The Need for More Affordable Housing in State College and Penn State University: An Integrative Approach
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Executive Summary
Located in the middle of central Pennsylvania with the small city of State College, PA, the University Park campus of the Pennsylvania State University is home to over forty-six thousand undergraduate students. Finding space to fit all of these students has become quite a difficult task. While University Park Housing services many students affordably, its relatively small capacity forces approximately 74% of students to seek housing off campus in the surrounding area. According to recent housing price indices, housing in State College, PA costs significantly more than both national and Pennsylvania average, yet only seems to be increasing. As an institution, Penn State has the responsibility to provide students, especially Pennsylvanian residents, affordable access to higher education. By combining three of the UN’s outlined sustainable development goals, reducing inequalities, sustainable cities and communities, and partnerships for the goals, Penn State in conjunction with the borough council of State College has an obligation to ensure affordable housing in the effort to safeguard accessibility to public education, a tenant of a sustainable society.

The first part of this policy paper focuses on how and why Penn State should integrate FAFSA into its housing lottery system to reflect a more need-based approach. Here we discuss the role that financial need plays in the choice and location of housing for Penn State students. We also discussed the challenges that students who reside in poorly maintained houses, which are located far from campus face day-to-day. Finally, we proposed that FAFSA ought to be integrated into Penn State’s housing lottery system so as to reflect a more need-based approach in order to help improve the standards of living of its students, thereby making Penn State’s cost of education affordable and accessible for all.

Student feedback is crucial in assessing the credibility behind the claims that housing contracts in Penn State and the surrounding area need some readjustments. Of a sample of 54 students questioned in a focus group setting, the majority voiced concerns over the logistical reasoning behind the early timeline of housing contracts both on- and off-campus at Penn State. A seemingly unnecessary feeling of “sign now or find yourself homeless” is spread throughout each year’s freshman class, which is an attitude carried with students beyond their first year. With 46,000 students populating Penn State, it is reasonable to fathom that both on- and off-campus housing options would see their demands met each year, even if the contract deadlines were pushed back a few months. Due to these assumptions based on student perspective and research on comparable schools, we recommend that Penn State on- and off-campus housing deadlines be moved to the spring semester while promoting collaboration between the university and off-campus realtors, and further utilizing the Housing Fairs offered at Penn State for better access to housing information.

The final policy focuses on the need for higher-density housing, particularly through the encouragement of mixed-use and mixed-income development. The United States as a whole struggles with urban sprawl, which is leading to disjointed communities and rapidly increasing home prices. Mixed-use spaces, mixed-income housing, and infill development all serve as means to increase population density, while also presenting a variety of economic, social, and environmental benefits to both the residents and local community. A number of programs exist in the United States currently, including the HOPE VI program and the Low Income Housing
Tax Credit (LIHTC), which serve to create affordable mixed-income housing while also providing an incentive for new development in economically-distressed neighborhoods. Each have well-studied successes and drawbacks, so it is important to combine the lessons learned from each program to provide the most effective affordable housing policy.

Mixed use development and mixed income housing has numerous social benefits that combat problems facing many communities today. Among these benefits include building a stronger society with a deeper system of trust among its population, providing a more stable environment for people to experience the emotional journey that is home ownership, as well as fighting inequities among certain demographics of a population. Case studies have found that there is a strong correlation between mixed use housing development and housing diversity and the social capital in a region. Mixed use development can be used to ameliorate town and gown relations by creating spaces that can allow both college students and town people to live and respect one another.

All three of the residential areas outlined above have heterogeneous qualities which equip them to be suitable for mixed-use and mixed-income, infill development. Each residential area will require significant community engagement to implement new development. As for the West End, development must be installed which respects the community’s abutment to the Holme-Foster and other long-term/family communities. This region might be best suited for housing which attracts renting employees of the University and graduate students. The East End / Collegiate area poses a significant opportunity for development for undergraduates. However, luxury apartments do not fit the needs of the majority students at Penn State University. Developments like the Rise neither benefit nor support the community of State College. The Highlands is a large enough region that certain sections can be developed in a way where long-term/family households do feel as if their community is turning into a metropolis. Development closer to downtown and along higher-trafficked roads will provide for the needs of the population while maintaining the feel of State College as a hamlet amongst the hills.

Overall, through an integrative approach, the combination of all three distinct policies aims to push for more affordable housing, resulting in a more sustainable community. Taking a needs-based approach to on-campus housing, adjusting housing contracts to give students better flexibility, and championing mixed-use and mixed-income housing would help to reduce inequalities among students, build a more sustainable community, and form long-lasting partnerships between the University and State College. By implementing these three policies, Penn State with the help of the borough council of State College will be able to ensure more affordable housing in the effort to safeguard accessibility to public education and develop a more sustainable community.
Introduction and Background

Context
Located in the middle of central Pennsylvania in conjunction with the small city of State College, PA, the University Park campus of the Pennsylvania State University is home to over forty-six thousand undergraduate students. In addition to the undergraduate students, just over six thousand graduate students are also enrolled. As of the 2016-2017 school year, the university provides a maximum of 13,728 students on-campus housing for an average cost of $5,940 per year (“Pennsylvania State University - Main Campus Room and Board Costs”). While University Park Housing services many students affordably, its relatively small capacity forces approximately 74% of students to seek housing off campus. Unlike university provided housing, off-campus students are slaves to the scarce supply of the State College housing market.

According to housing price indices, housing in State College, PA costs 35% more than the national average, and 48% more than the Pennsylvania average (“State College, PA Cost of Living”). For the month of March 2018, the average rent of a one bedroom apartment in State College was $1235 (“Rent trend data in State College, Pennsylvania”). Assuming that most one bedroom apartments are shared by two students over a yearly lease, this figure comes out to roughly $617.50 a month, or $7410 a year. Despite the additional four months of time included in the lease, the time between semesters often goes unused nor subleased, ultimately increasing the housing expenses of attending University Park. It should be noted though, that March is not entirely indicative of the historic trend of rent prices within State College. In fact, it happens to be underrepresenting the increasing expense that is housing security.

By studying the regressed trend line of the data over the last half-decade, a yearly growth rate can be approximated. Between April 2012 and September 2017, a span of nearly five and a half years, the monthly rent associated with a one bedroom apartment rose nearly 30%. This indicates a yearly, compounding growth rate of 4.88%. Meanwhile, the average inflation rate over this
time period happens to be roughly around 1.49%, suggesting that rent prices in State College for a single bedroom apartment are increasing at a rate three times that of inflation (“Historic Inflation United States - CPI Inflation”).

Furthermore, the increasing demand for off-campus housing, as revealed through the relatively high growth rate, has provided immense negotiating power to local landlords. Landlords are currently able to offer leases nearly a year in advance with the understanding that they will be filled immediately. Since University Park Housing is unable to ensure every sophomore a bed on campus, all students, especially incoming freshmen, are forced to make future housing decisions as early as their first month on campus. Little time is allotted for such significant decisions to be considered, frequently resulting in shortsighted choices and regrettable living situations. Likewise, low and middle income students opting to apply for more affordable, on-campus housing are instead required to partake in the housing lottery system. Regardless of need, students unable to afford expensive off-campus living situations are left vulnerable to being denied on-campus housing. Consequently, those denied on-campus housing discover mid-spring semester that they must secure an available lease for the upcoming school year, nearly half a year after leases were initially offered.

Finally, actions taken to preserve the culture in State College continues to inhibit the expansion of off-campus housing. Many residents, students, and alumni relish the “small town feel” of downtown State College. In efforts to preserve this nostalgia, the Borough Council has employed strict zoning laws, regulating the heights of buildings do not exceed specified ceilings. While seemingly well intentioned, these regulations have created a legislative bottleneck, slowing all efforts to build additional, vertical living space directly off campus. Nevertheless, new apartment buildings that manage to be approved by the Borough Council boast high quality furnishings and fetch exorbitant prices. Considering the most recent complex, The Metropolitan, a one bedroom one bathroom apartment costs $1700 a month, with a maximum capacity of two occupants (“The Metropolitan”). Despite increasing housing supply and therefore competition, the stark upgrade in quality standards actually increases the cost of housing across the board. Surrounding apartment complexes are now able to gradually raise prices while still being perceived as the cheaper alternative. The result is an aftershock of increasing rent standards that displaces middle and low-income students further off campus.

Policy Statement
Ultimately, the Pennsylvania State University is a public university. As an institution, Penn State has the responsibility to provide students, especially Pennsylvanian residents, affordable access to higher education. Despite having one of the highest in-state tuitions already, the booming housing market off campus is providing an additional financial barrier to higher education. Not only is the barrier perpetuating inequalities of opportunities among students, but also it is increasing the cost of living for the residents of State College, leading to a less sustainable community overall. By combining three of the United Nations’ outlined sustainable development goals, reducing inequalities, sustainable cities and communities, and partnerships for the goals, Penn State in conjunction with the borough council of State College has an obligation to ensure affordable housing in the effort to safeguard accessibility to public education, a tenant of a sustainable society.
Policy A: Need-Based Housing Lottery

Emmy Muhoza
Integrating FAFSA into Penn State’s housing lottery system to reflect a more need-based approach

Problem
Penn State’s housing lottery system does not factor into account students with demonstrated financial need after freshman year.

Who is affected?
Penn State’s students with demonstrated financial need.

How are they affected?
Poor living conditions, student homelessness and difficulty in accessing Penn State’s education leading to academic failure and difficulties. All of these problems eventually lead up to one major problem of “failure to provide affordable education” by Penn State, which according to UN’s sustainable development goals of providing quality education, reduced inequalities, and sustainable cities and communities, is not sustainable.

Problem in detail
Penn State’s housing placement is a lottery-based system where by any student can be given housing on campus or be rejected housing on campus. The only exception being first year students. As a result, Penn State’s students especially those living on campus are never really sure what their living options are the following year. Coupled with the issue of Penn State’s lottery system is an issue whereby both on-campus housing and off-campus housing impose early deadlines when it comes to accepting housing offers. This leaves students with no choice other than accepting whichever housing offer that comes their way so that they rest assured that they have a place to stay the following academic year.

The student population with the lowest income is the one that is hit most by this problem. For example, the further away you move from campus the less expensive the apartments are. The less expensive the apartments are, the less maintenance done to them and thus such housing are mostly in poor living conditions. If there were other options, no one would be willing to rent such apartments, but because of financial problems students with financial need often times find themselves accepting housing offers from such apartments (with lack of enough maintenance and poor living conditions).

As a result, this has very many negative implications on low income students such:

I. Long hours spent on the ride to and from school. You will find that there are students who commute for about an hour while traveling to and from campus. This can affect a student’s ability to do well academically because it is always so hard to concentrate on mentally consuming things like academics after a long bus ride. This is because the person is usually too tired from the ride and all he/she wants is to lie down and rest.

   Ii. Lack of focus on the social and academic life. This hinders a student from getting the full Penn State experience because he/she is constantly thinking of leaving school early to go do
some work at home or he/she is in most cases late for classes especially morning classes. This reflects negatively on a student’s transcript, which may result in the refusal of employers to hire such a student yet it is not really his/her fault.

Iii. Diseases and related health issues. Leaving in poor housing conditions does not only lead to social and academic failure, but also leads to diseases and various health issues such as depression, skin rashes, bed bugs, and lung issues due to poor indoor quality of air and lack of maintenance.

Iv. Stress and related psychological problems. It is easy for a student leaving in poor housing conditions to be stressed because he/she is constantly concerned with how much of a mess his/her apartment. Statements like “I can’t invite people to my house” constantly pop-up in their minds and may lead to high stress levels, which may result into depression for the student and worse, suicide.

V. Home injuries. Home injuries are a very serious health issue especially for students with children. A 2010 WHO report indicates that home injuries were the leading cause of injury deaths for many children under the age of 5 in many countries between 2002-2004.

Vi. Indoor air quality. Due to poor housing maintenance, indoor air quality can be a serious health and environmental concern due to asbestos, cleaning products, and deteriorating lead-based paint.

Vii. Pests. Given the fact that pests are mostly found in warmer areas, this is not usually seen as a problem, however, this can be a serious concern during the summer when temperatures are 70F and above.

Viii. Crowding. It is not uncommon to find two or more students who share an apartment or even a room just because one of the students cannot be able to pay the bills associated with rent at the moment. This however, is most likely to happen among low income students as a way to minimize their daily living expenses. Even though sharing an apartment or a room to cut on expenses is a noble thing, it can lead to a risk for social pathologies and mental symptoms and can lead to the increase of the transmission of infectious diseases.

Ix. Water and power shortage. In buildings with poor maintenance, there tends to be an unusually high rate of water and power shortage compared to other similar building which have been taken care of really well. This can lead to hygiene and sanitation problems which may lead to body diseases like skin rashes, and indigestion due to eating meals which are not well cooked due to unexpected power outages from time to time.

X. Flooding. Residents of poorly maintained buildings oftentimes find their basements flooded especially during heavy rainfalls. Not only does flooding of the basement take away the comfort of a home and make everything wet, but it also makes the building damp which may cause to the failure of the structure if the problem persists over time.
Proposed policy
Given the numerous number of challenges that students living off-campus, especially students with financial need, encounter on a daily basis, we propose that Penn State’s housing lottery system be changed or modified in such a way that it reflects a more need-based approach. This can be achieved by integrating FAFSA into Penn State’s housing.

How to implement the proposed policy
To implement the proposed policy, Penn State needs to:

I. Identify students with financial need by requesting who think they have a need for financial aid to file the FAFSA or renew the FAFSA every year.

II. Since Penn State uses a lottery system to decide who receives on-campus housing after freshman year, students who need financial assistance with housing should ensure that their cost of living off-campus is the same or approximately similar to the cost of living in the campus residence halls.

III. After identifying the students with financial need, Penn State can either reserve a given number of spots in the campus residence halls or Penn State can provide university sponsored off-campus housing to students with demonstrated financial need or Penn State can decide to directly give an amount of funds equal to the funds of on-campus housing to students with demonstrated financial need and let the students manage the funds themselves.

Advantages and disadvantages of the proposed policy

Advantage(s)
Integrating FAFSA into Penn State’s housing lottery system has various advantages which include, but are not limited to:

I. It reflects a more need-based approach. By integrating FAFSA into the housing lottery system, Penn State shows a strong dedication to providing easy access to education to all students without regard to whether has the economic means to attend Penn State or not. This goes along well with the UN and Penn State’s sustainable development goals of providing accessible and quality education as well as reduced inequalities.

II. This solution will also go a long way to helping mitigate all or most of the problems associated with poor housing and living conditions as discussed in this paper. For example, by providing a living assistance to students, Penn State will be ensuring that its students are less likely to suffer from diseases and psychological depression caused by poor living conditions. Once again, this will highly contribute to the academic success of Penn State’s students.
**Disadvantage(s)**
However, the above proposed policy has a number of flaws that might prove to be a challenge toward the implementation of the proposed solution. Integrating FAFSA into Penn State’s housing lottery system assumes that all of Penn State’s students are able to file FAFSA and this is not the case since FAFSA is only restricted to US citizens or Permanent residents of the United States. As a result, this would imply that Penn State is favoring students based on their citizenship status, which is against Penn State’s diversity and inclusion policy. As a result, this would attract criticism from education activists, the media, and various other groups whose interest lies in the advancement of education and provision of equal educational opportunities to all.

**How to handle the disadvantage(s) of the proposed policy**
Even though the main problem with this proposed policy is its failure to include international students into account since they (international students) are unable to file the FAFSA, there are various reasons why it shouldn’t stand in the way of integrating FAFSA into Penn State’s housing lottery system.

According to federal law, an international student has to provide proof that he/she or his/her sponsor is able to pay for all the funds needed for the international student to attend Penn State and to cover for all the basic needs for a minimum period of four college years. This includes the ability of the international student or his/her sponsor to cover for the needs associated with housing expenses as well. Therefore, this removes the burden off of Penn State to provide financial assistance to international students. It also takes away all the criticism that may arise as a result of integrating FAFSA into Penn State’s housing lottery system such as a lack of inclusion of international students into Penn State’s housing and failure to provide financial assistance to international students.
Policy B: Housing Contract Adjustments

Faith Hatchard
**Housing Contract Adjustments**

A part of Penn State’s responsibility to ensure that education is accessible by providing affordable housing accommodations is to do so without causing excessive emotional or financial burdens. The structure of current housing procedures at Penn State have proven to provide students with unnecessary stressors in addition to those faced in daily college life. According to an annual report concerning health released by Penn State, “51% reported having a more than average or tremendous stress level in the past 12 months” (“Stress Management”). With significant housing needs both on- and off-campus due to the sheer number of students that need housing in order to attend Penn State - University Park, it is practical to assume that this housing demand would be present no matter what time of year the housing transitions were facilitated. Focus group studies and research on comparable universities alludes to the truth of the previous statements.

In Focus Group studies assessing student experiences and expectations of housing on Penn State’s campus and in the State College community, students from various backgrounds and age groups were asked the following four questions:

1. What was your housing (& transition) experience like?
2. What factors went into choosing housing after your freshman year (and each consecutive year after)?
3. If the opportunity would present itself, what would you do to change the current housing processes?
4. If the deadline of housing contracts could change, what timeline would be effective in your opinion?

The student participants were part of a convenience sample created to keep matters in a timely fashion. Faith Hatchard facilitated each of the 8 groups that drew in 54 total participants (“Housing Focus Group”). All were on a volunteer basis from various organizations that Hatchard is a part of, such as Sapphire Leadership Academic Program, Presidential Leadership Academy and Lion Ambassadors. Because of this, data should be carefully assessed when comparing to the entire university student body. On the following page, the demographics of the study can further be assessed through graphics created by Faith Hatchard using Piktochart (Hatchard).

The majority of the students that participated in this study were freshmen, which gives a raw view into their first housing transition experience and how they went about handling that. Many noted that they began looking for housing because of pressure from peers; they either felt as though they were already too far behind, they panicked about not having enough information, or figured it was easiest to step back and let a friend handle their situation because they did not have the information themselves. Some students noted that they felt the idea of “no guarantees” to housing frightened them, especially when they had to choose between two binding options. Making a decision eleven months in advance of move-in day on something that you are bound to both legally and financially is very understandably frightening. There are so many options for
living here but when they overcomplicate the process, it provides an extra stress on students beyond the typical freshman still trying to grasp how to handle college life.
Another common perception of students who participated in the focus group was that as students, they are not respected by the adults in the community when it comes to the housing process. Yes, they may still rely on their parents for co-signing purposes and down payment logistics, but many of the students felt that realtors had taken advantage of them by manipulation, rather than respecting them as adults during the exploration process; this is especially due to what students see as paying for convenience over quality of housing. There are higher quality housing options available in State College, but they are much further than walkable distance to campus, therefore creating further logistical stressors for students (“Housing Focus Group”).

The University of Pittsburgh is frequently compared to Penn State when looking at universities in the state of Pennsylvania, however the two have quite different layouts: one being in the middle of a city, and the other in a “college town.” Despite the assumption that being a city may complicate housing arrangements, Pitt’s housing deadlines are in the spring semester and the university encourages various housing options for students spread across diverse parts of the city (“Housing Process”). One of Penn State’s main rivals, the University of Michigan, is a university of comparable size to Penn State, and yet does not even open its housing processes until January (“Returning Resident Housing”). On the other side of assessing universities and their housing systems, an interesting comparison is American University in Washington DC. As a private school immersed in a large city, they still manage to address student housing demand starting in January each year (“Returning Room Selection”).

Based on the information gathered both internally and externally, there are multiple courses of action that could solve the issues facing Penn State students over sustainable housing security.

1. Align housing deadlines on- and off-campus
2. Push all deadlines back to the beginning of second semester
3. Improve and utilize the Fall Housing Fair

Ideally, all of these courses of action could build on each other for the best outcome, but all have both advantages and disadvantages and they require the realtors in State College to work together with the university to sustain the student housing market.

If deadlines for both on- and off-campus housing are more aligned, it will alleviate some of the risk students face when signing binding contracts. Many sign contracts too early because they fear being “homeless” or later being forced into a poor situation far from campus if they don’t win the on-campus housing lottery. It is possible for students to go through all rounds of the on-campus housing lottery and end up with nothing; they then have to scramble to find living arrangements, which as stated before, causes undue stress on the student beyond the regular stressors they face in college life. If deadlines were more closely aligned, there would be less of a gamble because students would not feel pressured to commit to something so early; it would allow all options to be on the table at once, which in turn allows students to make the best educated decision for themselves.

What most students who participated in the focus groups advocated for was to push the housing deadlines back to the beginning of the spring semester. Students will always need housing, so no
matter when they secure it, the demand for it will always be there. This extra time allows freshmen and transfer students a chance to become acclimated with the campus and college life (academically, structurally, and socially) before they rush into a decision that is not going to affect them for another eleven months. If the deadline is after winter break, it logistically allows parents to be able to more easily co-sign leases, and discuss best options for their child if that is something that they want to have a say in (which when discussed with most focus group participants, it seemed to be). When the deadline is closer to when the students will actually be inhabiting the residence, it also creates more feasibility in putting a month’s worth of rent down as a security payment (if necessary) and avoids a significant financial burden early on. It is evident that many schools similar to Penn State have mastered this timeline, which brings high probability to the thought that Penn State could also do this, as long as the State College realtors and the university could work together on this. To implement both changes in timeline and alignment, the university would have to work together with local realtors and government to establish a law that coincides with university policy on the deadlines so that there is something holding the realtors to these deadlines without manipulating the process further.

Many focus group participants did not know that a Housing Fair was offered in both the fall and the spring semesters. If the fair was marketed more effectively (especially in the fall) as an opportunity for students to learn all that they need to know about changing residences, less students would feel pressured to “follow the crowd” in deciding their housing situations. They would instead be equipped with information to make the best educated decision. If on- and off-campus housing can work together on this to have all options laid out in one place, the cohesion could also help alleviate confusion and pressure that students may feel in those situations. There are some students that are under the impression that moving off-campus is the only option for them after freshman year, when that is not the case, but they don’t have enough information about the upperclassmen on-campus housing lottery or are too scared of that process to wait to enter the lottery. One student who participated in the focus group said he was able to utilize the housing fair this year while his parents were coincidentally on-campus, which gave them the opportunity to ask all the “right” questions; this turned into a fairly easy and seamless process to then secure housing. However, this is not the case for many students at University Park and we need to equip them with the opportunities to pursue housing information on their own and dissect that information appropriately without ulterior motives (“Housing Focus Group”).
Policy C: Mixed-Use and Mixed-Income Development

Ben Hartleb, Ray Hoy, Eli Reber
An Introduction to Mixed-Use Development and Housing Density
There is a growing need for more affordable and sustainable housing, as many cities in the U.S. are fighting to combat urban sprawl which is leading to long commutes and disjointed communities. This low density, large area housing structure creates housing prices that are generally infeasible for the average citizen. Anastasia Kalugina, in an academic paper published by the Cornell University Real Estate Program focusing on this issue, writes, “Affordable housing is generally defined as housing for which an occupant pays no more than 30% of his or her income for gross housing expenses such as rent and utilities” (Kalugina 77).

In general, there are a many options to making housing more affordable, but one predominant factor is increasing the density of residents. There are a variety of ways to make this feasible for both the tenants and property owners, including mixed-use development (residential and commercial living spaces) and mixed-income housing. Each of these housing setups increase urban density, as well as improving key factors within the community, such as financial accessibility, environmental burden, and improved social capital.

Image C-1.

Compared to countries around the world, major U.S. cities are poorly designed in regards to population densities. Data collected by LSE Cities and published in their report, Accessibility in Cities: Transport and Urban Form, visualizes this trend on page 6. As seen in the graphic (Image C-1), cities such as Atlanta and Los Angeles have 580 and 1,870 people per square kilometer. In contrast, cities such as Berlin and London have densities of 3,930 and 4,120 people per square kilometer, and these areas represent only the middle ground in terms of density. Hong Kong and Mumbai boast numbers in the tens of thousands of people per square kilometer. U.S. cities do have major work to do in the aspect of increasing population density, and an increased focus on mixed-use and mixed-income development will allow this goal to be achieved.
This philosophy of higher density, mixed-use housing is summarized by the idea of New Urbanism, which focuses on creating human-scale neighborhoods, placing an emphasis on creating revitalized communities. The logic can be applied to new developments, urban infill, and repurposing of existing structures. New Urbanism has a variety of benefits, including economic benefits to the local community, decreased environmental impact, and improved social capital for its residents ("What is New Urbanism").

Image C-2.

U.S. cities do not currently have infrastructure that encourages its residents to rely on public transportation, walking or cycling. As data presented in the report done by LSE Cities (Image C-2) shows, there is a clear trend between share percent of residents utilizing public transportation, walking or cycling and decreased CO₂ emissions (Graham and Rode 9). By creating more dense housing structures, communities are encouraging their residents to rely more heavily on public and shared transportation, thus reducing their environmental impact. This trend of increased public transit use as a result of higher density housing can be seen in the following section analyzing case studies of housing density in Central London and the U.S.

Case Studies and Existing Areas of High Density Housing
One area that U.S. cities can look to model are the high density housing setups in Central London. A case study conducted by LSE Cities in the early 2000’s analyzed Central London’s densely-populated areas, and analyzed the various benefits and trade-offs provided to its residents. The sample included representative rent prices at both ends of the financial spectrum, though the study focused predominantly on analyzing high-density areas, with all five analyzed areas having nearly 50% more resident per unit area than London’s average. Some of the key findings included that car use in Central London was below 18%, and rose as distance from center city increased, reaching over 50% at the outer boundary of Great London. They also found that residents enjoyed quick access to shopping centers (over 72% of shopping was done in the local community - i.e. corner shops/small businesses) and public transport, though they made complaints about parking issues, occasional vandalism, and smaller living spaces. The overall trade-off seemed to be one of space vs. proximity and convenience (Burdett 4-6).

Higher density housing has the natural effect of decreasing average rent prices, though it is important to also look at other ways that rent prices can be driven down. In the U.S., there are a variety of affordable housing programs of note, including the HOPE VI program that was
adopted in 1993. The program’s focus is to eradicate “highly distressed housing” and replace it with new, mixed-income developments (“HOPE VI - Public and Indian Housing”). Additionally, there are a number of affordable housing programs around the U.S. Programs in Boulder, CO and Austin, TX were analyzed by the Cornell Real Estate Program, each of which boast programs that require the cities to set aside at least 20% to be permanently affordable for low-income households (Kalugina 82-83). As a whole, many U.S. cities lack even programs as basic as these, which further showcase the pressing need for more affordable housing.

**Economic Benefits of Mixed-Income Development**

Encouraging mixed-income housing development has a number of benefits, though one of the most predominant is the economic benefits it will present to both the residents and the local community. The London case study is an excellent example of this, with an increased number of its residents shopping locally and becoming more engaged in their neighborhood and community. In a pragmatic sense, however, it can be difficult to increase the density of existing city populations while simultaneously trying to combat urban sprawl and zoning restrictions on excessively tall buildings.

One effective solution is the idea of infill development. In a paper published by the Journal of Urban Affairs, the effect of infill development on income diversity was analyzed. Infill development focuses on reducing land consumption by repurposing vacant land in already developed urban areas into new developments or redevelopments. One key finding of the report is that financial investment into newly-built development is introduced, which draws new residents into the community (Kim 281). By changing the structure of these neighborhoods, these residents are often of different socio-economic status than the existing residents, which promotes increased diversity and more mixed-income housing.

A journal article published by the American Planning Association (APA) in 2011 focused on the outcomes of mixed-income developments, particularly of the the HOPE VI program. It was found that one major benefit mixed-income housing has is the potential to provide institutional improvements to traditionally low-income neighborhoods, by creating new market demand. This dynamic motivates change to occur, bringing in higher quality police services and goods and services in general. As author Erin Graves states, “If mixed-incomes are present in a community, lower-income residents may be able to build ties with affluent neighbors and, thereby, improve access to employment networks and other resources” (Graves 145). Similar to the findings of the Journal of Urban Affairs findings, mixed income housing offers the opportunity for traditionally marginalized low-income areas to get an influx of resources and opportunities not previously afforded to them.

An important note, however, is that it is necessary to be very careful with how the mixed-income development is carried out to avoid gentrification. Displacing low-income residents with middle- to upper-class residents does nothing to promote mixed-income housing and reap the benefits described above. Author Jeongseob Kim concludes with, “When infill development simply reflects neighborhood market conditions, the supply of diverse housing options and subsequent increase in neighborhood income diversity cannot be expected” (Kim 294) It is crucial to
establish more direct guidelines or incentive programs to establish a broad range of housing prices for the newly-developed infill areas.

This was one of the major success of the HOPE VI program, which focused on mixing affordable and market-rate housing to attract middle- to upper-class incomes, while also ensuring lower-income families also had adequate accommodation. It is necessary to establish more inclusionary zoning laws which would encourage developers to target these economically distressed areas as sites for new or infill development. One possible way to do this would be through the Low Income Housing Tax Credit (LIHTC). The Department of Housing and Urban Development (HUD) defines the LIHTC as a program designed to, “Issue tax credits for the acquisition, rehabilitation, or new construction of rental housing targeted to lower-income households” (“Low-Income Housing Tax Credits”). The LIHTC offers an incentive for development to occur in these economically-distressed areas, which will help lead to an increase in mixed-income residence areas.

According to HUD, the LIHTC is used to subsidize either 30% or 70% of the affordable units in a project. The percentage depends on whether additional subsidies are used in a project. A 30% subsidy (4% tax credit) is applied to new construction projects that use other subsidies, or to qualify for the credit, a developer is either required to allocate 40% of the units to renters making no more than 60% of the area median income or 20% of the units must be allocated to renters making no more than 50% of the area’s median income (“Low-Income Housing Tax Credits”). Some key findings of a HUD report assessing the economic and social impacts of LIHTC in residents and neighborhoods were that over 70% of LIHTC households reported an adult working for pay at the time of the survey, with only 10% reported as receiving income from public assistance programs within the past year (Buron, et al. vii). There was, however, a lack of economic diversity among the LIHTC developments, with only two of the thirty-nine surveyed houses meeting economic diversity metrics (Buron, et al. xii). Overall, the LIHTC led to the creation of many stable neighborhoods in economically-distressed areas, though its ability to create mixed-income developments were limited. By combining the principles learned from HUD’s LIHTC program along with the Journal of Urban Affairs analysis on infill development, it is possible to create sustainable, vibrant communities for residents in a broad range of socio-economic situations.

There are many pros and cons to the use of mixed use zoning. As been discussed, mixed use zoning provides many opportunities for economic development in a region, as well as some environmental benefits. In addition to being beneficial for economic development and environmental conservation, mixed use zoning also provides numerous social benefits.

Social Capital
The notion of mixed use zoning providing some sort of social benefit relies heavily on the idea of social capital. According to, The Influence of Mixed Land Use on Realizing the Social Capital (Nabil, Noha Ahmed, and Gehan Elsayed Abd Eldayem, 288) social capital includes “the institutions, the relationships, the attitudes and the values that govern interactions among people and contribute to economic and social development”. From this definition, it is easy to see that
social capital influences not only the economic development of an area, but also the interactions among people, such as how much trust in a community there is.

It is shown from *The Influence of Mixed Land Use on Realizing the Social Capital* (Nabil, Noha Ahmed, and Gehan Elsayed Abd Eldayem, 296) that social capital has a direct influence in how sustainable a community is. While sustainability may be generally referred to as the environmental conservation policies that have been implemented in an area, the amount of trust and interaction within a community is also vital to measuring how well a community is able to sustain itself. A community that is void of interaction among its population and is unable to develop a sense of trust and open communication is a community that may have trouble with social, as well as possibly economic, development in the future.

**Cairo Case Study**

According to *The Influence of Mixed Land Use on Realizing the Social Capital* (Nabil, Noha Ahmed, and Gehan Elsayed Abd Eldayem, 296), mixed use development has an overall positive impact on increasing the amount of social capital in an area. The researchers did a case study in the Greater Cairo region, in which they split up the region into six different “study zones” and analyzed the land use of each study zone. They then had residents of each zone fill out a questionnaire that was aimed at measuring the social capital in each zone. The questionnaire prompted the citizens with questions that would quantify the region’s existence of networks and social relationships and a value system. Some of the attributes that were asked about in order to identify the networks and social relationship existence in the region were:

- Availability of formal and informal existing social networks
- The number of civil society organizations operating in the zone
- The existence of representative from the local bodies in the zone

Some of the questions that were aimed at quantifying the value system in the zone asked about:

- The extent of trust between the population and the government
- The existence of groups that operate for a common goal for the zone
- The number of religious institutions in the zone

Once these attributes were used to measure the social capital of the region, the researchers looked at relationships between social capital and different attributes that were thought to affect it, such as accessibility to services and the average length of the road network. It was found that in instances where the attribute was thought to increase social capital, there was a positive relationship. One relationship that was researched was the relationship between land use diversity and social capital. It was found that when there were a greater amount of land uses in an area, there was also a larger amount of social capital.

The researcher’s reasoning for this was because of the idea of “realized social capital”. When an area has a more diverse use of land development, more people will come into contact with each other, since people will be shopping in the same area that other people are walking into their residences. People will come into contact with people that they normally might not in their
day-to-day life, leading to a greater amount of social interaction in the area. The researchers argued that, when there is a greater amount of social interaction in an area, not only does this create a bigger network of connections among the population, but it also creates a larger sense of trust.

**Town and Gown Relations**

According to *Bridging Town and Gown with Sustainable Student Housing* (King, Kristen, 44), sustainable housing for students is able to solve social issues that deal with “town and gown” relations that occur in university towns. When a large amount of students move into an area, they can disturb the area’s real estate market, as well as cause other problems such as excess noise to occur. Not only does this sometimes lead to a reduction in the amount of housing available for residents, and subsequently forces them to live farther outside the town in order to find housing, but it also leads to conflicts of interest between the students and the town people. Providing an adequate amount of affordable housing for students can help to reduce the amount of conflict that the town population has with the student population.

In order to combat the harmful effects of negative town and gown relationships, Harvard University worked with the local North Allston area to develop a plan for mixed use development that would benefit the students, town people and the university, as well as provide for more integration between the two communities. Harvard University was experiencing issues with providing housing for its graduate students, and thus subjecting them to the high rental prices of the local area. According to the Boston Redevelopment Authority, an agreement between the local town and Harvard University was made to use mixed use development in order to combat this problem. The agreement asserts that a region of 760 acres in North Allston will be developed - the eastern region will be used for a institutional purposes, the central area will be used for residential purposes for students and town people and the western part of the region will be used for research and development for the university (Boston Redevelopment Authority).

Another example of a university trying to combat integration issues is Miami University in Oxford, Ohio. The administration from the university and the mayor of Oxford worked together, as they realized that students living off campus has “extended the boundaries of campus” into the surrounding area and has caused issues with the town people. In an essay written by the mayor of Oxford, it is stated that Oxford’s housing market is “unnaturally shaped for a college student”, as a single room in a four-bedroom house may cost as much as $1,000 per month, which puts downtown housing out of reach for many students. Not only is the cost too high for some students, but downtown housing also allows for dangerous and disruptive house parties (“Town-Gown Relations”, 1).

In an effort to better integrate the students into the downtown community, the university formed a partnerships with various downtown entities, including the mayor, local hospital, local school district, chamber of commerce, police force and the university athletics department. The task force designed the Good Neighbor Policy for students that live in the city. This policy allows the Dean of Students at the university to be notified whenever there are multiple violations of downtown ordinances from students that are living downtown. Once multiple violations are reported, the students must meet with both city and university officials as well as a community
member and come up with a strategy to stop the violations from happening. It is stated that students have actually “expressed relief for some guidance, as student house parties can easily get out of control and prove costly to the hosts who might have originally just wanted a few friends to come over to socialize”. Eventually, if many violations are reported, then the student may be referred to the Office of Ethics and Students Conflict Resolutions, in order to judge if they get charged with a violation of student conduct (“Town-Gown Relations”, 1).

In addition to having the Good Neighbor Policy, the Miami University website also has a page that gives information on how to responsibly host a party. The webpage instructs outlines the rules and punishments surrounding hosting a party and gives students suggestions, such as ensuring that they are familiar with everybody at their party, alerting their neighbors of the party beforehand and giving them the phone number of the sober host, etc (“Social Hosting.”).

The policy created by Miami University is an effort in ensuring mixed use development, as it is creating an environment that ensures the smooth integration of student housing and recreational life with that of the town people. With this smooth integration, the university and the town develop a space that is overall a more sustainable living situation for both students and town people, as it works towards ending the destructive living habits that threaten the town and gown relationship.

An extensive analysis of the projects has yet to be done, however they are proofs of concept that mixed use development is advantageous for a university to become integrated into a community. As found in The Influence of Mixed Land Use on Realizing the Social Capital (Nabil, Noha Ahmed, and Gehan Elsayed Abd Eldayem, 296), a larger amount of integration with a community leads to a larger amount of realized social capital. Having a more extensive social network and value system among students and town people could lead to a more positive relationship between the two populations and cut down on the problems that arise in college towns.

Social Benefit of Housing Sustainability and Diversity for an Individual
Aside from ensuring sustainable housing to resolve town and gown relations, it can also be used to benefit individuals. It is argued in Creating Sustainable Housing: The challenge of moving beyond environmentalism to new models of social development (Thorns, 5) that a house is more than a place of dwelling - it is a physical expression of one’s identity.

“Housing that is secure and allows the individual and household to express their identity through the reshaping of the domestic environment is a crucial component of wellbeing. Houses are not just physical shells but also emotional and symbolic places filled with meaning for their occupants. As the wider world that we live in becomes filled with new risks over which we have seemingly little control there has been an argument that the ‘home’ increasingly becomes central to our ‘ontological security’ that is our attempt to create some certainty about ourselves.” (Dupuis and Thorns 1998)
The emotional and symbolic value of a home may not be able to be quantified, so it may not be feasible to test the impact on a person when they feel as though their current living situation does not provide them with the satisfaction and emotional and physical security having a secure home would give them. Due to the difficulty of quantifying this measure, the researchers in *Creating Sustainable Housing: The challenge of moving beyond environmentalism to new models of social development* (Thorns, 8) analyzed the study done by the House and Home project, where the project encouraged people to tell their story about their housing history, such as where they were born, what was their first house like and when did they move.

The researchers found that people talked about their housing history as a “housing journey”, where people described that their housing situations would change because of a change in their life, such as a change work or school life, increase in family size, etc. In order to provide people with housing that fits their ever-changing needs while also providing them with the emotional and symbolic value that a home gives its owners, it is necessary to incorporate people into a community through mixed use development. Those that are in that stage of their “housing journey” where they need more space, as well as possibly a day care for their children would more easily be able to find such an option in a community that has social services integrated into it. Mixed use development would lead to a more sustainable community that is able to provide the diverse necessities that its citizens have, without forcing them to move to another area and thereby uprooting the emotional foundation that their current home has provided to them.

**Mixed Income Housing**

Another important aspect of sustainable housing is the integration of people in different socioeconomic statuses via mixed income housing. In many areas in the United States, citizens are segregated from each other, based on their income levels. Expensive housing puts certain zip codes out of reach for people from a lower socioeconomic status, which is an inherent social inequity. According to *Gentrification in Chicago* (French, 16), affluent people move to an area because of certain amenities, such as parks, good schooling and overall safety. Housing prices in these areas remain high, because of the amenities that they afford, thus putting them out of reach of lower income individuals. According to a study done by Stanford University, African American and Hispanic people are even at a greater disadvantage from receiving these amenities (Andrews). This results in a somewhat heterogeneous community that is composed of primarily white people.

In the past, cities has tried to build low income housing to try to fix problems of homelessness, however did not try to integrate them into the community. The economic segregation created many problems for the residents of the area. One example of failed low income housing is the Robert Taylor Homes in Chicago. This residential area was built for the purpose of providing housing for low income individuals, however it did not afford the people the same standard of living as a middle class development would. There was rampant poverty, drug use and schooling that was not up to par with middle class neighborhoods, thus showing that the people were not provided with a sustainable living option.

The researchers in *Where does Community Grow?* (Coley, Rebekah Levine, et al, 480) did an analysis on the amount of trees that were in a certain area in the Robert Taylor Homes and
whether or not there were people in engaging in that space. Overall, the entire development did not have much green space, but the researchers found that the common spaces that had more trees were much more likely to have residents congregating and socializing in that space. The presence of an amenity that is not commonly found in the low income residence area attracted people to it.

This research shows that citizens do value green space, and therefore it is an amenity that should be available in any sustainable living area. Since the presence of green space, as well as access to equal education and safety, is not a commonality among low income housing spaces, it creates a social inequality where the community does not provide the same resources to people of all socioeconomic levels.

Mixed income housing can be used to ensure to people of all income ranges are afforded the same opportunities that the local area provides. Not only does creating a more affordable option for people give them the same opportunities as those from a less affluent background, but it also leads to a greater sense of social capital. Residents of the Robert Taylor Homes were 91% African American (Coley, Rebekah Levine, et al, 474). White, middle class families living in heterogeneous communities were not exposed to the residents of the Robert Taylor Homes, and thus no social capital was built between them through interaction in daily life. Integrating those who are from a lower socioeconomic level by ensuring mixed income development provides them with the same amenities and opportunities that are afforded to middle class families, while also allowing for opportunities for people who are historically segregated by their economic status to interact with each other, thus creating a greater sense of realized social capital and trust and, in turn, a more sustainable community.

Implementation in State College:

Introduction

In recent years the State College borough has released several reports which outline a vision for the community at large. The Downtown State College Master Plan published by the Borough in 2013 and the State College Neighborhood Plan of 2014 frame goals for the Borough of State College and neighboring communities. The master plan “provides a framework to guide growth and change for a community” (State College Downtown Master Plan 5) whereas the Neighborhood Plan “has been prepared so that residents can learn about their neighborhood and the Borough as a whole, and understand the vision for the Borough’s neighborhoods in the future” (State College Neighborhood Plan 8). Both plans go so far as to provide recommended developments for existing lots.

Goals:

This section of the policy proposal will identify already flagged regions for the implementation of mixed income and mixed use infill development. Selections will be analyzed for their social and physical feasibility.
West End
The State College Master plan identified what they call the West End Revitalization Plan. The neighborhood of West End is loosely defined as the region south of University owned White Course Apartment, north of Fairmount Ave, West of Atherton Street, and East of Patterson Ave.

The residents of this neighborhood are mostly renters as only 3.7% of housing units are owner-occupied. It can be presumed that mostly students live in this area as the 2010 census revealed 88% of residents are between the years of 18 and 24. Oddly, there only six registered student homes in West End (State College Neighborhood Plan 130). This inconsistency between census and rental data and registered student homes points to the continued evolution of this area away from residential housing and towards converted single-family homes to multi-family homes. This area acts as a buffer between higher-density downtown and the residential Holmes-Foster. Holmes-Foster has a much lower percentage of 18-24 year olds and fewer renter-occupied units. The Downtown Plan identified several threats to the Holmes-Foster community like “high density housing...could bring other unintended impacts to the neighborhood.” and “all renters are students and that no families or professionals would want to live in certain areas [of] town. (State College Neighborhood Plan 127). Although no development is being recommended to take place in Holmes-Foster there is a significant opportunity for NIMBYism by residents if West-End is to be developed. NIMBY is an acronym for Not In My BackYard and is given to groups who fight a policy — which they would
otherwise support — on the basis that it is too close to their residence (Lewicki). Thoughtful consideration and careful community organization would be imperative to the success of developments or zoning changes in the West-End area.

**East / Collegiate End**

On the other side of College Ave the Borough outlines the Collegiate District as a specific target for development. Loosely, this area is East of Garner Street, West of University Drive, and bounded by College and Fairmount Ave.

The Downtown State College Master Plan understands the existing environment writing “The Collegiate District at the east end of downtown makes the most sense for student housing as this location is not desirable for non-student housing” (183). As this region already features medium/high density multi-family rental housing, higher density housing would infill with greater ease than lower density areas. The Master Plan also explicitly calls for mixed-use zoning in this region: “New student housing development should strive to incorporate retail space when applicable or, at a minimum focus student amenities such as gathering areas, workout facilities, and meeting areas on the ground floors facing major streets” (184). The Master Plan does not at any point in this section consider the affordability of housing for students and non students alike.

This lack of foresight in part led to the current construction of the Rise at 532 E. College Ave. The Rise meets all the requirements of mixed-use development, but the luxurious amenities like those outlined by the Master Plan, have priced many potential residents out. The cheapest studio apartment rents for $1589 per month. The affordable housing program in the Rise is also largely a failure. The affordable housing program targeted post-grads and young professionals who work in Centre County, but rates are still expensive at $814 per month for a studio (Rise: At State College.) The Rise has yet to fill these rooms allotted for post-grads and young professionals, so leasing agents have begun leasing them to undergraduates.
The Highlands

The Highlands should be considered for higher-density development than its current low dense state. The Highlands is one of the largest neighborhoods by area and provides a lot of the housing in State College.

Of the nearly 10,000 residents of the Highlands, 77% are of the student age population and only 5% of residents are under the age of 18. This coincides with an 88% rental rate and with baffling low registered student homes (Neighborhood Plan 64). Much of this area would be viable for higher density student housing developments because of the existing demographics. While the demand certainly exists, long-term and owner-occupied households state the drawbacks of having a high student population. These residents have identified that “new residents don’t often have a chance to get assimilated to living in the neighborhood before a school year changes and new neighbors move in” (State College Neighborhood Plan 72). Some resident have taken to reaching out to their student neighbors like those who participate in the Neighbor to Neighbor program. Organized by the Highlands Civic Association, Neighbor to Neighbor pairs homeowners in the Highlands with fraternity houses. The fraternities and families are asked to get together for social gatherings as well as to mediate conflicts. This communication has to possibility to generate a sense of togetherness which is imperative to the
success of proper community. When the Neighborhood Report was written, 20 families and fraternities were paired, so there is a lot of room for growth (“Neighbor to Neighbor”).

Many of the properties in the Highlands are registered as part of the Highlands Historic District. Although the Historic designation grants no regulatory authority, historic homes have guidebooks for recommended structural guidelines. Even though the designation has no legal ramification, proposed developments often require town halls or referenda as part of the approval process. Residents who reside in historic homes or streets will be particularly pernicious if development encroaches in their area and does not match the aesthetics or ambiance of the block.

Residents do understand the need for a reformation of housing in the area. The State College Neighborhood Plan summarized the need for housing reform from residents in the Highlands.

“due to the type of rental housing available, there are not many opportunities for young professional housing or affordable housing in the Highlands.” ... “Some residents felt that there is enough flexibility for reuse of properties in transitional areas of the neighborhood. Others perceive that individuals that do not live in the neighborhood or even in the Borough can sometimes have a significant influence on the neighborhood’s conditions” (68).

The two final sentences provide for many of the housing updates called for in this proposal. Opportunities will arise in the transitional areas outlined by the community members. These areas will reside closer to this existing higher density housing, so infill development will likely be passable for the existing community members. Key to the residents comments is the warriness they feel towards those individuals who do not live in the neighborhood yet have a significant impact on the community (State College Neighborhood Plan 68). This manifests itself in the recent developments made by CA Ventures and Landmark Properties. CA Ventures is responsible for The Rise and Landmark Properties developed the Metropolitan. Both companies develop around the nation and thus have no permanent stake in the climate of State College beyond the rents they can extract from students.
Conclusion

Overall, through an integrative approach, the combination of all three distinct policies aims to push for more affordable housing, resulting in a more sustainable community. At the university level, the first policy, integrating FAFSA into Penn State’s housing lottery system, will allow for affordable, on-campus housing to be dispersed more effective to students who demonstrate financial need. This would help mitigate the drastic off campus changes that would be necessary to better accommodate a higher population of low-income students. Consequently, the second policy, detailing beneficial housing contract adjustments, would intend to lessen the burden on students to be able to secure future housing. Simple changes such as aligning housing deadlines on- and off-campus, pushing deadlines back to spring semester, and improving the Fall Housing Fair could provide students great flexibility and additional information when making significant life decisions. Finally, the third policy, implementing mixed-use and mixed-income development, would allow for the community of State College to become more efficient, and thus sustainable. Both higher density and more diverse residential areas have proven to lead to a cheaper, more sustainable community. By implementing these three policies, Penn State with the help of the borough council of State College will be able to ensure more affordable housing in the effort to safeguard accessibility to public education and develop a more sustainable community.

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