THE CASE

FOR STUDENT APPROPRIATION

OF UNIVERSITY-PROXIMATE LAND VALUE

by

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Master's Thesis

Presented to the Faculty of the Graduate School of

The University of Texas at Arlington in Partial Fulfillment

of the Requirements

for the Degree of

MASTER OF CITY AND REGIONAL PLANNING

THE UNIVERSITY OF TEXAS AT ARLINGTON

December 2016

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Acknowledgements

I would like to thank my cat, Pepper Fontanelle.

I would like to thank my husband's cat, Olivia.

November 14, 2016

Abstract: This thesis proposes an eclectic pairing of Henry George's value capture theory and Marxist spatial theory as a possible space-based solution to the student debt crisis. The literature review section includes background on neoliberalism in public universities; student spending and debt; current policy proposals for alleviation of the debt crisis; and selected analysis of Georgist and Marxist theories, including the work of Henry George, Henri Lefebvre, and David Harvey. The paper includes a case study of the University of Texas at Austin that illustrates potential policy considerations and funds garnered by student appropriation of unearned increases in land value proximate to campuses.

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Chapter One

Introduction and Background

A college degree in the United States is widely considered an investment in one's future. The country coalesced around the idea that education represents opportunity; to avoid confronting harsh economic realities about the relatively recent emergence of the college wage premium, the exact nature of this opportunity is rarely specified. In fact, the wage premium has more to do with the decline of real wages for less educated Americans than a leap in the value of college, but this hasn't prevented a sustained disengagement with the consequences of massive student debt (Cappelli 2015, 90-91). As tuition rises at a rate far beyond the rate of inflation, the rate of college attendance has risen too (Cappelli 2015, 118-120; National Center for Education Statistics 2016). Meanwhile, the act of investment in one's future has coincided remarkably with investment in aspirational upper-class living that is providing considerably more opportunity for real estate developers than for the students whose loans pay into their profits.

Universities across the U.S. are typically surrounded by high-priced real estate (Woolley 2012; Vandegrift, et al. 2012). The land is expensive because of the booming business in student-oriented retail, dining, and off-campus housing; a confined, inexperienced, and perpetually stressed population makes an attractive customer base. Though most have mounting debt and low or no incomes, college students are targeted en masse with a branded urban or "college town" lifestyle that is pre-packaged and high-priced. As the success of the college town continues, profits gleaned from students are reinvested in the creation and marketing of even more aggressively luxurious college lifestyle opportunities and accommodations. The creation and growth of these college towns coincides with another trend: college students increasingly

using student loans to fund discretionary spending rather than just tuition costs (Holland 2015).

Rising tuition, rising costs of living, and the accessibility of student loans converge to create a delayed-action debt crisis, the money forgotten in deferment at the time it is actually being spent.

From a planning perspective, the real estate investment in student living, eating, and recreating is easy to predict given the density of student populations. In *Rebel Cities*, urban geographer David Harvey describes urban development trends as cyclical projects used to ensure continued profits for businesses and investors. Urbanization, sprawl, and infill are all solutions useful for "absorbing the surplus product that capitalists are perpetually producing in their search for surplus value" while urban residents experience (and pay for) "the construction of a new kind of urban persona" (Harvey 2012). Because students are a constantly replenished consumer base, their use as profitable sponges for surplus product is likely to continue unless cities create a barrier or disincentive to the practice. Harvey's "urban persona" aspect is also easy to apply: aspirational real-time consumption of high-end accommodations is a confirmation of the upward mobility promised by college education, much more sybaritic than statistics on postsecondary earning projections, and possibly more encouraging.

Mainstream and financial newspapers now predictably print annual back-to-school news reports on the massive marketing effort directed toward college students and the concomitant growth in students' discretionary spending. According to *New York Times* journalist Natasha Singer, college students spent about \$36 billion during the 2010-2011 school year on "things like clothing, computers, and cell phones" (Singer 2011). Another *New York Times* article reports on the "maximalist shift" in dorm room decoration (Kurutz 2012), spurred by advertising and outreach efforts from corporations. These efforts include hiring student "brand ambassadors" to promote products to other students (Singer 2011) and mass shopping excursions planned in

partnership with universities. Target's private shopping parties, for example, involve company-chartered buses, music, an after-hours party atmosphere, and in-store brand promoters who introduce college freshmen to the newest trends in college dorm and lifestyle spending (Singer 2011; Target Brands Inc. 2015). A 2010 article in *Entrepreneur* magazine listed advice on how best to market to college students, noting the importance of catching them "in their purchasing power formative years" and suggesting that covertly tapping into word-of-mouth advertising is a best practice, since the spatially contained students see each other so often that "they always need new topics of conversation" (Williams 2010).

Students are also pressured to spend on a proliferation of high-priced luxury off-campus student housing, featuring amenities like swimming pools, lounges, golf practice ranges, and private cinemas (Eligon 2013; Olick 2015; Bachelor 2015). This housing is often built with express consent from universities themselves, according to real estate journalist Diana Olick, who reports that colleges are often "in joint partnerships with private developers. It simply saves the schools money in an already tight budget environment" (Olick 2015). The new marketing of a luxurious college experience is one way that colleges compete with each other for students, and developers consider student housing a "relatively safe investment with potentially huge returns as students use government loans – and their parents – to pay the rent" (Bachelor 2015).

Easy access to financial aid, credit cards, and private loans fuels much of this spending, creating a huge market for student loans. Student debt is worth over \$1.2 trillion in the U.S., reflecting not only higher college attendance, but also an increasing amount of debt per student (Phillips 2013). The amount of student loan debt consistently outpaces both the level of credit card debt and the total amount of debt from auto loans in the U.S., though all three are rising (Cornish 2016; Zumbrun 2015). Both college tuition costs and discretionary spending are rising,

and luxury lifestyles are responsible for a good deal of the non-tuition debt volume (Phillips 2013; Holland 2015). Widespread acknowledgement of a growing student debt crisis has prompted a variety of proposals for public policy solutions. Most of these proposals involve either expanding existing federal aid or lowering monthly payments through income-contingent repayment plans (Maloney 2015; United States Department of Education 2016). A few allow partial federal loan forgiveness; almost none target lenders or the universities that continue to raise tuition at a rate that far exceeds the rate of inflation. And no policies target the campusadjacent developers who benefit so reliably from their own investment in changing the way that college students see their own consumption, increasingly, as a reflection of their post-educational goals.

Private developers, universities, and the cities that house public universities all benefit from the massive spending habits of student populations, both from direct profits and from the taxes collected on rapidly appreciating land (Olick 2015). Public universities are partially funded by their states, and many offset decreases in this public funding by raising tuition and outsourcing resources, decreasing their own capacity to control the prices of necessary student services like housing and food. Students create a strong development incentive with their amassed presence alone, but current planning tools offer no mechanism for recapturing or controlling how the value they generate is spent.

Special, site-specific assessments are normally levied either to promote development or to recoup unearned added value. They can be appropriated for relief of the spatially inscribed student population by simply considering students' collective presence as an unorthodox public resource spurring unearned land value increases. Just as special assessment taxes allow cities to partially recoup the costs of new parking lots and added police protection, university value

capture could allow students to partially recoup the costs of being spatially targeted by development. Unlike traditional value capture strategies like tax increment finance (TIF) districts, value capture around public universities should rely on taxation of university-owned and university-adjacent property that is complicit in predatory growth without adding value to the properties themselves. TIF exists to reinvest in targeted areas and raise property values; businesses and housing next to colleges rarely need such outside assistance. Funds collected can be distributed back to students in the form of tuition relief or student-led development funding rather than being used for public improvements (used here to indicate beautification and other amenities, not necessary infrastructure or repairs) that ultimately raise property values.

With this strategy, cities protect the diversity and livelihood of students and invest in their financial futures by resisting development that targets students and takes advantage of their easy access to loans that can be used for housing and discretionary spending (Madden 2015). If taxes collected on incremental value increases do not increase profit for cities or universities, these bodies lose their financial incentive to aid private developers' predatory growth and can refocus on promoting student and general civic welfare. As the college district recedes, students are less spatially inscribed and are better positioned for democratic participation in their cities at large. Students become truer urban citizens when they are able to grow and sustain existing cities, rather than the pre-choreographed cities-within-cities that continue to expand and define student life at major public universities nationwide.

This thesis begins by reviewing literature on five topics: neoliberalism, consumer culture in universities, student spending and debt, Georgist theory, and Lefebvrian theory. Original contributions and research tools are described in the methodology section. The remaining sections introduce the university-based value capture concept, illustrated by two case studies.

Chapter Two

Theory and Literature Review

Part One: Development, Neoliberalism, and the University

Interactions between universities and their surrounding cities are described in the literature as the "town-gown" relationship, an interesting metonym which places college students themselves in opposition to their non-academy surroundings. Planning history actually reveals relatively little indication that students were the driving force behind the university norms, expansions and expenses that most disturbed local residents. This section of the literature review examines existing work on how tax exemptions and spatial expansions have led to conflicts over universities' obligations to their surrounding cities. It also explores the effects of the increasingly globalized economy on the relationship between universities and surrounding local economies.

Planning history is rich with examples of town-gown conflict. Literature surveying expansion trends notes a history of "decisions made in relative institutional isolation, mirroring the pastoral traditions of campus and ivory tower," a planning tradition that appears to take pride in enforcing the separation between the academy and surroundings, at least until the town's rise in cultural status is sufficient to equal the cultural capital found on campus (Perry and Wiewel 2005, 5). One of the most famous and illustrative town-gown conflicts is the University of Chicago's late-1950s expansion into surrounding Hyde Park-Kenwood, which the urban advocate Jane Jacobs described as a project undertaken by "the planning heirs of the bloodletting doctors" due to its massive displacement of the working-class black families who were seen as "blight" (Jacobs 1961, 44-45). In these mid-to-late-20th century disputes, the town is generally

acted upon by the university, which leverages its power to expand its own enrollment and influence without regard for its surroundings (Webber 2005; Perry and Wiewel 2005). The classic town-gown conflict is one of institutionalized power disparities, with the university as a major employer and source of cultural capital. Additionally, the "town" and "gown" categories blur when the power structure of the community is headed by university faculty who are also local residents, valued for their expertise even with their implicit biases in favor of the university's success (Miller 1963).

One leading source of conflict between universities and their towns is taxation, particularly the fact that university-owned land is exempted from property taxes. When a university's campus expands, the city's tax revenues shrink, an interesting spatial twist in the usual drive toward development (Gumprecht 2008, 322-323). Since universities tend to strain local services like police, streets, and utility infrastructure, some cities have won offers from colleges to pay subventions, or PILOTs (payments in lieu of taxes). Since these payments are voluntary, cities approach them tenuously, while universities maintain that their economic and cultural contributions far outweigh cities' lost property tax revenues (Gumprecht 2008, 327-329; Mayhew and Waymire 2015). While literature wrestles with the power differentials and overlaps between university leaders and local leaders, it is difficult to find literature that questions students' relationship to their colleges' land use decisions, especially in the era of tabula rasa university expansion.

Yet the expansion attempts that continue to color the idea of town-gown conflict took place largely prior to the country's rapid shift toward neoliberalism and the rising urgency of joining the global economy even at the local level. Neoliberalism is the theory that political and economic institutions should prioritize individual entrepreneurship; free markets; free trade; and

government non-intervention (Hackworth 2007). The welfare state is rejected in favor of the premise that, as David Harvey writes, "the social good will be maximized by maximizing the reach and frequency of market transactions" (Harvey 2005, 3). Universities and towns alike now experience the same pressure: to raise their own profiles by seeking to be relevant to global economic powers like multinational corporations, a goal aided by relinquishing prior structures of local, state and federal control (Hackworth 2007; Harvey 2012). Urban economic scholars call this process "glocalization," particularly as a description of its effects on democratic control: the spatial patterns of neoliberalism cause "a simultaneous upward (to the global economy and its institutions) and downward (to the locality and its governance structures) propulsion of regulatory power previously held or exercised by the nation-state" (Hackworth 2007, 12). When government on any level gives decision-making power to private economic actors, by allowing and assisting in neoliberal agenda items like privatization of municipal utilities and speculative valorization of inner-city land, citizens lose some level of democratic control since they are unable to elect the members of the private corporations who make such decisions.

Public universities, like the cities that surround them, have taken advantage of the public-private partnership. The formalized practice is common enough to have earned its own acronym—PPAP, or public-private academic partnership (Murphy, et al. 2016, 95). The literature on PPAPs finds that they can benefit universities financially, but particularly when related to "highly visible" activities like college athletics that benefit from "mass market publicity" (Murphy, et al. 2016, 111-112). Less literature exists on the benefits of non-athletic PPAPs with business or technology incubation aims. More is found on private funding for public university research, and corresponding concerns over conflicts of interest and the devaluing of public goods by private actors (Glenna, et al. 2014). These funding relationships are not formal

PPAPs, but belong to the same category of public-private activities that advance the dependence of public institutions on private economic growth and development. However, universities also engage in promoting private interests when they join cities in inviting development and reconstruction. Universities offer their own programs, aid, and potentiation of the near-future labor force as incentives to attract private development (Gumprecht 2008; Murphy, et al. 2016; Perry and Wiewel 2005).

This spatial expression of glocalization now sees the town-gown conflict increasingly dissolving into the shared town-gown interests of economic growth in the neoliberal model.

Analyzing the metonym in the present shows its increasing inaccuracy: students no longer wear daily academic dress, but more importantly, their interests are no longer synonymous with the university's interests. As advancing neoliberal development commodifies students at every level, a more modern intra-academic conflict between intellectual and economic profitability emerges.

This will be discussed in the next two sections of this literature review.

Part Two: Consumer Culture in the University

Today's universities immerse students in layers of commodification and consumerism, beginning with the college choice itself, usually made before adulthood. Scholarship on academic trends in the United States and the United Kingdom has noted the rising prominence of the market analogy of postsecondary education, in which students are positioned as consumers, education is a commodity, and universities compete for business by increasing demand, appealing directly to their consumers before and during their time in school (McMillan and

Cheney 1996; Woodall, Hiller and Resnick 2014; Kaye, Bicket and Birtwistle 2006). Kaye, et al. (2006) argue that while education has always been a commodity in the sense that it is purchased, the particular expectations of consumer culture have caused a complete shift in students' relationship with their studies: from historical emphasis on the "liberal" nature of non-technical studies freed from the necessity of marketability to a consumerist emphasis on rate of return in post-college income (88-90).

Kaye, et al. (2006) also note that the idea of students as consumers elevates the importance of consumer rights, leading students to challenge grades and demand a return product detached from their own level of academic effort—in other words, an emerging belief that paying for a degree should be sufficient to earn the degree (also discussed in Molesworth, Nixon and Scullion 2009, 279-280). As colleges compete for consumer choice, grade inflation and easing of requirements is a natural response to the consumerist mentality (Kaye, et al. 2006, 95-100; 116). Molesworth, et al. (2009) agree, noting that current trends toward an instrumental evaluation of higher education support "a mission in confirmation rather than transformation" (278) that prematurely ends discussion of the intellectual and spiritual purposes of education. Colleges support this fixation on employment and marketability of degrees by advertising job placement success to prospective students; increasingly hiring teachers directly from industries rather than from academia; and focusing on proficiency in marketable skills (Molesworth, et al. 2009; Vander Schee 2011; McMillan and Cheney 1996).

The consumerist model of higher education does have its eager proponents. Their academic writing is particularly concentrated in journals that study marketing and business growth. Vander Schee (2011) presents research on how colleges can increase "brand loyalty," a phrase he uses to mean student retention, by identifying interventions in the freshman semester

that exaggerate practical and sentimental ties to the university and increase student attachment to the university brand. Among the findings, Vander Schee advocates first-year programming that awards course credit for attending campus events and introduces students to a broad segment of the faculty, if fleetingly (35-36). However, the paper also warns that "[b]rand mistrust can be exacerbated by distracting factors such as outside employment or family responsibilities" (35); in other words, the consumerist model demands constant exposure to and interaction with the university brand to achieve the highest student-consumer ratings and ensure the "fiscal stability" of universities (32). Singleton-Jackson, Jackson and Reinhardt (2010) study the effects of student entitlement on the academic environment, finding that an increase in emphasis on student services provided by the university shifted focus away from student effort and increased the perception that students have a right to degrees once they are enrolled in universities (346). The corporatization of universities is explicit to students in highly visible ways like naming rights for campus buildings; it is also implicit in the consumer culture. A decrease in public funding for universities may be partially responsible for the more visible aspect of the campus corporatization trend (Singleton-Jackson, et al. 2010, 347.)

Molesworth, et al. (2009) express concern about the academic implications of this neoliberal shift. They argue that while universities have always been integrated into society, they have also been the sites of social critique, including critique of the market economy. When colleges become primarily focused on competing in the market economy, they lose the drive and, in some respects, the ability to interrogate it (278-279). The dominance of consumer discourse and rising sense of entitlement to degrees and jobs among students leads to the apotheosis of neoliberalism in higher education and beyond: many universities now primarily "fix in students

an unquestioning acceptance of the primacy of consumer desires met by market offerings" (Molesworth, et al. 2009, 279).

As higher education explicitly and implicitly confirms the importance of consumerism and market demands, students are often shifting into a role with sharply increased independence, including greater discretion over their own spending and borrowing. Students contend with heavy pressure to spend: a continuation of the aggressive market emphasis explored in sections one and two of this literature review coupled with rising tuition costs and declining public funding. The next section of the literature review explores literature on growing student debt and proposed policy solutions.

Part Three: Student Spending, Debt and Policy Solutions

The amount of student loan debt in the United States has surpassed the amount of credit card debt, exceeding \$1 trillion and prompting a flood of research into the effects of indebtedness on rites of passage like marriage, home ownership, and travel (Marez 2014; Carr 2005). The increasing cost of college has raised the proportion of students who take out loans; literature suggests that somewhere between 40% and 71% of students go into debt to finance postsecondary education (Avery and Turner 2012; Hillman 2014; Marez 2014; Ward and White 2015). The variation in these numbers is due in part to inconsistencies in what is counted as schooling (the status of community colleges and for-profit institutes appears to be debatable) and what is counted as a student loan (some studies use the term "student loan" to mean only a

federal loan, discounting the debt generated by state and private loans). About one in ten students default on their student loan payments within three years (Hillman 2014, 170).

To receive federal loans, which have the lowest fixed interest rates and most generous deferment allowances, students must fill out the Free Application for Federal Student Aid (FAFSA), receive a loan offer, and figure out how to fill the gap between the legally limited federal aid they are offered and the combined price of tuition, housing and daily living that has far exceeded these limits (Stokes and Wright, 2010). The large gap between total college costs and federal aid offers has led to widespread use of private loans. In addition to having higher interest rates and more punishing repayment demands, these federal loan stand-ins are more difficult to quantify in studies since they may not be strictly earmarked as student aid (Stokes and Wright 2010, 20; Avery and Turner, 169-170). In addition to private student loans, students frequently rely on credit cards to fill the gap, especially for housing, lifestyle, and non-essential expenses (Stokes and Wright 2010; Jassim and Taylor 2010). Because credit cards offer no deferred repayment plans for students, this stop-gap solution frequently leads to high levels of debt before graduation. To pay their credit card bills, students often take on low-paying jobs that interfere with their academic attendance and performance, paradoxically endangering their longterm financial prospects to meet short-term financial demands (Jassim and Taylor 2010, 101; Hogan, Bryant and Overymyer-Day 2013, 103).

Student debt is generally discussed in terms of tuition and sometimes the expense of student housing. Student discretionary spending is a less frequently studied contributor, but discretionary spending trends overlap student loan debt and credit card debt trends. Prior to legal restrictions, credit card companies were known for aggressively marketing to college students. Banks began marketing credit cards to students in the 1980s, and over 70% of college students

had a credit card by 2003 (Joo, Grable and Bagwell 2003). Student credit card debt rose during the early 2000s; sensing exploitation, the U.S. government passed the Credit Card Accountability Responsibility and Disclosure Act of 2009 (known as the Credit CARD Act), which increased transparency and limited many aspects of marketing, especially to people under 21. The Credit CARD Act is correlated with a decrease in credit card use and credit card debt among college students beginning in 2009 (Norvilitis 2014). Brougham, Jacobs-Lawson, Hershey and Trujillo (2011) study compulsive buying with credit cards, a phenomenon more common among college students than among the general population (79). Though the researchers hypothesize early in the paper that students who have high financial literacy will be less likely to spend compulsively, their findings indicate otherwise. High rates of materialism, as assessed by a questionnaire, are most associated with compulsive spending across the study groups and financial literacy does not correlate with a decrease in compulsive purchasing (81-83). This suggests that financial education alone is not sufficient to counteract the materialistic mentality that consumer culture encourages.

Student loan debt, credit card debt, and poor discretionary spending habits also exacerbate existing racial differences in economic prosperity. African-American college students have higher credit card debt than non-Hispanic white students and are significantly more likely to exhibit spending-related stress and negative financial behavior (assessed by rates of agreement with statements like "I spend more than I earn") (Grable and Joo 2006). African-American students also have higher levels of student loan debt than white students and are more likely to default on their loans (Grable and Joo 2006). The culture of lifestyle spending and necessity of complicated multi-sourced loans increases existing gaps in debt level and college completion that disproportionately favor white and upper-income students, especially those whose families give

them additional money to ease the burden of costs and debt incurred by lifestyle spending (Jackson and Reynolds 2013; Hillman 2014). Some research has found a direct link between financial stress over debt and decreased academic success; pressure to spend and take on excessive debt to enjoy an immersive college experience seems to result, ironically, in a trend toward poor academic performance and heightened risk of dropping out (Norvilitis 2014, 635; Hogan, Bryant and Overymyer-Day 2013, 109-110).

Policy solutions for solving the student debt crisis tend to focus heavily on facilitating repayment of existing debt post-college, and are more common in policy publications outside of academia; this literature review first considers scholarly texts and then briefly assesses debt policy solutions proposed in non-scholarly publications to present a more complete picture of current ideas and best situate the proposal presented in this thesis.

One approach to reducing student debt is to reduce the number of academic offerings for students to spend money on. Ward and White (2015) suggest that reducing the number of credits needed for a degree could reduce student debt, enabling students to borrow money for fewer hours and fewer semesters. The downside to this is that students would have fewer classes, explicitly sacrificing educational opportunity for debt reduction. Ward and White also suggest less expensive online classes and massive open online courses (MOOCs) as ways to obtain credit at lower expense, though they note that this too may be perceived as lower-quality education compared to traditional face-to-face classes (165). A third solution proposed is that colleges focus on merit-based scholarship cohorts, investing heavily in small groups of students who are expected to be academically successful, although Ward and White do not comment on the scalability of this idea, which would presumably be difficult (166).

Stokes and Wright (2010) propose two alternative ways of funding college that do not

rely on student loans. The first is the "income-contingent scheme." Students attend college with the option of either paying "up-front" or taking out loans from the federal government. After graduation, students do not begin repaying the loans until they pass a certain income threshold in the Australian case study described by Stokes and Wright, this threshold is the average annual income of a first-year college graduate (20). The repayment takes place during taxation, and students who have not yet met the income threshold are not required to begin repayment until they do so. Students are also required to pay back only a certain proportion of their debt, not the entirety; this proportion varies based on their areas of study. While the varying proportions scheme rewards some people in public service professions, its lack of specificity can create unfair results. Stokes and Wright cite the example of history teachers being required to pay back a much lower proportion of costs than economics teachers, despite receiving similar salaries (22). Their second option is the "tertiary education levy" (TEL), based on the idea that what students pay for college should be related to how much they will earn and how much they will contribute socially as a result of the education they receive—the "private rate of return" (PRR) and the "social rate of return" (SRR), respectively (23). Under the TEL plan, students pay more as they earn more, but they only repay a certain percentage of the cost of their education; the remaining "repayment" is assumed in the social rate of return. In the United States, unlike in the United Kingdom, Canada and Australia, the SRR is higher than the PRR for students with degrees; simply put, the actual cost of the education funding allotted by the U.S. is less than the actual added monetary benefit that the country receives from the educated population (23). The entire country profits off of college graduates at the personal expense of these graduates, collectively.

Policymakers and financial analysts outside of academia are eager to propose solutions to the debt crisis, but most focus on debt that has already accumulated and is held by college graduates, not on debt that is currently being accumulated or has yet to be taken on. Popular proposals in the literature almost universally begin by avowing their own simplicity, and include allowing students to refinance their debt at lower interest rates (O'Malley 2015); capping monthly student loan payments to reflect incomes (O'Malley 2015); increased Pell grants (Maloney 2015); and, for the more radical among the indebted, convincing a critical mass of students to collectively refuse to make any student loan payments at all (Schmidlin 2014). Solutions are placed at the federal or state level and cite charity or workforce readiness as the main reasons to assist students in debt repayment. Table 1 on the next page summarizes the relief solutions considered in this literature review.

Table 1: Existing Student Debt Relief Solutions

Policy or Idea Description	Point of Intervention	Benefits	Drawbacks
Federal repayment plans that reduce monthly payments, including income-based repayment and "Pay As You Earn"	After debt has accumulated and student has left college	Lowers monthly payments; means-tested; can be combined with other loan forgiveness plans	Only applies to federal loans; reduces loan principal very slowly; doesn't challenge existing policies that encourage debt
Allow students to refinance their loan debt at low interest rates	After debt has accumulated and student has left college	Lowers sum total amount repaid; makes predatory student lending less profitable	Doesn't necessarily reduce monthly payments; doesn't challenge existing policies that encourage debt
Reduce number of credits that students need to earn a college degree	While student is in college	Lowers total cost of college education; frees up time that would be spent earning degree	Decreases the amount that students learn by decreasing number of classes
Allow students to obtain credit from inexpensive online courses or free MOOCs	While student is in college	Lowers total cost of college education; may be more convenient for students and professors	Course quality is questionable; students miss out on the classroom environment
Focus merit-based financial grants on student cohorts who are expected to be financially successful	During college acceptance phase, or possibly while student is in college	Attracts high-performing students to colleges; allows these students to avoid debt entirely	Not scalable; not means-tested; may favor certain majors when evaluating potential payouts; ignores lower-performing students
Income-contingent funding: students do not need to repay government loans until they pass an income threshold, and are only required to pay back a certain proportion of the debt	After debt has accumulated and student has left college	Repayment is scaled to expected earnings by area of study; means-tested; deferment is based on income status rather than time elapsed since graduation	Lack of specificity in repayment areas can lead to unfair outcomes; policy may affect students' choice of study area
Tertiary education levy: students repay a portion of loans after passing an income threshold, determined by calculating and comparing the private rate of return and the social rate of return on student's education	After debt has accumulated and student has left college	The public benefits of individual education are openly acknowledged; means-tested; students with careers that benefit society repay less out of pocket	Rates of return fluctuate more often than they are recalculated; policy may affect students' choice of study area

Policy or Idea Description	Point of Intervention	Benefits	Drawbacks
Organize critical mass of students to default on loan repayments simultaneously	After debt has accumulated and student has left college	Ends monthly payments; simple to administer	Ethical and legal issues; difficult to organize; doesn't challenge existing policies that encourage debt; may make it difficult for current and future students to continue receiving needed loans

The income-contingent and TEL schemes assess the value of education to society at large, but my study of the literature produced no policy proposals that rely on space as a basis for funding—even as the Ward and White study noted that inexpensive online classes tend to be rejected by potential students because they don't take place in the physical environment of the university (Ward and White 2015). Education produces economic returns for society in the long term, but the students in universities also produce economic returns for the spaces they occupy while they are attending school. The economic development of land surrounding universities and students' tendency to spend huge amounts of money locally are touted as major factors in offsetting lost property tax revenue from the acres of tax-exempt land that universities occupy (Gumprecht 2008, 332). Because this thesis introduces a planning-based solution for assisting in college funding, the next section of the literature review examines scholarship on value capture that is based on spatial, rather than political, boundaries.

Part Four: Value Creation and Value Capture

To examine the reasoning behind value capture, it is useful to first look at the literature on value creation in the context of land and development. As land grows in value, it generates

profits for the owners, which can then be invested in more land and greater development. However, economic and real estate practices that inflate land value also increase inequality (O'Donnell 2015, 25; Harvey 1973, 173-174). Radical and Marxist scholars provide a useful framework for evaluating why current land development trends threaten both income equality and equal access to democratic participation. Radical geographers also examine democratic control through application of French Marxist philosopher Henri Lefebvre's concept of "the right to the city," a collective ability to change society by changing the urban landscape; this will be examined for applicability to university spaces in section five of this literature review.

Urban economist and geographer David Harvey posits that urban development trends are driven by the need to reinvest surplus product in new projects that will generate further profit for capitalist investors (Harvey 2012). The spatial structure of cities is tailored by the need to reinvest accumulated capital, a constant cycle that demands physical space and expensive projects to accumulate further capital. Surplus product reinvestment opportunities meet the demands of capitalism by restructuring, either through heavy capital outlay in renewal or expansion projects (Harvey 1973, 135) or by introducing desirable new forms of the urban lifestyle (Harvey 2012, 8).

Land prices increased by speculation exclude would-be landowners who aren't wealthy enough to compete, but Harvey also describes how even the lowest-income citizens are affected by speculation. When land is "being held speculatively in anticipation of its acquisition by more intensive and therefore more remunerative land use," Harvey writes, property owners are unlikely to spend any money on maintenance or improvement of less profitable housing or development while they wait for a chance to sell for maximum profit (Harvey 1973, 173-174). This creates a cycle of large-scale "urban renewal" projects that sequentially and perpetually fail

to satisfy the increasing potential value of the appreciating land. Citizens who occupied space pre-renewal are displaced and denied access to the city de facto as its land grows in value. Property monopolies lead to scarcity economics, even when land is not actually scarce, forcing rents higher and denying citizens the ability to own land, the promise of stability, and the ability to inhabit the city on their terms (O'Donnell 2015, 27; Harvey 2012, 90-91).

Georgist or geoist scholarship, based on the advocacy of American political economist Henry George, examines solutions that mitigate this inequality of access by levying the government's ability to tax land. While George was not a Marxist or anti-capitalist thinker, he admired socialism and worked to leverage the application of traditional American republican values to achieve socialist goals, including intensified state control of land use (O'Donnell 2015, 155-158, 162). The mutual goals of increased access to democratic control and socialized distribution of excess wealth allow radical and Georgist scholarship to be used in tandem to evaluate urban land use issues, with the acknowledgement that Georgism is not anti-capitalist and is ultimately rejected by radical economists (O'Donnell 2015).

George noticed early in his adulthood that when the economy prospered, poverty rose in tandem with the rise in wealth. The bulk of his publishing took place at the end of the 19th century, a time when economic activity was mostly based on either extraction (the primary sector) or manufacturing (the secondary sector). Because of this, land ownership and use was fundamental to prosperity. George proposed that because land monopoly is a main driver of inequality, land should be taxed based on its unimproved value, a policy called land value taxation (LVT). The proceeds of this tax are then distributed among members of the community, who are assumed to have generated the excess value through their labor. This policy places the burden of taxation on the wealthiest landowners and acts as a disincentive to the practice of

speculatively holding large amounts of land without improvement. (O'Donnell 2015; Blaug 2000; Lause 1990). LVT also guarantees a basic income by redistributing the captured value of land, a component that George valued as an antidote to poverty, but which has been lost over time in modern small-scale value-capture ventures inspired by George's taxation ideas. This thesis proposes a limited version of George's basic income, but the literature on modern value capture tools does not yield any discussion of direct redistribution.

Value capture today is usually used as a short-term tool to promote capital investment by raising private property values through public improvements at no additional cost to cities. Redistribution occurs not directly, but by reinvesting in public improvement, which is presumably to be enjoyed by all but which generates actual added wealth only for landowners. Transportation planners have proposed value capture zones to aid in funding their large-scale infrastructural improvements (Batt 2001; Smith and Gihring 2006). The value-increasing effects of proximity to transit access are so well-documented that transit infrastructure could be funded and maintained primarily through this value (Smith and Gihring 2006). Tax increment financing (TIF) is the most widely used value capture tool in the United States. While TIF was created to revitalize underdeveloped areas, the financing method is "now used in areas that are plainly unblighted" and has done little to actually help cities (Briffault 2010, 65). Some scholarship suggests that TIF can harm cities outright by generating cities' promises to avoid any zoning changes or other actions that could interfere with private land profitability (Epstein 2010). Municipal gray literature on TIF tends to address potential local benefits neutrally, mostly dispelling myths about the extent to which TIF funds usually pay for projects (City of Dallas 2015), though Chicago in particular claims that TIF money has helped create hundreds of jobs and led to a sixfold increase in private investment (City of Chicago 2015).

Use of TIF funds to directly benefit the public is less common in the literature. In a glowing description of one of these rare examples, California lawyer Daniel Potash describes a local law still in effect in 1992: "20 percent of incremental tax revenues must be applied to expand and improve the supply of low- and moderate-income housing in the community" (Potash 1992, 8). While the funds accumulated, Potash noted that actual development was slow, hampered by disagreement over where such housing should be located and which developers would be responsible for maintenance (Potash 1992, 9). Clearly there is a precedent for value capture used as an economic justice tool, though the literature contains no studies of value capture specific to universities.

During his lifetime, Henry George appealed to popular conceptions of natural rights; his biography noted that George spoke "straight out of the lexicon of traditional republican terminology" with his warnings that land monopoly would infringe on "equality of political rights" (O'Donnell 2015, 156). Lause, reviewing George's political success, credits George with spreading the idea that sustained economic and political inequality in a nominal democracy allows society an especially egregious form of injustice: "a special strength [drawn] from its ability to wield power in the people's name" (Lause 1990, 408). This discussion of rights and democracy leads naturally into literature on the unique right of inhabitance proposed by Henri Lefebvre, and the final section of this literature review.

Part Five: The Right to the City

The boundaries of urban space are blurry and subjective, distinct in nature from political boundaries. Asserting the right to occupy and appropriate space is a theoretical exercise different from asserting rights that are linked to one's political citizenship in a nation, state, or city (Purcell 2003; Carpio, et al. 2011). This is pertinent to college students because of the structure of the unofficial, interior "college town" itself: first, because the space that students inhabit is typically being appropriated for them without being appropriated by them; second, because students are seldom residents in the political boundaries of their universities, but are inhabitants whose spatial identities are poorly understood because of their temporary residential status (Gumprecht 2008, 18-21). Students typically inhabit a space that is subjectively distinct from the surrounding city, and that has increasingly been designed to profit from their inhabitance at their expense; invoking a right of the inhabitant applies regardless of citizenship and regardless of perceived "town-gown" spatial conflicts that fail to distinguish between the desires of students and universities. Lefebvre's idea of the right to the city forces a reexamination of interests when applied to a thematic college "city" of land designed to maximize profit for developers and recoup lost property tax expenses for cities.

It is helpful to juxtapose the inhabitance patterns of college students with the current power dynamics surrounding popular reassertion of the right to the city. Some scholarship describes urban citizen frustration over an increasingly lack of political control and the ensuing loss of democratic participation: a transfer "from citizens and their elected governments to transnational corporations," which increasingly integrate urban space into "a single, laissez-faire, and capitalist world economy" (Purcell 2002, 99). The political right to vote for city, county, and

state officials is almost meaningless when elected officials become beholden to stakeholders other than voters (Purcell 2002; Carpio, et al. 2011). There has been little change in this area for university students, whose voting rights and habits have long been imperiled by both legal and practical limitations (Ardoin 2015; The Yale Law Journal 1971). Although college students were relieved from difficult residency limitations in 1972 and 1983 U.S. Supreme Court rulings, enough ambiguity remains that states have had little difficulty passing legislation that disenfranchises students. This is sometimes motivated by Republican-majority state legislatures' fear that students will overwhelmingly vote for Democratic candidates (Ardoin 2015).

Yet the spatial concerns about supply-side restructuring of cities remain pertinent to college students, perhaps to an even greater extent than to other inhabitants, since students are targeted so heavily with local expectations that they will offset the burden of university tax exemption with their heavy local spending (Gumprecht 2008, 272; 330-332). In his famous essay, "The Right to the City," Lefebvre begins by lamenting that "only those individual needs, motivated by the so-called society of consumption, have been prospected, and moreover manipulated" by the forms and function of the city (Lefebvre 2000, 147). This certainly parallels the effects of economic growth engines on the physical aspects of campus life: the growing spending power of student bodies is used to attract greater investment that spatially contains and targets them, an exaggerated microcosm of the general argument against neoliberal urban growth.

Here literature interpreting Lefebvre for the modern economy is helpful: his writings about space and urbanism involve both "perceived space," the objective surroundings of inhabitants, and "conceived space," the mental idea of what space is and could be as it functions in citizens' lives. These combined to create "lived space" (Purcell 2002, 102). Therefore

whoever produces the lived space in an urban area also produces the social space and every concomitant factor with a spatial tie. Purcell interprets Lefebvre's abstract claim as not only the right to physically occupy produced space, but also "the right to produce urban space so that it meets the needs of inhabitants" (Purcell 2002, 103), ascribing a political identity without a political border (Lefebvre 2000, 158).

When Harvey discusses use value in contrast with exchange value, he notes that land is unique in many ways from other goods: because use is a lifestyle that exceeds the importance of normal consumption, "a use value for one is an exchange value for another"; the components of use are not easily extracted from their exchange value for the individual and the community (Harvey 1973, 159-161). This is true of university land too; students use the resources that have been built for them, but the collaboration of the market, city and university in marketing the luxury college town blurs the distinction between use and exchange as students consume aspirationally, hoping to purchase future affluence by leveraging their borrowing capacity to prematurely upgrade their lifestyles. The Lefebvrian right is asserted when use value is prioritized over exchange value (Purcell 2002, 103; Pinder 2013).

While the literature gaps when discussing the right to the city in terms of universities, this paper doesn't aspire to fill this gap; rather, it creates an ad hoc antidote to mounting student financial crisis by applying Georgist ideas, using Lefebvrian ideals rather than charity as a basis for interrogating the injustice of the spatial-economic burdens associated with being a modern student.

Chapter Three: Methodology

This paper contains three research contributions. One is a section that develops the original concept of applying value capture to universities and the student-targeted land developments proximate to them, with recommendations for what qualities planners should assess to settle upon the most appropriate assessment district. This comprises the fourth chapter of this thesis. The second is a comparison of two flagship universities and the qualities that may affect the suitability of student appropriation of value on and around them. The third is a rough estimate, using current land values, of how much land value appreciation might be captured in a growing university-proximate neighborhood. These comprise the fifth chapter of this thesis.

The recommendations for considerations in value capture are original work, dependent on general field knowledge of planning. The fifth chapter, concept demonstration, uses two instrumental case studies to demonstrate how value capture policies can expand and contract depending on qualities that vary between campuses. An instrumental case study is generalizable to a wider pool of cases: Robert E. Stake states that an instrumental case is "examined to provide insight into an issue or refinement of theory" (Stake 2008, 88). The subjectivity of each case does not preclude generalizability.

The concept demonstration uses U.S. census data, including some household data that is not accessible below the level of the zip code tabulation area (ZCTA). Because of this limitation, university-proximate ZCTAs are used as stand-ins for more precise data on the demographics and housing characteristics of the actual surrounding neighborhoods. The second part of the concept demonstration uses data culled from a county's central appraisal district website. These land values are part of the public domain and, although the county doesn't guarantee their

accuracy, they are most useful in this paper in comparison to each other rather than as absolute statements of land value. All calculations were done by the author using Microsoft Excel formulas. All land values from years prior to 2016 were adjusted for inflation, and all monetary units in this thesis are 2016 U.S. dollars. Square footage was estimated using the area measure tool on Google Maps. This process is illustrated in greater detail in the fifth chapter.

Chapter Four

Concept Development

The introduction and literature review sections of this thesis illustrate a set of problems for students that lasts long after graduation: crushing debt and poor rate of return on investment, but also the loss of institutional opportunities to question the primacy of neoliberalism. Luxury student housing and other accommodations, both on and directly adjacent to campuses, continue to grow and redefine what the college space should be. This growth demonstrates incredible success at corporate appropriation of the student identity, with the radicalism of student movements in earlier decades less appealing to many than aspirational upper-class consumption. Spatial containment, easy loan access, and constantly refreshed population makes students an ideal market. The spatial element provides an entry point for city planning to be tapped for some aspect of the solution to the student debt crisis, which is tightly related to land use and development.

Fortunately, two valuable and applicable concepts are already in widespread use in the planning field, and must only be reformatted for site-particular redistribution rather than reinvented entirely. One is civic support for appropriation of space by its current users, a rising trend in a field still shamed for its onetime tabula rasa approach to development (Taylor 1998, 122-123). The other is value capture, a planning derivative of Georgist thought, which pools the profits from unearned land value appreciation in a given area and uses them to fund redevelopment or other forms of community investment in the same area.

Value capture is a broad toolkit for planning, and the research necessary to tailor policy to one's specific setting reveals the insufficiency of reliance on the one-size-fits-all

recommendations inherent in globalization, and "glocalization" in particular. Considering conclusions from the introduction and the literature review of this paper, value capture must proceed with the assumption that both public universities and the cities around them benefit financially from rising tuition costs and the commercialized college experience, but temper this assumption with local data. Because of this, the university value capture concept here involves two subsets: a policy for the land around universities, and a policy for university land itself. Each of these subsets can be adjusted, as with any extant assessment district, to a degree most appropriate to the level of development and for-profit use both on and adjacent to campus.

Existing value capture policies qualify included land in different ways. Tax increment financing (TIF), for example, generally involves drawing up relatively large districts which include a certain proportion of land that is blighted or otherwise unlikely to be developed. To maximize the reinvestment subsidy generated by TIF, these districts may include land already primed for redevelopment, with enough less desirable land included to be plausible for approval. A leading criticism of TIF is its misapplication as funding for already-lucrative spaces (Briffault 2010). A special assessment district (SAD) is a better model for value capture around universities because it isn't burdened by the expectation of renewal or reinvestment that traditionally accompanies TIF. SAD also exempts businesses that do not benefit directly from their proximity to a value-generating public improvement. This sort of exemption proves useful in assigning a university-proximate value capture zone, both to avoid forcing establishments to pay for a benefit they don't receive and to avoid pushing out what little diversity of use may remain alongside student-targeted accommodations and businesses in the intensely developed retail and housing areas proximate to many public campuses.

When developing a spatial policy for assessing land around universities, planners will need to assess qualities that vary from campus to campus. These include:

- The distance properties must be from campus before they are no longer assumed to benefit distinctly from proximity to campus. In many university towns, the density of students has spillover benefits for the entire local economy (Gumprecht 2008); a spatial policy should remain conservative to assess those properties that most exclusively interface with students and constantly reinvest in increasingly targeted aspects of the spatial component of "college experience" creation.
- The shape of the assessment district. The most simple solution is to draw a certain radius, perhaps an estimated maximum walking distance, around a college campus; however, development is often more extensive in a particular direction, especially when limited in other directions by barriers like highways and geographic features. Planners must assess likely future development to draw districts with inclusive shapes to capture maximum value.
- Criteria that merit exclusion from the assessment, if any. If real estate truly receives no benefit from being proximate to the dense, spatially constrained student population on a campus, it may merit exclusion. Planners must also consider nonprofits carefully; some nonprofit organizations like places of worship may still merit inclusion or wish to be included in the assessment since they benefit so heavily from proximity to the college population. In Texas, assessment of tax-exempt properties is provided for in the Texas Local Government Code's section on improvement districts (Texas State Legislature 2015, 372.014[b]). Other states have similar laws already in place which provide a

precedent for either assessing the property value of tax-exempt land or assigning value for a contractual equivalent.

Planners will also need specific criteria for assessing public university campuses. Campus land, including land that is being held speculatively or in anticipation of future expansion needs, is tax-exempt. This status does not entirely preclude assessment in a value capture district, a point described in the third bullet above. However, some further options are available for fairly assessing land based on use. Planners may wish to consider the following specific elements:

- The portion of land owned by a university that is actively used for student and administrative services. Many universities hold land speculatively like any other developer may, leasing or selling it when markets are favorable or saving it for anticipated future expansions. A mild value capture policy could involve estimating and assessing only this area of land.
- The portion of land that is used by profit-generating franchises. As explored in the introduction to this thesis, campuses regularly fill student-use buildings with fast food restaurants, popular coffee chains, and brand-name service and tech sellers. These franchises turn profits while intensifying brand loyalty and consumption among students. Major sports arenas and other sports-related real estate may be included in the profit-generating portion of a land assessment, especially in public universities where licensing and merchandising of sports logos is a major source of profit. Due to the rise of public-private university partnerships, labs and incubator spaces could also be included in this assessment. The patchiness of the campus landscape when subdivided by use could prove

challenging for planning assessments; this could be addressed with simple and conservative estimates of space, and could eventually result in a more transparent delineation of for-profit intracampus mini-districts.

• Simultaneous legal or practical provisions to prevent corresponding tuition hikes. This concern addresses the famous Bennett hypothesis, named for former US Secretary of Education William J. Bennett, who stated that when federal student aid is increased, colleges simply absorb the raise by increasing tuition by the same measure (Frederick, et al. 2012). Though some studies have found that the Bennett effect is more pronounced at private universities, its validity remains controversial (Kelly 2015). If campuses themselves are assessed, a state tuition cap on any university receiving state funds would be helpful in preventing colleges from simply raising tuition to eliminate any student relief that value capture may provide.

A third consideration when crafting policy is how captured value should be redistributed. The goal of university-based value capture should not be to raise property values and encourage more profitable redevelopment that benefits individual land owners, as most tax increment financing does in practice. The most obvious form of direct relief is simply using captured value for tuition relief, either by sharing the total equally among all students or by creating a meanstested disbursement program. The money could also be used for student-led development, allowing students the financial ability to appropriate some space for their own use. In particular, value capture districts that assess university-owned land could be used to fund student needs that are currently outsourced to cities, especially in areas where the student burden on local infrastructure is not offset by the cultural and economic advantages of the university's proximity.

Table 2: Summary of Options for Value Capture

Policy	Description	Benefits	Drawbacks
Special assessment district in given radius or development area around university	Captures added land value generated by proximity to public university. Like other special assessment districts, it may exclude selected real estate that doesn't benefit from this proximity.	Targets businesses that benefit from agglomeration of students; redistributive; decreases incentive to hold land speculatively; captured value could be used for tuition relief and reinvestment in student-led development	Fails to hold university accountable; may be a disincentive to some desired development; tuition relief effectiveness varies sharply based on campus
Value capture from all university-owned land, including speculatively held land	Assesses normally tax- exempt university-owned land, returning value to students. Policy could be contracted to target only land not actively used for student services and/or land appropriated for public- private uses or profit- generating uses.	Targets universities that pay no taxes while partnering with forprofit entities; redistributive; may incentivize clearer delineation of for-profit partnerships; decreases incentive for universities to hold land speculatively; captured value could be used for tuition relief and reinvestment in student-centered needs that decrease burden on city services (in lieu of PILOTs)	Fails to redistribute profits from student-targeted development surrounding universities; would likely require strengthening of tuition-hike limitations; possible incentive for university to outsource land-heavy services like dormitories; requires accurate assessment of university land values
Combined value capture district including university land and land in a given radius or development area around university	Combines some degree of each of the policies described above.	Combines benefits listed above; provides maximum level of captured value; reduces potential for outsourcing university services to proximate private land	Policy must be adjusted for appropriateness by campus; may be a disincentive to some desired development; would likely require strengthening of tuition-hike limitations; requires accurate assessment of university land values

Planners have three broad areas of adjustment available to specify these policies: the extent and inclusivity of assessment around the university; the extent and inclusivity of assessment of university-owned land; and the allowed uses for dispersing captured value. Final policies will be partly contingent on political and student activity, which is outside the scope of this paper, but they will also be contingent on the character of the campus and its surroundings. This includes land use and demographic elements like student population, level of development around campus, area of campus, amount of speculatively held land on and off campus, and whether the surrounding town is urban, suburban or rural. To roughly illustrate the ways value capture may expand and contract by campus, the next chapter considers two public university case studies—one in a large, dense capital city, and one in a rural town characterized mainly by the college's presence. While some specific data is unavailable, this concept demonstration assesses some of the decisions planners might make when forming a working redistributive policy to aid student reappropriation of the university lifestyle.

Chapter Five

Concept Demonstration

To demonstrate the application and potential benefits of university-based value capture, this section uses demographic and land use data for two flagship public universities to walk through the decisions a planner may make in developing a best-fit policy. The two cases are the University of Texas at Austin (UT), which operates a large campus in the center of a major metropolitan capital city, and the University of Missouri (Mizzou), which has an even larger flagship campus in a rural area. Mizzou's campus simultaneously operates as a school and a botanical garden (University of Missouri 2016).

UT is located in the center of Austin, Texas, and is partially funded by the net interest and dividends from a permanent endowment based on land use, rental and sale (Smyrl 2010). Austin itself is growing quickly, with a 15% increase in population between 2010 and 2015, and between housing the state capitol, the university, and a growing tech sector, Austin is not heavily reliant on UT for land value increases (U.S. Census 2016). This doesn't prevent a heavy price premium on land that is in walking distance of UT campus. For example, a parcel of land that houses a large off-campus student apartment complex three blocks west of the UT campus is currently valued at \$101.20 per square foot, while a parcel of land that currently holds an apartment with similar rent five miles from UT is valued at \$30 per square foot (Travis Central Appraisal District 2016).

The median monthly rent paid in the proximate zip code most heavily populated by students (78705) was \$1094 in 2014. In the same year, median rent for the city of Austin was \$1012. The number look similar, but the populations that pay them are not: 79% of renters in the

78705 zip code paid over 35% of their household incomes in rent, compared to only 40% of renters citywide (U.S. Census 2016). The residents of 78705, mostly students, earned median incomes only a quarter the size of the median income for Austin overall. The issue with Austin's off-campus student housing is not that it's disproportionately expensive for the city, but rather that it is disproportionately expensive for the population it serves.

Mizzou can be analyzed using the same census data and numbers, although the zip code that contains the most off-campus student housing (65201) is much physically larger than the zip code used for the UT analysis; 65201 covers over 85 square miles, while 78705 covers less than 3 square miles. The Missouri zip code extends far enough away from the campus that much of the land and population in it is not affected by the premium associated with the college. Because of this, census data on median rent and median income can be expected to have less angularity toward the characteristics of a college student population. Still, the median income for 65201 is less than 75% of the median income for the entire city, and Mizzou students are such a large percentage of the Columbia population that their inclusion almost certainly skews the citywide numbers downward. About 58% of residents in 65201 pay over 35% of their incomes in rent; the percentage dips to around 40% in other Columbia zip codes that contain little student housing (U.S. Census 2016).

Table 3 compares some relevant characteristics of the two schools:

Table 3: Characteristics of Two Flagship Universities

University	University of Texas at Austin	University of Missouri Columbia, Missouri		
City	Austin, Texas			
Estimated City Population (July 2015)	931,830	119,108		
Student Enrollment	50,950	35,448		
(Fall 2015)	(5.5% of Austin population)	(29.7% of Columbia population)		
Undergraduate Enrollment	39,523	27,812		
Main Campus Size	431 acres	1,262 acres		
Annual Full-Time Student Tuition	\$9626 - \$11,600	\$9518		
(resident)	(depending on program)			
Endowment Size (2015)	\$24.1 billion	\$1.48 billion		
	(University of Texas System)	(University of Missouri System)		
Median Income (city)	\$55,216	\$43,776		
Median Income (zip code with most student housing)	\$12,786	\$29,277		
Percentage of Students Living Off- Campus	81%	75%		
Average Rent (city)	\$1012	\$804		
Average Rent (zip code with most student housing)	\$1094	\$793		

(U.S. Census 2016a; U.S. Census 2016b; University of Texas 2016; University of Missouri 2016; National Association of College and University Business Officers and Commonfund Institute 2016; U.S. News & World Report 2016)

While similarities are to be expected around any major universities, there are also differences between Austin and Columbia that will drive a value capture policy in different directions. The schools have similar tuition, but the cost of living is lower in Columbia, and Mizzou's endowment is significantly smaller than UT's. Value capture is more likely to be a burden on non-student residents of Columbia, with their lower median incomes and much smaller population, than it is on Austin residents around UT's campus. Columbia also has a lower density of businesses and rental units than Austin, and less lucrative branding of Mizzou's sports teams and logos. Mizzou pours funding into operating its campus as an inexpensive botanical garden open to the public; UT, by contrast, leverages heavily branded athletics to fund academic programs and reinvest in even more growth of sports accommodations and promotions. UT recently entered a 20-year, \$300 million contract with ESPN giving the sports station rights to produce a 24-hour television channel covering the college's athletics (Mizzou Botanic Garden 2016; University of Texas at Austin 2011).

Specific plans and estimates for the two campuses require research beyond the scope of this thesis; estimating the square footage of each site that is devoted to profit-generating activities and franchising, for example, would require long site visits and detailed measurement. However, the general properties assumed using the data tabulated here are clear enough to walk through some suggestions about the direction that value capture policy might take for each campus.

Mizzou operates its campus as a non-profit garden, maintained for public enjoyment and educational use both by the college and the wider community. This feature should strongly consider in the portion of value capture policy that decides whether campuses should be assessed; the large amount of land that is exempt from city property tax rolls because it is a

public university would be exempt anyway since the land doubles as two different nonprofit uses. Though Mizzou does have sports teams, branding, and on-campus franchises, the nonprofit use of its campus should exempt it from paying an assessment based on land values. Because it does still engage in for-profit ventures, a contractually agreed-upon fixed sum would be a better fit for the campus portion of university-based value capture here.

Mizzou is partially surrounded by the increasingly typical luxury student apartments and student-targeted businesses. These are clearly visible in Google maps, as depicted in Figure 5.1



Figure 5.1: 9th St. adjacent to Mizzou campus.

(Source: Google Maps, 2016)

Mizzou's data isn't as compromising as UT's in terms of its reliance on student spending and out-of-proportion rents, but it still reveals a hardship placed on students for city and university benefit. The area surrounding the campus should therefore be added to a university assessment district to capture some of the value generated by proximity to campus. This will help relieve the burden of the restaurants, apartments, coffee shops, clothing retailers, and other

businesses that are clearly targeting the student market despite its low income relative to the rest of the city.

UT should be assessed more heavily for contribution to a special assessment due to its heavy use of tax-exempt land for profit-generating purposes. In 2013, UT made \$165.7 million through its athletics programs; \$58.8 million of that was solely generated by brand licensing of its famous longhorn logo. Licensing growth and the ESPN deal mentioned earlier helped UT grow its revenue by 84% from 2005 to 2013 (Gaines 2014). The campus is full of franchises, and donors are permitted to advertise on campus through naming rights, meaning that students attend classes next door to amenities like the AT&T Executive Education and Conference Center, a 4star hotel on the UT campus. Furthermore, UT has come under criticism for the relatively small investment it makes in tuition aid; the New York Times reported in 2015 that private equity fund managers received more money from UT's endowment than all its students combined (Fleischer 2015). Because of this, the campus should be assessed for university value capture much as a property that is not tax exempt would be: by taking a certain percentage of the value of its land. Texas Local Government Code provides a precedent for assessing tax-exempt facilities, as discussed earlier, and students are justified in attempting to regain some funds from the profitmaking activities that are appropriating their campus.

The area surrounding the UT campus is also a nexus of spending for students, and census data for the most student-populated area west of campus is clear: people with very low incomes are paying the same rents as other city residents, while also paying tuition. The city profits from taxation of this extremely high-value land. The densely packed restaurants and other businesses extend for blocks beyond campus, and these land values should be assessed in the same way as

Mizzou's off-campus retail districts. This tax helps recoup unearned value generated by proximity to the large, dense, largely loan-dependent student population.

In practice, planners will receive more case-specific data about campus land use and the true impact of advertising and proximity on student spending habits. These cases illustrate some of the basic considerations that will arise when surveying a campus and its surroundings; the amount of value captured and level of assessment at a given campus will require an extensive research investment to fairly return unearned funds for student appropriation of space.

Concept Demonstration: Estimating Potential Land Value Appropriation

Henry George's land value taxation theory promoted an astounding 100% tax rate on unearned land value; modern TIFs capture all added taxable value, but it is generated by a modest tax rate. The university value capture district proposed here can be valuable to students in at least one of two ways: it must discourage predatory development through a rate of taxation high enough to be a disincentive to development, or it must generate meaningful funds to offset student financial burdens by appropriating added value. Either way, students find relief from the spatial and cultural pressure to fund growing levels of university-proximate development through their own indebtedness. This section of the paper uses land value increases in a case study area to demonstrate the potential unearned value accrued on land proximate to universities. The case under study here is the University of Texas at Austin. Because specific data on the profit-generating uses of tax-exempt campus land is not available, this section explores only the potential value of off-campus development.

The estimates here are based on data from the Travis Central Appraisal District (TCAD). To estimate land value, I calculated the price per square foot of heavily developed land in West Campus, the area west of the UT campus, based on 2016 land market values. To reflect the negative correlation between land value and distance from campus, I estimated the land values of six subsections that spanned the north-south length of the campus and a width of 1-2 blocks. These six sections, added together, make up the entire West Campus neighborhood and most of the 78705 zip code tabulation area dicussed earlier in this chapter.

The full data collected to estimate the value of six sections west of campus can be found in the appendix of this paper. An example measurement for one section is discussed in more

detail here. To estimate the change in land value, I first looked up 2012 and 2016 land values on TCAD for 10-15 properties spanning one section to confirm that land values were consistent throughout. I also recorded the square footage of land and calculated the 2012 and 2016 prices per square foot of land (in U.S. dollars). These are seen in columns E and F in the spreadsheet created for section 1 below; the positive change in value is recorded in column G.

Table 4: Example Value Change Calculation

Property	Land Value 2016 (2016 \$)	Land Value 2012 (2016 \$)	Square footage	Price per ft ² 2016 (2016 \$)	Price per ft ² 2012 (2016 \$)	Δ price per ft ²
414 W M L KING JR BLVD	1887000	1344026.85	22200	85	60.54175	24.45825
1900 GUADALUPE	785400	486439.8	9240	85	52.645	32.355
2100 GUADALUPE	588000	353774.4	8400	70	42.116	27.884
2222 GUADALUPE	588000	353774.4	8400	70	42.116	27.884
2402 GUADALUPE	605540	392352.656	9316	65	42.116	22.884
2406 GUADALUPE	545350	353353.24	8390	65	42.116	22.884
2514 GUADALUPE	189150	122557.56	2910	65	42.116	22.884
2604 GUADALUPE	359450	203788.795	5530	65	36.8515	28.1485
2700 GUADALUPE	1722500	976564.75	26500	65	36.8515	28.1485
2801 GUADALUPE	883935	572735.484	13599	65	42.116	22.884
2820 GUADALUPE	487500	276386.25	7500	65	36.8515	28.1485
2900 GUADALUPE	416000	235849.6	6400	65	36.8515	28.1485
2915 GUADALUPE	1292525	628107.495	19885	65	31.587	33.413
2927 GUADALUPE	898560	436658.688	13824	65	31.587	33.413
					Average Δ (\$):	27.39551786

The changes in value range from \$22.88 to \$33.41 per square foot, with numbers averaging around a \$27.40 change.

The area in this section is then estimated using the Google maps distance-measuring tool, which calculates enclosed area of a selected section. I estimated the total area by adding together three subsections, pictured from southmost to northmost in three images taken from Google Maps pictured on the next page (note that the images are not to scale).

1,500.00 ft West Dr Ransom Center East Of 2,000.00 ft Dean Keeton St San Antonio Street W 24th S Measure distance 2,605.05 ft Click on the map to add to your path Measure distance Total area: 295,054.68 ft² (27,411.48 m²) Click on the map to add to your path Measure distance Total distance: 3,405.17 ft (1.04 km) Total area: 763,890.31 ft² (70,967.73 m²) Click on the map to add to your path Total distance: 1.41 mi (2.28 km) Total area: 213,591.16 ft² (19,843.27 m²) Total distance: 2,605.05 ft (794.02 m)

Image 5.2: Screenshots of estimated area immediately west of the UT campus.

The total area in the three measured subsections above was estimated at 1,272,536 square

feet. At an approximate \$27.40 of increased value per square foot, this meant that my estimated increase in unearned land value over the four-year period was \$34,867,486.40—or over \$8.71 million per year. With tuition of around \$10,000 per student per year, this meant that the estimated change in land value of just the dozen or so blocks across the street from campus would yield value enough to pay a full year's tuition for 871 UT undergraduates. The remaining five sections, progressively further west of UT but running along the same north-south axis, had the change in value of their total areas calculated in the same way.

Calculating value-added areas in this way produced the results shown in Table 5.

Table 5: Annual Value Captured from West Campus Land Appreciation

Section	Area (square feet)	Land Value Added Per Year (average from 2012-2016)		
1	1,272,536	\$8,716,872.60		
2	1,148,823.29	\$8,333,349.92		
3	894,757.91	\$3,667,814.12		
4	1,808,658	\$9,533,788.99		
5	2,597,824	\$10,643,650.55		
6	1,561,732.06	\$7,929,751.25		
Total	9,284,331.26	\$48,825,226.43		

Using the rough estimates found here, the West Campus neighborhood alone would generate over \$48 million if its increase in land market value were assessed for student appropriation at a 100% tax rate. This number could pay a full year's tuition for 4882 undergraduates, and is about 12.4% of the total undergraduate tuition bill (roughly \$10,000 per

year for UT's 39,523 undergraduates, which does not include any scholarships or grants that they already receive) (University of Texas 2016).

Chapter Six

Conclusion

Rising student debt is a well-recognized issue in the U.S., but the thesis proposed here is unique in two ways. First, city planning has not previously been examined as a tool for student economic advocacy in existing literature on debt mitigation. This thesis proposes that an existing planning tool for value capture be modified to benefit students and reduce cities' economic incentives to allow predatory development. Second, most policy solutions that address student debt are concerned with loan forgiveness or repayment after graduation, but avoid addressing student loan consumption during college. These tactics fail to acknowledge the effects of marketing that targets students and increases their housing and discretionary spending prior to graduation.

As the analysis of UT's campus showed, land values are rising in tandem with the increasing commercialization of a college version of upward mobility that depends on consumption rather than economic success. Rising land values represent unearned wealth, as Henry George knew when he proposed land value taxation. Because of this, cities should institute heavy taxation of incremental rises in land value, on whatever scale is necessary to either disrupt the progression of predatory development or raise funds for meaningful relief of tuition and other student expenses. In the UT example, one year of 100% taxation of a single campus-proximate mixed-use neighborhood would generate enough money to relieve 70% of tuition for an entire incoming freshman class (University of Texas 2016). This suggests that a lower tax rate would still capture enough value to offset a significant portion of actual student expenses, especially given that students have other sources of scholarships and grants.

A university-based value capture system alone will not relieve all student debt concerns; in fact, its success would most likely be contingent on additional work in other areas, like legal caps to prevent universities from simply shifting the burden of taxation onto students with tuition increases. It can provide an additional service beyond collecting funds: placing a greater focus on the beneficiaries of the current system and increasing the relevance of civic participation by allowing students to consider their relationship with space in a new way.

The agglomeration of students on and around campuses has shifted in many places from a political force to an economic resource, simultaneously deradicalized and indebted by an aspirational yet unaffordable upper-class lifestyle. Reassertion of the Lefebvrian right to the city through reappropriation of spaces is a long-term theoretical goal; the recouping and reappropriation of the profit generated by one's own spatial inscription constitute a smaller assertion. For planners, university-based value capture is one of many opportunities to channel democratic control by using existing tools to help people shape and use their spaces in the ways that benefit their communities the most. College students, away from home and viewing the power of their collective density for the first time, have an important opportunity to live as citizens on their own terms. Planning departments can take the lead in helping cities prove to students that investing in their enfranchisement, civic integration, and ability to exercise control over space is a top priority.

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Appendix A: Data from Travis Central Appraisal District and Calculations of Land Appreciation

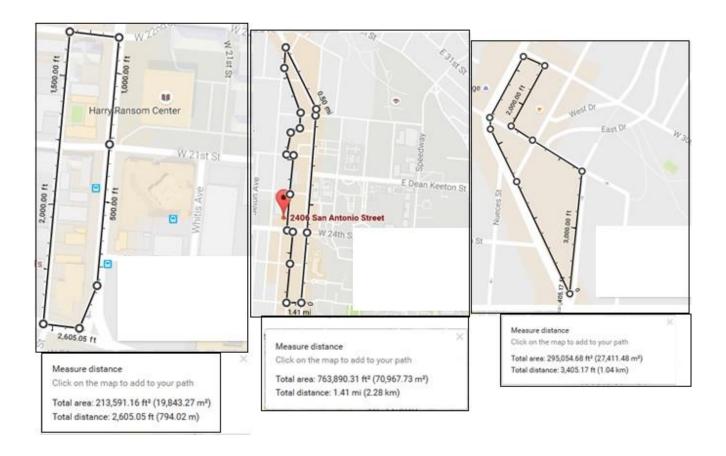
Property	Land value	Land value	Square	Price per	Price per sq	Δ price	
' '	2016	2012	feet	sq ft	ft 2012	per sq ft	
				2016			
414 W M L KING	1887000	1344026.85	22200	85	60.54175	24.45825	Area
JR BLVD							
1900	785400	486439.8	9240	85	52.645	32.355	1272536
GUADALUPE							
2100	588000	353774.4	8400	70	42.116	27.884	
GUADALUPE	33333	00077111	0.00		.2.220	27.00	
2222	588000	353774.4	8400	70	42.116	27.884	Total value increase
GUADALUPE	300000	333771.1	0.100	, ,	12.110	27.001	in section
2402	605540	392352.656	9316	65	42.116	22.884	34867486.4
GUADALUPE	003340	332332.030	3310	03	72.110	22.004	34007400.4
2406	545350	353353.24	8390	65	42.116	22.884	
GUADALUPE	343330	333333.24	0330	03	42.110	22.004	
2514	189150	122557.56	2910	65	42.116	22.884	Total value increase
GUADALUPE	109130	122557.50	2910	03	42.110	22.004	
	250450	202700 705	FF20	C.F.	26 0515	20 1 40 5	per year
2604	359450	203788.795	5530	65	36.8515	28.1485	8716871.6
GUADALUPE	4722500	076564.75	26500	C.F.	20.0545	20.4405	
2700	1722500	976564.75	26500	65	36.8515	28.1485	
GUADALUPE	22222				10.110		
2801	883935	572735.484	13599	65	42.116	22.884	
GUADALUPE							
2820	487500	276386.25	7500	65	36.8515	28.1485	
GUADALUPE							
2900	416000	235849.6	6400	65	36.8515	28.1485	
GUADALUPE							
2915	1292525	628107.495	19885	65	31.587	33.413	
GUADALUPE							
2927	898560	436658.688	13824	65	31.587	33.413	
GUADALUPE							
2100 SAN	1918808	1541654.074	26124	73.45000	59.01294113	14.437066	Area
ANTONIO	1310000	1541054.074	2012-	766	33.01234113	52	711 Cu
2204 SAN	1478400	1111862.4	19200	77	57.9095	19.0905	1148823.29
ANTONIO	1470400	1111002.4	13200	''	37.3033	15.0505	1140023.23
2304 SAN	497952	403302.816	8400	59.28	48.01224	11.26776	
ANTONIO	437332	403302.010	0400	33.20	40.01224	11.20770	
2406 SAN	307925	272351.5372	5685	54.16446	47.9070426	6.2574252	Total value increase
ANTONIO	307923	2/2331.33/2	3003	79	47.3070420		in section
	225000	126402 105	2501		E2 64E	95	33333399.7
2500 SAN ANTONIO	325000	136403.195	2591	125.4341 953	52.645	72.789195 29	33333333./
	F020470	2200417.445	F212C		C1 F1041FC2		
510 W 26 ST	5938479	3268417.445	53136	111.7599	61.51041562	50.249577	
				932	Average	6	Total value in area -
					Average:	29.015254	Total value increase
						12	per year
							8333349.924
						T	
				l			

510 W M L KING JR BLVD	362408	254385.9045	5900	61.42508 475	43.116255	18.308829 75	Area
1906 NUECES	358800	290600.4	6000	59.8	48.4334	11.3666	894757.91
2100 NUECES	524160	424529.28	8400	62.4	50.5392	11.8608	
2101 NUECES	655200	530661.6	10080	65	52.645	12.355	Total value increase in section
2200 NUECES	987000	742294.5	14100	70	52.645	17.355	14671256.46
2209 NUECES	589680	442218	8400	70.2	52.645	17.555	
2300 NUECES	6079264	4923737.338	47524	127.9198 721	103.6052802	24.314591 82	Total value increase per year
2400 NUECES	8471131	6860963.837	62178	136.2400 045	110.3439132	25.896091 28	3667814.116
2500 NUECES	639639	518058.387	9940	64.35	52.11855	12.23145	
2502 NUECES	909047	736258.2243	13578	66.94999 264	54.22435	12.725642 64	
				201	Average:	16.396900 55	
706 W M L KING JR BLVD	5323637	2802629.225	48787	109.1199 91	57.44623004	51.673760 94	Area
1900 RIO GRANDE	3541951	2365144.011	41817.6	84.70000 67	56.55857846	28.141428	1808658
1906 RIO GRANDE	634400	493262.592	8000	79.3	61.657824	17.642176	
2101 RIO GRANDE	1944124	1574590.892	17150	113.36	91.81288	21.54712	Total value increase in section
608 W 22 ST	366694	296993.6088	6132	59.80006 523	48.4334	11.366665 23	38135155.94
2215 RIO GRANDE	2996448	984119.3075	25725	116.48	54.5	61.98	
2222 RIO GRANDE	11439590	10037287.28	85116	134.3999 953	117.9248	16.475195 3	Total value increase per year
2313 RIO GRANDE	432588	350363.004	7080	61.1	49.4863	11.6137	9533788.985
715 W 23 ST	4905477	3973059.188	58503	83.85000 769	67.912059	15.937948 69	
2401 RIO GRANDE	624517	505811.0542	9705	64.35002 576	52.11860425	12.231421 51	
2419 RIO GRANDE	2580006	2241577.772	36084	71.5	62.1211	9.3789	
600 W 26 ST	25581618	22527359.85	207643	123.2000 019	108.4908225	14.709179 44	
2707 RIO GRANDE	2960100	2606685.588	29250	101.2	89.117456	12.082544	
2711 RIO GRANDE	2574000	2168131.68	39000	66	55.59312	10.40688	
					Average:	21.084779 95	
912 W M L KING JR BLVD	614939	447342.4643	11070	55.55004 517	40.41034005	15.139705 12	Area
1900 PEARL	913894	769790.9835	15825	57.75001 58	48.64398	9.1060357 98	2597824
2102 PEARL	715500	552456.63	11250	63.6	49.107256	14.492744	

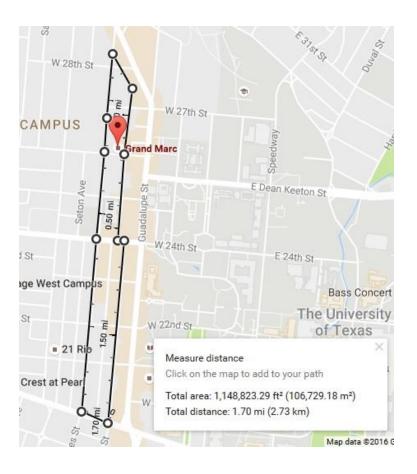
912 W 22 1/2 ST	332833	242121.7253	6507	51.14999	37.20942451	13.940567	Total value increase
322 ** 22 2, 2 3 **	33233		0007	232	07.203.2.02	8	in section
904 W 22 1/2 ST	2072585	1745779.797	21411	96.80000	81.53658387	15.263425	42574602.22
				934		47	
2222 PEARL	2900151	2445475.016	28909	100.3200	84.59216909	15.727835	
				042		07	
705 W 24 ST	565937	458365.2744	8976	63.05002	51.06565	11.984372	Total value increase
				228		28	per year
2401 SAN	3117466	1715790.047	30805	101.2	55.69842709	45.501572	10643650.55
GABRIEL						91	
708 W 25 ST	4329376	3644102.694	37897	114.2405	96.1580783	18.082521	
				995		22	
910 W 26 ST	815760	687130.9632	13200	61.8	52.055376	9.744624	
2614 RIO	1417062	1193513.742	22211	63.80000	53.7352547	10.064754	
GRANDE				9		31	
2704 RIO	4830448	4068783.591	44993	107.3599	90.43148025	16.928509	
GRANDE				893		08	
801 W 28 ST	350000	242941.9344	6270	55.82137	38.74672	17.074651	
				161		61	
					Average:	16.388562	
						97	
1900 SAN	1152000	606470.4	19200	60	31.587	28.413	Area
GABRIEL	110100		25200		02.007	1010	7 6
1919 ROBBINS	701250	473805	15000	46.75	31.587	15.163	1561732.06
PL					0 = 10 0 1		
1900 ROBBINS	141750	92128.75	3642	38.92092	25.29619714	13.624725	
PL				257		43	
2510 LEON ST	4229641	3234508.8	40053.4	105.6000	80.75491219	24.845136	Total value increase
				489		74	in section
2408 LEON ST	2640000	2021568	40000	66	50.5392	15.4608	31719005.01
1103 W 24 ST	1660285	953516.769	30187	55	31.587	23.413	
2312 SAN	2455200	1410043.68	44640	55	31.587	23.413	Total value increase
GABRIEL							per year
2100 SAN	880000	589624	16000	55	36.8515	18.1485	7929751.253
GABRIEL							
					Average:	20.310145	
						27	
					Total area	9284331.2	
						6	
					Total value	19530090	
						5.7	
					Total value	48825226.	
					per year	43	
	1	1		1	1 - 1	1 -	1

Appendix B: Area Estimates from Google Maps

Section 1:



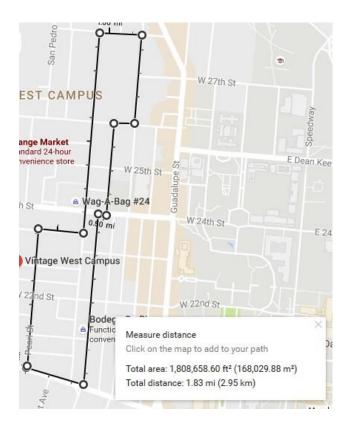
Section 2:



Section 3:



Section 4:



Section 5:



Section 6:

