

A JEWEL IN THE VIOLET CROWN

A PEOPLE'S PLAN TO PRESERVE AUSTIN'S
PUBLIC HOUSING

JULY 2016



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WE MUST KEEP THE PUBLIC IN PUBLIC HOUSING

Public housing is America's original affordable housing program. Thanks to an enterprising and energetic young Congressman from Central Texas named Lyndon Baines Johnson, Austin is privileged to be the location of the first public housing financed, built and occupied by the U.S. Housing Authority created by the 1937 Wagner Housing Act. It is a legacy of which all of Austin can be proud, particularly since all three of the city's original housing projects, Santa Rita Courts, Rosewood Courts, and Chalmers Courts, **are still in use as much-needed public housing.**

The New Deal planners that originated America's public housing program understood a fundamental reality: that the private sector has never furnished housing that is safe, decent and *truly* affordable over the long term.¹ What was true during the Great Depression remains true now, as we face housing affordability challenges not seen since the 1930's. Public housing fulfills an important role in the affordable housing mix in most countries around the world. In most European and Asian cities, for instance, public housing constitutes a significant percentage of the entire housing stock; for example in the Netherlands nearly forty percent of the country's housing consists of publicly financed housing. Nationwide, about .8 percent of the America's housing stock consists of public housing.² **Austin's conventional public housing upper-limit of 1,931 units is less than .6 percent of Austin's 2010 housing unit stock of 354,241 units.**³

ADDRESSING GENTRIFICATION REQUIRES ADDRESSING ISSUES OF HERITAGE PRESERVATION

Austin is in the midst of a severe affordable housing crisis. East Austin's 78702 zip code is one of the most gentrified zip codes in the nation.⁴

Affordable housing and historic preservation have a long track record of working together, particularly when sustainability considerations are also factored in. Since 2000 East Austin has lost hundreds of historic buildings, traditional cultural places and other heritage sites, as rents and property values have skyrocketed. As has been amply documented by scholars at the University of Texas as well as by the City of Austin's demographer, East Austin has also experienced massive displacement of its African-American population over this time period.⁵

Addressing gentrification in Austin will require a serious city commitment to affordable housing preservation, not only the subsidizing of the generation of more units. Doing so is also the most sustainable option: the greenest building is one that is already standing. Preservation does not just conserve what remains of the already diminished historic integrity of East Austin's unique cultural heritage, it also allows families to stay in their homes. Instead of community *placed* development by outsiders with no organic understanding of East Austin's unique culture and history, preservation done right encourages community *based* development in which the benefits of development are more broadly and equitably shared. This is the role Austin's public housing played when originally constructed during the New Deal; at a time of the worst affordable housing crisis since the Great Depression, it is a role it can play again.

THE AUSTIN HOUSING AUTHORITY HAS CAPABLY STEWARDED ITS PUBLIC HOUSING STOCK

Although technically a separate agency, the Austin City Council established the Austin Housing Authority on December 27, 1937. The agency was chartered as a public corporation under the laws of Texas to "promote the housing of families of low incomes." Gupton Morgan, the city manager of Austin, was appointed as the agency's first Executive Director. **The mayor of Austin has appointed all members of the housing authority's board since its inception.**

HACA (Housing Authority of the City of Austin) has capably stewarded nearly 2,000 units of rent-controlled housing for many decades. The agency has been designated by HUD as a high performer for 14 consecutive years.⁶ Unlike some housing authorities across the country, Austin's housing authority

has mostly operated free of scandal or large-scale corruption. While the agency's economic impact is relatively modest (\$45.3 million according to HACA's 2014-2015 report), as the oldest affordable housing provider in the city's history the agency's *social impact* is significant. HACA isn't just the housing provider of first resort for displaced tenants, the homeless or disaster victims, the agency has also played an important historical role in furnishing guidance and benchmarks for Austin's private real estate industry in the financing, site selection, construction, and long-term management of truly affordable housing.

PUBLIC HOUSING IS PUBLIC, NOT PRIVATE PROPERTY. PUBLIC ENTITIES HAVE A SPECIAL OBLIGATION TO PRESERVE THE SOCIAL, ENVIRONMENTAL AND COMMUNITY INTEGRITY OF HISTORIC PROPERTIES.

Whereas Congressman Johnson fought vigorously for Austin to receive the nation's first public housing in the late 1930's, nearly thirty years later it was President Johnson who fought just as vigorously for environmental and historic preservation legislation. The National Historic Preservation Act of 1966 remains one of President Johnson's lasting achievements. The law was largely enacted due to the loss of irreplaceable components of America's heritage due to Urban Renewal, particularly interstate highway construction. The U.S. Conference of Mayors convened a Special Committee on Historic Preservation, which produced a report titled *With Heritage So Rich* that made numerous recommendations that were eventually enacted into law.⁷

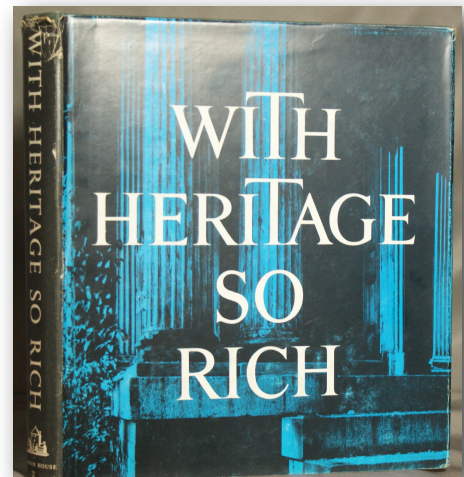
The 1966 National Historic Preservation Act created, among other things, the National Register of Historic Places, the list of National Historic Landmarks, the State Historic Preservation Offices, and Section 106 review, which requires federal agencies or their subsidiaries to "take into account" the effect a proposed project may have on historic properties.

Demolition, of course, constitutes the ultimate "adverse effect" on a historic property. Therefore **public agencies wishing to destroy their historic properties must craft an argument why demolition would constitute better public policy than preservation.** In order to answer that question in good faith, however, they must hire properly credentialed and qualified professionals to help them analyze the trade-offs between demolition and preservation, and submit these for public inspection, discussion, and consultation.

At the federal level economic considerations—the often repeated “environment vs. jobs” meme—are not supposed to be factored into heritage preservation considerations. Too often planners pre-determine that a property would be too expensive to preserve (or accept facile declarations of the same at face value), without doing the necessary technical work to ascertain whether that presumption is true, or involving the public in a meaningful way in order to ensure that community consensus supports the loss of cultural heritage that property demolition, neglect or destruction represents. The spirit of the National Historic Preservation Act is perhaps best summed up in a quote from *With Heritage So Rich*:

“The past is not the property of historians; it is a public possession. It belongs to anyone who is aware of it, and it grows by being shared. It sustains the whole society, which always needs the identity that only the past can give.”

Dr. Walter Havighurst, Quoted by Carl Feiss
With Heritage So Rich, 1966



In the foreword to this book, which led to the enactment of the 1966 National Historic Preservation Act, Lady Bird Johnson wrote: “...the truth [is] that the buildings which express out national heritage are not simply interesting. They give a sense of continuity and a heightened reality to our thinking about the whole meaning of the American past.”

AUSTIN IS A CITY THAT IS COMMITTED TO TACKLING INSTITUTIONAL RACISM.

Austin's city council has directed the city manager to create an equity office and has allocated \$183,000 in funding from the FY 2016 budget to accomplish this task. In addition, Austin is one of five cities chosen for funding by *Racial Equity Here*, an initiative of *Living Cities*, a collaborative of 22 of the world's largest financial institutions and foundations dedicated to improving life for low-income people in cities. Initial funding for the initiative is \$3 million dollars.⁸

The concept of *institutional racism* continues to be utilized by many social scientists because it possesses greater analytical power than the more narrow term "racial equity." The term also reinforces the understanding that it is institutions not just individuals that bear the burden of redressing past racial wrongs. The dialogues necessary to move Austin forward toward greater equity will need to be conducted on a basis of mutual respect, particularly respect for the African-American community's right to self-determination when it comes to questions of what is or is not considered "cultural heritage" within the black Community.

"Rosewood Courts is a pillar of the East Austin African-American Community, but it is not a historical artifact. It is "living black history" that helps to explain our present and that must continue to play an important role in our city's future."

**Lisa Byrd, Director of Six Square:
Austin's African-American Cultural
Heritage District.**

For instance, the construction of IH-35 and the city's segregated public housing are two of the most important legacies of racial discrimination in Austin's history. But it would be presumptuous and erroneous to conclude that the physical destruction of cultural heritage such as still-in-use public housing would be the right path forward. Austin's black community does not view East Austin's cultural heritage as something that should be unquestioningly bulldozed out of existence. It also does not believe in token preservation such as the erection of a plaque or the placement of inauthentic memorials.

History and culture are not static; they are in a constant state of motion and change. *Adaptive updating and reuse* are more authentic ways of not just acknowledging or appreciating the past, but of preventing cultural erasure. We cannot and ought not act like segregation did not exist or to try to wipe it off the landscape, which would be impossible in any case. What we can do is to use heritage conservation as a springboard for education and healing; for truth and reconciliation.

AUSTIN IS A CITY THAT BELIEVES IN INNOVATION. NOT JUST PRIVATE SECTOR INNOVATION, BUT IN PUBLIC ENTREPRENEURSHIP AS WELL.

Austin is committed to proactively and collaboratively tackling complex civic challenges. It is one of the reasons why the City of Austin created an innovation office.

However when it comes to understanding and embracing national and international best practices in affordable housing preservation—and combining them with international innovations in building science and sustainability—Austin remains behind the curve.

Extracting the right lessons from history is also important. For instance the public works initiatives sponsored by the New Deal and Great Society constitute a powerful legacy of civic action and promotion of the general welfare on the part of government.⁹ **Rehabilitating and upgrading our historic public housing would once again catapult Austin to its rightful place as an international leader in applying innovative thinking to the toughest social questions of the day.**

AUSTIN SHOULD USE ITS PUBLIC HOUSING TO DEMONSTRATE HOW TO USE HIGH PERFORMANCE CONSTRUCTION AND REHABILITATION TO MEET ITS CLIMATE PROTECTION GOALS.

New York City Mayor Bill de Blasio's plan to dramatically reduce greenhouse gas emissions from city buildings by 2050 relies on Passive House as a guiding standard for new construction and existing building renovation. Tens of thousands of Passive Houses have been successfully completed around the world, from a glass office tower in Vienna, Austria, to a hotel near Shanghai, China. European cities such as Frankfurt, Aachen, and Brussels have led in the regional implementation of Passive House. New York City is the first North American city to incorporate Passive House guidelines into its sustainability goals.

The New York City plan, *One City: Built to Last*, released September 20, 2014 states that energy used in New York City's buildings "...accounts for nearly three-quarters of our contribution to climate change." The solution: nearly two-thirds of greenhouse gas reductions must come from more efficient buildings. The plan's immediate goal is to achieve 35 percent carbon emissions reductions citywide by 2025, establishing a pathway for New York City to reach 80 percent reductions by 2050.

Austin's Climate Protection Plan uses *Net Zero* as the building framework for carbon reduction. The Austin plan indicates that our city's built environment is responsible for about 53 percent of our carbon emissions. Both Net Zero and Passive House would constitute a step forward from Austin's existing building codes, but the advantages of Passive House truly stand out in the case of public housing, which must last longer and accommodate a greater range of tenancy situations than private housing does. The disadvantage of a singular focus on Net Zero is that it requires balancing a building's energy requirements with renewable energy generation on the building. A poorly performing, uncomfortable building can still achieve Net Zero status in the right location and under the right conditions. Even a tent could achieve Net Zero status!¹⁰

Passive House and Net Zero can work together to produce energy efficient buildings that last and that also produce structures that optimize interior comfort, an important consideration in Austin where a significant proportion of the population suffers from allergies, asthma or other respiratory conditions. Building passive dramatically reduces core energy demand *in the first place*, allowing for small-scale on-site or utility-scale renewables to get buildings to Net Zero or beyond. It is important to understand that with Passive House the building fabric, which will last the lifetime of the building, will be highly energy efficient and ensure a comfortable building by design, regardless of how and where the required energy is generated.¹¹

THE CONSTRUCTION OF AUSTIN'S PUBLIC HOUSING DRAMATICALLY RAISED BUILDING STANDARDS AND HELPED TO PROFESSIONALIZE THE LOCAL BUILDING TRADES. REHABILITATION OF PUBLIC HOUSING CAN DO SO AGAIN.

When Austin's first three housing projects were built in the late 1930's, they were constructed without building permits and did not have to adhere to building codes, as these did not yet meaningfully exist. The planning and construction of Austin's New Deal public housing to modernist residential construction standards dramatically upgraded how local real estate development was conducted. In 1938 Austin was a relatively small regional capital, whose housing stock primarily consisted of improvised and vernacular residential buildings made of wood instead of homes that were formally designed by architects and built by skilled craftsmen using sturdier materials such as limestone or brick. The European-style building standards employed in the construction of Rosewood Courts, Santa Rita Courts, and Chalmers Courts are a key reason why the buildings remain in use as public housing nearly 80 years after their construction. These three housing projects were the first modernist multifamily housing units in Austin. Their construction helped educate the leaders and citizens of Austin, whose 1938 population was about 80,000, about what was possible in terms of cutting edge planning and real estate construction standards.



Rowan House at Sivell Place, Exeter, UK. This is one of the first social housing projects in the world built to the Passive House standard. Client: Exeter City Council; completed 2011¹²

In 2016 our sustainability-minded city once again has the opportunity to lead the way in modern building construction technology and craftsmanship by embracing a retrofit of Rosewood Courts—which the Austin Housing Authority is seeking to demolish and redevelop—to the prestigious and ultra-energy efficient Passive House standard. Some factors to bear in mind:

- A Passive House upgrade at Rosewood Courts will produce dramatic energy savings of 60-90 percent over conventional code-built buildings.
- Passive House buildings are typically 2-3 times as energy efficient as LEED Platinum or Austin Energy Greenbuilding 5-star certified structures.
- The modernist architecture of the Rosewood Courts buildings ("boxy" rectangular prism shapes) makes them perfectly suited for the Passive House retrofit.
- The interior comfort of Passive House buildings is exceptional, benefiting asthma and allergy sufferers or residents with other respiratory ailments.
- Passive House affordable housing projects are already reality in cities such as Portland, and Passive House public housing projects are currently underway in the UK.
- Passive House construction will dramatically upgrade the skill level of Austin's local building trades workforce, by educating workers in some of the most important and innovative building science skills available. These skills, which can never be taken away, are in increasing demand.

Public housing has a different mission than private housing; it should be built to last. Private sector functional obsolescence standards produce sub-optimal buildings, regardless of whether they are built to code. In other words, **building to code is the worst possible building that you are allowed to build; Passive House is the best possible building you can build.**¹³ An innovative city such as Austin with its impressive record of New Deal and Great Society based public entrepreneurship should embrace cutting-edge building standards that can achieve three important things simultaneously: retention of true affordability by preserving the only rent-controlled housing in the city, heritage preservation, and a dramatic reduction in carbon emissions.

We now turn to a more detailed discussion of the basics of the Passive House standard.

WHAT IS PASSIVE HOUSE?

The Passive House Standard is often referred to as “the world’s leading standard in energy efficient design.” It is an international, rigorous, scientific, performance standard for the design and construction of

energy efficient buildings. It applies to all kinds of buildings, not just houses. However, the Passive House standard is not just about the technical requirements of energy efficient design, it encompasses:

- Comfort
- Energy Efficiency, and
- Quality Assurance

Passive House is a predictable way to deliver affordable high-performance buildings. Residents enjoy many direct benefits such as:

- A healthy home, with great indoor air quality.
- A quiet home, with acoustic separation from the street and neighbors.
- A comfortable home, with unprecedented thermal balance.
- A well functioning home, with simplicity of operation.
- An affordable home, with significantly reduced energy bills.
- A safe home, with the ability to shelter-in-place in a power outage in the dead of winter or a summer heat wave.

Passive House reliably provides up to a 90 percent reduction in energy required to heat and air-condition a building, and up to a 75 percent reduction in overall energy use from our existing buildings. It focuses on passive measures and components like, insulation, airtightness, heat recovery, solar heat gains and incidental internal heat gains. It is an international building standard developed in 1991 by the Passive House Institute (PHI), located in Darmstadt, Germany.¹⁴



The Orchards, a 57-unit project in the Orenco Station development in Hillsboro, Oregon. For families earning less than \$30,000 annually. Rents range from \$611 to \$733 per month. It is the nation's largest affordable housing Passive House project. Developer: REACH Community Development.¹⁵

FEATURES OF PASSIVE HOUSE:¹⁶

INTERIOR COMFORT

The comfortable temperature inside a Passive House includes the surfaces of walls, windows and doors, etc. The Passive House Standard requires high-performance windows and doors so that the frames and the glass never feel hot or cold to the touch. This also has the benefit of eliminating condensation, which can lead to mold growth and associated health risks. Mechanical ventilation is required in Austin's climate, ensuring that the air inside a Passive House building is fresh, clean, de-humidified, and free of allergens. Because Passive Houses are so efficient, heating and cooling for the entire building can be performed by properly sized and installed ductless split systems.

RADICAL ENERGY EFFICIENCY

A house that is certified to the Passive House standard uses very little energy to stay exceptionally comfortable all year round – and for tenants to do all the other things that one would expect. The Passive House standard accounts for all the energy use in a home, from the heating and cooling, the cooking and lighting, washers and dryers, to TV and computer use.

The Passive House standard ensures that the house uses very little energy because of the way it is designed and constructed. It does not rely on adding renewable energy generation systems to provide (or offset) some of the building's energy needs, although this is possible. It also does not rely on tenants making dramatic lifestyle changes in order to use less energy.

RELIABLE QUALITY ASSURANCE

A greenbuilding standard that does not live up to what it promises is "sustainable" in name only. For instance numerous studies now show that many LEED certified buildings do not produce the energy savings and carbon reductions once thought or promised and that some LEED certified buildings actually use *more* energy than conventional buildings.¹⁷

The Passive House standard requires that the Passive House Planning Package (PHPP) be used to model the house and the energy use. The PHPP is a very detailed spreadsheet developed by the Passivhaus Institute in Germany. It reliably and accurately predicts how much energy will be needed to keep a house comfortable at the benchmarks set by the standard. Unlike LEED or the greenbuilding certification granted by Austin Energy's Greenbuilding division, Passive House is not a "points" based or graded standard. It is based on fundamental building science precepts. **The inspection to certify a Passive House is a Pass/Fail inspection. Either a building performs as designed, or it does not.**



**Knight's Place in Exeter, UK.
Affordable and sustainable housing
built to the Passive House standard.**



Weinberg Commons, a 50 year old brick and block three-story affordable housing project in Washington, D.C. that is Passive House certified. The apartments provide 36 affordable apartment units for low-income families including 12 homeless or formerly homeless families with below-market rents, employment services and other support for youth and families. One-third of the units are reserved for families with more intensive needs.¹⁸

The Passive House standard requires that **an independent third party checks the energy modeling** as part of the certification process. The certifier also checks key aspects of the design including construction details. The Passive House standard also requires that the construction process is monitored to ensure what gets built matches the design accurately. Where changes are needed, the energy model and details need to be updated and checked also. These all add up to a very robust quality assurance process. Designers and builders are more vigilant knowing their work will be checked and verified.¹⁹

APPLYING PASSIVE HOUSE AT ROSEWOOD COURTS

To its credit, the Austin Housing Authority has installed rooftop solar at selected housing projects it manages. However the Austin Housing Authority has never commissioned a thorough energy efficiency *and* performance review of its buildings by qualified and credentialed consultants with knowledge and skills in building science *as well as* affordable housing policy. As has been shown, **true energy efficiency and carbon reduction are best achieved via Passive House plus renewables**, not the installation of renewables on inefficient buildings.

COST

Passive House projects typically cost from 5 to 15 percent more than projects built using conventional methods. But the long term savings are considerable, a significant consideration for public housing authorities who must constantly strive to minimize operating expenses and maximize rents. In Pennsylvania the state housing finance agency incorporated Passive House benchmarks into its Low Income Housing Tax Credit application process; as a result developers have found that Passive

House standards can be built at affordable housing prices.²⁰ New York City continues to lead the way for municipalities in affordable housing construction using Passive House: city officials have recently released competitive Request for Proposals (RFP) for a 400 unit affordable housing building to be located on East 111th Street in East Harlem. In addition to being 100% affordable, four existing community gardens will be incorporated into the new development, and the East Harlem Little League's baseball field and two community gardens will be relocated in the surrounding neighborhood.²¹

Upgrading Rosewood Courts to the prestigious Passive House standard will make those units the most energy efficient multifamily units in the city of Austin. Because of their energy efficiency, interior comfort, Central East Austin location and unique history, they will become some of the most desirable rental units in the city. **The housing authority will be able to charge premium rents at its discretion, furthering the agency's mixed income goals and generating additional revenue.** The agency will be able to generate additional revenue by deepening its commitment to rooftop solar; placing solar panels atop Passive House certified buildings will reduce carbon emissions and will make the housing authority a micro-power producer, with the associated tax, revenue and finance benefits.

The Austin Housing Authority's maintenance personnel will need to upgrade their skills in order to perform scheduled maintenance as well as repairs on the Passive House buildings. This type of high-tech and high-skills training is good for the Housing Authority, for Austin, as well as for the workers themselves.

PUBLIC COMMITMENT

When the Austin City Council originally created the Austin Housing Authority in 1938 it offered the fledgling agency office space, equipment, trained administrative personnel, and other resources. **The first meeting of the HACA board was conducted in the city manager's office.** Placing the city manager in charge of the fledgling agency ensured that local decision-makers could stay abreast of federal requirements and respond quickly.

Most importantly, the City of Austin contributed both shoe leather and money. **Ten percent of the construction cost of Austin's first generation public housing was borne by local taxpayers in the form of 60 year bonds.** The local housing authority was also granted tax-exempt status and has not paid property taxes since its inception. City officials conducted necessary background studies proving the "need" for public housing in Austin and the city council also passed numerous resolutions which facilitated public housing site selection, zoning (one of the first times in city history), installation of utilities, financing and accounting controls, free engineering services, waste collection and disposal, special police and fire protection during construction and afterward, as well as public health supervision and inspection. The city also provided free legal services for the housing authority. Since its inception the housing authority has also forged special relationships with Austin's local school board.

FINANCING

Numerous funding options exist for renovating and improving Rosewood Courts. The most simple funding method would be for the Austin City Council to issue rehabilitation bonds. Bond funding is how the housing projects were originally funded in 1938.

The Housing Authority has been working with city officials to issue \$42 million dollars in rehabilitation bonds for its properties located at North Loop, Bolles Circle, Manchaca, Northgate, and Shadow Bend.²² It should be noted that none of these properties are located in East Austin and their population is disproportionately elderly and white.²³ Preserve Rosewood believes that \$20 million would be a good dollar figure for a Rosewood rehabilitation bond.

Another funding option is to allocate existing affordable housing trust fund or housing bond money.

A third option is to utilize funding created by special taxing zones such as from Homestead Preservation Districts.

Lastly, the Austin Housing Authority was recently awarded \$2.45 million by HUD to repair and upgrade its housing stock.²⁴ At least \$1 million can be put to use to redevelop Rosewood Courts.

Altogether, Preserve Rosewood believes that \$24.5 million in public financing can be generated to fund a Rosewood Courts rehabilitation and Passive House upgrade effort. When combined with a Choice Neighborhoods Grant that is committed to substantial rehabilitation instead of demolition, **over \$80 million can be generated for ensuring that Rosewood Courts remains a pillar of Austin's history for future generations—while continuing to serve as much need public housing.**

Rosewood Courts Rehabilitation Financing	
Source	Dollar Amount
Rehabilitation Bond	\$20 million
Affordable Housing Trust Fund	\$3 million
Homestead Preservation District	\$500,000
Austin Housing Authority	\$1 million
Total:	\$24.5 million

SUMMARY

On December 14th, 1968 President Lyndon Johnson spoke from a podium located on the shores of Town Lake (now named Lady Bird Lake) in honor of the dedication and ribbon cutting of Austin Oaks, an important low-rent housing project whose ambition was to mass produce highly energy efficient and sustainable housing options for families of modest means. He was in a reflective mood. It was his last official act as President of the United States.²⁵

President Johnson talked about his time as a Congressman in 1938 and how hard he had to work to convince local officials and businessmen that public housing was a good idea for Austin. Reflecting back on his more than thirty year political career, President Johnson said "I can't think of any action that I've ever taken in public life—and I've taken a good many that generated opposition—that generated more than that first project."²⁶

President Johnson is justifiably lauded for his accomplishments in civil rights, voting rights and in other important areas. But it is his lifetime commitment to the eradication of poverty via real estate equity that may be his most complicated and longest lasting political achievement. Austin in 2016 has a choice to make; it should choose to follow the road toward a sustainable future, freedom, and equality for all paved by President Johnson.

NOTES

¹Alex F. Schwartz, *Housing Policy in the United States*, p. 450. New York: Routledge.

² Alex F. Schwartz, *Housing Policy in the United States*, p. 164, table 6.1 and Bureau of the Census "Quick Facts, United States" (2015 housing data). Available online at: <http://www.census.gov/quickfacts/table/SEX255214/00,4805000>

³ Bureau of the Census "Quick Facts, Austin City, Texas. Available online at: <http://www.census.gov/quickfacts/table/SEX255214/4805000#flag-js-X>.

⁴ "How Gentrification and Racism is Pushing Black People Out of Austin in Drove." *Fusion*, May 26, 2016. Available at: <http://fusion.net/story/306394/why-black-people-are-leaving-austin>; "Crossing Over: Sustainability, New Urbanism, and Gentrification in Austin, Texas." *Southern Spaces*, August 19, 2015. Available at: <http://southernspaces.org/2015/crossing-over-sustainability-new-urbanism-and-gentrification-austin-texas>.

⁵ Tang, Eric and Falola, Bisola (May, 2016): *Those Who Left: Austin's Declining African American Population*. Institute for Urban Policy Research and Analysis, University of Texas at Austin.

⁶ Housing Authority of the City of Austin, 2014-2015 Annual Report. Available online at: https://issuu.com/bethphillips8/docs/annual_report_2014-15_revised_7-16

⁷ Lady Bird Johnson's contribution can be found online: <https://www.nps.gov/nr/feature/highlight/ladybirdjohnson.htm>

⁸ Available online at: <https://nextcity.org/daily/entry/living-cities-racial-inequity>

⁹ Ken Herman "Old Stuff From the New Deal," *Austin American-Statesman*, May 13, 2016. Available online at: http://www.mystatesman.com/news/news/opinion/herman-old-stuff-from-the-new-deal/nrLYh/?icmp=statesman_internallink_referralbox_free-to-premium-referral.

¹⁰ Elrond Burrell, *Zero-Carbon Buildings? Passivhaus First is the Best Approach*. Available online at: <http://elrondburrell.com/blog/zero-carbon-buildings-passivhaus-first/>

¹¹ Mary James, *Net Zero Energy Buildings: Passive House Plus Renewables*. 2015, Passive House Institute. Available online at: http://naphnetwork.org/NAPHN_NZEB_2015/Flipbook.pdf

¹² Available online at: <http://www.ecodesign.co.uk/projects/residential/rowan-house/>

¹³ Passive House Standard Central to New York City Mayor's Plan to Reduce Carbon Emissions 80 Percent by 2050. *PRWEB*, October 1, 2014. Online at: <http://www.prweb.com/releases/NewYork/PassiveHouse/prweb12216802.htm>; New York Passive House Pushes for Passive Home Standard in NYC. *amNewYork*, April 21, 2016. Online at: <http://www.amny.com/news/new-york-passive-house-pushes-for-passive-home-standard-in-nyc-1.11717825>

¹⁴ New York Passive House, *A Developer's Guide to Certified Multifamily Passive House Buildings*. Available online at: http://nypassivehouse.org/wp-content/uploads/2015/12/NYPH_A-Developer%E2%80%99s-Guide-to-Certified-Multi-Family-Passive-House-Buildings1.pdf

¹⁵ Information available online at: <http://www.greenhammer.com/insight/case-studies/the-orchards-at-orengo/>

¹⁶ The following information is taken, with gratitude, from the website of Elrond Burrell <http://www.elrondburrell.com>

- ¹⁷ Does LEED Save Energy? A Case Study of LEED at UC Berkeley. Available online at: http://www.green-rating.com/files/1614/2175/5772/Does_LEED_save_energy_-_A_case_study_of_LEED_at_UC_Berkeley.pdf; Mireya Navarro, "Some Buildings Not Living Up to Green Label," *New York Times*, August 30, 2009. Available online at: http://www.nytimes.com/2009/08/31/science/earth/31leed.html?_r=0
- ¹⁸ Details online at: <http://www.proudgreenhome.com/articles/retrofitted-low-income-housing-meets-passive-house-standards/>
- ¹⁹ Nothing prevents combining Passive House with other greenbuilding certifications, such as LEED, Living Building Challenge, Green Globes, Energy Star, or the Department of Energy's Zero Energy Home (formerly DOE Challenge Home), or Austin Energy's Greenbuilding Certification.
- ²⁰ For further details: <http://www.planetizen.com/node/83204/doing-well-doing-good-passive-house-and-affordable-housing>
- ²¹ Available online at: <http://rew-online.com/2016/05/25/city-issues-rfp-for-400-unit-passive-house-development-in-east-harlem/>
- ²² Plenty of Work, and Campaigns, *Austin Chronicle*, June 3, 2016, p.12.
- ²³ A leading reason why Rosewood Courts was chosen by housing authority officials for demolition is because its geographic location made it more attractive for funding under the federal Choice Neighborhoods Initiative. Unlike the precursor HOPE VI program which based federal funding decisions on the level of "severe distress" or funding need of a housing project, the "Choice Neighborhoods" funding formula grants additional points to housing projects and surrounding neighborhoods that will reach a tipping point within 10 years of grant funding. In other words if grant applicants can show that a neighborhood is up-and-coming, it will make their applications more attractive. The Choice Neighborhoods Initiative, therefore, explicitly targets gentrifying neighborhoods, with the goal of pushing the public housing even further in the direction of privatization and marketization.
- ²⁴ Available online at: <http://www.bizjournals.com/austin/blog/real-estate/2016/03/nabers-austins-robust-construction-activity-means.html>
- ²⁵ For brief discussion visit the web page of the Austin Tejano Trails Project: <https://austintejanotrails.wordpress.com/2014/02/24/ut-austin-students-assist-elderly-homeowners-at-historic-austin-oaksrobert-weaver-ave-site/>
- ²⁶ Listen to President Johnson's remarks here: <https://www.youtube.com/watch?v=tGuOYP6CpRI>