis: The Effects of Water-Related Green Building Features on Residential Water Consumption.” Available at <http://ascpro0.ascweb.org/archives/cd/2004/2004pro/2003/Tinker04b.htm>

If these savings, particularly in terms of electricity, are projected into the future, they could provide a significant contribution to the CPP. For three different scenarios of affordable housing development in future years, Table 11 shows the contribution to the CPP.<sup>110</sup>

Table 11: Future Potential of Existing S.M.A.R.T. Savings Projected to Meet Affordable Housing Demand

	Per-unit Energy Savings (kW)	Number of Units Built		
		Scenario #1	Scenario #2	Scenario #3
Single-family	0.83	5,000	6,500	10,000
Multi-family	0.65	4,000	10,000	29,000
Total		9,000	16,500	39,000
% Contribution to 800 MW CPP Goal		0.84%	1.49%	3.39%
Reduction in Emissions (tons CO <sub>2</sub> )		32,840	57,871	132,088
Equivalent in Cars Taken Off the Road		8,253	14,543	33,193

While the percentage contributions to the CPP may seem relatively small, it should be remembered that reaching the CPP goal will require action on many fronts, and that even seemingly minor savings, when compounded across multiple sectors (like transportation, industry, and waste disposal), will be significant. The inclusion of AEGB in

110 Multi-family energy savings are reported in kWh saved. Single-family savings, reported in kW as well as MWh, did not show a direct translation between kW and MWh by a simple conversion of hours per year. Therefore, a correction factor was derived from the single-family data and applied to the multi-family data to attempt to allow this conversion based on 8766 hours per year. Conversion factors for “CO<sub>2</sub>” and “cars” statistics are the same as those used in Table 10. Total housing numbers are based on the following estimates: 39,000 is the gap in rental units estimated in 2008 by BBC Reach and Consulting; 16,500 is the needed number of low-income rental units by 2020 according to the Imagine Austin Community Inventory: Housing and Neighborhood conditions, 2009 draft, available at <http://www.ci.austin.tx.us/compplan/inventory-housing.htm>; 9,000 is an arbitrary number to represent an under-achievement of these goals. The ratio of multi- to single-family housing is also arbitrary and could easily be modified to better represent changing conditions.

S.M.A.R.T. Housing is therefore uniquely poised to make a significant contribution to the CPP goals if it is supported in the production of affordable housing to meet Austin's needs. In its CPP goals, the City of Austin is not alone—there are other cities like Seattle and San Francisco that have similar objective. The lessons learned from these cities may illuminate possible improvements to these status quo approaches.

Although such results may sound good to advocates of economic austerity, the status quo neither satisfies Austin's demand for affordable homes nor takes advantage of long-term investment opportunities to reduce costly negative environmental impacts. Those costs will prove to be a significant burden to future generations of Austinites.



## Preferred Choice: S.M.A.R.T./S.M.A.R.T.er/ S.M.A.R.T.est Homes

Austin is a unique and diverse city, enriched by its diverse citizenry including musicians, artists, academics, students, waiters, immigrants from many different countries, the disabled, and the elderly. For many years, Austin was able to develop this distinction because living here was inexpensive. In order to retain its vibrant character and economic viability, Austin must offer reasonably- priced housing in every part of town. We believe that **all affordable homes in Austin should be S.M.A.R.T.**, because this program embodies Austin's values of access, affordability, sustainability, and contributes significantly to implementing the 2020 Climate Protection Plan.

Our first recommendation is to adopt the more general term “homes” in place of the term “housing,” which is laden with associations to public housing which represent only one option of many for the program. We, therefore, will utilize the term “homes” in the remainder of this report.

To be effective, a revised S.M.A.R.T. Homes code will do the following: provide a straightforward and simple process for achieving S.M.A.R.T. Homes, reduce permitting times, accommodate many different scales of projects and types of owners, lessen the workload of overtaxed city staff, create a sustainable financing structure, and benefit the citizens of Austin by encouraging preferred types of development. The proposed S.M.A.R.T./ S.M.A.R.T.er/ S.M.A.R.T.est Homes matrix, the basis of which evolved during our panel discussions, will work for a greater variety of project sizes and reward owners and developers that create the types of homes most valued by our community.

While the expanded matrix on the following three pages appears complex, we have developed an interactive web site to make it easier for owners and developers to explore and compare the expectations and benefits for each category of the acronym S.M.A.R.T. First we take a broad view of how varying numbers of homes should be treated and then we look in a more detailed fashion at how criteria would vary for S.M.A.R.T./ S.M.A.R.T.er/ S.M.A.R.T.est Homes.

All affordable  
homes in Austin  
should be  
S.M.A.R.T.

Table 12: Multi-family, S.M.A.R.T./ S.M.A.R.T.er/ S.M.A.R.T.est Homes

	S.M.A.R.T.	S.M.A.R.T.er	S.M.A.R.T.est
<b>Multi-family (5+ Units)</b>	<p><b>Safe:</b> Meet building code requirements</p> <p><b>Mixed-Income:</b> Affordability period</p> <p><b>Rental:</b> 25 years</p> <p><b>Owners:</b> 20 years</p> <p><b>Accessible:</b> Complies with Local and Federal requirements</p> <p><b>Reasonably-priced:</b></p> <p><b>Rental:</b> 10% of units from 50-80% MFI 10% of units from 30-50% MFI 5% of units at or below 30% MFI</p> <p><b>Owners:</b> 20% of units from 80-100% MFI 20% of units from 50-80% MFI 10% of units at or below 50% MFI</p> <p><b>Transit-oriented:</b> <b>Meets 1 of 3:</b> ¼ mile from 2+ CapMetro Stops 40+ Walkability Score “Moderate” Bikability Score</p> <p><b>Green:</b> AEGB ★ + 25% of S.M.A.R.T. Strategy Credits</p> <p><b>Incentives</b> Priority Review Fee Waivers Accredited Professional Pre-screened tenants/buyers 10% Ad valorem tax relief 10% Density Bonus 10% Height bonus 10% Parking Reduction</p>	<p><b>Safe:</b> Meet building code requirements</p> <p><b>Mixed-Income:</b> Affordability period</p> <p><b>Rental:</b> 40 years</p> <p><b>Owners:</b> 40 years</p> <p><b>Accessible:</b> Complies with Local and Federal requirements</p> <p><b>Reasonably-priced:</b></p> <p><b>Rental:</b> 15% of units from 50-80% MFI 15% of units from 30-50% MFI 10% of units at or below 30% MFI</p> <p><b>Owners:</b> 10% of units from 80-100% MFI 20% of units from 50-80% MFI 20% of units at or below 50% MFI</p> <p><b>Transit-oriented:</b> <b>Meets 2 of 3:</b> ¼ mile from 2+ CapMetro Stops 40+ Walkability Score “Moderate” Bikability Score</p> <p><b>Green:</b> AEGB ★★ + 50% of S.M.A.R.T. Strategy Credits</p> <p><b>Incentives</b> Priority Review Fee Waivers Accredited Professional Pre-screened tenants/buyers 20% Ad valorem tax relief 20% Density Bonus 20% Height bonus 20% Parking Reduction Inexpensive Land Low-interest Loan Loan Guarantees</p>	<p><b>Safe:</b> Meet building code requirements</p> <p><b>Mixed-Income:</b> Affordability period</p> <p><b>Rental:</b> 99 years</p> <p><b>Owners:</b> 60 years</p> <p><b>Accessible:</b> Complies with Local and Federal requirements</p> <p><b>Reasonably-priced:</b></p> <p><b>Rental:</b> 20% of units from 50-80% MFI 20% of units from 30-50% MFI 20% of units at or below 30% MFI</p> <p><b>Owners:</b> 20% of units from 80-100% MFI 25% of units from 50-80% MFI 30% of units at or below 50% MFI</p> <p><b>Transit-oriented:</b> <b>Meets 3 of 3:</b> ¼ mile from 2+ CapMetro Stops 40+ Walkability Score “High” Bikability Score</p> <p><b>Green:</b> AEGB ★★★ + 100% of S.M.A.R.T. Strategy Credit</p> <p><b>Incentives</b> Priority 1 Review Fee Waivers Accredited Professional Pre-screened tenants/buyers 30% Ad valorem tax relief 30% Density bonus 30% Height bonus 30% Parking reduction Free Land Low-interest Loan Loan Guarantees Grants/Loan Forgiveness</p>

Table 13: 1-4 Units, S.M.A.R.T./ S.M.A.R.T.er/ S.M.A.R.T.est Homes

	S.M.A.R.T.	S.M.A.R.T.er	S.M.A.R.T.est
1-4 Units	<p><b>Safe:</b> Meet building code requirements</p> <p><b>Mixed-Income:</b> Affordability period</p> <p><b>Rental:</b> 25 years</p> <p><b>Owners:</b> 20 years</p> <p><b>Accessible:</b> Complies with Local and Federal requirements</p> <p><b>Reasonably-priced:</b> <b>Rental:</b> At or below 80% MFI <b>Owners:</b> At or below 80% MFI</p> <p><b>Transit-oriented:</b> <b>Meets 1 of 3:</b> ½ mile from 2+ CapMetro Stops 40+ Walkability Score “Moderate” Bikability Score</p> <p><b>Green:</b> AEGB ★ + 25% of S.M.A.R.T. Strategy Credits</p> <p><b>Incentives</b> Priority Review Fee Waivers Accredited Professional Pre-screened tenants/buyers 10% Ad valorem tax relief Down Payment Assistance Density Bonus 1 Parking Spot Reduction</p>	<p><b>Safe:</b> Meet building code requirements</p> <p><b>Mixed-Income:</b> Affordability period</p> <p><b>Rental:</b> 40 years</p> <p><b>Owners:</b> 40 years</p> <p><b>Accessible:</b> Complies with Local and Federal requirements</p> <p><b>Reasonably-priced:</b> <b>Rental:</b> At or below 50% MFI <b>Owners:</b> At or below 50% MFI</p> <p><b>Transit-oriented:</b> <b>Meets 2 of 3:</b> ½ mile from 2+ CapMetro Stops 40+ Walkability Score “Moderate” Bikability Score</p> <p><b>Green:</b> AEGB ★★ + 50% of S.M.A.R.T. Strategy Credits</p> <p><b>Incentives</b> Priority Review Fee Waivers Accredited Professional Pre-screened tenants/buyers 20% Ad valorem tax relief Down Payment Assistance Density Bonus 1 Spot/Unit up to 25% Parking Reduction Inexpensive Land Low-interest Loan Loan Guarantees</p>	<p><b>Safe:</b> Meet building code requirements</p> <p><b>Mixed-Income:</b> Affordability period</p> <p><b>Rental:</b> 99 years</p> <p><b>Owners:</b> 60 years</p> <p><b>Accessible:</b> Complies with Local and Federal requirements</p> <p><b>Reasonably-priced:</b> <b>Rental:</b> At or below 30% MFI <b>Owners:</b> At or below 30% MFI</p> <p><b>Transit-oriented:</b> <b>Meets 3 of 3:</b> ½ mile from 2+ CapMetro Stops 40+ Walkability Score “High” Bikability Score</p> <p><b>Green:</b> AEGB ★★★ + 100% of S.M.A.R.T. Strategy Credit</p> <p><b>Incentives</b> Priority 1 Review Fee Waivers Accredited Professional Pre-screened tenants/buyers 30% Ad valorem tax relief Down Payment Assistance Density Bonus 1 Spot/Unit up to 25% Parking Reduction Free Land Low-interest Loan Loan Guarantees Additional Grants</p>

Table 14: Secondary Dwelling Units, S.M.A.R.T./ S.M.A.R.T.er/ S.M.A.R.T.est

	S.M.A.R.T.	S.M.A.R.T.er	S.M.A.R.T.est
SDUs	<p><b>Safe:</b> Meet building code requirements</p> <p><b>Mixed-Income:</b> Affordability period 25 years</p> <p><b>Accessible:</b> Complies with Local and Federal requirements</p> <p><b>Reasonably-priced:</b> <b>Either Owner-occupied Primary Home or SDU</b></p> <p>At or Below 80% MFI</p> <p><b>Transit-oriented:</b> <b>Meets 1 of 3:</b> ½ mile from 2+ CapMetro Stops 40+ Walkability Score “Moderate” Bikability Score</p> <p><b>Green:</b> AEGB ★ + 25% of S.M.A.R.T. Strategy Credits</p> <p><b>Incentives</b> Priority Review Fee Waivers Accredited Professional Pre-screened tenants/buyers 25% Ad valorem tax relief Down Payment Assistance Utility Upgrades Free and Reduced-price Building Materials Low/No-interest Financing (AHFC) Access to Plans Sweat Equity/Wage Subsidy</p>	<p><b>Safe:</b> Meet building code requirements</p> <p><b>Mixed-Income:</b> Affordability period 40 years</p> <p><b>Accessible:</b> Complies with Local and Federal requirements</p> <p><b>Reasonably-priced:</b> <b>Either Owner-occupied Primary Home or SDU</b></p> <p>At or Below 50% MFI</p> <p><b>Transit-oriented:</b> <b>Meets 2 of 3:</b> ½ mile from 2+ CapMetro Stops 40+ Walkability Score “Moderate” Bikability Score</p> <p><b>Green:</b> AEGB ★★ + 50% of S.M.A.R.T. Strategy Credits</p> <p><b>Incentives</b> Priority Review Fee Waivers Accredited Professional Pre-screened tenants/buyers 50% Ad valorem tax relief Down Payment Assistance Utility Upgrades Free and Reduced-price Building Materials Low/No-interest Financing (AHFC) Access to Plans Sweat Equity/Wage Subsidy</p>	<p><b>Safe:</b> Meet building code requirements</p> <p><b>Mixed-Income:</b> Affordability period 99 years</p> <p><b>Accessible:</b> Complies with Local and Federal requirements</p> <p><b>Reasonably-priced:</b> <b>Either Owner-occupied Primary Home or SDU</b></p> <p>At or Below 30% MFI</p> <p><b>Transit-oriented:</b> <b>Meets 3 of 3:</b> ½ mile from 2+ CapMetro Stops 40+ Walkability Score “High” Bikability Score</p> <p><b>Green:</b> AEGB ★★★ + 100% of S.M.A.R.T. Strategy Credit</p> <p><b>Incentives</b> Priority 1 Review Fee Waivers Accredited Professional Pre-screened tenants/buyers 100% Ad valorem tax relief Down Payment Assistance Utility Upgrades Free and Reduced-price Building Materials Low/No-interest Financing (AHFC) Access to Plans Sweat Equity/Wage Subsidy</p>

For an interactive version of the matrix above see:  
<http://soa.utexas.edu/csd/outreach/classprojects>

The following sections describe how the matrix could operate to radically simplify the process of permitting and implementing S.M.A.R.T. Homes.

## A Diversity of Building Types

In this system there are three general building types, which correspond to different scales of development projects. The smallest scale is the secondary dwelling units (SDU) such as Alley Flats. Incentives here will target homeowners and small developers, and their scales of incentives will reflect the higher support needs of single unit developers who lack the experience and advantages accruing to economies of scale.

The second category includes development of up to 4 units on the same parcel assuming appropriate parcel size and completion of other requirements of the Land Development Code. This category includes detached single family residences, as well as slightly larger developments, such as a new primary building with several small units arranged as a cottage development on a single parcel.

Multifamily developments, those with 5 or more units per parcel, could be divided into medium-sized and large-scale developments. Medium-sized developments may be suitable along collector and neighborhood roads, depending on design. Large multifamily complexes or new subdivisions require large spaces or more height and must be accommodated accordingly.

### ***Secondary Dwelling Units***

While this schema encourages a range of options for participating in the S.M.A.R.T. Homes program, highest tier developments are models given particular priority. In single-unit products, secondary dwelling units such as those in the Alley Flat Initiative are considered a model of particular interest to the City in terms of promoting mixed-income neighborhoods and expanding housing choices within existing residential neighborhoods without disrupting the existing neighborhood fabric. Many of the Neighborhood Planning Areas have adopted the Secondary Dwelling Unit (SDU) Overlay, signaling their support of this building product. **At present more than 40,000 lots in the Neighborhood Planning Areas that have adopted the SDU overlay could accommodate SDUs.**<sup>111</sup>

At present more than 40,000 lots in the Neighborhood Planning Areas that have adopted the SDU overlay could accommodate SDUs.

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<sup>111</sup>

See: <http://soa.utexas.edu/files/csd/AFL.pdf>

### ***Medium-sized and Multi-family Developments***

While single-unit infill techniques are appropriate to existing single-family residential neighborhoods, a key component of generating affordable housing in Austin is the development of S.M.A.R.T. multifamily complexes of small to medium and larger scales. The City already features significant development in the form of apartment complexes, but many of these structures do not meet basic S.M.A.R.T. Homes goals. We find them concentrated in a few major clusters and along the periphery of the urban core, often with mediocre access to public transit, total lack of sustainable building standards or design, and with marginal accessibility.

S.M.A.R.T. Homes for both moderate and large multi-family complexes should be promoted in line with existing City priorities to promote a greater number of units per acre along major commercial corridors (especially those designated by the Vertical Mixed-Use Overlay) and in the following targeted growth nodes:

- Transit Oriented Developments
- CAMPO Activity Centers
- Underdeveloped intersections of major arterials.

This strategy insures that any major growth in residential density is targeted to areas already possessing significant commercial and infrastructural development, which minimizes disruption to the design fabric of residential neighborhoods which are better served by SDU infill.

Additionally, we encourage the development of medium-sized multi-family complexes along collector roads and potentially on wide, busy residential streets. When combined with neighborhood-oriented commercial activities, this form of development can serve to create a “buffer” region between single-family residential neighborhood cores and perimeter transit arteries. This enhanced articulation will allow for greater variety of housing stock and multi-generational housing choices in a manner that gives single-family neighborhoods opportunities for more unique definition.

### ***Renovations***

Historically, funding for weatherization and renovation of existing housing stock has been managed in isolation from new home construction. Our recommendation is that combining the two will lead to productive synergies. First,

renovating older homes will contribute to the preservation of neighborhood character. Second, a large percentage of older home properties can support one or more SDUs. And third, renovation or new SDU construction generally requires utility upgrades that can be expensive. Combining renovation and SDU construction is, then, not only more efficient economically, but it reflects the opportunities inherent in the built fabric of the city's older neighborhoods.

## Preferred Development Targets

Building upon the **Existing Conditions and Lessons Learned** portion of this report, the following pages explain our rationale for certain recommended expectations of the S.M.A.R.T./ S.M.A.R.T.er/ S.M.A.R.T.est Homes framework and suggest methods for accomplishing these targets.

First and foremost the S.M.A.R.T./ S.M.A.R.T.er/ S.M.A.R.T.est Homes matrix is intended to enhance the choices available to homeowners, developers, community organizations, and neighborhoods. Instead of using a one-size-fits-all rubric, we offer different tiers at which builders may choose to participate according to their interests, capabilities, and talents.

Each tier refers to a different level of social benefit offered by a development, with variability for accessibility, affordability standards, green-building rankings, and proximity to transit. Each level receives benefits in terms of expedited review, fee waivers, and subsidies, but higher tier projects will receive greater priority in allocating these benefits, as well as enhanced additional benefits including density, zoning, square footage and height waivers, free or discounted land, ad valorem tax waivers, and low or no interest loans and loan guarantees. While each level for each basic housing type is associated with preferred implementation methods, substitutions will be possible on a case-by-case basis, particularly for renovation and rehabilitation projects.

### ***Safe and Accessible***

For the Safe and Accessible portions of the code we have adopted the existing requirements for S.M.A.R.T. Homes

which stipulate that these projects must comply with all relevant building codes. Additional preference will be granted to those properties that provide sprinkler systems and/or increased accessibility.

**Long-term Affordability Targets**

To address the Mixed-Income and Reasonably-priced portions of the code we have established aggressive affordability targets shown in Table 15.

Table 15: Recommended Affordability Targets

	S.M.A.R.T.	S.M.A.R.T.er	S.M.A.R.T.est
Multi-family (5+ Units)	<b>Rentals:</b> 25 years 10% of units from 50-80% MFI 10% of units from 30-50% MFI 5% of units at or below 30% MFI <b>Owners:</b> 20 years 20% of units from 80-100% MFI 20% of units from 50-80% MFI 10% of units at or below 50% MFI	<b>Rentals:</b> 40 years 15% of units from 50-80% MFI 15% of units from 30-50% MFI 10% of units at or below 30% MFI <b>Owners:</b> 40 years 10% of units from 80-100% MFI 20% of units from 50-80% MFI 20% of units at or below 50% MFI	<b>Rentals:</b> 99 years 20% of units from 50-80% MFI 20% of units from 30-50% MFI 15% of units at or below 30% MFI <b>Owners:</b> 60 years 20% of units from 80-100% MFI 25% of units from 50-80% MFI 30% of units at or below 50% MFI
1-4 Units	<b>Rentals:</b> 25 years at or below 80% MFI <b>Owners:</b> 20 years at or below 80% MFI	<b>Rentals:</b> 40 years at or below 50% MFI <b>Owners:</b> 40 years at or below 50% MFI	<b>Rentals:</b> 99 years at or below 30% MFI <b>Owners:</b> 60 years at or below 30% MFI
SDU <sup>112</sup>	20 years at or below 80% MFI	40 years at or below 50% MFI	99 years at or below 30% MFI

<sup>112</sup> If either the primary home or S.D.U. is owner occupied.



These recommendations are based on a bold, yet simple assertion—that all affordable housing in Austin should follow S.M.A.R.T Homes principles. We realize, however, that in a free-market system economic forces are and will continue to be the main driver of what types of housing get built, and where. In order to create and maintain long-term affordability, significant incentives will be needed. These are discussed in the following section entitled **Incentives**.

**Green Building Targets**

Inspired by the historical alignment between S.M.A.R.T. Homes and AEGB, we recommend that the City of Austin should strengthen and build upon this relationship by leveraging S.M.A.R.T. Homes as a viable means for achieving its CPP goals. S.M.A.R.T. Homes help realize the objectives in the Homes and Buildings Plan of the CPP and incentivize the achievement of higher-tier ratings in the AEGB program while simultaneously prioritizing AEGB credits which promote Austin’s S.M.A.R.T. Homes and climate protection objectives.<sup>113</sup>

Table 16: Recommended Green Building Targets

	S.M.A.R.T.	S.M.A.R.T.er	S.M.A.R.T.est
Multi-family (5+ Units)	AEGB ★ + 25% of S.M.A.R.T. Strategy Credits	AEGB ★★ + 50% of S.M.A.R.T. Strategy Credits	Zero Energy Capable, AEGB ★★★ + 100% of S.M.A.R.T. Strategy Credits
1-3 Units	Same as above	Same as above	Same as above
SDUs	Same as above	Same as above	Same as above

113 Stakeholder feedback has informed us that, in the case of renovations and rehabs, the Enterprise Green Communities (EGC) program is preferred. Thus, in lieu of complying with the AEGB rating system for renovations and rehabs, project teams can comply with the EGC Rating System and a similar list of “S.M.A.R.T. Strategy” credits sourced from their program. Information on their criteria and strategies is available at - <http://www.greencommunitiesonline.org/tools/criteria/index.asp>

In order to prepare Austin's design, building, and housing professionals to meet the ambitious 2015 net zero energy requirements, we feel it is important to incentivize higher-tier single-family AEGB requirements.

We have developed a two-part strategy for each category of S.M.A.R.T., S.M.A.R.T.er, and S.M.A.R.T.est projects. The first criterion establishes the minimum AEGB star rating that is required for compliance. The second criterion establishes the minimum percentage of "S.M.A.R.T. Strategy" credits that a project must earn from a pre-determined list of potential AEGB credit options. In the case of single-family homes, we have also required that the S.M.A.R.T.est projects will achieve the zero energy capable status as defined in the Homes and Buildings Plan of the Austin CPP.

In order to assess the appropriate level of higher-tier AEGB requirements, we reviewed the historical statistics of star ratings earned by S.M.A.R.T. Homes projects between 2000 and 2010. Table 17 demonstrates that a two- and three-star AEGB rating is most common for multifamily projects, while a one and three-star rating is most common for single-family homes. These findings suggest that earning a higher-tier AEGB rating is not only possible for S.M.A.R.T. Homes projects, but that it is already occurring and should be further incentivized. While the single-family statistics have trended towards the minimum one-star standard, we recognize the significant role that zero energy capable single-family homes plays in the CPP, and how achieving that goal can position homes towards higher-tier ratings within the AEGB rating system.<sup>114</sup> Thus, **in order to prepare Austin's design, building, and housing professionals to meet the ambitious 2015 net zero energy requirements, we feel it is important to incentivize higher-tier single-family AEGB requirements.**

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114 The Guadalupe-Saldana Project is a subdivision of ninety affordable housing units representing single family, duplex, and townhome residences. Sixty of the units are slated for net zero energy status and the remaining thirty are designed to be net zero energy capable. Every unit has earned a five-star rating from the AEGB rating systems. The project is located in East Austin at Webberville Road and Goodwin Avenue and is scheduled for completion in late 2011. Information is available on pg. 23 of the Austin Energy Green Building, 2009 Annual Report. Available at <https://my.austinenergy.com/wps/portal/aegb>

Table 17: Historical Statistics of AEGB Star Ratings for S.M.A.R.T. Homes

	Total # of S.M.A.R.T. Ratings	One Star	Two Stars	Three Stars	Four Stars	Five Stars
Single Family Homes						
# of S.M.A.R.T. Communities Rated	53	8	24	15	2	2
% of S.M.A.R.T. Communities Rated		15%	45%	28%	3.7%	3.7%
Single Family Homes						
# of S.M.A.R.T. Homes Rated	3,530	2,561	410	446	75	38
% of S.M.A.R.T. Homes Rated		72.5%	11.6%	12.6%	2.0%	1.0%

Currently, the structure of the existing AEGB and S.M.A.R.T. Homes partnership allows for a green building certification to be earned without directly linking compliance to the goals of reduced energy and water consumption.<sup>115</sup> Therefore, the “S.M.A.R.T. Strategy” requirement of our proposal identifies and prioritizes credits within the AEGB rating systems that are most directly linked to reducing energy and water consumption, as well as credits which support the overall priorities of S.M.A.R.T. Homes. Examples of potential “S.M.A.R.T. Strategy” credits that are available in the Multifamily Rating System are featured in Table 18. As projects advance beyond the current standard of meeting only the basic requirements of the rating system, project teams will be required to prioritize a percentage of the “S.M.A.R.T. Strategy” credits they feel best suits the needs of their project stakeholders and future residents. It is important to note that coordinating these credits between S.M.A.R.T. Homes and AEGB is essential as the latter is updated with each code revision. S.M.A.R.T. Homes should also be revised concurrently to reduce confusion for developers and city staff.

115 This is to say that a 3-star rating, for example, could be achieved through a patchwork of different credits related to materials or equity, resulting in a wide variance of actual energy and water savings among 3-star projects.

Table 18: Potential S.M.A.R.T. Strategy Credits from AEGB Multi-family Program

Category	Credit	Measure	Available Points
Site	1.1	Environmental Sensitivity	2
	1.2	Desired Development Area	4
	2	Brownfield Redevelopment	1
	3	Site Characteristics Study	1
	4.1	Public Transportation	1
	4.2	Parking Capacity	1
	4.3	Electric Vehicle Charging Station	1
	5	Site Disturbance	1
	6	Heat Island Reduction	1
	7	Light Pollution Reduction	1
	8	Accessibility	1
	9	Outdoor Environmental Quality	1
	10	Integrated Pest Management	1
	11	Diverse, Walkable Communities	1
	12	Bicycle Storage	1
Energy	1	Energy Efficient Building	12
	2	Green Energy	1
	3	On-site Renewable Energy	4
	4	Additional Commissioning	1
	5	District Cooling	1
	6	High Efficiency Clothes Washers	1
Water	1	Irrigation Water Minimization	3
	2	Indoor Potable Water Use Reduction	4
	3	Central Laundry	2
Indoor Environmental Quality	1	Indoor Air Quality Monitoring	1
	2	Indoor Chemical & Pollutant Sources	1
	3	Daylighting	1
	4	Views to Outside	1
	5	Thermal Comfort	1
	6.1	Sealants and Adhesives	1

	6.2	Flooring System	1
	6.3	Composite Wood and Agrifiber Products	1
	6.4	Insulation	1
	7	Humidity Control	1
	8	Acoustic Quality	1
	9	Outdoor Pollutant Sources	1
	10	Construction Indoor Air Quality	1
<b>Materials &amp; Resources</b>	1	Additional Construction Waste Management	1
	2.1	Building Reuse: Envelope & Structure	2
	2.2	Building Reuse: Interior Non-Structure	1
	3	Exterior Wall Materials	1
	4	Durable Floor Materials	1
	5	Low VOC Paints, Coatings, & Adhesives	1
	6.1	Interior and Exterior Materials	7
	6.2	Interior and Exterior Materials-Prescriptive	3
	7	PVCs and Phthalates	2
<b>Equity</b>	1	Housing Affordability	3
	2	Access to Information	1
	3	Transportation Options	2
<b>Innovation</b>	1	Open	4

By introducing flexible options for incrementally aligning Austin’s affordable housing with its CPP objectives, this proposal enhances the ability of S.M.A.R.T. Homes to make significant contributions towards an environmentally, socially, and economically sustainable future for Austin’s residents. In theory, there is a natural and powerful alliance between advocates of S.M.A.R.T. Homes and those who support the City’s CPP goals.

**Enhanced Mobility Targets**

In addition to the existing requirements of S.M.A.R.T. Homes to be located close to public transportation, ¼ mile for multi-family and ½ mile for single-family, we recommend adding the related criteria of “walkability” and “bikability”<sup>116</sup> as shown in Table 19. A score of 40 by Walk Score<sup>®117</sup> is considered easily obtainable in an urban setting and should only be considered a starting point for compliance. We also recommend, as does AEGB, that each site needs to be professionally evaluated for a diversity of “basic services” and a lack of barriers to walking and biking.

Table 19: Recommended Additional Transportation Targets

	S.M.A.R.T.	S.M.A.R.T.er	S.M.A.R.T.est
Multi-family (5+ Units)	<b>Meets 1 of 3:</b> ¼ mile from 2+ CapMetro Stops 40+ Walkability Score “Moderate” Bikability Score	<b>Meets 2 of 3:</b> ¼ mile from 2+ CapMetro Stops 40+ Walkability Score “Moderate” Bikability Score	<b>Meets 3 of 3:</b> ¼ mile from 2+ CapMetro Stops 40+ Walkability Score “High” Bikability Score
1-4 Units	<b>Meets 1 of 3:</b> ½ mile from 2+ CapMetro Stops 40+ Walkability Score “Moderate” Bikability Score	<b>Meets 2 of 3:</b> ½ mile from 2+ CapMetro Stops 40+ Walkability Score “Moderate” Bikability Score	<b>Meets 3 of 3:</b> ½ mile from 2+ CapMetro Stops 40+ Walkability Score “High” Bikability Score
SDUs	Same as 1-4 Units	Same as 1-4 Units	Same as 1-4 Units

The following section outlines a wide range of incentives available to entice developers to voluntarily participate in the various levels of the program. As the requirements from S.M.A.R.T. to S.M.A.R.T.est require increasing amounts of creativity and effort to accomplish, the incentives also grow proportionally.

116 See the EPA’s grading rubric at: <http://www.epa.gov/smartgrowth/scorecards/component.htm>  
117 See: <http://www.walkscore.com/TX/Austin> and AEGB’s rating system under the “Diverse, Walkable Communities” credit.

Incentives

Table 20: Incentives for Each Type of Development

	S.M.A.R.T.	S.M.A.R.T.er	S.M.A.R.T.est
Multi-family (5+ Units)	Priority Review	Priority Review	Priority 1 Review
	Fee Waivers	Fee Waivers	Fee Waivers
	Accredited Professionals	Accredited Professionals	Accredited Professionals
	Pre-screened tenants/buyers	Pre-screened tenants/buyers	Pre-screened tenants/buyers
	10% Ad valorem tax relief	20% Ad valorem tax relief	30% Ad valorem tax relief
	10% Density Bonus	20% Density Bonus	30% Density Bonus
	10% Height Bonus	20% Height Bonus	30% Height Bonus
	10% Parking Reduction	20% Parking Reduction	30% Parking Reduction
		Inexpensive Land	Free Land
		Low-interest Loan	No-interest Loan
1-4 Units		Loan Guarantee	Loan Guarantee
			Additional Grants
	Priority Review	Priority Review	Priority 1 Review
	Fee Waivers	Fee Waivers	Fee Waivers
	Accredited Professionals	Accredited Professionals	Accredited Professionals
	Pre-screened tenants/buyers	Pre-screened tenants/buyers	Pre-screened tenants/buyers
	10% Ad valorem tax relief	20% Ad valorem tax relief	30% Ad valorem tax relief
	Down Payment Assistance	Down Payment Assistance	Down Payment Assistance
	Density Bonus	Density Bonus	Density Bonus
	1 Parking Spot Reduction	1 Spot/Unit up to 25% Parking Reduction	1 Spot/Unit up to 25% Parking Reduction
		Inexpensive Land	Free Land
		Low-interest Loan	No-interest Loan
		Loan Guarantee	Loan Guarantee
			Additional Grants

<b>SDUs</b>	Priority Review	Priority Review	Priority 1 Review
	Fee Waivers	Fee Waivers	Fee Waivers
	Accredited Professionals	Accredited Professionals	Accredited Professionals
	<b>25% Ad valorem* tax relief</b>	<b>50% Ad valorem* tax relief</b>	<b>100% Ad valorem* tax relief</b>
	<b>Down Payment Assistance</b>	<b>Down Payment Assistance</b>	<b>Down Payment Assistance</b>
	<b>Utility Upgrades</b>	<b>Utility Upgrades</b>	<b>Utility Upgrades</b>
	<b>Free and Reduced Price Building Materials</b>	<b>Free and Reduced Price Building Materials</b>	<b>Free and Reduced Price Building Materials</b>
	<b>No/Low Interest Financing (AHFC)</b>	<b>No/Low Interest Financing (AHFC)</b>	<b>No/Low Interest Financing (AHFC)</b>
	<b>Access to Plans</b>	<b>Access to Plans</b>	<b>Access to Plans</b>
	<b>Sweat Equity/Wage Subsidy</b>	<b>Sweat Equity/Wage Subsidy</b>	<b>Sweat Equity/Wage Subsidy</b>

Space does not allow for a full breakdown of every suggested incentive in this report. However, a few of the most important recommended criteria are listed below.

***Priority Review***

In order to encourage the most good while preserving the limited resources the City can provide, the greenest and largest projects should be approached with the most urgency. Permit processing time should be directly related to compliance with the most aggressive strategies. While all S.M.A.R.T. Homes projects should enjoy expedited processing, a hierarchy should exist based on factors valued by citizens to ensure the most efficient use of limited resources.

***Fee Waivers***

A method for encouraging the development of S.M.A.R.T. Homes is the use of fee waivers from permitting, utility connections, and inspections. These costs can be absorbed by the City or Austin Energy, while eliminating barriers to the development of S.M.A.R.T. Homes. These can also come from Austin’s “Payment-in-Lieu programs,” which



collect fees from developers who elect to pay fees rather than construct affordable units in their projects.

### ***Accredited Professionals and Nonprofits***

One important incentive initially offered by S.M.A.R.T. Homes was dedicated city staff that could both aid developers and homeowners through the development process and advocate for them within the City departments. Navigating the S.M.A.R.T. Homes process is not an easy task, especially for first time applicants. For instance, speaking of building the first Alley Flat, Michael Gatto, executive director of the Austin Community Design and Development Center said, “it took three trips to the City to get the first Alley Flat permitted and ultimately the department director had to be consulted for final approval due to confusion regarding potential conflicts between the land development code and recently enacted city ordinances.”<sup>117</sup> Additionally, with the reductions in city staff over the last several years, not-for-profit stakeholders note that getting service, particularly in a timely manner, can be difficult.

#### **An “accredited professionals” program could address the service gap without the need for increasing city staff.**

There are several ways in which such a program could operate. In all options, professionals such as affordable housing providers would undergo specific S.M.A.R.T. Homes training, and in all projects, the role of the accredited professional would be to bridge the knowledge gap and aid in navigating the development process.

Three of the ways such a program could operate are as follows. First, the City could accredit professionals, but keep no formal contractual relationship with the professionals. The professionals could advertise their expertise and offer to assist with obtaining S.M.A.R.T. Homes approvals, either as an additional service or part of their basic services to be paid by the applicant. The City would perform all of the final reviews, and the S.M.A.R.T. Homes reviews would still be expedited. In practice, this option is not very different from the system now in place. It would require implementing an accreditation program, but little other investment from the City. Without a direct relationship with the City, these professionals, although offering expertise, could create another layer of bureaucracy

An “accredited professionals” program could address the service gap without the need for increasing city staff

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117 Gatto, Michael, Panel Discussion, UT-Austin School of Architecture, February 17, 2011.

in the development process and could slow approvals even further.

A second option is for the City to keep a limited number of these representatives on retainer for S.M.A.R.T. Homes consulting. For the smallest projects, up to four units per lot, these professionals could act as the reviewer. For larger projects, the professionals would act as S.M.A.R.T. Homes consultants. Through a direct, contractual relationship with the City, these professionals would have the ability to truly act as facilitators and to bring together disparate departments when necessary. This biggest question is who would pay for these services. It seems to be most fair for the City to pay for these services, perhaps using funds from the Payment-in-Lieu Programs.

The third option is similar to the second option, except no professionals would be kept on retainer. This option has the potential of developing a larger knowledge community of professionals, but could be difficult for the City to administer if there were too many participating professionals. It would also be prudent for the number of professionals to be limited to prevent developers from staffing someone who, in essence could become an in-house reviewer. This limitation might be accomplished by requiring completion of a mandatory training seminar for the program. The questions from option two regarding who should pay for the professional services apply here as well.

### ***Tax Relief***

In discussions with various stakeholders, it was continually emphasized that ad valorem tax relief by Travis County, Austin I.S.D., and the City is critical for encouraging greater development of affordable housing. Although we have no specific recommendations for how such a program might be achieved, we do recommend that in order to ensure these tax abatement programs are not abused and to keep gentrification in check, the City should enforce property requirements in the proposed new S.M.A.R.T. Homes code. Further work to implement ad valorem tax relief for S.M.A.R.T. Homes should be considered a priority moving forward.

Divided ownership can also help lower tax rates. Shared equity mortgages could help some single family homeowners achieve an affordable mortgage by offering low cost loans and down payment assistance in exchange for the lender sharing in the home's appreciation on an equal basis with the homeowner. This plan has the added

benefit of keeping property taxes low, because this divided ownership is reflected in the home's assessed value.<sup>118</sup>

### ***Prescreened Buyers***

A second implementation program grew out of a comment made by a large-scale housing developer in Austin. When developing a subdivision, it is easy in the planning stage to set aside a certain number of units for affordability requirements. **The problem, from the developer's perspective, is finding targeted income-level buyers who can qualify for the mortgage in order to buy the house at the right time.** In other words, there is a point of disconnect between potential S.M.A.R.T. Home buyers and S.M.A.R.T. Home developers. One way to bridge this gap is to create a pre-screening program for potential S.M.A.R.T. Home buyers. This could be a logical extension of first-time buyer counseling. Potential families would fill out an application including needs in terms of location and size unit. After pre-qualifying, these applications would be placed in a file and could be matched with potential housing. For a fee, developers could be connected with potential buyers, at the buyer's consent. Austin Housing Finance Corporation, or a local non-profit organization, could operate such a program. Not only would this limit the investment needed by the City to implement such a program, but several non-profits already work with these targeted constituencies, both citizens and developers. Additionally, a nonprofit would have the capacity to promote the pre-screening program in concert with other housing services already provided. The S.M.A.R.T. Homes website would link developers, renters, and buyers to the organization providing screening services.

The problem, from the developer's perspective, is finding targeted income-level buyers who can qualify for the mortgage in order to buy the house at the right time

### ***Land***

#### *Underutilized City, County and State Land*

The City of Austin, State of Texas, and Travis County own many lots and larger tracts of land in Austin for a variety of reasons, including tax foreclosures and seizures. Also, many city related entities such as Austin Energy, Austin ISD, and all the various City departments own unneeded or underutilized land and buildings, many of which could be made available for S.M.A.R.T. Homes development on

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118 Ferguson, Francie, Panel at UT-Austin School of Architecture, May 5, 2011.

long-term ground leases or through land trusts. These assets should be inventoried fully and deployed for S.M.A.R.T. Homes.

The following map<sup>119</sup> shows City of Austin-owned parcels over 1,750 sq. ft., which indicate potential land to be used in the S.M.A.R.T. Homes code as an incentive for developers. A preliminary suitability analysis was performed by us in order to show parcels that have the greatest access to CapMetro routes –in this case, those within a 5-10 minute walking distance (¼ mile to ½ mile radius) . Again, this is a preliminary analysis meant to show the type of steps that could be taken by the city to identify the land best suited for inclusion in the S.M.A.R.T. Homes matrix.

This preliminary analysis indicates that if 50% of fallow city-owned property were redeveloped as few as 4,900 and as many as 32,935 affordable and sustainable homes could be built. See Table 21 for a breakdown of this estimate.

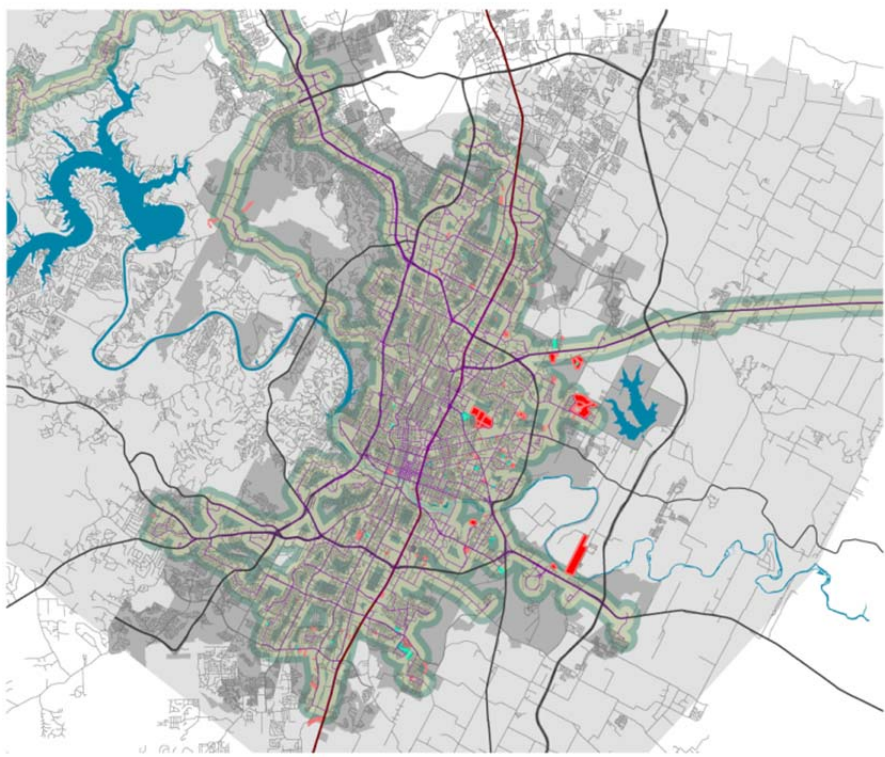


Figure 4: City-owned Undeveloped Parcels within S.M.A.R.T. Boundaries

119 See “City of Austin Undeveloped Land Maps” under the S.M.A.R.T. Homes section of : <http://soa.utexas.edu/csd/outreach/classprojects>

Table 21: Potential Unit Development on City Owned Parcels at a Range of Densities

		Build-out Potential at Given Densities <sup>120</sup>				
	# of Parcels	Total Area (SF)	SDUs	SF3	MF1 (17)	MF5 (54)
Undeveloped	225	53,224,200	30,414	9,256	20,772	65,980
Single-family	124	3,136,828	1,792	546	1,224	3,889
Total #			32,206	9,802	21,996	69,869
50%			16,103	4,901	10,998	34,935

*Conservation easements*

Conservation easements for SDU’s possibly could be used to ensure the character of a neighborhood is maintained and to prevent the financial burdens of gentrification. Property tax increases are a huge concern for many neighborhoods that are wary of infill housing projects such as Alley Flats and other S.M.A.R.T. Homes adding to their property’s assessed value. Conservation easements are a possible tool against gentrification by putting a portion of the homeowner’s lot in conservation. Lots can be defined as permanently or temporarily in conservation for an affordable housing rental unit. This would limit the lot’s potential for further development, which would ensure the character of the neighborhood is maintained. Thus the easement would curb rising property values, because further development would be prohibited so long as the unit remains in use for affordable housing.

*Land Trusts*

The Land Trust model is common in Europe and many older U.S. cities such as Philadelphia and Chicago. Under this type of program, land remains under the ownership of the Community Land Trust and individuals lease the land while purchasing the buildings on the land. Leases are commonly 99 years with costs as low as \$1 for the entire lease period.<sup>121</sup>

In Austin, the PeopleFund was established in 2007 as a non-profit accessory organization to administer the PeopleTrust community land trust program. This program provides an

120      The two multifamily categories listed, MF1 and MF5, represent the high and low ends of density. MF1 has a maximum density in Austin of 17 dwelling units per acre (DUA), and MF5 has a max of 54 DUA.

121      “Land Trust”, People Fund,  
<http://www.peoplefund.org/programs/landtrust.php>.

opportunity for Austin residents with household incomes between 80% and 40% of MFI to become home owners. Austin residents can apply for affordable homes through the program, which uses a shared appreciation approach between the homeowner and PeopleTrust. This allows the home owner to reap the benefits of appreciation on their investment, while providing funding to the program to preserve long-term affordability.<sup>122</sup>

#### *Tax Increment Financing*

Tax Increment Financing (TIF) Districts are traditionally established to revitalize struggling communities or promote growth in stagnant communities. Tax funds are often reinvested in neighborhoods to finance infrastructure improvements or for specific development and improvement projects needed to accommodate projected increases in residential population or commercial districts.<sup>123</sup> TIF revenues can be also used to preserve existing affordable housing, finance new affordable housing development, or to provide funding to help renters buy homes in their neighborhoods and reinvest in the community.

#### *Homestead Preservation Act*

The Homestead Preservation Act was passed in the Texas legislature in 2005, and includes all three of the above land acquisition tools. This legislation gives the City of Austin the power to create a special TIF districts to be used for affordable housing creation and preservation. The law also authorizes the creation of land banks and community land trusts within the preservation district. To date, the tools included in the Homestead Preservation Act have not been employed in Austin. Staff from Representative Eddie Rodriguez's office, champion of the original bill, indicated that there was some disagreement between Travis County and the City of Austin on who would bear the responsibility for loss of tax revenues. This tool has the potential to parlay the benefits of TIF, land banks and land trusts tools to address gentrification.<sup>124</sup>

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122 Ibid.

123 Anderson, John E, "Tax increment financing: Municipal adoption and growth," National Tax Journal 43 (1990): 155-163.

124 See: [http://www.ci.austin.tx.us/council/martinez\\_homestead.htm](http://www.ci.austin.tx.us/council/martinez_homestead.htm)

## ***Sweat Equity & Wage Subsidies***

Organizations such as Habitat for Humanity have developed rigorous and accountable processes that allow future home owners to invest their own time in construction while also providing supervision so as to assure conformance to prevailing codes. The Austin Community Design and Development Center (ACDDC) is, for example, developing designs and manufacturing proposals for a “core package” containing all mechanical and electrical systems. The availability of such cores would simplify the use of sweat equity in building other rooms around the core. Partnerships with the ACDDC or other non-profits could assure lenders and the city of quality control.

Another means by which Austin can help S.M.A.R.T. Homes bring down costs is to create wage subsidies for approved contractors working with Austin Community College in education programs or other building trade programs. These programs can provide labor for S.M.A.R.T. Home projects at a significant cost savings.

## ***Utility Upgrades***

Infrastructure assistance is also important in the continued development of neighborhoods in which SDU’s and S.M.A.R.T. Homes are developed. While SDU’s and S.M.A.R.T. Homes aim to decrease the consumption of water, energy, and other city utilities, the increase in density may require some upgrading of utility services. This expense, however, will be far less than the costs of extending infrastructure to new green field developments.

Smart meters are currently being deployed throughout Austin and once data from the Pecan Street Project becomes available, Austin Energy should move quickly in implementing a smarter rate structure, such as real-time pricing, which rewards conservation and allows all residents to lower their monthly energy bills. This will be particularly beneficial to lower-income residents because it potentially empowers them to reduce their utility costs and as discussed earlier, utility costs make up an inequitable portion of their income.

## ***Energy Efficiency Rebates***

The use of green building and renewable energy products is critical in the vision of S.M.A.R.T. Homes, because sustainable, affordable housing must have a low cost of

The use of green building and renewable energy products is critical in the vision of S.M.A.R.T. Homes



occupancy. At the current time, some of these technologies are prohibitively expensive. The development of programs that rent or sell these products at reduced prices could be hugely beneficial in the expansion of use of green technologies such as rainwater collection systems and solar roof panels.

The AEGB already offers fee waivers for S.M.A.R.T. projects and these incentives should continue. In addition, a variety of incentives that already exist on the municipal, state and national level should be incorporated in the S.M.A.R.T. program in a way that is understandable and beneficial to developers, builders and homeowners. Additionally, the incentives should be directed in a way that encourages the use of green building elements that builders often consider financially unfeasible, whether real or perceived.

Austin Energy currently has rebate programs that should be prioritized and adapted to serve S.M.A.R.T. Homes projects. The Power Saver Program provides rebates for energy efficiency improvements to existing multi-family properties.<sup>125</sup> According to the program's website, developers are eligible for up to \$100,000 in rebates in addition to the lower operating costs and increased market values of their properties, while residents receive the benefit of 10-40% utility savings. See Table 22 on the following page.

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125 Austin Energy, "Power Saver Program, Multi-Family," <http://www.austinenergy.com/Energy%20Efficiency/Programs/Rebates/Commercial/Multi-Family%20Properties/index.htm>



Table 22: Austin Energy Power Saver Program, Multi-family rebates<sup>126</sup>

Rebates for Window Treatments	
Add Solar Screens	\$1.88/square foot
Add Solar Film	\$1.88/square foot
Low-e windows	\$2.00/square foot
Rebates for Insulation	
Add Insulation	\$0.23/ square foot
Add R-8 or Higher to Roof Insulation	\$0.10/ square foot
Rebates for Roof Coating	
Add Reflective Roof Coating	\$0.15/ square foot
Rebates for Air Duct Systems	
Seal Leaky Duct Returns, Supply Buckets and Air Handlers for AC	\$0.38/ square foot
Replace or Improve Duct System	\$1.75/ linear foot
Rebates for HVAC Systems	
Replace 4 or More Split-System Air Conditioners	\$200-\$500 per system
Replace 4 or More Packaged Air Conditioners	\$300-\$500 per system
Replace 4 or More Split-System Heat Pumps	\$250-\$600 per system
Replace 4 or More Packaged-unit Heat Pumps	\$200-\$500 per system
Rebates for Lighting Systems	
Convert Kitchen Fixtures from Incandescent to Fluorescent	\$18 per fixture
Convert Bathroom Fixtures from Incandescent to Fluorescent	\$15 per fixture
Replace Existing Incandescent Lighting with Energy Star rated	\$4 per lamp

A limitation to the Power Saver rebates is that they are generally reserved for upgrading existing buildings (rehab). Essentially, the only rebates available for new construction are those for HVAC systems.<sup>127</sup> In addition, the rebates rely upon funding that is limited and available on a first-come, first-serve basis.<sup>128</sup> Changes need to be made to resolve these limitations and make the energy rebates more available for projects.

Because S.M.A.R.T. Homes projects provide both the benefits of green building and affordable housing, they should receive preferred treatment with energy rebates. S.M.A.R.T. project applications for Power Saver rebates should be expedited and prioritized to ensure the receipt of funding. In addition, both new construction and rehab projects should be able to take advantage of all the multi-family rebates. In both cases, rebate levels should rise significantly with the graduated energy standards of S.M.A.R.T./ S.M.A.R.T.er/S.M.A.R.T.est.

126

Ibid.

127

Email from Sunshine Mathon

128

Ibid, Austin Energy.

Table 23: Recommended Rebate Levels

	S.M.A.R.T.	S.M.A.R.T.er	S.M.A.R.T.est
Rebate Levels	150%	200%	250%

In addition to multi-family projects, the Power Saver Program offers solar photovoltaic (PV) rebates to encourage the installation of solar energy systems. The residential solar rebate is \$2.50 per watt, with annual rebates limited to \$15,000 and a maximum total rebate for residential solar energy systems of \$50,000. In addition to rebates, the program estimates that a 100 square foot area of solar access produces 1,000-1,400 kWh of electricity per year, or \$100-\$140 worth of electricity annually. Austin Energy also offers solar PV loans to help cover the upfront costs of these systems. PV offerings have expanded to include solar water heater incentives, with rebates from \$1,500 to \$2,000 and a 30% tax credit of \$1,000. Just as proposed for the multi-family rebates, S.M.A.R.T. Home applications for these rebates should be expedited and prioritized with graduated rebate levels. Although there is energy efficiency to be found in locating large PV arrays on the roofs of parking garages or large commercial buildings, greater social equity could be gained by placing AE-owned systems on the roofs of homes owned or rented by more vulnerable citizens.

**Building Materials**

Bringing down building material and supply costs would be another effective way to make SDU’s and other S.M.A.R.T. Homes more affordable. Stores such as Home Depot already have programs that offer significant discounts on building materials, appliances, and supplies for affordable housing and SDU programs. By working with building material suppliers, SDU and other S.M.A.R.T. Homes builders may be able to utilize these programs.

Austin Energy should greatly expand the use of the Power Saver free weatherization program and other such programs as part of an overall affordability protection strategy in the city. Specifically, it is recommended that all retrofits that qualify under the “S.M.A.R.T.est” requirements of the matrix qualify for free weatherization under the Power Saver program. To do this, Austin Energy must relax its ownership requirement and allow multi-family and rental units to become eligible.

## Housing Campaign

In light of all we have gathered from stakeholders, we recommend a public awareness campaign similar to that of the City of Fort Collins. Our analysis of public processes and insights gained from stakeholders clearly demonstrate that one of the biggest hurdles in Austin is perception. Other major issues are connecting diverse stakeholders to each other in the S.M.A.R.T. Homes process as well as the dissemination of information. All of this can be addressed through a public campaign, linked to the 2012 General Obligation Bond election.

We see this campaign as two-pronged, consisting of, 1) a media campaign which disseminates information to the variety of stakeholders associated with S.M.A.R.T. Homes, and 2) establishing funds to support affordable housing, in the form of a city bond. We picture a multi-media campaign that reaches out to Austin on all levels, employing all forms of technology for our diverse population. Information would be disseminated on all levels, such as: television, video (<http://envisioningdevelopment.net/affordable-housing>), animation, cartoons, mobile text and SMS, cell phone applications and interactive internet maps, (<http://www.seeclckfix.com/austin>), billboards, posters (such as “Faces and Places” employed by the City of Fort Collins)<sup>129</sup>, newspapers, magazines, and housing listings.

Additionally, we envision information being disseminated in the following types of venues: institutions, schools, faith-based organizations, museums, businesses, advocate agencies, supermarkets, internet, organizations, blogs and online forums, etc.

To succeed it will be important to communicate how citizens can get connected to S.M.A.R.T. Homes if they need it, as well as information for developers. We see that this information should be readily available online, and even associated with a virtual networking community. We recognize much of this shall not fall under the responsibility of a S.M.A.R.T. Homes code.

**The campaign is not just about the dissemination of information, but creating citywide stakeholder investment to inspire citizen mobilization.** We see the campaign as being supported by the City, providing that internal push needed to make services and processes

The campaign is not just about the dissemination of information, but creating citywide stakeholder investment to inspire citizen mobilization

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129 See: <http://www.fcgov.com/affordablehousing/faces-places-posters.php>

associated with S.M.A.R.T. Homes robust. We see a variety of opportunities for stakeholders to be involved.

In addition to housing counseling, down payment assistance programs, working with non-profit organizations to produce affordable housing, and partnering with local credit unions to provide financing for these housing units are encouraged. Bond money could be used to secure these loans, leaving the principle alone and using any interest earned as the seed money for counseling programs, etc.

The second prong to a city-wide campaign for S.M.A.R.T. Homes in Austin is mobilizing the citizenry to pass the bond issue, and then utilizing the funds to support existing programs that are successful, expanding them to make the process more friendly and comprehensive, and getting the word out about the programs to the people of the community. We recommend that the first task is to bring together a grassroots support system that can identify the ways in which an affordable homes initiative can be positively presented to the voters of Austin.

The campaign must be approached in such a way that diverse economic and cultural interests throughout the city see personal benefits arising from the affordable housing programs offered in Austin. The campaign must include a successful fundraising effort in order to provide money for billboards, signs, postcards, a speaker's bureau and other campaign tools. We see a grassroots coalition mobilizing from neighborhood planning groups, the C.H.O.D.O. Roundtable, churches and other local non-profit organizations who are aware of the need for more affordable housing in Austin. Not only might this coalition work together for the bond issue, but these same stakeholders might form the foundation for a subsequent campaign. Once bond money has been allocated and has helped expand AHFC's Housing Smarts Down Payment Assistance and S.M.A.R.T. Homes programs, mobilized citizens might spread the word. It might become common knowledge that Austin has funds, financial and housing counseling, and affordable homes available.

This coalition could provide many of the actual services, through city funding, that would be enabled by an expansion of the current city housing programs. Rather than directly offer home loans, the bond money could serve as loan guarantee funds, allowing the principle to stay in the bank while the interest works in the community, providing support staff and funding public relations efforts to get information on these programs out to the community at-large. Partnering with local credit unions, builders,

contractors, architects, and homeowners might be able to get better interest rates and profit from having the money stay in the Austin economy.

## Appendix A: Zoning Process<sup>130</sup>

**S.M.A.R.T. Housing™** staff will authorize the waiver of the zoning application fee and the 45-day processing of the zoning change request only after verifying that the applicant has responded to the legitimate concerns of the neighborhood residents. A project for which a zoning application is filed without **S.M.A.R.T. Housing™** staff authorization will not receive fee waivers for the zoning application or the 45-day processing, and may be decertified from **S.M.A.R.T. Housing™**.

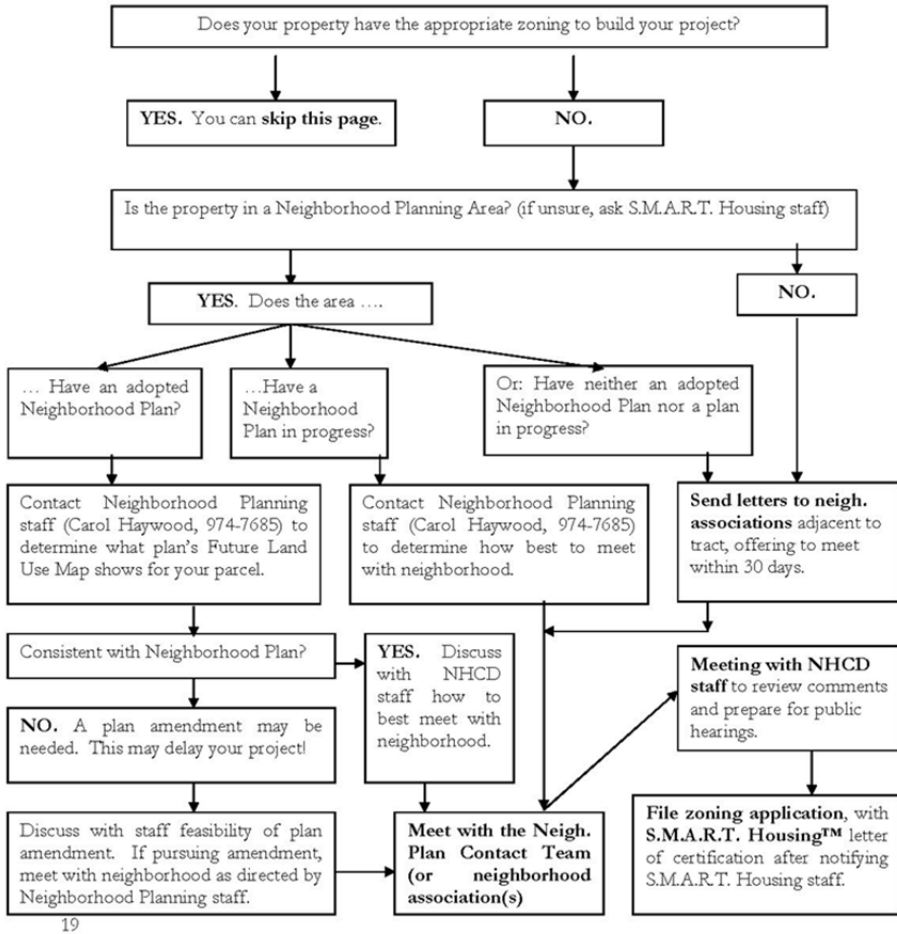


Figure 5: Existing S.M.A.R.T. Housing Zoning Change Process

<sup>130</sup>

See:

<http://www.ci.austin.tx.us/ahfc/downloads/Web%20version%20SMART%20Guide%203-16-07.pdf>, p.21.

# Appendix B: Process Flowchart<sup>131</sup>

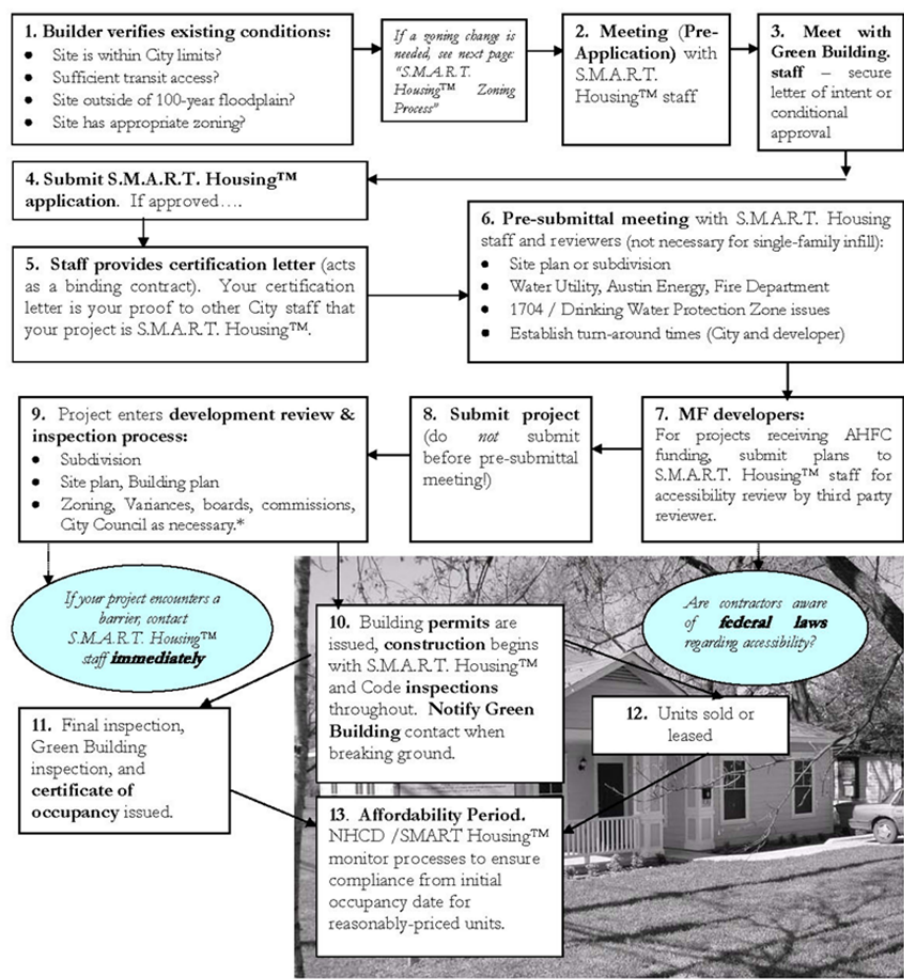


Figure 6: Existing S.M.A.R.T. Housing Process Flowchart

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See:  
<http://www.ci.austin.tx.us/ahfc/downloads/Web%20version%20SMART%20Guide%203-16-07.pdf>, p.20.

## Appendix C: Neighborhood Plan Analysis<sup>132</sup>

Table 24: Snapshot of Neighborhood Plan Analysis.

NEIGHBORHOOD PLAN / PLANNING AREA	GENERAL OBSERVATIONS	YEAR	CONCERNS							AFFORD-ABILITY	
			DENSITY	HISTORIC PRESERVATION	CHARACTER	ENVIRONMENT	TRAFFIC / PARKING	GENTRIFICATION / HIGH COSTS	FINANCING	RETAIN AFFORDABILITY	INCREASE AFFORDABILITY
Bouldin Creek NP	PRESERVE THE CHARACTER OF THE EXISTING ZONING	2002	Y	Y	Y					Y	Y
Brentwood/Highland Combined NP	WORRIED ABOUT DENSITY IN THE INTERIOR OF THE NEIGHBORHOOD / OPEN TO MORE DENSITY	2004	Y								
Central Austin Combined NP	THEY DON'T REJECT AFFORDABLE HOUSING BUT ARE PRIMARILY CONCERNED WITH SCALE	2004	Y	Y	Y		Y				
Chestnut NP	AFFORDABLE HOUSING FOR THE ELDERLY	1999				Y				Y	Y
Crestview/Wooten Combined NPA	CONCERNED ABOUT SINGLE FAMILY CHARACTER OF THE NEIGHBORHOOD	2004	Y		Y					Y	
Dawson NP	PRESERVE FRIENDLY, FAMILY ORIENTED ATMOSPHERE. NOT SPECIFIC COMMENTS REGARDING AFFORDABLE HOUSING	1998			Y						
East César Chávez NP	HOUSING EDUCATION TO PRESERVE AND REHABILITATE EXISTING HOUSING / INCREASE HOME OWNERSHIP	1999							Y	Y	Y

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See full version entitled “Neighborhood Plan Analysis” under the S.M.A.R.T. Housing heading available at: <http://soa.utexas.edu/csd/outreach/classprojects>





