GETTING FROM HERE TO THERE?
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To our families:

Elizabeth, John, Rachael, and Walker

and

Debra Faith, Emerson Bradford, Elizabeth Benetta, Emily Beatrice, Rebecca Ruth, and Rose Elaine
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This book project was born of the hope and promise of sustainability. It was written over a period during which this central concept of our times gained widespread, even global, attraction only to fall victim to two powerful forces. The first was its corporatization through greenwashing, as economic policy makers and business management practitioners attached the adjective ‘green’ to products, processes, and technologies to blunt its critical, even radical edge and holistic meaning, especially its social and ecological justice component. Then, as the meaning became mired in a growing confusion over its core meaning and in a darkening pessimism over its political possibility in the face of mounting challenges, a new political realism led even its most ardent erstwhile supporters to abandon it for resilience--an essential part of strong sustainability, but certainly not its replacement or its predominant element.

In many ways, this work serves as a companion to the more theoretically and designed-oriented book, *The City as Fulcrum of Global Sustainability* (2011), written by the first author (Yanarella) and his long-time compatriot, Richard S. Levine. Where that book sought to compile the conceptual and theoretical foundations of urban sustainability developed under the auspices of the University of Kentucky Center for Sustainable Cities and the writings of its co-directors Yanarella and Levine, this book has striven to refocus a series of representative case studies (some of which were partly explored in the first work) upon the politics of these sustainable city endeavors and the ineluctable role of power in leading to the outcome of each of these cases. This book differs from the earlier one in confining its analysis to select cases in North America.

We should note in this preface that the question mark at the end of the title is intentional and symbolic of the ambiguous results of these urban sustainability projects across North America. If power directed by vision form two critical resources for carrying programs and initiatives to their conclusion, the course of these eight non-utopian projects to get from here to there have all been stymied by a host of differentially weight factors in their ambition to complete their intended telos and reach the goal of strong and robust sustainability. This sobering realization, represented by the question mark, should not of course lead to political cynicism or fatalism, since the future is relatively open and popular dissatisfaction with the unsustainable status quo continues to provide impetus to new sustainable city initiatives in the United States, Canada, Europe and elsewhere around the globe. Simultaneously, sustainability theorists and urban policy planners and practitioners...
play their role within the efforts of wider groups and movements to bring sustainability to terra firma.

In some respects, this book is very much a work in transition. In tackling urban sustainability as a project of urban power and politics, it re-opens our work to the theoretical-practical terrain of actually-existing sustainability projects and hard-ball politics. Among those social science researchers who have examined late twentieth- and early twenty-first century politics theoretically or “empirically,” few contemporary political scientists are likely to appreciate its approach to urban power and many sociologists and geographers, especially those in social theory and social, economic, and cultural geography, are likely to find its theoretical thrust not advanced enough, given the state of the literature especially in those disciplines and sub-disciplines. The recent work of Marit Rosol on urban sustainability using Lacalu and Mouffe’s post-marxist hegemonic theory grounded in discourse analysis points to a direction that my case study work into urban sustainability will go in my (Yanarella’s) future book on China’s eco-city initiatives.

The co-authors of this book maintained a teacher-graduate student and then collegial relationship for over two decades. Ernest J. Yanarella served as graduate mentor and then doctoral supervisor of Robert W. Lancaster’s doctoral dissertation on the politics of sustainability in Canada and the United States. This book grew partly out of Lancaster’s dissertation and partly from Yanarella’s convergent interests and writings on parallels and differences between local urban sustainability experiments in Canada and those in the US. With the launching of this collaborative book project, the co-authors carried out individual or joint fieldwork into all of the cities featured in this work over ten or more years. Lancaster’s former “day job” as a Certified General Real Estate Appraiser was only somewhat sidelined when he obtained an academic appointment, and it proved a valuable resource in several of the cases--especially the Civano, Chattanooga, and Bamberton.

I (Yanarella) am pleased that this endeavor has consummated in this book and would like to thank my co-author for his hard work, his distinctive perspective on housing and urban sustainability, his devotion to strong sustainability, and his seemingly limitless sense of humor. Likewise, I want to express my gratitude to Dick Levine and Herb Reid, two longtime colleagues and comrades-in-arms, who provided deep insight and wisdom into the many facets of sustainability and their places in shoring up hope and the demand for social justice even in the bleakest of times. Dick regales me with stories of his ventures in Europe, the Middle East, northern Africa, and even nations of the former Soviet Union where struggles for a better life and true human development often translate into raising the banner of sustainability and its nested components. Herb has always thought more deeply into the theoretical grounding of hope and equality and been a role model of the engaged intellectual for whom theory and practice do not exist on separate ontological planes. I am in their debt.
I am grateful to my wider network of fellow and sister sustainability scholars who have read parts or all of this manuscript and have been gracious in sharing their ideas and criticisms on how it could be improved. A special note of thanks to Joan Fitzgerald and Mark Roseland for reviewing this book for publication, and to Kent Portney, whose sharp critique of parts of the work has made it a better contribution to the literature than it would have been without his unsparing criticisms. I am pleased that the general approach to urban sustainability and some of its grounding concepts have found converging theoretical perspectives and operational application in Bill Rees and Mathis Wackernagel’s writing and that of one of Bill’s last PhDs, Jennie Moore. To Matthew McCauley and Victor Shanker of the firm GeoSim Cities, I wish to offer my thanks for allowing me to work with them in Chattanooga, Edmonton, Calgary, Vancouver, and Seattle, which in the process of promoting their powerful 3D visualization software and services, permitted me to develop high-level contacts in planning agencies in Canada and the United States and to gain insight into the future intersection of 3D urban visualization and the making of sustainable cities. Former students, Christopher Rice and Hugh Bartling, have ventured into new terrain after exploring urban sustainability sites in their dissertations and subsequent journal articles informed by their tutelage from Herb Reid, Dick Levine, and myself. And the list goes on to include: Jared Flanery, Margaret Stiles, Tyler Hess, Jordan Leising, and, in particular, Laura Frye-Levine. Each of these undergraduates and graduate students have been involved in my sustainability courses and each has taken them as a waystation in their education and struggle for a social justice, sustainable cities, and a more peaceful community of nations.

In addition, I (Lancaster) am most grateful to Ernie Yanarella, a colleague who today serves as my co-author, but who also served first as my committee chair and mentor, and who remains my close friend; special thanks go to Dick Levine and his sustainability insights of the ‘built’ world that prompted the Certified General Appraiser in me to continue my research beyond sustainability theory. None, however, was more crucial throughout this process than my wife Debra Faith, and my children, Emerson Bradford, Elizabeth Benetta, Emily Beatrice, my daughter-in-law Rebecca Ruth, and of course my one of a kind granddaughter, Rose Elaine. Their love, support, prompting, and patience were critical for me to achieve a goal I often felt was unattainable.

We also owe much to Lynne Glasner, who worked to convert our sometimes stilted academic prose to clearer, more readable form without compromising the arguments and evidence we brought to bear in writing these cases studies and honing our critical theoretical analysis. Despite breaking her pinkie finger part way through the copyediting process, she soldiered on and presented us with a completed manuscript and set of references whose clarity and accuracy had eluded our original work and talents.
Finally, to Jeff Young, founder and editor of BrownWalker Press, we wish to express our gratitude for publishing this work. His publishing house has grown to become a significant force in academic book publishing and we are pleased to be academic partners in contributing to his publishing line and vision.

In dedicating this book to our families, we also wish to acknowledge their engagement in our life’s work as academic professionals and political actors. They are among the voices of the present and for a future they are helping to shape and whose lives in turn are being impacted. That they give good weight to the small and large ways they affect those around them and at a distance is testimony to their work in the present and hope in the future for loving, healthy, and harmonious families and just and sustainable communities. Thank you.

Finally, we express our appreciation to the following journals and editor for giving us permission to incorporate all or part of previously published journal articles:


INTRODUCTION

Amid the many huge problems to which the 21st century has fallen err, the flowering of sustainability organizations on local, regional, and global scales offers a ray of hope and a ready alternative to the pervasive political cynicism and cultural fatalism infecting diverse political and social arenas. The stirring words of Vandana Shiva, the can-do spirit of Ray Anderson, the acute analysis of Hazel Henderson, the blessed assurance of Paul Hawken, the eco-feminist novels of Ursula Le Guin, the techno-twit policy advice of Amory Lovins, the interdisciplinary research successes of Heidi Dumreicher, the planning genius of Jaime Lerner—these and so many less well-known sustainability advocates the world over—continue to light candles and build durable, resilient projects and programs to establish sustainability alternatives in the built and natural worlds. These voices resonate against the dystopian possibilities stemming from global warming, top-down globalization, peak oil, deep recessions, and social injustice stalking the new century.

Many points of entrée to overcoming these complex and interrelated global problems have been recommended by scholars and policy makers beginning in the last decade or so of the last century. As the proportions of the crisis that modern civilization is facing begin to settle into popular culture, as exhibited by the spate of apocalyptic films of the last decade, a powerful countertendency to global solutions involving transnational organizations and world summits has emerged: the growing sustainable city/community movement. Interest in the scale of the town or city is no doubt motivated by a strong sense of the pull of place and landscape, the desire for community, the need for roots, the security of a dense network of embedded social relationships, and the close association of personal identity and storied community life. These and other factors have surely prompted men and women of stout hearts and noble intentions in particular places to take up the cudgels in support of rebuilding cities along sustainable lines to reflect greater density and neighborliness and to harmonize that built environment of place and community with its natural surroundings and resources.

Guiding these many gatherings of people across the world dedicated to this long-term enterprise is perhaps, too, a vague sense that the city or city-region is the proper scale on which to initiate human effort and artifice to achieve resilience, robustness, and a measure of self-sufficiency—in short, urban or community sustainability—in the midst of the erosion of so many presumed verities and nostrums of technological optimism, economic developmentalism, hypermobility, and mass consumerism. The iconic symbol of the American Dream touted in the post-World War II era of seeming limit-
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less growth, prodigious science, human-centered expansion of possibility and opportunity now seems to have given way to a global nightmare of diminishing natural resources, overpopulation, worsening gaps in economic wealth and social well-being, and heightened personal insecurity and global dangers.

In this world turned upside down, the place where one lives and inhabits seems to be the place to begin with others to right the many things gone wrong. So a guidepost that has directed our theoretical and empirical work in studying towns and cities across the United States and Canada appears similarly to instruct and govern the actions of local sustainability organizations: the idea that the

city is at once the largest unit capable of initially addressing the many urban architectural, social, economic, political, natural resource, and environmental imbalances besetting the modern world and the smallest scale at which such problems can be meaningfully resolved in an integrated, holistic, and sustainable fashion. (Yanarella & Levine, 2011, chapter 1)

So much of the confusion about sustainability goes away if sustainability is anchored in the first place in a space and a place we call our city or town or community. Symptomatic of the slippage in a consensus meaning of sustainability is evidenced by corporate definitions of sustainability, which are shaped by their own sustainability practices. As many critics rightly point out, those programs and activities simply amount to greenwashing—that is, the practice of companies deceptively and disingenuously portraying their products and policies as eco-friendly or resource-efficient. More recently, the term sustainability has been supplanted by green to denote products, building practices, public and private programs, consumer activities, and even lifestyles that are good for the environment and/or that cut down on the use of precious natural resources. And, in just the last couple of years, the notion of resilience has been put forward as a way of marginalizing sustainability as a policy goal in the face of mounting fears that climate change is unstoppable (Yanarella & Levine, 2014). Not only do these verbal dodges steer sustainability programs into politically and economically safer territory, they also marginalize or—worse—eliminate one of the core elements of sustainability: social equity. (See Yanarella, Levine, & Lancaster, 2009.)

Finally, in fostering human effort and energy in systems that operate either at the sub-urban or super-urban scales, so-called sustainable or green activities often steer enormous energy into practices that often fail to deliver what they promise in energy or other resource savings. For example, despite its widespread popularity across the United States and into Canada, Leadership in Energy and Environmental Design (LEED), an internationally known green building certification system, has funneled enormous amounts of government and private funding, enlisted the energies of sizable numbers of
construction-related experts, and drawn hundreds of thousands of homeowners into its fold, while mounting studies of the actual performance of LEED-certified homes and buildings have raised serious questions about the cost reductions and energy efficiencies of such constructions in comparison to conventionally built dwellings and buildings.

Getting from Here to There—the Ultimate Question
If the place one lives is the site where sustainability should begin, the driving question of any serious sustainability project or program is: How do you get there from here? Being able to get from here to there, according to students of politics, is what distinguishes serious political strategies from utopian projects. Indeed, many such students argue that not being able to get there from here is the defining characteristic of utopias! Before we can address that question in a preliminary fashion, we must tackle a host of other questions: What is sustainability and how do we approach defining its meaning and parameters? How do we study it? How should urban sustainability connect with global sustainability?

Defining Sustainability
Among serious-minded scholars and practitioners, the meaning and scope of sustainability begins with the sustainability tripod (or stool) or, as it has been alternately termed, the Triple Bottom Line (TBL). Here, sustainability is depicted either as a tripod or stool with three legs, or intersecting spheres shown as three overlapping circles (see Figure 0.1). In either case, the legs or circles represent ecological health, economic well-being, and social justice. Our inclination has been to innovate this figural representation of sustainability by adding another leg or circle to include a cultural leg or sphere. Sustainability advocates have frequently acknowledged that a cultural or intellectual paradigm shift is required for sustainability to become truly incorporated into everyday practices. This rationale for assimilating a cultural dimension into sustainability highlights the fact that aesthetic, ceremonial, and ritualistic components are necessary to root the assumptions and precepts of a new
cultural paradigm or worldview into the quotidian activities and experiences of the social body and the body politic.

This augmented understanding of sustainability underscores the critical nature of the environment, economy, equity, and everyday culture as four intertwined policy realms that must be addressed if sustainability is to be realized. Strong, as opposed to weak, sustainability also entails that environmental health, economic development (qua sustainable development), social equity, and sustainable cultural practices be pursued together, with recognition of their intertwined nature. Too often, green projects and programs neglect or pay only lip service to the integration of social equity into grounded policy. Similarly, the goal of strong sustainability is vitiated when the meaning of the various components of a sustainable policy framework are compromised by employing surrogates (e.g., substituting economic growth for economic development) that can be pursued in their own right and then balanced to make action unnecessary. In this example, damages to environmental and public health are attributed to what economists call negative externalities stemming from mere economic growth, which can be repaired by conventional environmental policies and social policies.

Perhaps a better way to represent sustainability is to embrace Levet’s interpretation, which sees sustainability on the model of Russian nested dolls, also called matryoshka dolls (see Figure 0.2). On this view, rather than
modeling sustainability after stools or tripods or intersecting spheres, it is imaged as a series of concentric circles, in which economy and then society are nested in a larger and more encompassing environmental or ecological circle. This Russian nesting doll model or metaphor has the virtue of accentuating the idea that the economic and societal spheres reside within the life-giving gifts and services of the ecosystem, not the other way round—that is, that the economic system is the all-embracing sphere.

A strong, vibrant, and compelling definition of sustainability has also been obscured and retarded by a minimalist definition that has become all but the mantra for enthusiastic local activists and well-meaning policy makers populating many ongoing sustainable city endeavors throughout North America. This definition, rendered in the famous Brundtland Commission report, *Our Common Future*, declares that sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987, p. 43). This rendering says little about the character of those needs of the present or the future, or the constituencies who may have to bear the costs of preserving those potentialities for meeting future needs, or possibly the technical or other means for alleviating those costs and sacrifices. Instead, it has largely served as a minimalist definition around which social consensus might coalesce to initiate such broadly based and loosely organized programs.

This augmented definition has also contributed to blurring a distinction that has proved crucial to clarifying a major issue in the dispute over sustainability—namely, the difference between growth and development. While some advocates of sustainability programs use the terms interchangeably, Daly and Cobb (1989, p. 71) have clarified the distinction by defining growth as “quantitative expansion in the scale of the physical dimensions of the economic system,” while defining development as “qualitative change of a physically nongrowing economic system in dynamic equilibrium with the environment.” Placing the economic system within a more encompassing ecological system, they argue that

by definition, the earth is not growing but developing. Any system of a finite and nongrowing earth must itself also eventually become nongrowing. Therefore, growth will become unsustainable eventually and the term “economic growth” would then be self-contradictory. But sustainable development does not become self-contradictory. (Daly & Cobb, pp. 71-72)

This argument against sustainable growth (whether interpreted as economic growth sustained indefinitely into the future or as economic growth counterbalanced by environmental protection or repair) is grounded in Daly and Cobb’s embrace of the reduced consumption approach over the substi-
tutability approach to sustainable development (Colgan, 1997) and their defense of strong sustainability over weak sustainability as the linchpin of sustainable development. Against the assumption of the human exceptionalist school (e.g., Julian Simon, 1983), which postulates the infinite replaceability of finite natural resources by humanly created substitutes, Daly and Cobb press their defense of strong sustainability by arguing that the latter requires “maintaining both humanly created and natural capital intact separately, on the assumption that they are complements rather than substitutes in most production functions” (p. 72).

Working from the idea that social sustainability can be discerned in part by understanding sustainable processes in natural settings, we have followed Michael Redclift (1987), who has shown how complex ecosystems, like tropical rainforests, achieve homeostatic balance, or what natural ecologists call climax systems of high diversity, large biomass, and high stability through protection from rapid change and “through shifts of energy flows away from production and towards the maintenance of the system itself” (Redclift, 1987, p. 18). By contrast, he notes, human settlements typically seek to stall such ecosystems in early stages of ecological succession, where the yield of products is high, but the stabilizing elements of organic matter and biomass fail to accumulate. High production within these ecosystems, then, comes at “the cost of confounding nature’s strategy of maximum protection or adaptation” (1987, p. 18). This image of ecological sustainability may be taken as an essential point of departure for a sophisticated understanding of strong social sustainability.

For the purposes of offering an alternative definition of sustainability, we wish to enumerate in truncated fashion an operational definition that flows from the work of strong sustainability advocates like Daly and Cobb and Redclift, which is elaborated in a previously published book titled, *The City as Fulcrum of Global Sustainability* (Yanarella & Levine, 2011), and which forms the theoretical and design foundations of this work. There, sustainability is defined as a “local, informed, participatory, balance-seeking process, operating within its Sustainable Area Budget, exporting no harmful imbalances beyond its territory or into the future, and in so doing opens spaces of opportunity and possibility” (p. xxiii). As the more lengthy iteration of the elements of this definition in the accompanying table reveals, this definition emphasizes the crucial role of democratic participation by citizens in the policy making process, the need for a sustainability yardstick, a strenuous policy commitment to preventing negative externalities of production processes or public policy activities being visited upon nonlocal populaces or future generations (see Table 0.1). A word of explanation on several of these features is in order. First, involvement of wide segments of citizen-stakeholders or their representatives in sustainability policy making is a core value of this understanding of sustainability. As policymaking has increasingly been taken over by corporate interests and technocratic elites and veiled from
Sustainability Defined

Sustainability is a local...: Sustainability needs a place to happen. Although problems aggregate and become manifest on a global scale (e.g., ozone depletion, global climate change), offenses to the environment are produced locally. When dealt with locally, where “local” means the city/region, the neutralization or reuse of all negative byproducts must be considered part of the price of doing business. The earlier history of our civilization is the history of city/regions—largely autonomous towns that gained virtually all of their material needs from their local countryside and had to maintain the quality of the countryside in order to sustain their way of life. From this perspective, sustainability can only happen at the scale of the city/region—the largest scale capable of addressing the many urban architectural, social, economic, political and other imbalances besetting the modern world and simultaneously the smallest scale at which such problems can be meaningfully resolved in an integrated and holistic fashion.

... informed...: In order to be able to maintain the quality and the productivity of the local region and its countryside one must understand the consequences of the metabolic activities occurring within the city/region. Earlier towns operating within a largely closed system received rather rapid feedback as to the consequences of their activities. Because almost all activities manifested locally, causes and effects related to those activities were quickly understood. When imbalances threatened the city/system, they were noted and adjusted locally. In the modern world there are effectively no local boundaries and positive activities at a small scale may well have negative consequences at larger scales. By using modern means, however, we gain powerful tools both to design and monitor major energy and material flows and to model the projected implications of different processes we might choose to include in our city/region.

... participatory...: Sustainability is a process by which a local community can decide how it will afford to live within its natural budget and the limits of its own creativity. Such a process starts with the principle that sustainability is nonnegotiable, where in principle everything else is negotiable. That means that all participants in the process must agree that the health, equity and viability of the city/system is the precondition for any other decision. Secondly, as the sustainability process proceeds, stakeholders increasingly realize that they share a common destiny and that significant synergies will result from their creative encounters and negotiations. Through many iterations, the city/region becomes understood more as an urban ecosystem and less as adversarial, zero-sum game. Eventually, the players become partners and more focused on building common wealth.

... balance-seeking process...: The problem with our existing economic system is that it has no built-in mechanism to insure its own long-term survival. It is not designed to pursue balance. As noted above, natural ecosystems in early stages of succession are also designed to maximize production at low levels of diversity, but as such systems mature, and organic material accumulates, the emphasis shifts away from production and toward maximizing diversity, resiliency and maintaining internal balances. This needs to be the model for human ecosystems.

... operating within a Sustainable Area Budget (SAB)... : In the past, nature was assumed to be so vast as to be able to comfortably absorb any and all offenses that humankind’s activities dumped upon it. It is now clear that we have long since exceeded many of nature’s capacities. The Sustainable Area Budget is our concept for the natural budget in land area, available for each city/region to support its way of life. A simple determination of the SAB for a city/region goes something like this: simply divide a country’s total land area by its population and multiply by the number of people in the city/region.

... exporting no problems beyond its territory or into the future...: The key idea here is that when the prior part of this definition is realized such a city/region will effectively export no problems beyond its territory or into the future. Even this circumstance is negotiable, given our Fifth Operating Principle for Sustainable Cities, which states that “imbalances are to be negotiated outward” meaning that in some cases an imbalance may be exported from the city/region, but only if its rebalancing can be accounted for by an agency beyond the scale of the city/region.

-Dumreicher, Levine, Yanarella and Radmard, 2000

Table 0.1: Operational Definition of Sustainability
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the eyes and ears of an increasingly manipulated and fragmented public by
corporate media outlets, a fealty to bringing back active citizen and stake-
holder participation is crucial to rehabilitating the democratic republican
tradition. If sustainability is the goal, revitalized local democratic policy
making is the means. In *The City as Fulcrum of Global Sustainability*, this demo-
cratic commitment takes the form of the Sustainable City Game (Yanarella &
Levine, 2011, Chapter 6).

Second, the Sustainable Area Budget (SAB) may be thought of as a
measuring rod or metric establishing the land budget of a particular city (or
region or state or nation). That is, it may be viewed as another more com-
prehensive way of looking at and addressing the problem of unsustainability.
Rees and Wackernagel (1997) have championed the notion of an ecological
footprint in the large and expanding literature on sustainability to illustrate
just how unsustainable the living practices of all highly industrialized nations
are. Less well known is their concept of a *fair Earthshare*, which provides a
rough calculation of the amount of land equivalent that each human being
rightfully may command and appropriate to live equitably among the world’s
population and the available resources on, in, and around the Earth. (For
recent work on the implementation of the fair Earthshare idea, see: Moore &
Rees, 2013; Rees & Moore, 2013.)

With this latter idea in mind, the preliminary formulation of the SAB
goes like this: If each city-region were to have a budget, a land-based budget,
from which to satisfy its needs now and into the future, then it would have a
clearer understanding of its resources and its limitations. With a fixed area
budget the citizen-stakeholders of a city-region would in principle be free to
negotiate their way of life within the limitations presented by their locale and
their own culture and creativity as long as they were not to export any harm-
ful imbalances beyond their SAB or into the future. Note that such a specifi-
cation has certain precursors or antecedents. For example, many of the
exemplars of true urbanity designated by Lewis Mumford in his monumental
work, *The City in History* (1961)—for example, the Greek polis and the Italian
medieval hill town—operated historically within the limits of nature’s bounty
and in a humanly scaled manner, except for cases in which greed, jealousy,
and thoughtlessness prompted them to impinge upon the appropriated land
budget of neighboring or more distant cities.

Calculation of a Sustainable Area Budget for a town or city is relatively
simple in principle, though difficult in practice. Discounting the likely effects
of certain environmental variables (e.g., the long-term impact of global
warming, acid rain, and other forms of environmental pollution), the land
area of the Earth and each region on it is fixed. As Rees & Wackernagel
(1998) have demonstrated, that land area can be converted into a common
measure of appropriated land. Thus, the land budget of a city-region would
be the same fraction of its country’s total land area as its population is a
fraction of the country’s total population. This means that each resident of a
country carries a claim to the balancing potential of his/her fraction of the country’s land area divided by its population. Putting aside the many questions and issues that would arrive from a practical calculation of a city or city-region’s SAB, if we were able to agree on such a land-based budget, it should be possible to establish a calculable and relatively precise yardstick with which to conduct a local sustainability process.

While there are empirical dimensions to this way of tackling sustainability, the approach to understanding sustainability and by implication pursuing it is normative and critical in orientation. By contrast, some students of urban sustainability, particularly political scientist Kent Portney, have chosen an empirical-constructivist tack. In his book, *Taking Sustainable Cities Seriously: Economic Development, the Environment, and Quality of Life in American Cities* (2003), Portney adopts an approach to defining urban sustainability that involves what might be called the two-path approach. He begins with a careful catalogue of the evolution of thinking about sustainability that touches on the difficult and slippery concept of “carrying capacity“ and then couples this concept with the notion that current anthropogenic activity on the Earth is unsustainable. He further acknowledges that rapid and unchecked economic growth would seem to impose a heavy, even extreme, burden on the Earth’s carrying capacity. Ultimately, Portney embraces a version of the Brundtland Commission’s definition of sustainability that involves “finding ways to promote growth that are not at the expense of the environment, and that do not undermine future generations,” (Portney 2003, p. 7), what he calls “environmentally sensitive economic growth” (2003, p. 9). That places his substantive understanding of sustainability into the category of weak sustainability, summarized in our Urban Sustainability Rubric (see Table 0.2).

Portney’s book, however, is not really a discourse on sustainability as much as it is a study that involves assessing how seriously cities take sustainability through “the working definitions of sustainability that cities develop themselves” (2003, p. 9). To perform this task, he begins by choosing a sample of American communities (24 in number, from the universe of all possible candidates) with functioning sustainable city programs. Then he identifies from a review of those U.S. cities a comprehensive list of sustainability measures or indicators that are being pursued by one or more of the targeted communities. With these data, Portney calculates how many of these measures or indicators are being used by each city. Based upon these numbers, he then rank orders these cities from 1 (using the most indicators) to 24 (using the fewest indicators).

The constructivist nature of this methodology for defining sustainability resides in the fact that the researcher himself invests no substantive meaning into the concept of urban sustainability. Rather, its meaning is constructed
**Table 0.2: An Urban Sustainability Rubric**

<table>
<thead>
<tr>
<th>Level</th>
<th>Characteristic/Prerequisite</th>
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<tbody>
<tr>
<td>0. Environmentalism</td>
<td>Billetes widthness and full environment documentation as “environment”&lt;br&gt;Understand the relationship between economic growth and environment as a matter of balance or repair&lt;br&gt;Receives economic-environmental rebalancing or mitigation through government regulation and bureaucratically mandated standards or market mechanisms; involves purchase of pollution credits</td>
</tr>
<tr>
<td>1. Smart growth</td>
<td>Rejects no-growth and controlled growth urban planning while seeking smart alternatives to urban sprawl&lt;br&gt;Recognizes the need to curb economic growth and commercial/residential growth&lt;br&gt;Advances policies to alleviate adverse consequences of uncontrolled growth intended to elevate overall quality of life&lt;br&gt;Pursues adoption of smart planning through neo-traditional neighborhood design; high-density downtown commercial and residential construction; mixed-use, high-density commercial conduits to mass transit and walking; PDR and TDR agreements&lt;br&gt;Focuses on only one of three legs of sustainability tripod</td>
</tr>
<tr>
<td>2. Green products, techniques, practices, policies</td>
<td>Focuses on individual devices, products, indicators, practices, buildings&lt;br&gt;Engages in “pick the low-hanging fruit” practices - i.e., individual changes and reforms that make world less unsustainable&lt;br&gt;Employs itself within the political realm as conventional, “pragmatic realist” and reformist policies and actions&lt;br&gt;Defines success in terms of indefinite progress through incremental improvements</td>
</tr>
<tr>
<td>3. Weak sustainability</td>
<td>Embraces rhetoric of Bundeslander Commission definition of sustainable development&lt;br&gt;Identifies sustainability as a never-ending pathway pursued through sustainability indicators marking progress toward an ambiguous, unarticulated goal&lt;br&gt;Insofar as the goal of sustainability is operationalized, it is treated in terms of the three-legged table metaphor: economic wellbeing, environmental health, and social equity&lt;br&gt;Retains the practice in policy making of separating economic “development” (growth) and environmental protection through practices intended to mitigate the negative consequences of the former upon the latter</td>
</tr>
<tr>
<td>4. Transitional sustainability</td>
<td>Through adoption of LEED certification standards, promotes a whole-building approach to sustainability by recognizing performance in five areas: sustainable site development, water savings, energy efficiency, materials selection, indoor environmental quality&lt;br&gt;Pursues economic growth (deemed necessary) through urban growth and planning mechanisms that seek to combine good urban design undertaken by eco-sustainability subsidies negotiated with real developers to incorporate into building, neighborhood projects, sustainability-oriented design, and other practices&lt;br&gt;Negotiates revenue sharing and other policy practices within a regional framework that mitigates spillover tendencies from towns and cities adjacent to the urban growth boundary; teaches surrounding communities the benefits of moderate sustainability</td>
</tr>
<tr>
<td>5. Strong sustainability</td>
<td>Understands that growth (quantitative increase) is not equivalent to development (qualitative improvement)&lt;br&gt;Works from the five operating principles of sustainability&lt;br&gt;Recognizes the basic unit and minimum scale of sustainability as the city region&lt;br&gt;Aligns sustainability as a local, informed, balance-seeking process, operating within its sustainable area budget and by so doing, exports no negative imbalances beyond its budgeted territory or into the future, thus opening spaces of possibility and opportunity&lt;br&gt;Seeks to generate local/regional sustainability policy making metaphorically around the modeling of a sustainability game involving multiple scenario building as the driving process for generating sustainable solutions to urban development, land use, site selection, etc.</td>
</tr>
<tr>
<td>6. Existentially realized strong sustainability</td>
<td>Fosters an urban regime (or controlled growth coalition) organized around a local policy agenda embracing strong sustainability and its political requirements&lt;br&gt;Establishes agricultural partnership employing sustainability-guided farm practices to provide essential food to community&lt;br&gt;While trading for critical non-locally producible resources and products, effectively decouples from globalization processes that would colonize the locale and integrate it into dependent commercial relations&lt;br&gt;Institutionalizes a planning system that includes a stockholder driven and collaborative multi-scenario building process that feeds into and complements representative democratic institutions (discuss democracy and representative democracy)</td>
</tr>
</tbody>
</table>
from the second-order interpretations of sustainability that are derived from the determinations made by public authorities in city government involved in policy making who, in turn, may have derived their reconstructions of sustainability measures or indicators from citizens who participated in visioning meetings or community workshops set up by elected officials, appointed officials, or civil servants for consultative purposes.

On balance, Portney’s *Taking Sustainability Seriously* is a serious and in many places insightful book about urban sustainability. Our point, however, is that his understanding of urban sustainability (a type of weak sustainability with which we disagree) is secondary to the perceptions of city officials and planners in charge of these activities and the yardsticks that they attribute to sustainability, allowing him to place these 24 cities on a sustainability index or ranking. We wish to acknowledge that in the second, expanded edition of his book (Portney, 2013) he incorporates new modeling techniques to explain why some cities are leaders in this continuing urban movement while updating his original qualitative case studies. Still, this more sophisticated qualitative/quantitative treatment stands in contrast with both this present study’s interpretation of sustainability as strong sustainability and its normative-critical approach to evaluating actually existing sustainable city case studies featured in this book.

**Politics, Power, and Political Strategy: Foundations for Getting from Here to There**

This book seeks to take the study of sustainable cities into a realm of analysis and critique that has not been previously investigated in any explicit and systematic manner: the sphere of power and politics. Using detailed case studies of selected urban sustainability programs—some stillborn or short-lived, others celebrated, still others most promising—we will focus on the political agencies shaping them and the structural elements either impeding or facilitating these efforts to build sustainable cities. To accomplish this task, we plan to utilize three theories or models of urban power to explore the dynamics of power and politics to better understand these cases.

**Theories of Power and Politics**

Social scientists have developed myriad theoretical perspectives to explain the origins, use, and abuse of power in local, national, and global settings. At least since Floyd Hunter’s celebrated and controversial book, *Community Power Structure* (1953), grounded in reputational analysis, students of urban sociology and politics have sought reliable and persuasive methodological tools to uncover the political workings of urban governance. These theories have been derived from public choice theory, growth machine or growth coalition theory, urban regime theory, and Marxist urban theory (including hegemonic and structural variants). Our choice for lending insight into key dynamics and developments in sustainability in North American cities is three-fold:
GETTING FROM HERE TO THERE?

Molotch and Logan’s growth machine theory, Stone’s urban regime theory, and neo-Gramscian hegemonic theory. We do so because we believe advocates of these three theoretical representatives have maintained a continuing dialogue with one another that has generated a kind of productive intellectual tension in arguing about the comparative value and virtues of each. Simultaneously, both theoretical elaborations and empirical studies involving these theoretical frameworks have highlighted both theoretical convergences and normative differences that illuminate some weighty issues for the study of the proliferating phenomenon of sustainable cities.

Growth Machine or Coalition Theory

The study of the “city as growth machine” was more-or-less inaugurated by Harvey Molotch in his now-celebrated journal article (1976). As Gendron and Domhoff (2008) point out, growth machine or growth coalition theory “was first proposed in an attempt to connect traditional urban sociology’s interest in markets, land use, and neighborhoods with the focus on power and hierarchy in the community power structure literature” (2008, p. 7). Its central premise is that land use is the central focus of urban politics. According to growth machine theorists, at the heart of the coalition that drives urban politics and governance is a set of mostly local players who loosely coalesce around their predominant interest in land development and allied players who support them.

Among the key members of the growth coalition are growth machine allies—rentiers; the development community (land developers; financiers; construction companies; and planning, architecture, and real estate professionals); local media, energy, and service industries; and other place-based agencies and interests (colleges and universities, cultural institutions, professional sports clubs, labor unions, and self-employed and small retailers). It is these individuals, institutions, and interests who perceive land in terms of its exchange value—roughly, its cash value or its worth to others measured in monetary terms. By contrast, adversaries of the growth coalition are those who treat land in different terms—that is, in terms of its use value, or generally as its intrinsic value with respect to life. So, for example, to the owner of a family farm that has been passed down from family member to family member for generations, the farmland on which a large reservoir of oil has been discovered may be seen as priceless because its inherent use value for the family is tied to its identity and tradition as a functioning farm in spite of the fact that to a land developer or oil company its market value or exchange value is worth $12 million because its yield in oil is potentially valued at much more. Such adversaries of the growth coalition include: those who champion the use value of land over its exchange value (historic preservationists, local and regional environment groups, small farmers, sometimes horse farm owners, or other elements of a local or regional anti-growth movement). Given its emphases on land and locale, growth machine theorists and re-
searchers often associate their studies with the search for a political economy of place (Logan & Molotch, 1987).

A key aspect of growth coalition supporters is their advocacy of what they believe and seek to convince wider segments of the local community to be a truism: the idea (or really, ideology) of “value-free development“ (Logan & Molotch, 1987, pp. 32-33). Against those who embrace the notion of certain buildings, neighborhoods, parkland, or other undeveloped land within city boundaries in terms of use value, growth machine proponents defend the claim that all land and land uses have their price. Likewise, despite the rents and profits that they derive from treating land as simply a commodity whose value is determined on the open market, these growth-is-good advocates endeavor to sell their development approach to land by arguing that such growth is about jobs and job creation, not profits.

While growth coalition politics remains a strong force in the United States and Canada and in spite of the fact that the historical evolution of cities in both nations have favored nonpartisan elections and local government administration, the politics of the growth machine in recent decades have had to contend with local and regional challenges to its much vaunted position and status, as well as to its ideological legitimacy. The rise and dispersion of environmental consciousness and the emergence of sustainability groups and movements locally and around the world have posed problems for the growth machine. As towns and cities have increasingly succumbed to the hollowing out of downtowns, urban sprawl and suburbanization, edge cities, ecological unsustainability, and fiscal crises, new organizations and antigrowth forces have become influential in reshaping the political landscape along with more traditional use value advocacy groups involved in city politics. This new factor in urban politics has prompted scholars to study cites like Boulder, CO (Adams, 2006); San Francisco (DeLeon, 1992); Santa Cruz, CA (Gendron & Domhoff, 2009); and Santa Monica, CA (Kann, 1986), as well as other cities where antigrowth and controlled-growth alliances have coalesced. As a result, the growth machine literature has spawned an expanding typology or spectrum of coalitions from growth to antigrowth, surfacing and operating (at least temporarily) in progressive cities, often against institutional and cultural biases favoring the growth machine.

Besides the sustainability challenge, growth coalition theory has been criticized for being too localist in orientation and theorizing—that is, it gives short shrift to the global reach and economic power of transnational capital and its role in the politics of business and industrial recruitment to integrate local economies into a global marketplace and inject transnational capital players into growth coalition politics (Cochrane, 1999, pp. 109-124; Jessop, Peck, & Tickell, 1999, pp. 141-159; Lauria, 1999, pp 124-139). A refrain from the urban regime critique of growth machine theory is that growth coalition theorists and practitioners place disproportionate emphasis on a single facet of local economies and business concerns—land use and property develop-