The Student Research Briefing Series is designed to publish a broad range of topics in American Politics, Comparative Politics, Political Theory and Philosophy, and International Relations. The briefings are intended to enhance student appreciation of student research completed in the Department of Political Science. In addition, the publication hopes to serve as outreach to interested undergraduates and prospective students considering a major in Political Science. This publication is student produced and the research was conducted during Robert’s undergraduate studies. Read “Sustainability Policies and Economic Development in Large American Cities.”

Environmental disasters are not future events that will happen the day after tomorrow; they are already happening. For the last twenty years, federal and state governments have been relatively ineffective at addressing large issues like resource depletion and climate change while city governments have produced most of the innovative policy in this area. This paper seeks to explore policies in large American cities affecting matters of sustainability and sustainable development. Using quantitative and qualitative data from interviews Joseph conducted over two summers with economic development officials, this paper clarifies some of the relationships between sustainability, politics, economics, and quality of life. In particular, Joseph focuses on the relationship between sustainability policies and economic development, attitudes within city government regarding sustainability, and the factors that affect the passage of such policies. The future of our environment and economy depends on the extent to which impactful sustainability policies are enacted today.

About the author

Robert Joseph, A'15, completed a major in Political Science and a minor in Urban Studies. Compelled by his interest in urban planning, Robert worked continued on Page 2
for two summers on various projects for his hometown's planning and zoning department in Greenburgh, New York. During the second summer, Robert assisted with a regional sustainability for which Greenburgh was one of the two consortium leaders which gave him a front seat to all the meetings and action of the plan. At a public meeting in Newburgh, New York, members of what appeared to be a local Tea Party organization disrupted the meeting with gripes about sustainability policies. This experience led Robert to team up with Professors Portney and Berry to conduct original research for another two summers on Tea Party opposition to sustainability as well as the attitudes of city officials on sustainability policies. That research underpins the bulk of the thesis that follows.

In the Fall of 2015, Robert will begin pursuing a Master's degree in Urban Planning at NYU's Wagner School of Public Service.
Sustainability Policies and Economic Development in Large American Cities

An honors thesis for the Department of Political Science

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Chapter 1: Introduction

Nearly every week a major news outlet runs a story on the impacts of climate change and efforts made to mitigate its effects and adapt to its consequences. Clearly the changing composition of Earth's atmosphere to include more greenhouse gases and the depletion of Earth's resources are of large importance both on a national and international scale. However, despite the enormity of the situation, much of the progress and many of the innovative developments are made at the city and metropolitan levels. In the United States, one of the world's current and historical top emitters, the cities have taken the lead as the federal and state governments increasingly show inability and disinterest in addressing these issues. Cities are in many ways better-suited to tackle this matter because they are often more politically progressive than broader state or national entities. In addition, cities can easily tie environmental initiatives to urban development sites because they control land use at the local level. By virtue of their dense physical plant, cities are more likely to be efficient in ways that lend themselves to sustainability so they already have a natural advantage in creating and implementing programs.

Perhaps the foremost concern of most municipalities in addressing matters pertaining to sustainability is the increased costs directly to the city as well as the indirect potential impacts on economic growth. Ever since the inception of the environmental movement, business and conservative leaders have derided efforts to protect the environment as expensive and not worth the return on the investment. Given the regulatory structures in the 1970s and 80s, it is quite possible that new or additional technologies and processes required increased spending on the part of businesses to comply with regulations. However, since that time, the regulatory regime has shifted, environmentally-friendly processes have drastically decreased in cost, and the benefits of sustainability have become more apparent. Although these factors are not universally
known, more and more experts and city officials are beginning to take novel approaches to sustainability in their work.

The current state of affairs raises many important questions about the direction in which American cities will move in the future as well as the impacts of such policies on the environment and economy. One of the critical inquiries of this quandary is how does the proliferation of sustainability policies affect urban economic development in large American cities? Whether such policies lead to greater economic growth or not is pivotal to answering this question. Cities will not willfully engage in activities and create policies that they know are not advantageous in the long run. One of the issues inherent in this matter is the calculation of benefits; environmental and indirect social benefits often yield positive results for economic growth and economic models are not always able to encapsulate the actual aggregate effect. In order to take all the pieces of the puzzle into account, it is necessary to examine each city's economic development strategy to evaluate the trends in which strategies are more beneficial for economic growth as well as those which are more compatible with policies favoring environmental sustainability.

Apart from the economic development strategy each city uses to plan its future job expansion and business revenues, there are many factors which may ultimately be responsible for or indicative of a greater willingness to support sustainability initiatives. The primary concern here is unpacking what are the major factors that influence cities to pass and enforce legislation pertaining to sustainability. It is quite possible that one of the indicators of political will to pass such legislation is the absence or presence of groups committed to opposing those same measures. As such, how does the Tea Party, a standard bearer of opposition to sustainability, influence the creation, repeal, or absence of sustainability policies? As telling as opposition to
sustainability may be, there must also be proponents of the policies if they are to gain traction. One important set of stakeholders in cities that may or may not support these policies are business interests. Local Chamber of Commerce organizations are strong barometers of the larger sentiments felt by local businesses because they comprise the membership and elect the leadership of the organization. Therefore, it would be prudent to understand how local business interests affect local sustainability policies where the Chamber of Commerce is viewed as a proxy for the greater business community. Local groups often have the ability to wield significant influence at a local level so examining their part in pressuring local government may hold answers to these questions, especially when considered in conjunction with economic development trends.

One of the last pieces of the puzzle regards the prevalent attitudes toward sustainability in city government. Do officials in city government view sustainability as attractive to potential residents and businesses? The manner in which sustainability is implemented and marketed in cities is indicative of the future role it will have in the city. Presumably, if a city markets itself to residents and businesses as environmentally conscious, the city has an obligation to follow through on that promise or tenants will either leave or attempt to make the city conform with their expectations through political pressure. One way in which government attitudes are visible is the advantages touted by a given city. Determining that a city likes to tout its low carbon footprint would be clear evidence that sustainable, low-carbon-consuming infrastructure is something of which the city is proud. Since expanding on one's advantages is a natural tendency, favorability toward sustainability today indicates willingness to strive for more policies promoting it tomorrow. That said, not every city is satisfied with its policies, infrastructure and current state of affairs. Understanding what cities wish they had to attract residents is an
important indication of a new direction or goal toward which the city would like to move. Although city officials are not perfect representations of the electorates they serve, they are hopefully somewhat representative of those views and the level political will to make changes in favor of policies promoting sustainability.

In fact, urban sustainability policies have increasingly important implications for the United States. Because re-urbanization is a continuing process whereby Americans are moving back to urban core areas, cities will becoming ever-larger and more important places in the context of American life. In addition to regaining their eminence as population centers, cities have will only continue to become more crucial to economic activities and innovative practices. Cities have almost always been the job centers throughout history, but it is increasingly clear that they are also the main drivers of new technological and business development. Therefore, cities are likely to become paragons of both sustainability and invention. The influence urban areas will exert on the rest of the nation will be unprecedented in that they are the cultural leaders who pioneer the policies that may eventually be exported to other places or even levels of government. If all of the largest cities develop policies favoring environmental sustainability, it is not too hard to imagine that smaller municipalities and eventually state legislatures will follow. Since sustainability is a common thread that often affects nearly all aspects of daily life, it is probable that as policies are more widely adopted and expanded, American life will begin to look different for most citizens, not just those living in cities.

The research examined in this paper brings in current evidence from city officials in over 40 cities surveyed. In eighty-six percent of the fifty-city cohort, an interview occurred with a city official that brings in both quantitative data points and qualitative ideas that give color to the data. The enormous quantity of data is necessary to shed light on the many different ways in
which economic development, sustainability, and other policies are shaped, framed, and marketed. These many different viewpoints are absolutely critical to beginning to capture the diverse palette of colors in which sustainability is conceived and packaged. Although there are similarities among strategies and programs in certain cities in the sample, each city is unique for some aspect of its policy development. Even though the response rate is relatively high, those seven cities for which data was not obtained represent seven perspectives on sustainability policies. That said, this paper attempts to paint an overall picture of the state of sustainable initiatives in all of those cities signifying the direction in which urban American is headed.

To push the envelope further, my hypothesis for the entire paper unites many of the smaller hypotheses to advance the idea that the United States no longer needs to pollute the environment in order achieve economic development; cities that engage in sustainability initiatives are ultimately are more successful at growing their economies, improving the life quality of their residents, and protecting the environment. The old paradigm in which degradation of the natural environment was inevitable and efforts to protect the natural environment were met with strident opposition from business groups may have fundamentally shifted. Although no singular test can prove that this is the case, the sum of all tests combined with textual evidence from interview transcripts may support this hypothesis. While my overall hypothesis may seem like a large leap, it is grounded in the works of previous scholars. The concluding chapter of this paper will examine whether a fundamental paradigm shift has occurred with respect to business and environmental protection.

This paper builds upon previous scholarship to contextualize how this research fits into the scholarship on environmental and sustainability policies in the United States (chapter: background). Using the established literature in the field, the concepts and research designs used
in this paper are shown to have their root in the work of recent influential scholars. The methodologies used in this research are laid out and the strong connection to the research conducted by Portney and Berry is abundantly clear (chapter: methodology). The data are then evaluated broadly and examined topically. In searching for how the sustainability policies affect urban economic development in large American cities, whether these policies lead to greater economic growth must be considered (chapter: sustainability and economic development). In exploring government as the mechanism for change, do officials in city government consider sustainability an asset for attracting businesses and residents? What advantages do cities like to flaunt and what do they wish they could had to woo companies and people their city? The possibility that there appreciable differences in attitudes between officials in cities strongly embracing sustainability and those that are not warrants further investigation (chapter: attitudes in city government toward sustainability). How do the attitudes of city officials translate into policy? In this exploration, it is critical to understand the primary factors that affect the passage and implementation of sustainability policies (chapter: factors that affect the passage of sustainability policies). Does opposition to sustainability policies from groups like the Tea Party affect the outcomes and conversely, does support (or resistance) from local business groups influence the passage of sustainability initiatives? Finally, based on all of these concepts, what aspects of further study are necessary to better answer these questions? If there has been a paradigm shift in how economic development relates to sustainability, it must be discussed (chapter: conclusion).
Background
This chapter aims to examine the existing literature on sustainability and determine how and where in the literature this research fits. Beginning with modern environmental policy during the Pax Americana period, up to today's scholars and urban sustainability policies and their relationship with economic development, this chapter probes the scholarly literature for the antecedents that led to this research. The term sustainability itself is an ambiguous one that is given a definition, context, and operationalization. Finally, this work is explored and framed in the context of other research works by Portney and Berry. This chapter reviews much scholarly research that has already been conducted on these sustainability policies and how they are marketed or utilized as local economic development strategy. However, this chapter also strives to demonstrate how the paper overall contributes to a richer, deeper understanding of city sustainability policies and their impacts on business development and municipal self-promotion.

Environmental Policy in the United States
With the publication of Rachel Carson’s 1962 book, “Silent Spring”, on the horrific effects of the overuse and abuse of pesticides and pollutants, environmentalism began its entry into the American political dialogue (Kraft 2011, p. 94). By 1970, President Nixon had established the Environmental Protection Agency (EPA) to ensure the preservation of the natural environment and the resources it provides (Kraft 2011, p. 95). Shortly thereafter, the environmental movement sprouted and groups like Greenpeace were founded to fight for conservation. In the wake of the work done by these groups, a number of initiatives were passed by the Federal Government including the Clean Air Act amendments (1970), The Clean Water Act amendments (1972), and the Endangered Species Act (1973).

As explained by Kraft and widely accepted by other scholars, American environmental policy since the creation of the EPA fits into three regulatory regimes (Kraft 2011, p. 249-250).
The aforementioned pieces of legislation were part of the first epoch of policymaking which typically involved command and control regulation directly from the federal government. In many cases, these regulations set concrete limits for emissions and corresponding penalties for those who violated them. While effective for a period of time, these laws drew much criticism from business interests and other conservative groups ideologically opposed to government intervention into business activities and environmental protection.

This epoch dominated until the early 1980s when another regulatory regime began concurrent to the first. This second epoch of environmental regulation is best characterized by government imposed market controls on pollutants and materials at the state level. Regulations of this epoch often took the form of a cap-and-trade system where polluters had to comply with a certain set of standards or purchase emissions credits from other polluters to avoid steep penalties. These market controls also drew strong criticism from business groups and many state governments in the face of such pressure were unable to continue these programs effectively.

The third epoch began in the early 1990s shortly after the World Commission on Environment and Development (also known as the Brundtland Commission) published its report containing the first succinct definition for sustainable development. In addition to defining sustainability, the Brundtland Commission stressed the moral imperative for nations to develop sustainably. That sentiment is clearly articulated in part of commission's explanation that society must "Meet the needs of the present without compromising the ability of future generations to meet their own needs" (Mazmanian and Kraft 2009, p. 15). Also inherent in the document was the concept of sustainable development which tied environmental protection to economic and land development. Because land use planning and economic development are most directly
handled at the local level, cities were presented with the opportunity to take the lead on environmental policy. Hence, the third epoch is primarily focused around city policies.

Kraft's presentation of the three different epochs of American environmental policies is not a controversial one. However it is critical for framing sustainability at the local level in the broader policymaking history. Since the research in this paper is squarely positioned in the third epoch of environmental policy, it expands upon Kraft's concept and the scholarly understanding of what sustainability means. In addition, this paper builds upon how widely sustainability is accepted and how cities are embracing it. Kraft's work provides the context for the studies in this paper, and is the key to how environmental policy arrived at sustainability in the third epoch.

Following the second epoch of environmental policy in which market controls often implemented around the state or federal levels were beginning to fade, local governments started processes focused on working toward "sustainable development" as outlined in the Brundtland Report. Shortly thereafter, the city of Seattle completed one of the first sustainability plans in the United States in 1994 (Seattle Department of Planning and Development 2015). Since then, many cities have followed suit.

**Sustainability in an Urban Context**

One of the quandaries inherent in an examination of sustainability policies is the lack of clarity around the term sustainability. While the Brundtland Commission's report provides a strong conceptual framework for sustainability, it is also an abstract idea. To follow the definition laid out in the report, a society must consume so little that it will not inhibit the ability of future generations to meet their own needs. This presents several issues: what is technically considered a need and what is the threshold for inhibited ability to meet needs? These questions
have no clear answer and raise many philosophical debates that are beyond the scope of this paper.

Scholars have grappled with those larger questions raised by the Brundtland Commission's definition of sustainability and some have coherently and comprehensively built well-conceived arguments. In fact, Moldan, Janoušková, and Hák (2011, p. 5), argued that the traditional definition of sustainability, in which purely environmental resources are considered as the target of protection, should also include economic and social sustainability as critical components of the equation. The authors contend that economic sustainability is necessary for any regime to be viable. This point is completely logical given that maintaining a financially draining program is not sustainable for any public or private sector entity. Social sustainability on the other hand is needed because human well-being, quality of life, and cohesion among members of society is critical for stability in the long term. Unsurprisingly, social unrest is considered not to be acceptable or maintainable because it often leads to radical societal change. Societies rife with turbulence and inconsistency clearly have a low probability of being sustainable in the long term.

Moldan, Janoušková, and Hák are hardly alone in their findings of three pillars supporting the concept of sustainability. Scholar Robert Gibson not only corroborates the wisdom of conceiving sustainability as a triple bottom line, but also espouses the necessity of addressing social, economic, and environmental concerns in one integrative approach rather than separate fragmented processes (Gibson 2006, p. 260-261). Gibson laments the separation of those societal concerns in fields of study and those trained to deal with the issues; instead he claims that most societal issues fit into two or more of the pillars and therefore require a more inclusive examination (p. 263). In addition, Chourabi et al. (2012, p. 2289) explain what they
conceptualize as a smart city: an icon of a sustainable and livable city. The eight clusters of factors that comprise a smart city are management and organization, technology, governance, policy, people and communities, the economy, built infrastructure, and the natural environment (p. 2290). As described by the authors, these factors are not only the best characterization of smart cities, but also determinants of their ultimate success. These eight factors clearly add to the other scholars' definitions of sustainability; simultaneously, they are not incompatible with the novel understanding of sustainability as requiring more than just the natural environment. In essence, sustainability is a broad, inclusive concept and both Gibson's and Chourabi's contributions further the argument that this is true.

In terms of the understanding sustainability, there appears to be a strong consensus among scholars that it is largely reliant on environment, economy and equity (or some near variant). Accepting only the environmental aspects of policies (as a traditional interpretation might) pertaining to sustainability eliminates two-thirds of the picture of what these policies actually affect. Consequently sustainability is treated in this paper as a vibrant concept pertaining to all three pillars. This expanded view of sustainability is not only widely accepted in the literature, but it permits this study to demonstrate not only the breadth matters connected to sustainability, but the links between them as well.

**Effectiveness of Sustainability Policies**

The idea that a city is passing or implementing sustainability policies is not the end all and be all of environmental and quality of life legislation (or any legislation for that matter). Outcomes are inherently critical to answer the questions "are the policies actually doing what they were intended to do?" and "are they achieving the desired outcome?" Cities must constantly assess the work they have put into creating policies and programs to ensure that the environment
is protected in the manner that was anticipated, that quality of life actually improved for residents, or that jobs were in fact created in connection with a certain program or development.

And if a city is self-congratulatory or zealous in marketing how "green" it is when its victories are small or non-existent, to what degree does greenwashing (the dissemination of disinformation so as to appear environmentally-friendly) persist?

There are many ways to evaluate outcomes for relationships between a variety of variables such as the ecological footprint, carbon emissions per capita, economic production, or the poverty level (Brandon and Lombardi 2011, p. 87). Berke and Conroy (2000) devised a system of evaluation in which city sustainability plans are evaluated for how many plans in categories like the aforementioned ones are either suggested or required based on the language in the plan. With 84% inter-coder reliability, Berke and Conroy's results appear relatively accurate. However, there are several issues with this methodology. The most clear problem is that cities lacking a sustainability plan are automatically excluded from assessment. In addition, the contents of a city's sustainability plan may bear little resemblance to both the municipal codes and the realities existing within those cities. Should a city with high aspirations be evaluated as more sustainable than a city that actually makes large strides to be environment and quality-of-life conscious? The answer to that question may not be clear, but Brandon and Lombardi (2011, p. 149) have devised three guidelines for helping find a method that is fair and comprehensive in their discussions of philosophies for evaluating sustainable development. Evaluation must be flexible to accommodate varied situations, transparent, and assistive in decision-making. In accordance with all three of these guidelines is there is a simple method of measuring how dedicatedly a city has pursued sustainability: sum the number of different programs they have enacted. Every city has programs and this measure allows for flexibility in exactly what each
program looks like. Public policies are just that: visible and transparent to a broad audience. And finally, one of the last steps in the policymaking process is evaluation which can help decision-makers shift the focus of policy if needed. This strategy of counting policies is taken by Portney (2013) who creates a score for each city and each program implemented out of thirty eight counts for one point. This measure appears to be an excellent dependent variable for determining what influences city sustainability policies.

The exceedingly important other side of evaluating cities on their willingness to embrace sustainability is recognizing when a city is not exactly truthful about its programs and policies. Some cities see gains to be made from marketing themselves to businesses and residents as being more green than they really are. Therefore it is important that any assessment of city policies account for this phenomenon of trying to appear more eco-friendly known as greenwashing. Not only is it crucial that comprehensive assessments delve into the actual presence of policies a cities claims to have implemented, but understanding the motivations of why cities would choose to engage in marketing themselves as being sustainable.

**City Openness to Sustainability**

An evaluation of urban sustainability must include more than just the outcomes associated with being more sustainable. If a city has a favorable geography that gives it advantages in air quality, waste management, or livability, should that city be considered more sustainable than one that has implemented concerted policy measures but less favorable outcomes? Even though all cities are not on an even playing field (nor will they ever be), it seems most logical and fair to assess them based on their efforts rather than their outcomes. Therefore, measures of sustainability could gauge the number or the depth (or a combination therein) of policies and programs implemented in a given city. The factors that affect policy
creation are pivotal in determining a city's willingness to embrace sustainability and the interest groups supporting or opposing such legislation are the major players.

Prado-Lorenzo, García-Sánchez, and Cuadrado-Ballesteros (2011, p. 34-35) elaborate on the trends affecting a city's propensity to support sustainability policies. When a city government is weak or fragmented, it appears as though the opposition (or status quo) is more likely to prevail because the political will to impose the preferences of the minority on a larger group will not succeed. While the aforementioned authors originally hypothesized that a positive relationship between leftist political ideology of the governing party and sustainability (36) they ultimately proved the opposite to be true (42). Although Prado-Lorenzo et al. used Spanish cities as their subjects, this finding raises questions about conventional assumptions regarding sustainability and ideology in American cities.

In local politics, the groups most likely to fight for sustainability policies are pro-environmental or community groups. Although these groups may wield great power in certain cities, they are the exception and not the rule. Business groups are typically influential in cities and may hold the necessary political capital for enacting or implementing sustainability policies. According to Portney (2007, p. 303-304), businesses (whether organized or not) may have vested interests in city plans responsible for guiding future development or even in how policies are enforced on the ground. Business and local government are often believed to have a clichéd relationship: the local government attempts to protect some aspect of its environment and businesses oppose the protection efforts because they see such protections as costly and potentially cutting into profit margins. While this truism may have been accurate in many cities several decades ago, manufacturing as a major employment base in American cities has since declined and so have the situations in which environmental protection is viewed as a zero sum
game (Portney 2007). Although environmental issues still appear to businesses in some cities as an adversarial conflict, others have transitioned to a point where sustainability initiatives promoted by cities are geared toward economic development and therefore are actually desired by businesses. Portney is not alone in this postulation; Sharp, Daley, and Lynch (2010) also agree that businesses often do not fit the classic model and that businesses can save money by participating in sustainability programs. In fact, challenging the old model is one of the broader aims of this paper which will hopefully uncover national trends with respect to attitudes toward sustainability within the context of economic development in larger cities in the U.S.

Conversely, many groups with a role in purely opposing sustainability measures have sprouted. In recent years, local Tea party organizations have emerged as influential players in some cities. The rise of these ultra-conservative organizations has resulted in local opposition to environmental policies in a number of places. Berry, Portney and Joseph (2014) find that there is likely to be a strong connection between the presence of Tea Party organizations and the absence of sustainability-friendly local policies. They are joined by Trapenberg Frick (2013) who concludes that Tea Party activists are not to be disregarded because their movement may catalyze opposition in a meaningful way implying that the Tea Party may adversely influence environmental outcomes. Challenges to sustainability policies are equally important to understanding which cities engage in the implementation of such policies (and the extent to which they do so) as are the factors that motivate cities to do so.

Sustainability and Economic Development

Finally, the literature provides a solid support for new views of sustainability and economic development in cities. As Portney mentions (2013), one of the aims of recent economic development efforts has been achieving a certain level of quality of life. Portney
defines quality of life as the level of employment and average family incomes. Not so coincidentally, these are the two economic indicators used in this paper. The concept of traditional economic growth is raised as one in which growth is considered good regardless of the consequences. While growth and environmental protection have in the past often been at odds, Portney describes the emerging concept of smart growth in which environmental and quality of life concerns are integrated and addressed. Furthermore, there is evidence that cities undertaking smart growth and sustainable development initiatives have experience more growth over the last twenty to thirty years (Portney 2013).

Although there are many reasons for why green development may lead to stronger economic growth, Richard Florida puts forth a strong argument for one plausible mechanism. Florida claims that creative people, often known as the creative class, are often the driving forces in regional growth. Apparently, they are not deciding where to live based on jobs, but rather lifestyle and economic factors; the jobs appear to be following them (Florida 2003). If Florida's claim holds true, economic development may have less to do with direct appeals to businesses, and everything to do with attracting the residents those businesses want to employ. Florida goes on to say that creative people are not looking for the things offered by cities engaging in traditional economic growth, but rather ones that offer high quality of life experiences (Florida 2003). These topics are explored in-depth in chapters two and three of this paper.

Conclusion

The work conducted by previous scholars is critical to this research in many ways. The historical and societal context surrounding sustainability policies provides a decisive answer to the question regarding why this research matters; the history of American environmental policy demonstrates that sustainability is not a fad in policymaking and is in fact a framework for
environmental protection aimed at alleviating current ecological burdens and preventing future calamities. Besides explicating the importance of research into sustainability policies, the literature provides a relatively consistent and decisive definition of what sustainability is in an urban setting. Scholars agree that a broader characterization of urban sustainability is most appropriate which ultimately affects how it is studied, operationalized, and evaluated. From the scholarly interpretation of sustainability, individual components can be extracted to help respond to the query how can we measure sustainability policies and their effectiveness at achieving their goals. Finally, the works on political favorability toward sustainability explain why sustainability policies have proliferated in some cities and stagnated in others. If properly connected back to the original idea that America needs sustainability policies to avoid environmental disasters, it may be possible to encourage or foster sustainability policies based on these factors. Overall, the literature on sustainability policies serves to setup the research design and understand what should be tested as well as how it should be done.
Methodology

Perhaps one of the more unique aspects of this paper is that I was able to personally conduct research to generate most of the new data. Almost all the specific city data used in this paper is derived from interviews I conducted with city officials in each of the target cities. Having the fortune to be able to do this has provided two main opportunities: the ability to create a dataset that is completely original and never before collected or utilized in an academic setting and the ability to control the data collection process. Hopefully, the abundance of new variables and data points will lead to new findings about how sustainability programs and policies operate in these cities. Plus, I can guarantee both the quality and the veracity of the data because I know what was and was not said during the interviews. The qualitative aspect of the data cannot be overlooked because there are certainly some cogent quotes to be gleaned from the interview transcripts. Before explaining the methodology behind the research examined in this paper it is crucial to note that the studies conducted in this paper were inspired by some of the previous works of Portney and Berry who previously have published pieces on urban politics and sustainability. As leaders in this field of research, Portney and Berry have advanced the collective academic understanding of sustainability policies in cities and this paper has borrowed some of their models to compare, challenge, and push the envelope. For example, the list of cities included in this study was based on cities used in prior works and therefore may not be the present fifth through fifty-fourth largest cities (populations shift constantly), but they are close. In addition to interviews with city economic development officials, interviews were conducted concurrently with members of local Tea Party Organizations and staff members of Chamber of Commerce Organizations in the same set of cities for papers I am writing with Portney and Berry. In fact, a preliminary paper already been published on the Tea Party (Berry, Portney, and Joseph 2014), and other works incorporating the other sets of interviews are forthcoming. It is
important to note that while none of the decisions made with respect to research design were
arbitrary, many were made with the ultimate goal of this data complementing other datasets.

In examining sustainability policies in large American cities, the preferred unit of
analysis is the municipal level because nearly every populous city in the country has an
economic development department or a similar city agency. While it may seem desirable to
search at the regional or metropolitan level, not every city has a regional economic development
agency and those that do often do not have a significant amount of power under their purview. In
addition, city officials are often somewhat knowledgeable about city policies due to their
employment by a specific municipality whereas regionally-focused economic development
officials are not as likely to be familiar with specific policies in the individual jurisdictions
within the region.

In terms of city selection, larger cities are the ones where the most innovative changes are
taking place. Smaller cities and towns simply have not made quite the same strides that major
American cities have and changes enacted by larger cities have a broader reach both population
and environment-wise. Although an in depth look at the largest cities in the nation would provide
strong insights as to what is at the cutting edge for innovative sustainability policies, the four
largest American cities are so large in scale that it would not be reasonable or fair to compare
one of them to any smaller city. To even attempt to analyze Chicago on the same playing field as
San Jose, California, Baltimore, Maryland, or Arlington, Texas would clearly not be comparing
apples to apples. Therefore, in the interest of a larger number of data points, it makes the most
sense to examine cities smaller than the four largest in the nation. With New York, Los Angeles,
Chicago, and Houston omitted, the next fifty cities (the fifth through fifty fourth largest) are the
subject of my research. With such a large potential pool of data points, it may be possible to
observe the broader trends in city sustainability policies. Unsurprisingly, the more cities for which data is acquired, the more accurate and representative the data set will be for the cohort of the fifth through fifty-fourth largest cities.

Data collection took place in the form of interviews with city officials working in economic development or another comparable department. Presumably, an individual working to spur economic growth and development within a city should be aware of the overall strategy, initiatives, and programs instated by the city. It is possible that an individual may not be aware of every subject area about which questions were asked. However, because elite interviewing methods were used, the interviewees were specifically selected to be knowledgeable about the interview topics and probing questions were asked and adapted as necessary during the interview. Elite interviewing allowed me a degree of flexibility in asking the interviewee for information in terms of timing and the wording of the question based on what the interviewee had already said.

Interviewees were identified using city government websites. The preferred interviewee was generally the director (or other leading position) of economic development for each city because this position is almost certain to be knowledgeable about both the city's economic development strategy as well as other city policies and practices. Both emails and phone calls were placed to reach the director of the department in an attempt to set up a time to speak by phone. Sometimes the only contact information provided on the city's website was for a department's administrator. In these cases, the department administrator was asked for help in reaching the director or in some cases directly scheduling a meeting with the director of economic development. If the economic development director was not available for interview, another senior official in the economic development department was the next individual who was
targeted. In cases where the economic development department did not exist, another department playing a similar role was identified. In some cases this was the department of planning, the department of development, or the department of business services. The process was the same as the one used with economic development departments where the director was most-desired interviewee and other individuals were interviewed if the director was unavailable.

City officials were contacted in each of the target cities. If a city official or administrator failed to follow up after an email or a call, another email or call was made to attempt to schedule a time for an interview. For some cities an interview was scheduled during the first phone call or email exchange; for others multiple calls and emails were made before arranging an interview. In total, city officials in 43 cities were interviewed leaving just 7 cities where officials were not interviewed. Officials in four of the cities simply could not be reached: emails, calls, and voicemails went unreturned. In two of the cities, officials refused to set up a time for an interview because they were "too busy" and there was no suitable alternative for the topics of the interview. One city official refused the interview because the city was in the process of developing its new economic development strategy. All in all, the 43 cities in which an official was interviewed represent 86% of all cities in the cohort. In elite interviewing, a hit rate this high is considered excellent.

After contact was made with the desired city official, a mutually convenient time for a phone conversation was arranged. On occasion, this required the use of an administrative assistant for scheduling. If asked, I provided the interviewee with the following topics: the city's economic development strategy and its level of success, the city's image, and the city's competitive advantages and disadvantages. In most cases I was asked to contact the interviewee by telephone, but sometimes the reverse was true.
Upon beginning the conversation with the interviewee, I read the verbal consent script regarding the project and its aims. Once verbal consent was given the interview began roughly following a template of questions on economic development, how the city markets itself, and sustainability (see Appendix A for the full list of questions). Based on the answers given by the interviewee, I asked clarifying questions if the answer given was vague or unclear and in some cases, questions were skipped if they were already answered or irrelevant to the situation. In many ways there is an art to interviewing well and it required immediately synthesizing what was said by interviewees. While the intention of the interview was to make it feel more conversational than interrogative, I still needed to ensure that the interviewees were staying on point, giving answers that fit what I was asking, and were ultimately truthful. This required quick analysis and decision-making to keep the conversation going smoothly.

During the conversation, I took detailed notes on the important points made by the interviewee. Notes were written down in shorthand during the interview and transcribed into a text document immediately following the interview. Although the interview transcripts do not capture every word said during the interview, they are extremely accurate representations of the conversation. The most challenging aspect of the interview was recognizing when the interviewee was attempting to present a facade for their city. Although content occasionally gives away the truth, tone played an important role which was more difficult to capture in writing. Where possible, I captured "umms" and uncomfortable pauses if I felt it enhanced the narrative of the interview. In order to preserve anonymity, when quotes from city officials were used in this paper, they were referred to as "a city official from the [region of the country]" where the region was determined according to the map in Appendix D.
The interview data was then converted into variables that could be represented quantitatively. First, a codesheet was developed to probe for all the different variables which appeared in the data with reasonable frequency (see Appendix B for a copy of the codesheet). A codebook was created simultaneously to add explanations, examples and rules to each of the variables described in the codesheet. Some variables were straightforward like "What is the name of the interviewee?" or "Does the city have a sustainability plan?" Others were complex and required scanning the transcript and judging the presence of variables such as "Was there a mention of a strategy to attract talent?" or "How is the city implementing its economic development strategy?" All of the variables were coded for all 43 interviews. Many of the variables are represented as dichotomous variables where something is either present or not. The codebook contains strict guidelines for assessing each variable with as much precision as possible. For a full list of variables and guidelines for assessing each variable, see Appendix C.

This set of data is to be used with previous Portney and Berry data as well as other datasets including the 43 (or 50) cities. The most important metric taken from this data is a sustainability score which describes how many sustainability programs a specific city has enacted and implemented. Outside of that variable, the rest of the variables pertain to partisanship such as the percentage of people voting for the percentage of city administrators who are liberal and data on the relative strength and activity of local Tea Party Organizations. The dataset collected specifically from city official interviews can also be compared within itself to see if the data here indicates any trends. The data is ready for digital analysis either with STATA or another program and may be supplemented with quotations from the interviews as well.

Analyzing Hypotheses
In broad terms, this paper seeks to answer three main questions regarding city sustainability policies: What is the relationship between sustainability policies and urban economic development? How and to what extent do cities implement and publicize their sustainability policies? What factors affect a city's propensity to adopt or not to adopt such policies? There are clear parallels between these ideas; they reflect three distinct interactions sustainability policies have with the urban metabolism. In fact, each question represents one of the three pillars comprising sustainability: environment, economy, and social equity.

Although these concepts are highly related, the variables used to operationalize and test them are quite varied. As such it would be illogical to list the analytical methods here all together purely for the purpose of creating one comprehensive place for them. Therefore each chapter contains its own section pertaining to methods explaining the variables, operationalization, causal mechanisms, and analytical tests used to evaluate the relationships in the proposed hypotheses. Two-tailed T-tests and regressions are used for several different hypotheses for the purposes of determining statistical significance. The end goal of these methods is to draw conclusions regarding the answers to the main questions that are well-substantiated in the data.

Using the variables described above along with publicly available data from the American Community Survey, statistical tests can be run to determine the relationship between the variables and the statistical significance of that link. These statistical tests also serve to validate or invalidate the alternative hypotheses made regarding each of the questions. In nearly all cases there is a null hypothesis stating that there is no apparent relationship between the variables that exists. In circumstances where the null hypothesis is rejected and the alternative hypothesis is accepted, it indicates that there may be a conclusion to be drawn.
Chapter 2: Sustainability and Economic Development

In the literature, economic sustainability was cited as one of the three tenets of sustainable development. Any policy which is not economically viable is clearly unsustainable in the long term. This chapter aims to gauge some of the larger trends in sustainability policies and economic outcomes.

Methodology

In terms of examining the relationship between sustainability policies and economic growth, it would be preferable to employ a time series analysis of the cities in the cohort. While historical data for all of the cities examined in this paper is not available, there is a strong dataset from previous Portney and Berry research that includes many of the cities using the same metric: the number of sustainability programs in place. The data display the number of policies many of these cities had in place in 2009 and then later in 2012. Even though a longer period of time would provide a greater contrast, the data are still helpful. The sustainability indicator mentioned above serves as an independent interval-level variable measured by the total number of sustainability programs a city has implemented. The difference in this variable over time (the time series change) is testable against the change in economic development indicators during the same period of time. In this project, economic development is represented by unemployment or the median household income (and the change therein), but another economic indicator such as Gross Domestic Product (GDP) per capita would suffice as well. Median income is an excellent indicator for economy because it captures the financial wellbeing of residents at the 50th percentile. In many ways this can be argued as the true middle class marker of income. Unemployment frequently is an indication of economies that are struggling because there are not enough jobs for all residents. GDP per capita is a more business-oriented indicator because it
measures the amount of value created which tends to explain the financial health and strength of firms rather than people.

An index measuring the depth of the sustainability policies has been created. This depth index represents a sum of the variables that indicate a deeper commitment to sustainability such as smart growth policies, location based development, and attracting talent as a means to economic development (in Appendix C: 50, 49, and 11). Location based development and use of smart growth, new economy, or transportation-oriented development, and attracting talent to the city are all indicative of a strong adherence to sustainability. Focusing development based on location requires significant regulation of economic resources and is more difficult to enact than a simple recycling program or other low-level sustainability policy. Attracting talent is indicative that a city is using its amenities and built environment as a draw for young professionals who value sustainability and a city's commitment to it. The value of the index is equal to the sum of the number variables for which the city official responds positively where the minimum is zero meaning the city is taking none of those actions and the maximum is three meaning the city is doing all of those things representing a deeper commitment to sustainability.

Both the number of sustainability policies and the sustainability depth index can be used to demonstrate the effects of sustainability on economic growth. These are helpful tests for evaluating the hypothesis that cities with greater emphases on sustainability have stronger economic outcomes in terms of median income and unemployment. Time series data can be used to compare a city's change in median income with the number of sustainability policies in order to evaluate whether cities that have more sustainability policies see more economic growth as well. A two-tailed T-test can demonstrate whether there is a statistically significant difference in cities that have higher or lower scores on the depth index or cities that have more or fewer
policies. Similarly, a T-test can determine whether sustainability measures have a tangible effect on unemployment and median household income at a given point in time. As a more comprehensive test, the number and the depth index of sustainability policies as well as indicators of economic growth can be used as independent and dependent variables respectively to determine whether they fit a regression model with any degree of statistical significance. This test will determine if there is a definitive and possibly causal relationship between sustainability and economic development. In all of these tests, it would be preferable to run a time series analysis, but merely measuring the variables against each other at a given point in time may cast light on trends that are not reflected in the change data. These cross-sectional data may also put the time series tests into context.

As mentioned before, the new data from interviews with city officials makes it possible to go beyond a count of how many sustainability policies each city has and delve into the depth and form of such policies. These officials also discuss the policies their cities have in place and how they affect different aspects of their cities' economies and lifestyles. This qualitative data provides invaluable insight into how some mechanisms actually operate. These textual excerpts, as well as statistical tests tie together questions related to the number and effectiveness of sustainability strategies at achieving economic development goals. Although it is likely that some of these tests won't yield significant results, some hopefully will bring us one step closer to understanding the effects that sustainability policies have on local urban economies.

**Analysis**

With the current availability of economic data, the best indicators provided by the American Community Survey (ACS) were median household income and unemployment rate. While other indicators would have been helpful in measuring effects particularly on businesses such as GDP per capita and the number of jobs located in a specific place, the only datasets
containing these variables were regional in nature which would present several incongruities with the data. The first issue is that all of the original variables collected pertain to specific city jurisdictions and not regional areas. Counting an entire metropolitan area is a concern because each metropolitan area has a different sociopolitical, economic, and geographic landscape. For example, comparing the Omaha metropolitan area to the Boston metropolitan area may be so incongruous spatially and jurisdictionally that it may be more like comparing apples to oranges. Finally, the last reason these variables could not be used is because some of the cities in the sample are contained within the same metropolitan area and would therefore have no distinguishing data for that variable. When considering that San Francisco and Oakland share a metropolitan area, or that Dallas, Fort Worth, and Arlington are all deemed part of the same metropolitan unit, it becomes clear that using the same value for all of the cities in one region is a fallacious and untrue representation of reality.

Despite the fact that the regional variables were excluded, unemployment rate and median income still serve as excellent indicators for these purposes. The one-year ACS data was used instead of the ACS three- or five-year data for several reasons. The time-series data indicating the change in the number of sustainability programs is only three years apart. If ACS five-year data were used, the years in between the two would be overlapping data points which would distort and dilute the results. In addition, the time period during which the data is compared is one marked by rapid economic decline and growth because it spanned the beginning and middle of the great recession with data points from 2010 to 2013. The data from 2010 was used because it is the earliest such year that the same dataset is available for all the cities in the cohort while 2013 is the most recent year for which data is available for all cities. Using the
broader-term data (ACS 3- or 5-year sets) would only render the results less precise and less pronounced given the large fluctuations occurring at the time.

In comparing the economic variables with the sustainability metrics, the unemployment data appears to indicate that as the depth and number of sustainability programs increase, so too does the unemployment rate. At the beginning of the Great Recession, unemployment rates across the United States soared and by 2010 they were as high as 17.8% (Detroit) in large cities. The years following the beginning of recession generally meant slow but steady growth and recovery. Due to this phenomenon, most cities were in recovery throughout the time of the study until 2013 or 2014 putting them all on relatively equal ground for comparison. Table 2-1 is expected to support the hypothesis that cities with more sustainability policies have better economic outcomes by showing them as having less unemployment. According to table 2-1, cities with low sustainability depth (possessing one or zero factors used in the index) had an average unemployment rate of 5.45% in 2013 whereas cities with high sustainability depth (possessing two or three factors) had an average unemployment rate of 6.38%. Although there may be questions as to whether the small number of cities with low sustainability depth (13) was skewed against the cohort with high sustainability containing thirty, the two-tailed T-test indicated that the p-value is 0.0615. This value indicates that the results are significant at the 0.10 level, but not at the 0.05 level as is often used in social sciences. If the results are accurate it would appear that cities that have greater emphases on sustainability have higher unemployment rates which is the opposite of what was expected. The most logical explanation for this trend could be the typical gripe made by businesses that environmental, health, and labor regulations will increase the costs and reduce the overall output of firms, causing them to cut jobs. While this one measure is not enough to draw final conclusions about the interaction between
sustainability policies and unemployment rates, it provides a peek into the how these dynamics may operate.

Using median income (and change in median income) as an indicator of economic growth tells a much different story than unemployment rate. There is a direct relationship between the number of sustainability policies and the change in median income (between 2010 and 2013) similar to the relationship between sustainability depth and unemployment rate. Nevertheless, the former suggests that sustainability policies are a positive force on local economies whereas the opposite is true for the latter. Table 2-2 is expected to support the alternative hypothesis that cities with more sustainability policies have stronger economic outcomes through income growth. As the two-tailed T-test in table 2-2 displays, cities with more sustainability policies saw an average 7.36% increase in median income whereas cities with fewer sustainability policies only experienced a 3.83% increase in median income. The drastic difference between these two has resulted in a p-value of 0.0175 which is significant at the 0.05 level and almost significant at the 0.01 level. The clear supposition made from these data is that cities with greater emphases on sustainability have been more successful at increasing the incomes of their residents, at least for those in the middle class (around the 50th percentile) which supports the alternative hypothesis. This may mean that cities in which the tenets of sustainability (economy, equality, environment) have been embraced have been able to improve wages for workers better than those that have not. It is important to note here that median household income is used rather than mean household income because cities are often the locations of vast inequalities and very wealthy individuals may thrive while large parts of the population live in poverty. In order to measure that more than just select populations have high incomes, median income is used to more accurately represent middle and working class incomes.
Although income inequality is currently a popular issue, it is not the subject of this paper. Considering that quality of life is a large part of sustainability, and that quality of life is thought to increase as income does, it is not surprising that incomes have increased faster in cities where sustainability policies have been more prevalent.

When discussing quality of life amenities, a city economic development official from the Midwest proclaimed "We have a high average income. We rank highly on health and people are able to afford to live well." The connection between quality of life and income is relatively clear when viewed from this lens: city residents must be able to afford to live comfortably and some cities have programs and policies in place to prioritize high living standards. The social factors of sustainability are often spurred or catalyzed by the economic ones. The connection to environmental factors is clearer with another example: a development official from the Northeast mentions that the consolidation and buyout of their energy utility has yielded hundreds of millions of dollars for investment in energy efficiency savings across the state. "That went toward weatherization of homes for low income individuals." Because weatherization is a process that seals homes in ways to better protect them from the elements that often results in optimized energy efficiency for heating and cooling, it is an environmental program that helps residents benefit economically. In that Northeast city, it is also a matter of equity because it was provided to low-income households so that they could reap the advantages of efficiency. This program epitomizes the cohesive and interconnected nature of social, environmental, and economic policies.

Examined together, the links between sustainability initiatives and the economic factors such as median income and unemployment rate may actually paint a broader picture about the forces at work. If cities that embrace sustainability programs have enacted more environmental
and safety regulations meant to protect workers, residents, and others from dangerous business practices, this could explain a lot. Because these regulatory regimes may cost firms more money for compliance in the short term, they may cut back on labor costs thereby reducing the number of jobs and increasing the unemployment rate. Simultaneously, these regulations protect workers and improve quality of life for residents in general. These regulations may have direct effects on income such as wage protections and minimums or indirect effects that improve life quality and productivity which increase wages over time. Essentially these sustainability policies may present a spectrum of regulation that governs the practices of businesses in each given city. If this vision of sustainability and business holds true, the relationship between economic development and sustainability may not be straightforward and may have both positive and negative effects on different parts of the economy.

Another result stemming from the data is an affirmation of the relationship between the median income in cities and the number of sustainability policies the city has enacted. Table 2-3 is expected to support the alternative hypothesis that cities with more sustainability policies have higher incomes. As shown in table 2-3, cities with more sustainability policies on average had a median household income in 2013 of $53,093 whereas cities with fewer sustainability policies had a median income of $44,665. This discrepancy in median income between the two groups of over eight-thousand dollars is considered significant by a two-tailed T-test which yielded a p-value of 0.0108. This result is considered quite significant and suggests that cities that have more sustainability programs are in general wealthier than cities that have fewer of such programs which supports the alternative hypothesis. The most important thing to note about the results of the T-test is that it does not imply causality. Cities may have higher incomes due to the effects of the sustainability policies they have enacted, or cities may more sustainability policies when they
have more money to pay for them. It is also entirely possible that there is an intervening factor that affects both sustainability policies and median incomes like urban density which is directly related to land values. More densely populated cities will have more expensive real estate markets and therefore have higher costs of living; they also will be more prone to support sustainability initiatives because transportation, energy consumption, and other factors are optimized in such urban areas.

In order to examine a potential causal relationship between the median income in cities and the number of sustainability policies, regression analyses were run to determine if a potential causal relationship exists. Tables 2-4 and 2-5 are expected to support the alternative hypothesis that cities with more sustainability policies have higher incomes. As displayed in tables 2-4 and 2-5, there appears to be a direct relationship between the number of sustainability policies a city had in 2009 and the median income in 2013, as well as the number of sustainability policies in 2012 and the number of sustainability policies in 2013. The relationship operates in this direction because as table 2-2 indicates, cities with more sustainability policies saw a faster rise in income and not the other way around; the time series data helps prove the causal direction. The coefficient for sustainability policies in 2009 is $1,174 and has a p-value of 0.004 which means that it is considered very significant. The regression model as a whole has an adjusted R-Squared value of 0.374 which means that the model accounts for 37.4% of variation in the dependent variable. Conversely, table 2-5 shows that the number of programs a city had in 2012 was much less helpful in explaining the variation in a city's median income. The coefficient for the number of sustainability policies was only $685.54. Although the p-value of the coefficient was still quite significant at 0.022, it was not as significant as the coefficient in the other model. In addition, the adjusted R-Square value was only 0.158 which means that the model accounts for 15.8% of
variation in median income which is a notable amount, but not as much as the model in table 2-4. Both regression models appear to support the alternative hypothesis.

The Average Democratic Vote and population density variables are meant to serve as a control against which the sustainability variable can be measured. The lack of significance that Average Democratic Vote plays in median household incomes is somewhat surprising considering the perceived relationship between political ideology and sustainability policies. Perhaps the two do not have as strong a relationship as previously thought. The other unexpected result in the models is the significance of population density to median household income since it was included as a control variable. While population density might be related to sustainability because more densely populated cities tend consume fewer resources per capita, the reason for this relationship is not entirely clear. It may be possible that more densely populated cities have many of the same attributes that allow sustainable ones to prosper: fewer wasted resources on sprawl, resource savings in more dense environments, and attractive quality of life amenities (see chapter three).

The bivariate relationship between sustainability and income is manifest visually with scatterplots in figures 2-1 and 2-2 which correspond to tables 2-4 and 2-5 respectively. The scatterplots indicate that there are no large outliers which skew the results. The trendline indicates what the linear regression model suggests and it is clear that most data points are not far from the line. Considering what these two models mean, they actually paint a very cohesive and accurate picture of the relationship between the number of sustainability policies implemented by a city and the city's median income. The number of policies a city had in 2009 was most significant and impactful on the variation in a city's income because there was more time between the implementation of those policies and the time when median income is being
measured. The number of sustainability policies cities had in 2012 had a weaker effect on median incomes in 2013 because such policies are likely to have more potent effects on urban economies over greater periods of time. It is important to note that in both models the effect of having more sustainability policies is positive on median household income. There are many possibilities for why this may be the case. The sustainability policies may increase the economic efficiencies of businesses allowing them to pay their employees more. These policies may also require individuals to work in certain areas (environmental and transportation programs for example) which creates a demand for employees which drives up the cost of labor.

However, one of the leading reasons for growth in cities with more sustainability policies is likely to be the fact that well-educated young professionals (who have high incomes) are drawn to cities with such policies. A city official from the American West recounted how he "looked around the town and asked what could we do to attract more millennials." After discussions with a group of young professions, "the millennials [came] up with the foundation for our sustainability plan." Young, educated, adults appear to be enthusiastic about sustainability initiatives and want to live in cities where it is appreciated, and a part of daily urban life. That same city official goes on to add "We do things that attract millennials like put in Bus Rapid Transit and we’ve inviting Jeff Speck here, Mr. Walkability to town to help us with our plans." This strategy of utilizing sustainability initiatives to attract millennials was a common theme in the comments of city officials. Because individuals in this group tend to have relatively high incomes doing professional work, it would explain the increased incomes in cities where they live. While attracting millennials is not necessarily the exact or only reason for why cities with cities with more sustainability policies have seen higher median incomes, it is likely to be a leading possibility.
Given the data and statements made by city economic development officials it is possible to make some preliminary judgments about the relationship between city sustainability policies and economic development. Sustainability and incomes appear to be tied together positively suggesting that adopting such measures typically has beneficial impacts on wages earned by those in the workforce. The anecdotal evidence from city officials even provides a mechanism through which these factors may operate. As for unemployment, there is relevant but weaker indications that sustainability measures may lead to higher unemployment rates. It is possible that other datasets may yield different results or pertain to other economic factors that were not available through the American Community Survey data. While these analyses have illuminated the links between sustainability and economy in large cities, the following chapters will explore attitudes toward sustainability in city government as well as the factions that support or oppose the passage of sustainability measures.
### Tables and Figures

#### Table 2-1

**Mean Unemployment Rate by High and Low Sustainability Cities**

<table>
<thead>
<tr>
<th>Group</th>
<th># of Cities</th>
<th>Mean Unemployment (2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Sustainability Depth</td>
<td>13</td>
<td>5.45%</td>
</tr>
<tr>
<td>High Sustainability Depth</td>
<td>30</td>
<td>6.38%</td>
</tr>
</tbody>
</table>

Two-Sample T-test with Equal Variances

P-value: 0.0615

#### Table 2-2

**Change in Median Income by High and Low Sustainability Cities**

<table>
<thead>
<tr>
<th>Group</th>
<th># of Cities</th>
<th>% Change in Median Income (2010-2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer Sustainability Programs</td>
<td>22</td>
<td>3.83%</td>
</tr>
<tr>
<td>More Sustainability Programs</td>
<td>21</td>
<td>7.36%</td>
</tr>
</tbody>
</table>

Two-Sample T-test with Equal Variances

P-value: 0.0175

#### Table 2-3

**Median Income by High and Low Sustainability Cities**

<table>
<thead>
<tr>
<th>Group</th>
<th># of Cities</th>
<th>Median Income (2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer Sustainability Programs</td>
<td>22</td>
<td>$44,665</td>
</tr>
<tr>
<td>More Sustainability Programs</td>
<td>21</td>
<td>$53,091</td>
</tr>
</tbody>
</table>

Two-Sample T-test with Equal Variances

P-value: 0.0108

#### Table 2-4

**Impact of Selected Factors on Median Income**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Multivariate Regression Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>DV Dependent Var: Median Income (2013)</td>
<td>Coefficient</td>
</tr>
<tr>
<td>Constant</td>
<td>$36,512.51 $</td>
</tr>
<tr>
<td>IV Number of Sustainability Programs in 2009</td>
<td>$1,174.00 $</td>
</tr>
<tr>
<td>Control Average Democratic Vote</td>
<td>$ (295.20) $</td>
</tr>
<tr>
<td>Control Population Density, in sq. miles (2010)</td>
<td>$1.65 $</td>
</tr>
</tbody>
</table>

**Adjusted R-Squared: 0.374**

**p-value<.05, ***p-value<.01**
Table 2-5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dependent Var: Median Income (2013)</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>$36,609.88</td>
<td>$8,876.88</td>
<td>0</td>
</tr>
<tr>
<td>IV Number of Sustainability Programs in 2012</td>
<td>$685.54</td>
<td>$287.62</td>
<td>0.022**</td>
<td></td>
</tr>
<tr>
<td>Control Average Democratic Vote</td>
<td>$ (183.27)</td>
<td>$147.75</td>
<td>0.222</td>
<td></td>
</tr>
<tr>
<td>Control Population Density, in sq. miles (2010)</td>
<td>$1.13</td>
<td>$0.530</td>
<td>0.038**</td>
<td></td>
</tr>
</tbody>
</table>

Adjusted R-Squared: 0.158

**p-value<.05

Figure 2-1

Sustainability Policies in 2009 vs Median Income in 2013

\[ y = 1197x + 25803 \]

Number of Sustainability Programs in 2009

2013 Median Income Trendline

n = 24
Figure 2-2

Sustainability Policies in 2012 vs Median Income in 2013

$y = 674x + 31291$

Median Household Income in 2013

Number of Programs in 2012

Median Income in 2013 Trendline

Sustainability Policies in 2012 vs Median Income in 2013

$n = 43$
Chapter 3: Attitudes in City Government toward sustainability

The social sustainability pillar of the triple bottom line is exceedingly important, but often the most ignored of the three pillars. Instead of dealing with environmental protections and economic profits, social sustainability concerns the average citizen and their contentment with sustainable development. If the typical person benefits from sustainability programs, they are often enjoying the quality of life amenities that their city has to offer as result of such programs. These programs make sustainability initiatives not only politically palatable, but sometimes politically desirable. When cities capitalize on the quality of life amenities they have, they brand themselves as such to entice residents and business to move.

Methodology

Aside from economic development strategies, cities also have marketing strategies which may or may not overlap with the larger economic strategy. For some, marketing is purely to potential tourists, some do not conduct any marketing, while others conduct marketing to reach prospective residents and businesses. When advertising themselves to the world, what do cities like to emphasize about themselves? Fortunately, the interview data provide direct answers to this question in many cases. One of the main advantages of having conducted interviews is being able to utilize the qualitative data and quotes from the transcripts. Because some overarching questions are not easily captured in quantitative data, consulting qualitative data may be useful in providing context and in-depth explanations. Perhaps the most germane aspect of marketing a city to this project is whether the city official mentioned that the city has a sustainability plan or not. Such a plan is an outward message that the city is focused on sustainable initiatives. To test this hypothesis that cities with sustainability plans are more likely to have higher numbers of sustainability policies, a two-tailed T-test can be run to determine if there is a statistically significant difference between cities that do and do not have a sustainability plan.
In addition to discussing reality in their work, city officials mentioned what they would want to see changed about their cities. Inspired by the works by Portney and Florida, one aspect to which special attention was paid was quality of life and amenities. Quality of life is often a selling-point for enticing residents to relocate; in terms of amenities that are frequently associated with it, walkability and access to open space top the list. Therefore these variables have been combined to create a quality of life index. The quality of life index is the sum of dichotomous variables measuring a city's emphasis on open space, downtown development, and a plan to intentionally make this happen (Appendix C: 32, 40, and 44). On a range of zero to three, zero means the city has none of these attributes that suggest it cares about quality of life whereas three suggests it has all of those characteristics. This index is helpful for understanding the extent to which a city markets quality of life amenities and assets.

As a critical component to sustainability, quality of life is likely related to sustainability in many substantial ways. Hence, the alternative hypothesis here is: cities that have more sustainability policies, and more in-depth policies are more likely to implement, promote, or mention the quality of life aspects the city has to offer. The aforementioned quality of life index can be tested both with the number of sustainability policies and with the depth index to see if either breadth in policy or deep commitment to sustainability has a relationship with a city's quality of life amenities. A regression analysis using the quality of life index as the dependent variable will determine whether cities boasting more quality of life amenities do so as a result of sustainability policies, or whether some other factor is responsible. As a critical supplement, excerpts from interviews can be used to highlight what archetypical cities with high levels and low levels of quality of life amenities are doing in a more concrete sense. Although not usable for evaluation or determination of significance, the accounts from city officials will add an extra
degree of information to improve the understanding of what different cities are doing on the sustainability and quality of life fronts.

In a similar vein, I hypothesize that cities that view sustainability as a moral obligation have more sustainability policies and more in-depth ones as well. A two-tailed T-test can separate cities that have a moral emphasis on sustainability from those that do not and determine whether they are more or less likely to have a greater number of sustainability policies. A city's moral purpose in engaging in sustainability initiatives--in some cases described as "The right thing to do"--can be tested against the number and depth of policies to indicate the strength and directionality of a potential relationship.

Analysis

In attempting to shed light on attitudes within local governments regarding sustainability policies, there are many smaller factors at play that comprise the larger question: what does the city government outwardly project about sustainability? Is it promoting sustainability initiatives or trying to distance itself from them? How do officials in city governments feel about sustainability apart from what is publicly projected? What are the goals and reasons for why cities do support sustainability policies? These are few of the important questions that make up the broader matter of attitudes within and espoused by government.

Based on the transcripts of the interviews conducted with city economic development officials, a few variables were created or gauged that provide excellent insight into how each city feels about sustainability initiatives. While this may seem like a rather odd idea, the context and associations surrounding sustainability measures says a lot about what the city is doing and why they are doing it. The best demonstrations of the range of sentiments regarding sustainability lie in the words of city officials themselves. When asked about the attitude toward sustainability in city government, one official in the South explains:
It depends. Just the word sustainability. Part of the problem is that there are different meanings and different meanings to different people. The city,..., not as much as the rest of [the state], is conservative. With sustainability there is a distrust of government and a sentiment of overregulation. This is just my opinion, but the EPA overstepped its bounds in some places. Even if it makes good progress in some places like brownfields, the clean-up standards may be too high and it’s overregulated.

In this excerpt, there are clearly some negative associations with not only the term "sustainability" but with environmental protection efforts in general. In this city, sustainability appears to be a politically toxic subject that might be avoided by municipal officials in rhetoric. The well-intentioned policies of environmental protection organizations and agencies are apparently not worth the overregulation in the mind of this official and he even mentions that these policies foster distrust of the federal government. These particular attitudes are explored in greater depth in chapter four with a discussion of the factors that support or oppose the passage of sustainability policies with members of the Tea Party.

The opposite reaction to sustainability programs is best explained by a city official from the western part of the country: "We promote green building and energy efficiency. Those and transportation are the big sources of carbon emissions... most people in the community say that sustainability is not a fad and most have bought into the need to reduce our CO₂." Instead of repudiating green initiatives, this city appears to actively embrace and publicize its sustainability efforts. Instead of remarking on the ways in which environmental protections are disliked by residents, this official cites programs already in place that are geared toward reducing inefficiencies. The official then remarks that sustainability has a wide base of support from community members which is likely to persist in the long term. If city officials in senior economic development roles have attitudes that are representative of those in their respective municipal governments, the universe of sentiments toward sustainability initiatives are contained in the interviews and hopefully represented in the data. While it is true that the perspective of the
city official in the West is the antithesis the one from the South, most city officials interviewed fell somewhere between those two.

For the purposes of examining municipal governments themselves, the largest question raised by the multitude of opinions in city government is whether this affects sustainability policies in substance if a city does not outwardly embrace the concept. As part of the interview script there was actually an explicit question asking whether the official's city currently had a sustainability plan. A sustainability plan in many senses is a substantial commitment to the ideals and goals of sustainable development. Planning for sustainability necessitates an evaluation of each city's current conditions, a goal-setting agenda, and then a variety of concrete actions the city will take to reach its goals. The data collected during interviews are complete and city officials directly answered the question in all but one case. Although it may seem simple, these data were used to examine whether cities that have sustainability plans are more likely to have a greater number of sustainability programs than cities that do not have a plan. Table 3-1 is expected to support the alternative hypothesis that cities with sustainability plans have more sustainability policies. Cities with no sustainability plan had an average of 22.2 policies pertaining to sustainability whereas cities that did have a plan had an average of 27.07 policies. In table 3-1, a two-tailed T-test indicates that this difference had a p-value of 0.0179 which is significant at the 0.05 level. The result of this test, although obvious, is an important one: cities that commit to engaging in sustainability planning processes ultimately have more policies which supports the alternative hypothesis. This finding actually raises the question as to why cities without sustainability plans have as many policies as they do: only one-fifth fewer than cities that have plans. The answer to this question may actually be a matter of how the issue is framed politically as well as the political factors at play in each city (see chapter four for more
information). For example, if a policy that is beneficial from an environmental standpoint is actually marketed as something else, it may still pass even though it has the same end result. The idea that having a sustainability plan leads to having more sustainability policies means that such a plan is not a false promise.

In terms of reasons why cities choose to adopt measures aimed at promoting sustainability, there were several different general attitudes that recurred in the interview transcripts. It was found that most cities had sustainability policies: to genuinely increase residential quality of life thereby creating a desirable place to live; because it is the right thing to do; or to greenwash the city in a way that makes it look more 'green' than it actually is. Although these three attitudes were not mutually exclusive, most cities conformed with just one of these ideas, and none conformed to all three. Each was tested to determine if any attitude had a tangible impact on city creation of sustainability policies. Although there were no significant results pertaining to creating a desirable place or greenwashing, seeing sustainability as a moral obligation registered significant results. Table 3-2 is expected to support the alternative hypothesis that cities that saw a moral obligation to engaging in sustainability have more sustainability policies. Among the 29 cities that did not see sustainability as "The right thing to do", the mean number of sustainability programs was 24.51 whereas cities that did see the moral value in such policies had an average 28.93 programs. As suggested by the two-tailed T-test in table 3-2, the p-value is 0.0178 is considered quite significant at the 0.05 level. Cities where government officials believe that sustainability is a moral obligation are significantly more likely to have more policies addressing the matter which supports the alternative hypothesis. This result is also supported by depth is sustainability policies as well. Table 3-3 elucidates that idea; it is expected to support the same alternative hypothesis as table 3-2 except the sustainability depth
was used instead of number of policies. Cities where sustainability is considered a moral obligation had an average sustainability depth index of 2.357 versus cities that did not which had an average of 1.724. This difference yielded a p-value of 0.0528 which is significant at the 0.10 level, but not as significant as the previous test regarding number of policies rather than depth; this result is relatively supportive of the alternative hypothesis. Much like how cities that see moral justification in sustainability have more policies on average, they also have more in depth policies. In order to test whether another variable might be responsible for these relationships, income was also tested (because it was shown in chapter two to be strongly related to sustainability). Table 3-4 was expected to support the alternative hypothesis that cities that have a moral obligation toward addressing sustainability have higher incomes. The two-tailed T-test in table 3-4 displays the results: while cities that see sustainability as a moral obligation have a mean income that is $52,261 while cities that do not see it that way have an average income of $47,100, the p-value is 0.1543. This p-value is not technically significant even if cities with the attitude that sustainability is a noble cause generally have higher incomes than those that do not. The alternative hypothesis is rejected for this case and the null hypothesis that no apparent relationship is assumed to be correct.

These results are particularly clear; they suggest that cities in which officials view sustainability as "The right thing to do" are more likely to not only have more sustainability programs, but also more substantial, in-depth programs. The motivation for undertaking the creation and implementation of sustainability policies affects the degree to which a city is successful at bringing those programs to fruition. The relationship between the intent and the outcome is critical in this mechanism and it indicates that attitudes among city officials must play an important role in the process. In order to ensure that the sentiments fostered by officials
were not responsible for an intervening variable, that variable was tested against median income. Median income was shown in chapter two to be related to the number of sustainability policies so a two-tailed T-test visible in table 3-4 was run to ensure that the relationship between city attitudes and sustainability programs was not unduly influenced by a city's median income. Ultimately the relationship was not statistically significant and not as influential on the sustainability program and sustainability depth variables as could have been the case.

Given the relationship between attitudes of city officials and sustainability programs, what does this look like in terms of focus or emphasis and how do cities share those ideas with the public? One of the recurring themes in the interview transcripts, especially among cities with more sustainability policies was the importance of improving quality of life for the city's residents. Sustainability and quality of life overlap in many ways and fit together as a cohesive strategy for cities. An official from the South best explains:

[Our] city has put in amenities that improve the quality of life here. We have running trails and bike paths. Companies know that they can come to this location and recruit talent. There is a high quality of life and a lower cost of living. We focus on sustainability for those areas to make sure they can continue and we can be structured about how we do it. We can score projects coming in, in a matrix to see how a company aligns with the values and benefits that matter to our community.

This official provides an excellent example of what many cities consider quality of life to be: access to open space and a low cost of living. In addition there is a substantial connection of quality of life to both sustainability and recruiting talented employees. Based on the picture painted by this official, the city attempts to create a high quality of life environment in order to attract talented individuals who thrive and desire to live in such places. Employers then want to locate themselves in cities where talented and educated people live in order to hire these individuals for their businesses. The city ensures that both the lifestyle and companies wishing to enter the city are compatible with the values and ideas cherished by the community, one of
which is sustainability. Quality of life amenities appear to go hand in hand with sustainability programs, so the question here is whether there is an actual relationship between quality of life and sustainability.

Based on the commonly mentioned aspects of quality of life amenities, a quality of life index was created. This index measures the sum of four dichotomous variables regarding whether an official mentioned or reference quality of life issues before they were explicitly asked about them (there were several questions on this matter in the interview template), whether the official mentioned access to natural features as an asset, whether the official mentioned a focus on downtown development often associated with quality of life, and a connection to whether such amenities were planned rather than happening by accident. In attempting to determine what factors have the greatest impact on quality of life, several variables could logically have an effect. The hypothesis here clearly relies on sustainability as the driver of quality of life improvements so the number of sustainability programs and the sustainability depth index were utilized to operationalize the tests to that end. Beside an indicator of sustainability, two control variables that could plausibly impact quality of life were selected and tested as well. Median household income was also used as a variable in this process because quality of life is often seen as reliant on or related to income. As a family earns more money, it would seem logical that the quality of their lives would increase for many reasons including the ability to personally consume more and the ability of the municipality to tax and spend more on improving public amenities. Finally, the last variable tested here was population density which is often tied to walkability and access to nearby open space. Population density could have a reasonable connection to quality of life due to the proximity of beneficial neighborhood services.
In tables 3-5 and 3-6, the results of multivariate regressions with the aforementioned variables are displayed; the only difference between the tables is that the former uses sustainability programs while the latter uses the sustainability depth index. Tables 3-5 and 3-6 are expected to support the alternative hypothesis that cities with a greater emphasis on sustainability have greater quality of life amenities. Also, the relationship must operate in that direction because sustainability policies can logically be tied to improving quality of life amenities whereas no logical mechanism exists by which such amenities lead to the creation of sustainability policies; quotes from city officials support this idea. It should be noted that both regression models use ordinal variables which are not optimal for regressions; the quality of life index only has four different possible values and the depth index used in table 3-6 has only four as well. These ordinal variables may limit the accuracy of the model, even if the results appear significant. In table 3-5 the constant is 0.60561 while the number of sustainability programs had a coefficient of 0.02568, population density had a coefficient of 0.00042, and median income was effectively negligible. In this regression, median income and population density are control variables used as a basis for comparison with the number of sustainability policies. In terms of significance, the number of sustainability programs had a p-value of 0.036 which is significant at the 0.05 level. The bivariate relationship between the number of sustainability programs and the quality of life index is visually represented in figure 3-2. The graphic does an excellent job representing the positive relationship between the variables. The control variables in table 3-5 had much higher p-values and none were close to statistical significance. The adjusted R-Squared value for the model as a whole is 0.114 which means that it accounts for 11.4% of the variation in the dependent variable, the quality of life index. The model depicted in Table 3-6 has a constant of 0.92551, a coefficient of 0.26125 for the depth index, 0.00002 for median income
and 0.00003 for population density. The p-value for the sustainability depth index is 0.077 which is significant at the 0.10 level. The rest of the (control) variables in table 3-6 had no statistical significance close to that level. The adjusted R-Squared for the model is 0.084 which means that the model accounts for 8.4% of variability in the dependent variable. Both tables are relatively supportive of the alternative hypothesis for this case.

Even though both models displayed relative significance for the variable measuring sustainability, the model with the number of programs has a greater significance and does a better job of accounting for variability in the dependent variable. Given the comments of city officials seen earlier, it is not surprising that sustainability policies both in terms of number and in terms of depth could have a causal relationship with quality of life. Since sustainability programs often foster improvements in urban environments that better the lives of residents such as the creation of open space or cultural resources like museums, this mechanism makes sense.

In the words of a city official from the West:

The quality of life is very high here. We have access to the outdoors. We have a resurgent downtown with a modern streetcar that will open in a month. There has been a lot of investment in the area, and it has been bringing in more young people to downtown. We have co-working spaces downtown so they can work and learn together.

Investment in improving downtown areas appears to be one of the most critical aspects of quality of life in the eyes of city officials. Access to mass transportation cannot be ignored as a driver of growth and attraction to these areas. Young people appear to be drawn to downtown environments in which municipal, social, and professional resources provide for their needs and desires. But also referenced in the official's description of downtown is the fact that some cities rely on certain key industries while others have their own critical sectors. Based on sectors mentioned in interviews with city officials, the prevalence of eight different sectors was recorded. In figure 3-1, the eight sectors are depicted with their frequency in the sample of 43
cities. The figure represents what was mentioned in interviews; presumably all cities have healthcare and tourism sectors, but it was only recorded if it was important enough for the city official to mention. As visible in chart, biological and life sciences research is the most popular sector found in 65.12% of cities in the sample, followed by manufacturing, healthcare, and tourism. The prevalence of these sectors is telling about the economies of large cities and can easily be used in future studies that assess the impacts of industry on sustainability.

Ultimately, my hypotheses regarding sentiments in city government are largely correct. The idea that attitudes held by city officials as well as an outward municipal commitment to planning for sustainability have been confirmed as influential factors in the creation of greater numbers as well as more in-depth sustainability policies. Quality of life amenities have also been shown to be inexorably connected to sustainability. The features of cities that are attractive to young professionals who often drive economic growth (or at least part of it) are the same features that make cities more sustainable.
Tables and Figures

Table 3-1

<table>
<thead>
<tr>
<th>Group</th>
<th># of Cities</th>
<th>Mean Number of Sustainability Programs (2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cities with no Sustainability Plan</td>
<td>10</td>
<td>22.2</td>
</tr>
<tr>
<td>Cities with Sustainability Plans</td>
<td>33</td>
<td>27.09</td>
</tr>
</tbody>
</table>

Two-Sample T-test with Equal Variances

P-value: 0.0179**

**p-value<0.05

Table 3-2

<table>
<thead>
<tr>
<th>Group</th>
<th># of Cities</th>
<th>Mean Number of Sustainability Programs (2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Mention of Moral Obligation</td>
<td>29</td>
<td>24.51</td>
</tr>
<tr>
<td>Sustainability seen as Moral Obligation†</td>
<td>14</td>
<td>28.93</td>
</tr>
</tbody>
</table>

Two-Sample T-test with Equal Variances

P-value: 0.0178**

†Often mentioned in interviews as "The right thing to do"

**p-value<0.05

Table 3-3

<table>
<thead>
<tr>
<th>Group</th>
<th># of Cities</th>
<th>Sustainability Depth Index‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Mention of Moral Obligation</td>
<td>29</td>
<td>1.724</td>
</tr>
<tr>
<td>Sustainability seen as Moral Obligation†</td>
<td>14</td>
<td>2.357</td>
</tr>
</tbody>
</table>

Two-Sample T-test with Equal Variances

P-value: 0.0528*

†Often mentioned in interviews as "The right thing to do"

‡Index is measured on a scale of 0 to 3 based on three variables measuring city official emphasis on Smart Growth, Location Based Development, and new economy.

*p-value<0.10

Table 3-4

<table>
<thead>
<tr>
<th>Group</th>
<th># of Cities</th>
<th>Median Household Income (2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Mention of Moral Obligation</td>
<td>29</td>
<td>$47,100.00</td>
</tr>
<tr>
<td>Sustainability seen as Moral Obligation†</td>
<td>14</td>
<td>$52,261.00</td>
</tr>
</tbody>
</table>

Two-Sample T-test with Equal Variances

P-value: 0.1543

†Often mentioned in interviews as "The right thing to do"
### Table 3-5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DV</strong> Dependent Var: Quality of Life Index†</td>
<td>0.60561</td>
<td>0.7641</td>
<td>0.433</td>
</tr>
<tr>
<td>Constant</td>
<td>0.72555</td>
<td>0.72555</td>
<td>0.21</td>
</tr>
<tr>
<td><strong>IV</strong> Number of Sustainability Programs in 2012</td>
<td>0.02568</td>
<td>0.25681</td>
<td>0.036**</td>
</tr>
<tr>
<td>Control Median Income (2013)</td>
<td>0</td>
<td>0.00001</td>
<td>0.803</td>
</tr>
<tr>
<td>Control Population Density (2010)</td>
<td>0.00042</td>
<td>0.00004</td>
<td>0.306</td>
</tr>
</tbody>
</table>

**Adjusted R-Squared: 0.114**

†Index is measured on a scale of 0 to 4 based on four variables measuring city official emphasis on quality of life, natural features, downtown development, and planning.

**p-value<0.05

### Table 3-6

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DV</strong> Dependent Var: Quality of Life Index†</td>
<td>0.92551</td>
<td>0.72555</td>
<td>0.21</td>
</tr>
<tr>
<td>Constant</td>
<td>0.72555</td>
<td>0.72555</td>
<td>0.21</td>
</tr>
<tr>
<td><strong>IV</strong> Sustainability Depth Index‡</td>
<td>0.26125</td>
<td>0.14378</td>
<td>0.077*</td>
</tr>
<tr>
<td>Control Median Income (2013)</td>
<td>0.00002</td>
<td>0.00001</td>
<td>0.22</td>
</tr>
<tr>
<td>Control Population Density (2010)</td>
<td>0.00003</td>
<td>0.00004</td>
<td>0.412</td>
</tr>
</tbody>
</table>

**Adjusted R-Squared: 0.084**

†Index is measured on a scale of 0 to 4 based on four variables measuring city official emphasis on quality of life, natural features, downtown development, and planning.

‡Index is measured on a scale of 0 to 3 based on three variables measuring city official emphasis on Smart Growth, Location Based Development, and new economy.

*p-value<0.10
Figure 3-1

Mentions of Industries

- Percentage of Officials Mentioning Sector
- Medical/Healthcare
- Manufacturing
- Finance
- Military
- Tourism/Hospitality
- Food/Cuisine
- Entrepreneurship/Startups
- Biological or Life Science Research

Figure 3-2

Sustainability Policies in 2012 vs Quality of Life

- Number of Sustainability Programs in 2012
- y = 0.0632x + 0.7765
- n = 43
Chapter 4: Factors that affect the passage of sustainability policies

One of the main questions surrounding sustainability policies in urban areas is the extent to which other entities in the city influence the passage of sustainability policies. Several of authors cited in the literature review stressed the importance of interest groups in the process of enacting and implementing sustainability legislation. Some interest groups are in favor of such policies while others use their time and energy to oppose them. Regardless of where a sustainability program is implemented, there must be sufficient political will to support the initiative and interests groups often make-or-break the success of the effort.

Methodology

Beginning with the opposition, the Tea Party has emerged in recent years as one of the most vigorous detractors of sustainability. It seems quite possible that in areas where the Tea Party has been popular and successful, sustainability policies have suffered as a result. While considering the alternative hypothesis that cities with greater opposition to sustainability policies have fewer of such policies, it makes sense to find a strong measure of opposition that could exist in cities across the country. Since Tea Party organizations fit that description fairly well, they make an excellent indicator. As part of the project with Portney and Berry, there are Tea Party data that correspond almost perfectly with the economic development data. That dataset contains variables such as Tea Party activity at the local level, Tea Party meetings with the city council and mayor, and Tea Party activities in opposition of sustainability policies. These variables will be used to form an index that measures Tea Party strength and opposition to sustainability. Therefore, the Tea Party index represents the sum of four dichotomous variables: is the Tea Party organization active in local elections, does the Tea Party group meet with the mayor, does the group meet with the city council, and does the Tea Party group oppose sustainability policies. These are all actions that relate to political advocacy and policymaking on
the local issue of sustainability; presumably the more of these actions a Tea Party organization is
taking, the more opposition to sustainability there is in a given city. This index ranges from zero
to four where zero means that the Tea Party is taking none of those actions and is essentially not
affecting local policies and four means the Tea Party is taking all of those actions and is doing
everything possible to influence local policy. A two-tailed T-test can determine whether cities in
which the Tea Party is highly active tend to have more or fewer sustainability programs.

In addition, the support (or antagonism) of the business community can be vital for the
passage (or defeat) of sustainability policies in some cities. Business interests frequently hold a
lot of power and if they are swayed, it could herald sufficient support for sustainability
initiatives. Therefore several variables pertaining to city relationships with the business
community have been coded from the interviews. These variables encapsulate information
related to working with a local Chamber of Commerce and tax incentives the city has in place.
To test the relationship between these variables and the proliferation of sustainability policies,
two-tailed T-tests can be run to evaluate the alternative hypotheses: cities that work with the
Chamber of Commerce are more likely to have numerous sustainability policies; cities that have
low-tax environments are less likely to many sustainability policies.

The effects of political preferences must be taken into account. The percentage of city
administrators who are liberal is the measure of a city's left-leaning ideology for the purposes of
this paper. In order to understand this relationship and ensure that there are no intervening
variables or relationships, that measure shall be correlated with both the Tea Party index and the
number and depth of sustainability policies to see if the political preferences of residents have an
effect on sustainability policies directly or indirectly through Tea Party opposition to such
policies. After the general relationship between the variables is captured from a correlation, a
regression analysis can determine the significance of each factor in the variation of the dependent variable: the number of sustainability policies.

Analysis

Given the clear variation in the number and the strength of sustainability policies that has been explored in this paper, the obvious questions pertain to what makes some cities more likely to pass and implement sustainability programs and policies than others. While there is no one factor that is directly and completely responsible for these differences, there are some factors that have broad impacts in many cities. Because sustainability initiatives are a largely political matter, they are likely to involve many interest groups and constituencies. In interviews with both economic development officials and members of Tea Party organizations there were indications of what makes it more or less likely for sustainability policies to be passed by city government.

Most Tea Party organizations are vociferously opposed to sustainability policies and work to pressure current politicians not to support such legislation. They also campaign fiercely to ensure that supporters of sustainability policies are not elected to office. The strong stance on sustainability makes sense given the values espoused by Tea Party organizations. Although Tea Party groups are free to set their own agendas and decide what they as a group believe in there were common threads among nearly all the interviewees. According to a leader in a Tea Party organization in the Northeast, "There are three things that [they] believe in: fiscal responsibility, constitutionally limited government, free market." From a conservative point of view, these beliefs appear diametrically opposed to policies pertaining to sustainability. As mentioned in chapter two, there is a public perception, especially among non-progressive circles that environmental and sustainability initiatives are costly to the government because green technologies are currently more expensive than traditional ones. This also ties into the supposed
idea that the government is favoring one type of business or sector, in this case environmentally friendly ones. According to Tea Party insiders, picking winners and losers is against the free market and undercuts capitalism. Finally, members of the Tea Party generally have a strict constructionist view of the U.S. Constitution and government and they believe that policies aimed at promoting environmental conservation and social equity are beyond the scope of governmental authority. In fact, roughly 60% of Tea Party members interviewed expressed their opposition for some form of environmental policies. For all these reasons, Tea Party activity makes an excellent factor to examine as part of what makes it likely (or rather unlikely) for sustainability policies to be successfully enacted.

In order to gauge Tea Party activity, an index was created which is the sum of four dichotomous variables measuring communication with the city's mayor, the city council, involvement in local elections, and opposition to sustainability policies. For each city where a member of the Tea Party was interviewed, a score from zero to four was assigned based on the presence of each of the aforementioned variables. Table 4-1 is expected to support the alternative hypothesis that cities with higher levels of Tea Party activity have fewer sustainability policies. In Table 4-1, a two-tailed T-test was run on cities with high (a score of two, three, or four) and low (scores of zero and one) levels of Tea Party activity. Given that cities with low Tea Party activity have a mean of 27.57 sustainability programs and cities with high Tea Party activity have 22.12 on average, a clear disparity between the two exists. This test yielded a p-value of 0.0403 which is statistically significant at the 0.05 level.

This result indicates that the Tea Party likely has a tangible effect on the passage (or lack thereof) of sustainability policies in cities therefore supporting the alternative hypothesis. There is a concern of possible endogeneity regarding Tea Party activity inversely correlated with liberal
or democratic voters or representatives that will be discussed later. However, setting aside such issues for now, it would appear that Tea Party organizations have a strong negative effect on the number of sustainability policies a city has in place. As previously mentioned, such groups often involve themselves in local elections either supporting candidates who share their beliefs or opposing those who do not. Although the relationship between Tea Party activity and sustainability policies is not perfect, the presence is definitely felt. Regarding the Tea Party presence, a city official in the South mentions that:

They haven't directly stopped anything, but they've slowed it down and distracted from the conversation. We have to deal with it and it takes energy away from doing what we want... It's not so much about limiting economic development as it is part of the Agenda 21 thing. They think it's government intervention. So we're learning to do the same thing but not say why we're doing it and we'll be more successful. It's a stealth game. You have to present things not for why they're the right thing, but for the reason that appeals to their view.

There is clearly a contingent of Tea Party members who have exerted political pressure on city government in a way that is not necessarily blocking any sustainability legislation, but is slowing things down enough to be inconvenient. In addition, the official indicates that Tea Party groups tend to view actions related to sustainability as heavy handed government interference. Curiously, it seems as though policies that are framed as environmental or otherwise potentially related to Agenda 21 are toxic, but those same policies can fly under the radar if they are not labeled as such. This may be a possible explanation for why more conservative cities still have some sustainability legislation: measures that are framed as part of the general good or even quality of life may be acceptable to conservatives. In fact, cities where conservative groups may have prevented the passage of a sustainability plan (see chapter three) still have an average of 22.2 sustainability programs. Furthermore, there was one unique Tea Party organization in which the group supported renewable energy initiatives. This exceptional group’s leader remarked "We worked with the Sierra Club to advocate in support of solar energy in a conservative way which
is talking about the national security need." This group could be viewing sustainability issues framed in a way that is not only acceptable to them, but extremely appealing. Although differing values could be responsible for the stark contrast with other Tea Party organizations, this appears to be one specific case in which the framing of renewable energy policies has made all the difference in disarming the opposition. In most cities, regardless of the exact conditions on the ground, both the statistical and anecdotal evidence point to the fact that Tea Party activity is inversely related to the number of sustainability policies in a given city.

Other factors that appear likely to play a role in the probability that sustainability policies are implemented are often related to business because of the political influences they wield and exert. In most cities, a Chamber of Commerce is the advocacy organization for the main business interests in the city. Chambers will usually promote the city to outsiders while lobbying city government for business-friendly policies. According to a city official from the South, "There is sustainability for our businesses and we engage them with our Chamber of Commerce which is the cornerstone of the community." The Chamber of Commerce serves as a bridge from government to businesses, and not just in that direction. From the interviews with city officials, most cities work with the Chamber of Commerce when it comes to attracting businesses to move to the city or when running public relations campaigns to convince residents to move there from other places. In all, 30 of the interviewees mentioned working with the Chamber in some capacity while 13 did not mention it at all.

Since the Chamber of Commerce is frequently an advocacy organization, they could plausibly have an effect on city sustainability programs. Tables 4-2 and 4-3 are expected to support the alternative hypothesis that cities that mention working with the Chamber of Commerce have a greater emphasis on sustainability policies than those that do not. In table 4-2,
a two-tailed T-test indicates that cities working with their local Chamber of Commerce have an average of 27.4 sustainability programs versus 22.62 in cities that do not work with the Chamber. This difference has yielded a p-value of 0.0114 which is quite significant (below 0.05). Table 4-3 displays a T-test with the same variable regarding city work with the Chamber but using the sustainability depth index as an indicator of sustainability. Cities working with the Chamber have a mean 2.03 sustainability index whereas other cities have a mean 1.69 sustainability index. While the result appears largely similar to that in table 4-2, the result is much less significant in table 4-3 because the p-value is only 0.3147. Still, the relationship runs in the same direction for both tests and there seems to be a clear result that cities working with the Chamber of Commerce are likely to have more sustainability policies. The results from table 4-2 are would appear to confirm the alternative hypothesis while those from 4-3 would reject it.

Although the explanation for this is not entirely clear, there is certainly a plausible mechanism for such a phenomenon. The chief possibility may be that cities working with the Chamber are more likely to succeed at passing sustainability policies because there is more collaboration between the two groups. It makes sense that if a prominent business group such as the Chamber of Commerce is in disagreement with the city, it would be more difficult to pass sustainability legislation due to the increased opposition. However the main question here is whether Chambers of Commerce generally are supportive of sustainability measures. One Tea Party member from the Northeast explained that "The Chamber of Commerce is run by liberals" and none of the other interviews explicitly mentioned that the Chamber was against sustainability. Perhaps the Chamber of Commerce which is a pro-business organization is aware of the economic benefits that sustainability programs can bring to cities and the companies located within them (see chapters two and three).
The idea of what it means to be pro-business has traditionally been characterized by governmental actors that seek the minimum of taxes and regulation in order to placate corporate desires for the greatest profit. However, it very well might be that the least possible taxes and regulation are no longer optimal for business in accordance with the economic forces described in chapters two and three. Table 4-4 is expected to support the alternative hypothesis that cities mentioning advantageous tax policies are less like to emphasize sustainability. The two-tailed T-test depicted in table 4-4 suggests that cities in which tax policies are a selling point for the city (typically meaning they are lower than competitors') have fewer sustainability programs--24.44 on average. Cities that do not emphasize state or local tax policies have a mean of 28.5 programs. This difference is quite significant because the p-value is 0.0252 which is well below the 0.05 level which confirms the alternative hypothesis. In essence, this result is completely logical: cities that have lower taxes also have fewer sustainability programs. Because sustainability programs often rely on public services such as mass transportation, parks, and other infrastructure, cities will need to collect more money in taxes to fund them. Even though this result is not surprising, it would present a conflict with the idea that Chambers of Commerce can be relatively supportive of sustainability if we maintained traditional assumptions about what business interests want.

The exact political pressures behind sustainability policies are still not perfectly clear even though it appears that political preferences still play a role. Table 4-5 illustrates both the clarity and the murkiness inherent in these issues. Very strong relationships exist between the three variables: number of sustainability policies, percentage of city administrators who are liberal, and the index measuring Tea Party activity. Liberal city administrators are typically reflective of the elected officials who appointed them and therefore the voters. These city
officials also wield influence over elected offices in a way that can be rather pervasive. For example, a city planner can suggest solutions to a city's issues based on their own views. And finally, these officials matter because they are the ones who implement the legislation enacted by the municipality. Understandably, Tea Party activity has a strong negative correlation with the other two variables which have a clear positive relationship with each other. In short, each of these variables correlates at least 38% with each of the other two. This high degree of overlap suggests that the variables are endogenous in that they measure the same thing: the political leanings of a city's population. Because these variables inherently gauge the same thing, it is difficult to determine whether the positive or the negative influences have greater effects as well as whether they are significant. In table 4-6, all three of these variables are used as independent variables in a multivariate regression seeking to explain the variation in the number of sustainability programs a city has. Tables 4-6, 4-7, and 4-8 are expected to support the alternative hypotheses that Tea Party activity leads to a smaller emphasis on sustainability while a greater percentage of liberal administrators leads to a larger emphasis on sustainability. The relationship between sustainability and political factors could plausibly operate in both directions, but it seems more likely that certain populations within a city affect legislation than legislation substantially changing the overall composition of the city. It should be noted that the Tea Party and tax indices used in the regression model shown in table 4-6 and the subsequent tables are ordinal variables and are not optimal for regressions; each index has a small number of different possible values. This may cause issues regarding accuracy even if the results appear significant. As expected, the tax policy and Tea Party variables have negative coefficients and the percentage of city administrators who are liberal has a positive coefficient. However, only the tax policy variable is statistically significant (with a p-value of 0.046) while the other two are apparently
not significant. The Tea Party and liberal administrators variables are essentially competing because, as previously mentioned, they measure the same thing. Consequently neither is statistically significant in the regression modeled in table 4-6 even though the adjusted R-squared value for the regression is 0.287 representing 28.7% of the variation in the dependent variable.

Tables 4-7 and 4-8 each display the multivariate regressions with either Tea Party activity or percent of administrators who are liberal omitted. In table 4-7 both the tax index and the Tea Party activity index are considered at least somewhat significant and the adjusted R-squared for the model is 0.243. The relationship between the Tea Party index and the number of sustainability policies a city had in 2012 is represented visually in figure 4-1; the scatterplot clearly points to a negative relationship between the two variables. In a similar fashion to table 4-7, table 4-8 displays that the percentage of city administrators who are liberal is very significant while the tax index is not considered significant. The adjusted R-squared for that model is 0.209. Table 4-6 cannot help to confirm the alternative hypotheses, but tables 4-7 and 4-8 do. The visual manifestation of the relationship between the percentage of city administrators who are liberal and the number of city employees is displayed in figure 4-2; there is no doubt that the relationship between the variables is solidly positive. It would appear to be a quandary that three variables could each be significant under different circumstances, but the large amount of overlap between the variables could explain the situation. Politics does play a factor; the question is whether an abundance of liberal city employees (and likely councilors who appointed them) is more likely to spur the creation of sustainability policies than a dearth of Tea Party activity. Because the two appear to have an obvious relationship in cities—that Tea Party members are less likely to exist where there are liberal environments and vice versa—they are clear measures of the same thing. Therefore a definitive judgment about which factor is more important cannot
be made from this data. It can be said however that the percentage of liberal administrators variable tends to have greater significance than the Tea Party variable in all of the regression models. This could be a plausible explanation that liberal administrators are more important to the process of creating and implementing sustainability policies than a lack of Tea Party activity because liberal administrators are usually advocates for such policies which would not exist without their support. Additionally, cities could conceivably lack large populations of either group. Still, not enough information to make a final judgment on this matter exists.

What can be said is that there are indisputable political effects from populations like Tea Party activists and liberal city administrators. A relationship with the Chamber of Commerce tends to be a positive force for sustainability policies and low taxes for obvious reasons are negatively related to such policies. Together with the economic forces and attitudes surrounding these sustainability policies, these trends begin to paint a comprehensive picture of how contemporary American cities have operated with respect to sustainability as a sociopolitical regime. Unlike other environmental regimes, sustainable development has taken a much more civically and socially centered form as opposed to previous regimes primarily focusing on business regulation.
### Tables and Figures

#### Table 4-1

**Number of Sustainability Programs by High and Low Tea Party Activity**

<table>
<thead>
<tr>
<th>Group</th>
<th># of Cities</th>
<th>Mean Number of Sustainability Programs (2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Tea Party Activity at Local Level†</td>
<td>14</td>
<td>27.57</td>
</tr>
<tr>
<td>High Tea Party Activity at Local Level†</td>
<td>11</td>
<td>22.12</td>
</tr>
</tbody>
</table>

P-value: 0.0403**

†Based on an index measuring involvement in local politics and work on Agenda 21

**p-value<0.05

#### Table 4-2

**Number of Sustainability Programs by Mention of Work with Chamber of Commerce**

<table>
<thead>
<tr>
<th>Group</th>
<th># of Cities</th>
<th>Mean Number of Sustainability Programs (2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mention of work with Chamber of Commerce</td>
<td>30</td>
<td>27.4</td>
</tr>
<tr>
<td>No Mention of work with Chamber of Commerce</td>
<td>13</td>
<td>22.62</td>
</tr>
</tbody>
</table>

P-value: 0.0114**

**p-value<0.05

#### Table 4-3

**Sustainability Depth by Mention of Work with Chamber of Commerce**

<table>
<thead>
<tr>
<th>Group</th>
<th># of Cities</th>
<th>Mean Sustainability Depth Index‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mention of work with Chamber of Commerce</td>
<td>30</td>
<td>2.03</td>
</tr>
<tr>
<td>No Mention of work with Chamber of Commerce</td>
<td>13</td>
<td>1.69</td>
</tr>
</tbody>
</table>

P-value: 0.3147

‡Index is measured on a scale of 0 to 3 based on three variables measuring city official

#### Table 4-4

**Number of Sustainability Programs by Mention of State or Local Tax Policies**

<table>
<thead>
<tr>
<th>Group</th>
<th># of Cities</th>
<th>Mean Number of Sustainability Programs (2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Positive Mention of State or Local Tax Policy</td>
<td>16</td>
<td>28.5</td>
</tr>
<tr>
<td>Positive Mention of State or Local Tax Policy</td>
<td>27</td>
<td>24.44</td>
</tr>
</tbody>
</table>

P-value: 0.0252**

**p-value<0.05
### Table 4-5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>27.5157</td>
<td>3.3327</td>
<td>0</td>
</tr>
<tr>
<td>Tax Index†‡</td>
<td>-3.0872</td>
<td>1.4491</td>
<td>0.046**</td>
</tr>
<tr>
<td>Tea Party Index‡</td>
<td>-1.0189</td>
<td>1.2581</td>
<td>0.428</td>
</tr>
<tr>
<td>Percentage of City Administrators that is liberal</td>
<td>0.6162</td>
<td>0.0389</td>
<td>0.129</td>
</tr>
</tbody>
</table>

**Adjusted R-Squared: 0.287**  
†Composed of two variables about having favorable state and local tax programs  
‡Index measured on a scale of 0 to 4 based on Tea Party communication with local officials, involvement in local elections, and opposition to sustainability  
**p-value<0.05, *p-value<0.10**

### Table 4-6

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>31.3224</td>
<td>2.3302</td>
<td>0</td>
</tr>
<tr>
<td>Tax Index†‡</td>
<td>-3.2636</td>
<td>1.478</td>
<td>0.038**</td>
</tr>
<tr>
<td>Tea Party Index‡</td>
<td>-2.1131</td>
<td>1.0947</td>
<td>0.067*</td>
</tr>
</tbody>
</table>

**Adjusted R-Squared: 0.243**  
†Composed of two variables about having favorable state and local tax programs  
‡Index measured on a scale of 0 to 4 based on Tea Party communication with local officials, involvement in local elections, and opposition to sustainability  
**p-value<0.05, *p-value<0.10**

### Table 4-7

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>24.6566</td>
<td>1.5272</td>
<td>0</td>
</tr>
<tr>
<td>Tax Index†‡</td>
<td>-1.3732</td>
<td>0.9671</td>
<td>0.164</td>
</tr>
<tr>
<td>Percentage of City Administrators that is liberal</td>
<td>0.0757</td>
<td>0.0241</td>
<td>0.003***</td>
</tr>
</tbody>
</table>

**Adjusted R-Squared: 0.209**  
†Composed of two variables about having favorable state and local tax programs  
**p-value<0.01**
**Figure 4-1**

*Tea Party Activity vs Number of Sustainability Policies*

- **Equation:** $y = -2.393 + 29.029$
- **Trendline:** $y = -2.393 + 29.029$
- **Data Points:** 25

**Figure 4-2**

*Percentage of Liberal City Admin vs Number of Sustainability Policies*

- **Equation:** $y = 0.0789x + 23.267$
- **Trendline:** $y = 0.0789x + 23.267$
- **Data Points:** 42

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Conclusion

In evaluating the overarching hypothesis for the entire paper, whether there has been a fundamental paradigm shift with respect to business and environmentalism, many of the smaller hypotheses as well as most of the anecdotal evidence support this notion.

Chapter two explains how cities with more sustainability programs have higher median incomes and have recovered from the recession faster than cities with fewer sustainability programs. The descriptive evidence from city officials elaborated that businesses are looking young professionals who tend to locate in cities that value sustainability and have more quality of life amenities. Chapter three expands upon this idea and connects sustainability policies to quality of life amenities. All of these tests together form a cogent causal mechanism for how sustainability can be positively related to economic growth.

In chapter four, the conflict between the apparent support for sustainability lent by Chambers of Commerce and the tendency of cities with higher tax rates have fewer sustainability programs appears to signal a fundamental shift in what it means to be pro-business. Supporting the interests of businesses no longer means creating a low-regulation, low-tax, environment, but rather one in which the new urban economy can thrive. Business interests are recognizing and capitalizing on the relationship divined in chapters two and three and instead of opposing sustainability, they are supporting it. As one city official mentioned about cooling down the opposition, programs germane to the aims of sustainability can be passed if they are framed in a way that appeals to broader values. This explains why cities that do not have a sustainability plan still have 22.2 sustainability programs on average. Because sustainability, as defined in the literature and in this paper is more than just policy for the environment, but also for economy and social benefits, it may be possible to convince detractors of sustainability to support programs that advance its goals if they are presented as supporting the secondary aspects.
While political factors such as the ideology of city administrators or the amount of Tea Party activity in a given city did have an effect on the number of sustainability policies a city has enacted, the exact factor is not clear. Still, some combination of diminished ideological opposition and increased ideological progressiveness are necessary conducive to the creation of sustainability policies. While general ideological preferences in cities may not have changed greatly in recent years, the attitudes of the business community certainly have; the adoption of sustainability policies in many cities can be traced largely to economic viability and business support of such policies. Based on the aggregate evidence in all the chapters of this paper, it appears as though the hypothesis posited in the introduction is in fact correct: the relationship between urban economies and the businesses groups driving them has become one of mutual gain instead of one of constant conflict. The paradigm has fundamentally shifted.

This answer is of great import for city governments and developers wishing to do business in cities. Both of these groups must recognize the potential of the new regime to achieve the aims of economic development in terms of income and quality of life. As displayed in this paper, the barriers to creating sustainability policies such as Tea Party organizations are not infallible and even cities where political opposition is high and support is low still have a reasonable numbers of sustainability policies. City sustainability policies can be passed even if key interests in the city do not value sustainability so long as the legislation is framed in a way that appeals to those interests. Environmental impact may not matter to residents, but economic benefits such as increases in income and capital very well might, and quality of life issues such as permissible water consumption per person certainly do. While sustainability measures can be enacted in a subtle manner, committing to sustainability in a visible way such as a sustainability plan clearly results in a the passage of more of these policies. Even the intentions behind such
policies count since cities which have enacted sustainability policies because it is "The right thing to do" have significantly more of them. Which raises the original idea of the importance of these policies in the first place.

Sustainability policies are critical to our future not only in an economic and social sense, but in an environmental sense. As mentioned by Kraft, the environmental regime that dominates the scene today primarily relies on local and city government for conservation policy. These sustainability policies are currently the strongest governmental response to the environmental damage humanity has inflicted and will continue to impose on the Earth. The success and prevalence of these policies are critical to ensuring that as the Brundtland Commission put it, "Future generations will be able to meet their own needs." Cities are the locus of activity and the focus of this paper because they will continue to grow in population as re-urbanization continues. Even more important is the role that cities will play as leaders and pioneers for other municipalities, for states, and the federal government. The result of this paper indicates that there is no longer a tradeoff between the present and the future regarding sustainability. Socially and environmentally conscious policies are economically feasible today and that is why cities and businesses must understand this new economic regime in order to prevent as much environmental degradation as possible and allow for economic opportunity as soon as possible. It is my sincerest hope that this paper can serve as a guide for cities and the stakeholders within them wishing to take tangible steps toward enacting sustainability legislation.
Appendices

Appendix A: Interview Template Questions

Part I: Economic Development
Virtually all cities have some economic development strategy as their futures are tied to jobs and incomes. I know that economic development is a complicated area and can have lots of different components, but in a nutshell how would you describe the essence of [CITY’S NAME]’s strategy?

[UNLESS ALREADY CLEAR FROM ABOVE ANSWER] Some cities employ different strategies to help attract, retain or foster strong businesses. What does your city’s strategy look like what kind of businesses does it target?

How has this strategy worked? Have some parts of the city’s plan worked better than others?

[UNLESS AN EXAMPLE JUST GIVEN] That’s really interesting. So building on that could you give me an example of how you worked with a company to attract them or help them expand or start up? [NOTE: CHOOSE WORDING ON LAST CLAUSE TO MATCH THE CITY’S DOMINANT STRATEGY OR LINK TO PREVIOUS ANSWER]

Part II Marketing
When you’re trying to attract new businesses or residents, you need to sell the whole city as a place to work or live in. When people outside of your city look at [NAME OF CITY], what do you think their image of it is? What stands out about [NAME OF CITY]?

People in the marketing world talk about “competitive advantage.” I recognize that cities aren’t consumer products but cities do exist in a competitive environment as they must compete with many other cities for the same types of businesses or residents. Are there some qualities that give [NAME OF CITY] a competitive advantage in attracting either businesses or residents?

What’s the most important thing your city could do to give itself more of a competitive advantage against other cities?

Some cities actively market themselves through image building campaigns. Some cities purchase advertising, some have targeted outreach, some even have a slogan--“I love New York” comes to mind. Has [NAME OF CITY] ever conducted a public relations campaign?

[IF SO, PROBE FOR CONTENT OF CAMPAIGN]
[IF SO, PROBE FOR HOW SUCCESSFUL, WHAT PART(S) WORKED BEST]

Part III Sustainability
Alternative 1: You’ve already alluded to quality of life issues as part of your city’s image and I wonder if you could expand a little on that. What are the quality of life amenities or lack thereof that are most significant in [NAME OF CITY]’s image?

Alternative 2: There seems to be a lot of talk these days about quality of life issues in cities. There is a widespread assumption that when people are deciding where to live, and especially when professional people, highly educated people, are choosing where to live, that they focus on quality of life issues. What are the quality of life amenities or lack thereof that are most significant in [NAME OF CITY]’s image?

Along those lines, does [NAME OF CITY] have a citywide sustainability plan?

IF YES, PROBE FOR MOST IMPORTANT PARTS OF THAT PLAN

IF NO, ASK WHY THEY DON’T HAVE SUCH A PLAN

Some people argue that while sustainability initiatives may be sexy and help a city’s image with young people, environmental protection efforts can drive business away. Others regard sustainability as a modern-day economic development strategy that is built around so-called green businesses. Does either of these two philosophies generally guide government policymaking in your city?

Thanks! Thanks for taking the time to speak with me. This was great. Before I get off the phone, is there anything important in the areas we’ve discussed that you’d like to add?
Appendix B: Codesheet for Marking City Official Variables

1. City ID Number
   __ __ __ __

2. City Name
   __________________________________________________

3. Name of respondent
   ____________________________________________________

4. Name of respondent’s department/agency
   ____________________________________________________

5. Respondent’s position/title
   ____________________________________________________

6. Date of the interview?
   ____________________________________________________

7. Did respondent mention
   a strategy to Attract?
   1. YES____  0. NO____  9. NO MENTION____

8. A strategy to Retain?
   1. YES____  0. NO____  9. NO MENTION____

9. A strategy to Expand?
   1. YES____  0. NO____  9. NO MENTION____

10. A strategy of Job Creation?
    1. YES____  0. NO____  9. NO MENTION____

11. A strategy to Attract Talent?
    1. YES____  0. NO____  9. NO MENTION____

12. Has the strategy worked?
    1. YES____  0. NO____  9. NOT CLEAR____

13. Have some parts worked
    better than others?
    1. YES____  0. NO____  9. NOT CLEAR____

14. What part of the strategy has worked well?
    _____________________________________________

15. What part of the strategy has not worked well?
    _____________________________________________

16. Did respondent give an example
    of trying to attract a company?
    1. YES____  0. NO____  9. NOT CLEAR____

   16a. If YES, Name of company
    _____________________________________________

   16b. Did company locate in city?
    1. YES____  0. NO____  9. NOT CLEAR____

17. Did respondent give an example

75
of trying to expand a company? 1. YES 0. NO 9. NOT CLEAR

17a. If YES, Name of company

17b. Did company expand in city? 1. YES 0. NO 9. NOT CLEAR

18. Did respondent give an example of trying to retain a company? 1. YES 0. NO 9. NOT CLEAR

18a. If YES, Name of company

18b. Did company stay in city? 1. YES 0. NO 9. NOT CLEAR

19. Does city use tax abatements, rebates, or tax increment financing to attract business? 1. YES 0. NO 9. NOT CLEAR

20. Does city have a closing fund? 1. YES 0. NO 9. NOT CLEAR

21. Mention of a state or local loan or grant program to businesses? 1. YES 0. NO 9. NOT CLEAR

22. Does the city focus or rely on any of these sectors:

22a. Medicine 1. YES 0. NO 9. NOT CLEAR

22b. Manufacturing 1. YES 0. NO 9. NOT CLEAR

22c. Finance 1. YES 0. NO 9. NOT CLEAR

22d. Military 1. YES 0. NO 9. NOT CLEAR

22e. Tourism 1. YES 0. NO 9. NOT CLEAR

22f. Food/restaurants 1. YES 0. NO 9. NOT CLEAR

22g. Startup/Entrepreneurship 1. YES 0. NO 9. NOT CLEAR

22h. Life Sciences/Biosciences 1. YES 0. NO 9. NOT CLEAR

22i. Other technology 1. YES 0. NO 9. NOT CLEAR

23. Mention of Airport or other transportation hub as positive? 1. YES 0. NO MENTION

24a. Mention of Sports or Sporting
Events as part of city’s image? 1. YES____ 0. NO MENTION____

24b. Mention of nearby non-sports Attractions (amusement park etc.) as a positive? 1. YES____ 0. NO MENTION____

25. Mention of Weather as a positive? 1. YES____ 0. NO MENTION____

26. Mention of Location as a positive? 1. YES____ 0. NO MENTION____

27. Mention of Secondary or postsecondary educational institutions as a positive? 1. YES____ 0. NO MENTION____

28. Mention of Low cost of living/housing as a positive? 1. YES____ 0. NO MENTION____

29. Mention of Infrastructure, roads as a positive? 1. YES____ 0. NO MENTION____

30. Mention of Quality of Labor force as a positive? 1. YES____ 0. NO MENTION____

31. Mention of City or state tax policies as a positive? 1. YES____ 0. NO MENTION____

32. Mention of access to nature, open space, trails, natural features as a positive? 1. YES____ 0. NO MENTION____

33. What could give the city a competitive advantage?
   33a. Reason 1: _________________________________________
   33b. Reason 2: _________________________________________
   33c. Reason 3: _________________________________________

34. Ever conducted a public relations campaign? 1. YES____ 0. NO____ 9. NOT CLEAR____

35. Who conducted the campaign? 1. CITY AGENCY____ 2. CHAMBER OF COMMERCE____
   3. VISITORS BUREAU____ 4. OTHER ORGANIZATION________________________
9. NOT CLEAR____

36. What aspect of city was emphasized in public relations campaign? __________________________________________

37. Was public relations campaign successful?  1. YES____  0. NO____  9. NOT CLEAR ____

38. Does city work with Chamber of Commerce?  1. YES____  0. NO____  9. NOT CLEAR ____

39. Most significant quality of life amenities?

39a. MOST IMPORTANT __________________________________________________________

39b. SECOND MOST IMPORTANT _________________________________________________

40. Any focus or concentration on downtown areas?  1. YES____  0. NO MENTION____

41. Does the city have a sustainability plan?  1. YES____  0. NO____  9. NOT CLEAR ____

42. Why does the city not have a sustainability plan?

42a. REASON 1: ______________________________________________________________

42b. REASON 2: ______________________________________________________________

43. City official is knowledgeable of content of sustainability plan beyond basics (recycling or LEED certified city hall)?  1. YES____  0. NO____  9. NOT CLEAR ____

44. Is sustainability plan connected to economic development?  1. YES____  0. NO____  9. NOT CLEAR ____

45. Which philosophy guides policymaking in city—sustainability is sexy or regulation hurts business?
1. SUSTAINABILITY IS SEXY/RIGHT THING TO DO____
2. REGULATION HURTS____
3. BOTH____
4. NEITHER____
9. NO MENTION____

46. Quality of life was mentioned as important prior to question on it?
   1. YES____
   0. NO____

47. Did the city's strategy work? Successful example of Attract/Retain/Expand given?
   1. YES____
   0. NO____

48. What is explicitly or implicitly expressed to be the top goal of the city government?
   1. QUALITY OF LIFE AND AMENITIES____
   2. SOCIAL EQUITY POLICIES____
   3. JOB CREATION____
   0. NOT CLEAR____

49. How is the city's economic development strategy (more than one answer possible) implemented?
   1. TARGETED SECTORS____
   2. LOCATION DEVELOPMENT____
   3. PROVISION OF SERVICES____

50. Does the official demonstrate city engagement in new economy or smart growth? (TOD, etc.)
    1. YES____
    0. NO____

51. If sustainability is an emphasis, (more than one answer possible)
    Why does it seem to be important?
    1. TO CREATE A GENUINELY ATTRACTIVE PLACE____
    2. IT'S THE RIGHT THING TO DO____
    3. GREENWASHING____
### Appendix C: Codebook for Assessing City Official Variables

<table>
<thead>
<tr>
<th>Number</th>
<th>Variable</th>
<th>Explanation for how to code variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>City ID Number</td>
<td>Assigned</td>
</tr>
<tr>
<td>2</td>
<td>City Name</td>
<td>Given</td>
</tr>
<tr>
<td>3</td>
<td>Name of Respondent?</td>
<td>Given</td>
</tr>
<tr>
<td>4</td>
<td>Department or agency in which respondent works?</td>
<td>Given</td>
</tr>
<tr>
<td>5</td>
<td>Position or title of respondent?</td>
<td>Given</td>
</tr>
<tr>
<td>6</td>
<td>Interview Date?</td>
<td>Given</td>
</tr>
<tr>
<td>7</td>
<td>Mention of strategy to attract?</td>
<td>Any part of the strategy, however small. Can be businesses or people.</td>
</tr>
<tr>
<td>8</td>
<td>Mention of strategy to retain?</td>
<td>Any part of the strategy, however small. Can be businesses or people.</td>
</tr>
<tr>
<td>9</td>
<td>Mention of strategy to expand?</td>
<td>Any part of the strategy, however small. Can be businesses or people.</td>
</tr>
<tr>
<td>10</td>
<td>Mention of strategy to create jobs?</td>
<td>Any mention of job creation or creating employment opportunities.</td>
</tr>
<tr>
<td>11</td>
<td>Mention of strategy to attract talent?</td>
<td>Strategy must be to attract or retain talent in some way. Training does not count, but keeping talent in a place does. Code words for talent may include &quot;young&quot; or &quot;creative&quot; people.</td>
</tr>
<tr>
<td>12</td>
<td>Has the strategy worked?</td>
<td>Either in direct response to the question or another mention of success.</td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td>Possible Answers</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>13</td>
<td>Have some parts worked better than others?</td>
<td>Either in direct response to the question or another mention of differing levels of success.</td>
</tr>
<tr>
<td>14</td>
<td>What Part(s) of strategy have worked well?</td>
<td>Specific examples referenced in answering question 13.</td>
</tr>
<tr>
<td>15</td>
<td>What part(s) of strategy have not worked well?</td>
<td>Specific examples referenced in answering question 13.</td>
</tr>
<tr>
<td>16</td>
<td>Example given is attraction?</td>
<td></td>
</tr>
<tr>
<td>16a</td>
<td>Name of companies mentioned in attraction example?</td>
<td></td>
</tr>
<tr>
<td>16b</td>
<td>Did company locate in city?</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Example given is expansion?</td>
<td></td>
</tr>
<tr>
<td>17a</td>
<td>Name of companies expansion in example?</td>
<td></td>
</tr>
<tr>
<td>17b</td>
<td>Did company expand in city?</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Example given is retention?</td>
<td></td>
</tr>
<tr>
<td>18a</td>
<td>Name of companies mentioned in retention example?</td>
<td></td>
</tr>
<tr>
<td>18b</td>
<td>Did company stay in city?</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Does city use tax abatements, rebates, or increment financing to attract businesses?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>20</td>
<td><strong>Does city have a closing fund?</strong></td>
<td>The official specifically references a closing fund or other allotment of money to finish a deal with companies.</td>
</tr>
<tr>
<td>21</td>
<td><strong>Mention of a state or local loan or grant program to businesses?</strong></td>
<td>Federal loans or grants do not count; must be local or state funded.</td>
</tr>
<tr>
<td>22a</td>
<td><strong>City focus or rely on sector in Medicine?</strong></td>
<td>Mention of medical, healthcare or similar facilities.</td>
</tr>
<tr>
<td>22b</td>
<td><strong>City focus or rely on sector in Manufacturing?</strong></td>
<td></td>
</tr>
<tr>
<td>22c</td>
<td><strong>City focus or rely on sector in Finance?</strong></td>
<td></td>
</tr>
<tr>
<td>22d</td>
<td><strong>City focus or rely on sector in Military?</strong></td>
<td>Mention of military, Army, Navy, or Air Force presence or base in or near the city.</td>
</tr>
<tr>
<td>22e</td>
<td><strong>City focus or rely on sector in Tourism?</strong></td>
<td>Mention of tourism, hospitality, vacations or other similar concept.</td>
</tr>
<tr>
<td>22f</td>
<td><strong>City focus or rely on sector in Food/Restaurants?</strong></td>
<td>Might include a focus on food production or on restaurants and a &quot;food scene&quot;.</td>
</tr>
<tr>
<td>22g</td>
<td><strong>City focus or rely on sector in Startup/entrepreneurship?</strong></td>
<td>Mention of focusing on entrepreneurship, fostering an entrepreneurial spirit, incubators, accelerators, startups or other similar concepts.</td>
</tr>
<tr>
<td>22h</td>
<td><strong>City focus or Life Sciences/Bio Sciences?</strong></td>
<td>Mention of sector or research in bio-sciences, life sciences or other similar concept counts.</td>
</tr>
<tr>
<td>22i</td>
<td><strong>City focus or rely on sector in Other Technology?</strong></td>
<td>Any other mention of a technology related sector including IT, computer-based or other technology area that does not fit into the other sector focuses.</td>
</tr>
<tr>
<td>23</td>
<td><strong>Mention of airport or other transportation hub as positive?</strong></td>
<td>Mention of a train station counts. The facility must be in the metro area to count (ex: Chicago's airport not a benefit for Milwaukee).</td>
</tr>
<tr>
<td>24a</td>
<td><strong>Mention of sports or sporting events as part of city's image?</strong></td>
<td>This includes professional or other spectator sports or sporting events. Recreational sports are not included here.</td>
</tr>
<tr>
<td></td>
<td>Mention of non-sports attraction (amusement park etc. as a positive?)</td>
<td>May include an amusement park, a museum, a symphony, a zoo, aquarium or other similar destination frequently visited by tourists. Any attraction must currently be built and must not be aspirational.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>25</td>
<td>Weather is mentioned as a positive?</td>
<td>Weather is described positively or city is described as unaffected by adverse weather such as hurricanes and snowstorms.</td>
</tr>
<tr>
<td>26</td>
<td>Geographic location is mentioned as a positive?</td>
<td>Geographic location is relative to the rest of the country rather than within the metropolitan area.</td>
</tr>
<tr>
<td>27</td>
<td>Mention of secondary or postsecondary educational institutions as a positive?</td>
<td>High schools, colleges, or universities that were mentioned as a positive aspect of the city.</td>
</tr>
<tr>
<td>28</td>
<td>Mention of low cost of living/housing as a positive?</td>
<td>Mention of vacant or foreclosed homes is a negative even if it implies low costs.</td>
</tr>
<tr>
<td>29</td>
<td>Mention of infrastructure, roads, cited as a positive?</td>
<td>Mention of specific infrastructure, roads, highways or other general infrastructure counts.</td>
</tr>
<tr>
<td>30</td>
<td>Mention of quality of labor force as a positive?</td>
<td>Mention of a skilled, qualified, or otherwise desirable workforce.</td>
</tr>
<tr>
<td>31</td>
<td>Mention of city or state tax policies as a positive?</td>
<td>Tax abatement, lack of tax, or any other tax related policy that is cited as a benefit to the city counts.</td>
</tr>
<tr>
<td>32</td>
<td>Mention of access to nature, open space, trails, or natural features as a positive?</td>
<td>Internal features are more important than external features. If there is a mention that these features are scarce or not accessible within the city, features outside the city (such as national parks and mountains) do not take precedence in answering this question.</td>
</tr>
<tr>
<td>33a</td>
<td>What would give the city more of a competitive advantage?</td>
<td>Something that would boost the cities competitive edge against other cities.</td>
</tr>
<tr>
<td>33b</td>
<td>Reason 2</td>
<td></td>
</tr>
<tr>
<td>33c</td>
<td>Reason 3</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Ever conducted a public relations campaign?</td>
<td>Mention that a public relations campaign was conducted, regardless of which entity was responsible for it.</td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>35</td>
<td>Who conducted the campaign?</td>
<td>Which entity was responsible for the campaign?</td>
</tr>
<tr>
<td>36</td>
<td>What aspect of city was emphasized in public relations campaign?</td>
<td>What was the theme of the campaign? Was the city trying to flaunt a certain amenity that it might have?</td>
</tr>
<tr>
<td>37</td>
<td>Mention that a public relations campaign was successful?</td>
<td>Either in direct response to the question or another mention of success.</td>
</tr>
<tr>
<td>38</td>
<td>Does the city work with the Chamber of Commerce?</td>
<td>The official must mention the organization as the Chamber or the Chamber of Commerce in any capacity.</td>
</tr>
<tr>
<td>39a</td>
<td>Most significant quality of life amenities?</td>
<td></td>
</tr>
<tr>
<td>39b</td>
<td>Reason 2</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Any focus or concentration on downtown areas?</td>
<td>Any mention about a tangible push to work on downtown areas.</td>
</tr>
<tr>
<td>41</td>
<td>Does the city have a sustainability plan?</td>
<td></td>
</tr>
<tr>
<td>42b</td>
<td>Why does the city not have a sustainability plan?</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>City official is knowledgeable of content of sustainability plan beyond basics?</td>
<td>The city official must mention something other than LEED certified buildings, renewable energy sources or conservation programs.</td>
</tr>
<tr>
<td>44</td>
<td>Is sustainability plan connected to economic development?</td>
<td>The city official must draw at least one connection to economic that is not one of the three &quot;basic&quot; items identified in #43.</td>
</tr>
<tr>
<td>45</td>
<td>Which philosophy guides policymaking in your city?</td>
<td>A generally positive outlook on sustainability falls under answer one even if they don't necessarily think sustainability is &quot;sexy&quot;</td>
</tr>
<tr>
<td>46</td>
<td>Quality of life was mentioned as important prior to question on it?</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Did the city's strategy work? Successful example of Attract/Retain/Expand given?</td>
<td>There must be one successful example of attraction, retention, or expansion, or another example of how the city's own strategy has succeeded.</td>
</tr>
<tr>
<td>Page</td>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>48</td>
<td>What is explicitly or implicitly expressed to be the top goal of the city government?</td>
<td>Provision of services can take the form of any city program or programs that are aimed at spurring business development or consumption. Expediting the approval process for development is a provision of service strategy.</td>
</tr>
<tr>
<td>49</td>
<td>How is the city’s economic development strategy implemented?</td>
<td>The city official must mention at least one of the following: walkability, transit oriented development, the creative class, downtown development as a means to economic growth.</td>
</tr>
<tr>
<td>50</td>
<td>Does the official demonstrate city engagement in new economy or smart growth? (TOD, etc.)</td>
<td>The three categories used here are: 1) to create a genuinely attractive place 2) because it’s the right thing to do, and 3) greenwashing just to make the city look more green.</td>
</tr>
<tr>
<td>51</td>
<td>If sustainability is an emphasis, why is it important?</td>
<td>The three categories used here are: 1) to create a genuinely attractive place 2) because it’s the right thing to do, and 3) greenwashing just to make the city look more green.</td>
</tr>
</tbody>
</table>

Appendix D: Map of Geographic Regions in the United States

![Map of Geographic Regions in the United States](courtesy-of-blog.youngsurvival.org)
Bibliography


Seattle Department of Planning and Development. 2015. “Seattle’s Comprehensive Plan.” *City of Seattle.* 
