Town, Gown and Place-Based Sustainability: Collaborating in the Shared Space

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Introduction

By the end of 2011, the Arbor Day Foundation had recognized 115 universities and colleges and more than 3,400 cities as meeting the standards of the “Tree Campus USA” and “Tree City USA” designations, respectively.1 The designations are in recognition of “excellence in . . . tree management . . . and community involvement.”2 The number of campuses and cities seeking these designations indicates a trend in higher education and municipal governance gravitating toward a shared vision of sustainability. While Tree Campus USA and Tree City USA are distinct programs, local governments hosting tree-friendly campuses derive substantial economic, environmental, and even psychological benefits from tree-friendly universities, and vice versa.3 For example, universities seeking the Tree Campus USA designation must show how their efforts are integrated with the community’s. They must convene a Campus Tree Advisory Committee, which includes community members, and they must engage the student population with community tree projects.4 With local governments struggling to meet budgets and maintain a minimum level of services, higher education strategies that enable local participation, such as those advanced by Tree Campus USA, can have a significant and positive impact on a community’s sustainable impact.

The Tree Campus USA and Tree City USA designations are only one example of the far-reaching and diverse positive, sustainable impacts town and gown can have on each other. Due to the circumstances of shared space, town and gown are joined in a symbiotic relationship.

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that involves direct and indirect, and intentional and unintentional impacts on each other. Higher education institutions and cities contribute enormously to advancing common goals, including those implicating the social, economic, and physical conditions. Universities, for example, gather workforce opportunities, exercise immense purchasing power, and exhibit a capacity for innovation that may benefit communities. University leadership in sustainability has been identified as a relevant and important factor in gauging “climate-ready” cities. Further, several aspects of higher education can be assets to local governments, particularly if treated as such. Dedicated sustainability staff and sustainability coordinators are becoming commonplace among universities, and universities are preparing students for entry into an intensely competitive market that is beginning to show support for sustainability training. In addition, universities are uniquely situated to exert a profound influence on cultural norms and beliefs, both for the present and into the future. As such, universities are one of local governments’ most productive and important assets in confronting the environmental, social, and economic perils they face.

Conversely, higher education institutions may exacerbate the negative environmental, social, and economic conditions facing cities, and vice versa. For example, universities may create public service demands, maintain nuisances, generate significant traffic, create housing and employment demands, and cause race and class distinctions. Further, poorly designed and situated university buildings can degrade air quality, negatively impact biodiversity, and increase local costs for services, such as water and waste, to the detriment of the city and university. Less-obvious and less-explored examples where cities and universities indirectly impact one another can include the local crime rate and quality of elementary education, and their impact on faculty retention and student admission.

Although the foundation of this chapter lies in the legal strategies used to maximize the beneficial relationships between town and gown, there are few legal parameters that precisely govern campus and local government sustainability. Many of the laws and practices governing universities are irrelevant to local governments and many of the laws and practices governing cities are irrelevant to universities. Nevertheless, the more fundamental community-building and sustainable impacts stemming from each entity’s actions are critical to the operation of town and gown.

Many opportune moments for community-building and for positively impacting one another arise due to the sharing of space between town and gown. The sharing of space presents invaluable chances for productive collaboration by two mutually compatible institutions. This chapter refers to these moments as “place-based collaborations,” as they stem from the physical placement of a university in a city. The first section of this chapter introduces the opportunities that are central to the educational mission of the institution, including the more progressive notion that pedagogical strategies for engaged learning, combined with the
introduction of sustainability in the curriculum, might serve as a driver for local, nested sustainable practices. The next section considers the special relationship that towns may foster in their nested universities by recognizing shared space. The final section illustrates interaction and collaboration possibilities that build on the intellectual capital occurring in educational institutions.

**Place-Based Learning Experience**

One area with great potential to mutually enhance sustainability in town and gown concerns the development of university curriculum. Many opportune learning moments for both town and gown stem from their place-based relationship. While difficult to achieve, it is not hard to imagine a symbiotic relationship in which (1) the town benefits from a highly motivated and intelligent student body and faculty, (2) the students benefit from a unique, engaged, active, and experiential education experience, and (3) the university benefits from improved environmental and social conditions and community relations.

Enhancing collaborative learning experiences relevant to sustainability promotes the long-standing desire that institutions of higher education take responsibility for producing an environmentally literate population. In the Belgrade Charter and the Tbilisi Declaration, the United Nations established the need to “develop a world population that is aware of, and concerned about, the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations, and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones.” Environmental literacy helps to establish the principles of civic responsibility, communal needs and resources, and the relevance of the vocabularies of ecology to the well-being of society. Because environmental literacy has been identified as a necessity to achieve sustainable communities, institutions of higher education play a vital role in the march toward sustainability.

The areas in which town and gown may collaborate to enhance environmental literacy are diverse and plentiful. Sustainability, which offers a framework for directing governance activities in a direction that serves the “triple-bottom line” of environmental, economic, and social well-being, has become more than a curricular catch-phrase among institutions of higher education. Sustainable practices pervade curricular and operational planning, as well as the character of many institutions across the nation. Groundwork for reducing the university carbon footprint and improving the sustainability of the educational process might include course coverage of environmental literacy, sustainability research, efficiency in campus operations, student exposure to sustainable practices, and the formal adoption of sustainability objectives in school administration.

A number of institutions of higher education have adopted plans and policies that support the sustainability agenda, both in terms of visioning sustainability and training students with
the skills to implement that future. For instance, in a partnership with Forever Green Training and Sustainable Design, Molloy College plans to offer training programs in green building and design to prepare students for LEED accreditation. The University of California, Davis Extension has launched a sustainability studies certificate program to train students in green building, sustainable design, and energy. The College of the Canyons plans to offer courses to support a solar energy technician certificate program. The University of Toledo, Ohio, recently created a new school that will teach students about “green” chemistry and engineering that will enable students to think about product design with renewable raw materials and environmentally safe processes.

Many universities have grasped the potential of incorporating local governance and local government conditions into their sustainability curricula. At least in part, local circumstances have served as drivers for curricular development, as many cities overflow with the types of challenges that future professionals must know how to solve, and serve as useful, concrete examples for experiential learning opportunities. In the meantime, the ideas behind sustainable implementation strategies are rapidly developing, particularly as the strategies relate to local values, priorities, and needs. This provides a ripe opportunity for universities to reach out to local governments and incorporate engaged learning into their classes. Universities can use the town as a model for classroom exploration, take advantage of the town as a constructive mechanism for conveying the reality and relevance of the curriculum, and to insure learning that is engaged in communities.

At a recent conference at Pace University Law School, the authors of this chapter presented courses offered at Albany Law School and Drake University Law School that use the town as the text. Our courses were intended to capitalize on the diverse, important, and interesting issues in our communities. Through a pedagogy that includes problem-based and experiential learning, we explored sustainability in a manner that went beyond merely thinking and consideration of the issues. Students in these courses were required to connect to their communities as they likely had never done before. Our courses were made possible by the willingness of neighborly and visionary members of our community, who understood the benefits to town and gown by attempting these endeavors.

Another accomplished and highly developed example can be found in the CityStudio program in Vancouver, British Colombia. CityStudio is a collaborative effort between the City of Vancouver and the city’s six public universities and colleges (see fig. 17.1). Although the goal of the program is lofty—“The project aims to establish a unique, innovative inter-institutional and collaborative relationship between the six post-secondary institutions and the City of Vancouver, emphasizing sustainability leadership, social enterprise, education of new change managers and the development of green business”—the participants have set a measurable goal of assisting Vancouver to become the greenest city in the world by 2020.
CityStudio bonds students, faculty, experts, and city officials to the common vision of local and effective sustainability implementation in ten specific, city-identified project areas. Over the course of the next year, CityStudio has agreed to contribute more than 25,000 student hours to implementing these ten sustainable strategies. The designers of CityStudio acknowledge the rate at which sustainability is changing and note that "over the next 10 years, as [CityStudio] exchange[s] learning between cities, [it] aim[s] to accelerate sustainability with a significant mobilization of learning and action." In the meantime, the benefits flowing from collaborative
efforts between town and gown will also extend to the university. Vancouver and its six public universities and colleges, for example, will benefit in the form of reduced operational costs, increased attractiveness to prospective students and citizens, and a healthier environment.

In like manner, the University of Oregon has developed the Sustainable Cities Initiative (SCI) as “a cross-disciplinary organization . . . that seeks to promote education, service, public outreach and research on the design and development of sustainable cities.” The program involves the efforts of hundreds of students and approximately twenty faculty members in crafting sustainable solutions to partner cities and their identified social, economic, architectural, and transportation challenges. Gresham, Oregon, served as the pilot city during the 2009–2010 academic year, followed by the participation of Salem, Oregon, during 2010–2011. SCI chose to work with nearby Springfield, Oregon, as its partner city of the 2011–2012 academic year. A brief perusal of the breadth, inclusiveness, and energy of the SCI program suggests success in facilitating effective implementation of sustainability goals. For instance, students in the graduate-level Strategic Communication program were asked whether sustainability initiatives in the City of Salem were sufficiently visible. The students developed several communication plans designed to encourage two-way communication between the city and its residents. Students in other departments studied and made recommendations to improve congestion, park connectivity, urban design and redevelopment, industrial ecology, and cultural mapping for the city.

These projects begin to highlight some of the mechanisms and methods for incorporating learning opportunities into the collaborative process between town and gown. While more empirical data would assist in identifying key areas for town and gown collaboration on issues of sustainability through the curriculum, these examples illustrate how utilizing the university’s research capabilities and human capital can help enhance local government sustainability and provide invaluable learning opportunities for students. Further, city employees have invaluable institutional knowledge and a plethora of challenges. Bringing these two separate knowledge bases together could provide unique learning experiences and could more intelligently and efficiently address issues relevant to sustainability.

Place-Based Sharing in the Physical and Natural Environment

The external implications stemming from the university’s physical presence in a shared space creates numerous opportunities for town and gown to collaborate on diverse topics relevant to sustainability, such as building facilities, transportation, and food production. This is particularly true when the university accounts for a large percentage of the city’s population and consumes a significant amount of the community’s resources. This section explores the benefits and options of town and gown collaboration on issues relevant to the physical presence and operations of the university, including energy, water, and waste disposal.
Often most important factors contributing to the sustainable external effects town and gown have on each other are the intensity and scale of the collaboration. On one end of the collaboration spectrum, town and gown can become fully immersed in a true joint collaboration in which they recognize and account for the full extent of their operations. In these collaborations, the parties realize that they are deeply intertwined on matters concerning the physical landscape. Based on this realization, they integrate efforts to simultaneously improve the physical operations of both town and gown. At the opposite end of the spectrum, collaboration can occur with very low levels of intensity, in which one entity internalizes the lion’s share of the cost to improve the physical conditions in both town and gown, while both parties share the benefit. Despite the inefficiencies of acting irrespective of one another, town and gown often act independently on issues relevant to sustainability in the physical space.

An example of town and gown collaborating at a high level of intensity and pertaining to physical operations is occurring between the City of Iowa City and the University of Iowa. Modeled after similar programs at other universities, the partnership, known as UniverCity (see fig. 17.2), is a cooperative effort by the city, the university, and several supporting partners to preserve the character of the residential neighborhoods near campus and to “recognize” that the physical occupation of the neighborhood is a “valuable resource for the University” and the city.

The program is cooperatively funded and contains three core components: (1) it provides down-payment assistance and low-interest home improvement loans to university employees who seek to live within walking distance of the university; (2) it assists in funding home improvements, “including home insulation and energy-efficient improvements, such as Energy Star home heating or air conditioning or window and door replacement”; and (3) it establishes a preservation program, whereby current owners wishing to preserve the stability of the neighborhood may enter into an agreement with UniverCity that vests UniverCity the option to buy the real estate when the homeowner is ready to sell.

With 30,000 full-time students, 1,700 faculty, and 13,000 staff, the university places great demand on the city’s housing stock (along with transportation, parking, and other city services). This program recognizes these demands, particularly as they relate to housing, and attempts to address the challenges by encouraging individuals associated with the university to remain in the town. It incentivizes redevelopment and improves the urban landscape, as opposed to encouraging sprawl beyond the local government’s borders. The city realizes the...
benefit of an improved housing stock, increased property tax base, and stabilized neighborhoods through an increase the number of owner-occupied units. By providing employee incentives to live near their work, the city is able to reduce the number of vehicular miles associated with travel, reducing greenhouse gas emissions, to the benefit of town and gown. The university thereby benefits as an employer by being able to offer incentives to current and future university employees, improving its ability to attract students, faculty, and staff.

While it may be desirable for cities and their partner institutions to undertake such an expansive program, the reality is that many cities and universities may not have the initial capital to coordinate such a large effort. This is not to say, however, that lower levels of collaboration are ineffective in the development and implementation of sustainable practices. Lower levels of collaboration may be more desirable, as they may reduce the transactional costs in forming the collaboration and may open up a dialog between town and gown that grows over time.

Programs resulting from lower levels of collaboration typically focus on a specified purpose. For example, since 2007, the Des Moines Area Regional Transit Authority has allowed Drake University students, faculty, staff, and retirees to ride metro-area buses for free. Each year, hundreds of individuals associated with Drake ride the buses, "reduc[ing] the demand for parking . . . [and] the cost of commuting." In addition, it "helps protect the environment and relieves traffic congestion," while helping the university to "recruit and retain students and employees." The benefits of the partnership extend to both parties: Drake is able to offer its students, faculty, and staff low-cost efficient transportation, thereby increasing the attractiveness of their institution, while the City of Des Moines is able to reduce traffic congestion, energy consumption, and the amount of greenhouse gas associated with travel.

Even less-intense collaboration can still benefit the sustainability of both town and gown. For example, simply providing legal or financial support to the other’s plans can greatly facilitate sustainability. Winona State University in Winona, Minnesota, plans to build a sustainable theme house to be used as an educational piece and to potentially serve as a model for the future. In July 2011, the Winona Planning Commission voted to recommend the plan. The planning commission also recommended a zoning overlay that would allow additional sustainable construction in adjacent areas. "Most who spoke during the hearing said they supported the concept of academic theme houses, adding that the university may actually improve neighborhoods and adjacent property values by providing supervised and well-maintained student rentals." Here, the town is providing necessary support to encourage or, at least, remove obstacles to the university’s attempt to improve the sustainability of its physical presence.

Similarly, Paul Quinn College, a historically black college in Dallas, Texas, provides a good example of how town and gown can provide mild support to each other to increase sustainability. Paul Quinn was concerned that its Dallas community was underserved by grocery stores, thus contributing to poor nutrition and a lack of access to healthy foods. In response,
the college converted an unused football field into an organic farm to serve the college's needs. Hoping to go further, the college sought city assistance in luring a grocery store to the immediate area. While we were unable to confirm whether the city intends to support this initiative, the city's support through its land use and economic development tools would surely benefit town and gown.

At a minimum, town and gown should seek an open dialog and a sharing of information concerning facilities management. Simply inviting town to join gown's efforts to improve sustainability, and vice versa, can have discernible impact. Hence, when Philadelphia Mayor Michael Nutter created the City's Sustainability Advisory Board, he appointed the vice president of Facilities and Real Estate Services at the University of Pennsylvania in Philadelphia to serve as the co-chair. This provides an opportunity for key employees from town and gown to interact and find common ground for collaboration.

Even when town and gown act independently of each other on issues that arise in the physical space, they still have the opportunity to impact each other in a positive, sustainable manner. The relationship between the University of Michigan and the City of Ann Arbor is one example of a relationship that, despite a lack of collaboration, has had a positive sustainable impact on both the university and the city. In 2009, the university launched a university-wide commitment to sustainability with the implementation of "Planet Blue: The Sustainable Difference." The program was designed to measure and address the sustainability of campus operations. While the program can properly be classified as an independent university initiative, it has had a direct impact on the city's governmental operations, such as water provision. The university's water is supplied by the City of Ann Arbor and represents 21 percent of the total water distributed by the city. Through implementation of Planet Blue initiatives, the university was able to reduce their water usage by 3 percent. This reduction in the amount of water used on campus translates into a direct cost savings to the city, in the form of reduced water-treatment costs. In addition, conservation of water by the university will have a positive long-term impact on the environment, as the university’s daily water usage represents 1 percent of the total volume of the Huron River.

By seeking an open dialogue, towns are likely to find that the institution is willing to take a stake in the well-being of the community. For example, the location of university retail services often serves as a catalyst to private development. In August 2010, in an attempt to revitalize the downtown area of Lewisburg, Pennsylvania, Bucknell University relocated its bookstore to space formerly occupied by a hardware store. The project is intended to spur economic development in the area; by establishing an anchor store in the downtown area, organizers believe that other business will be more likely to develop in the area.

Conversely, when town and gown act independently of each other they may have an unsustainable impact. When a university maintains energy-inefficient buildings, poor water run-off
management, or lack of available transit options, or vacates a city, the physical effects can be enormous. Universities occupy significant quantities of physical space, in the form of buildings and housing. These structures are often not readily adaptable to use by other entities and uses and, therefore, when vacated, often sit dormant. A university vacating a city often has a deleterious effect on the local economy, including the loss of jobs. In May 2000, Bradford College graduated its last class. The 197-year-old liberal arts institution was forced to close when it became financially insolvent, leaving vacant the large second empire-, colonial-, and classical revival-style buildings. Many of these buildings remain vacant today, as they are not adaptable to alternative uses. At the time of its closing, Bradford had an annual budget close to $10 million dollars, employed thirty-three full-time professors and 133 staff, and enrolled 500 students, contributing significantly to the local economy.

The contents of this book indicate the breadth of possible impacts that universities and cities have on each other, based on their physical location, including impacts on housing, food production, biodiversity, education, energy, waste, water, and transportation, among others. The examples discussed in this chapter highlight the diverse levels of collaboration that can exist between town and gown, as well as the diverse context in which these collaborations arise to resolve challenges in economic development, housing, transportation, public safety, labor, land use, arts, and culture. Achieving physical sustainability in the physical landscape requires town and gown to understand the tools available, leverage their resources, and identify which issues can be best accomplished by collaboration.

Place-Based Engagement and Community Building

A third area of interest to improving the sustainability of town and gown concerns the manner in which educational institutions constitute local assets as accessible intellectual capital. An earlier section of this chapter addressed the environmental literacy objectives of higher education and their value in defining a sense of place, as well as physical presence of educational institutions as an issue of shared space. This section considers the ways in which educational institutions can be engaged as community builders.

In general, universities have served essential public roles through research and intellectual outputs. In complex and uncertain matters, such as carbon emissions and climate change, we depend on innovative research in universities to identify and predict future environmental conditions and challenges, and, as such, universities are partially funded by public investments in research. Often, students in higher education assume the leadership role in pursuing sustainability. For example, students at Yale University’s School of Management, San Diego University, University of Findlay, and Temple University all recently formed new student-run sustainability groups. The groups have taken on the role of enhancing sustainability as it relates to university practices, including reducing electricity use and organizing “zero-landfill” events.
governments can benefit from the strengths of educational institutions by adopting policies and forming partnerships that foster low-impact university activities, incorporating university-based projects and innovations into local land use planning schemes, encouraging interaction between community and the university populations, and, in some cases, even incentivizing research and learning in ways that result in direct benefits to the community.

In some instances, universities have incorporated community economics, practices, and norms into their operations. For instance, the University of Montana has received recognition for meeting sustainable business standards for food service observed by the Western Sustainability Exchange. The university purchased more than $612,000 of local food, and reduced food waste through a tray-less dining program, a food pulper, and a waste dehydration system. Appalachian State University’s Food Services initiated an “Always Local” list of products that can be found in its dining facilities, and identifies locally grown and produced items for students, faculty, and staff. These programs meet the sustainability demands of both university and local community, through investments in local food production and other local markets.

Towns are finding ways to employ the university’s intellectual capital in the community. For instance, the Town of Meredith, New Hampshire, has partnered with Plymouth State University to monitor water quality at several locations in the Waukewan watershed. In a more pervasive example, school groups at the University of Minnesota have partnered with neighborhood organizations to reduce waste and facilitate reuse. The Southeast Como Improvement Association of Minneapolis has formed a program called Como Green Village and the MIMO program. Through MIMO, which stands for “Move In/Move Out,” the SECIA seeks to reduce the massive amounts of curbside waste left after the regular moving cycles (such as the beginning and end of the academic school year) by promoting reuse. MIMO has received funding from the Minnesota Pollution Control Agency (MPCA), the McKnight Foundation, and the University of Minnesota.

In a third example, universities are frequently modeling progressive, sustainable practices in the community. The “Terps for Change” program at the University of Maryland has partnered community and urban agriculture groups to provide urban farming opportunities to student volunteers in Edmonston, Maryland. The Engaged Community Offshoots (ECO) project, known as “City Farms,” is an educational enterprise located inside the Capital Beltway in Maryland and is intended to provide local food opportunities and models for sustainable local farming at solar and geo-thermal powered locations in the community.

Long-term goals of ECO include regeneration and reuse of urban spaces for food production and local self-sufficiency. In furtherance of this goal, ECO has launched an Urban Farmer Training Program. ECO partnered with Cross Roads Farmers Market of Langley Park to train nine local residents and educate them on urban farm design, composting, vermiculture, hoophouse construction, crop diversity, beekeeping, renewable energy systems, and financial management.
In its first year of operation, the farm went “off the grid” with fifteen photovoltaic collectors, solar hot water, and shallow geothermal “earth tubes” for heating and cooling hoophouses. ECO now provides local food to restaurants, food co-ops, and farmer’s markets.68

Evidence of the impact of the ECO City Farms project is developing. However, ECO City Farms has partnered with Prince George’s Community College to create the Certificate in Commercial Urban Agriculture program. As the first of its kind in the region, the certificate program offers students an opportunity to gain comprehensive understanding of operating and managing an urban farm.69 The fact that the program has been incorporated into the curriculum suggests the soundness of recognizing the relevance of sustainability, to both educational and local priorities.

Local governments can depend on institutions of higher education to continue modeling, experimenting, and implementing. For instance, for their submission to the U.S. Department of Energy-sponsored 2011 Solar Decathlon, students at the New Jersey Institute of Technology and Rutgers University have built a one-story, 940-square foot modular house that features precast concrete walls, an inverted roof to catch water and sunlight, and the integration of solar and thermal technology into every exposed surface of the house.70 At the University of Delaware, students and faculty cooperated to improve classroom temperatures in designing and installing a green roof on campus.71 On a broader scale, San Diego State University has launched a program under the direction of Professor Sasidharan in which students—from a variety of disciplines—performed a sustainability assessment for the Dominican Republic. The students developed “a sustainability evaluation that will create benchmarks based on the United Nations Millennium Development Goals, and will be used to assess development in the region.”72

Universities also distribute the benefits of intellectual capital through their involvement in pursuing shared sustainability objectives. Consider the cooperative venture involving the University of Wisconsin’s (Madison) Center for Sustainability and the Global Environment, Madison Gas and Electric, and 1000 Friends of Wisconsin to create the online tool known as C02gether.73 The intent of this project is to simplify and make accessible the notion of carbon footprint, and by extension, encourage the communities and residents of South Central Wisconsin to reduce carbon footprints.74

The C02gether website offers information about the state’s contribution to climate change and suggests the likely impacts on common areas, such as outdoor recreation (fishing, skiing, and cold-weather tourism), water supplies, and cost of maintaining infrastructure.75 However, the main component in C02gether is the C02 calculator. For any home, a visitor to the website may provide the number of residents, the home’s monthly average energy use (kWh for Electricity; therms for Natural Gas), and monthly transportation usage (car use, bus trips, and air flights). The calculator provides an annual carbon footprint estimate, together with analytical tools that allow comparisons to the average persons in both Madison Wisconsin and the rest of the world. The website encourages and allows the website user to track carbon footprint
data over time to show how a user’s carbon footprint has been reduced. In addition, customers of Madison Gas and Electric may automatically track their energy data on the C02gether site. C02gether also shares these individual carbon footprints with other users, to encourage beneficial results. The website hosts discussion groups to exchange ideas and information on methods of reducing energy and transportation carbon emissions. Focused discussion groups have included Energy Saving Appliances, High-Efficiency Furnaces, Bicycling, and other changes in habits and lifestyle.

These examples highlight some key strategies to further relationships for building sustainable practices. Opening lines of communication would facilitate the identification of key areas of mutual interest for cooperation. Identifying complementary strengths would help lead to workable partnerships. Universities have research and innovation capital, while cities have institutional knowledge and legal mechanisms. Bringing these two separate knowledge bases together could more intelligently and more efficiently address issues relevant to sustainability.

**Conclusion**

Due to their proximity, universities and local governments impact each other. This chapter has explored the manner in which sustainability can pervade places where town and gown converge, with particular attention given to areas where cooperative resolutions can provide opportunities for both town and gown. This chapter is not intended to present a conflict-resolution model, but is, rather, a discussion of opportunities for nested sustainability and, where the otherwise-divergent missions of town and gown allow, and even compel, cross-pollination strategies designed to maximize the potential of these symbiotic moments. Of course, the range of possible areas of convergence is substantial, and local governments are obliged to consider the impacts of educational institutions on virtually every aspect of the local economy, environment, and community. As such, it is difficult to identify each and every area of possible convergence. This chapter, instead, identified and explored three areas of university operations that illustrate where sustainable strategies can benefit the interests of both town and gown. First, town and gown share space and place: local governments can tease sustainability from the physical occupation of the institution in the town, particularly through a cooperative effort to integrate land use and community concepts into university facilities management. Second, town and gown can exchange assets: local governments should foster and benefit from the university’s practices of community and private sector interaction in developing new, sustainable, and innovative technologies that can foster responsible economic development and uses of land. Third, town and gown share a sense of place: universities are leading a trend in innovative pedagogies that incorporate the community into the sustainability curriculum, where students learn about the effectiveness of particular sustainability strategies in particular communities, and the community grasps the linkages between the educational process and
resolving community challenges. Recognizing these three areas of convergence illustrates that institutions of higher education are assets for sustainability.

Notes

1. For a current tree campuses list, see Tree Campus USA Recognition Poster, ARBOR DAY FOUNDATION, available at http://www.arborday.org/programs/treecampususa/ (last visited November 11, 2011).

2. ARBOR DAY FOUNDATION, supra note 1.


4. ARBOR DAY FOUNDATION, supra note 1.

5. Anthony D. Cortese, The Critical Role of Higher Education is Creating a Sustainable Future, 31 PLANNING FOR HIGHER EDUC. 15, 19 (2003) (“Colleges and universities have an obligation to support local and regional communities, making every action lead to community improvement”).


10. See Cortese, supra note 5, at 16 (“Higher education institutions bear a profound, moral responsibility to increase the awareness, knowledge, skills, and values needed to create a just and sustainable future”).


15. NAT’L COMM’N ON THE ENV’T, CHOOSING A SUSTAINABLE FUTURE 33 (1993) (“Sustainable development depends not only on generating new and environmentally appropriate technologies getting prices right, governmental leadership, and stabilizing human population growth, but also on the evolution of
an environmentally literate citizenry”); Carmela Federico & Jaimie Cloud, Kindergarten Through Twelfth Grade Education: Fragmentary Progress in Equipping Students to Think and Act in a Challenging World, AGENDA FOR A SUSTAINABLE AMERICA 109, 109–110 (John Dernbach ed., 2009) (“Comprehensively reforming our educational system can redefine business as usual as shapes the knowledge, attitudes, and values of every student in United States”).


17. Interestingly, we have been unable to locate any reference to the relevance of tuition to sustainable education, although tuition clearly influences (if not dictates) access to institutions of higher learning.


The school presents an opportunity for the town to allow students to research and apply “[g]reen chemistry and biomimicry, which is green chemistry and engineering that uses natural raw materials and processes that mimic nature and produce zero waste” to real world situations. Meghan Cunningham, UT to Establish New School for Green Chemistry and Engineering, Univ. Of Toledo (July 11, 2011), available at http://utnews.utoledo.edu/index.php/07_11_2011/ut-to-establish-new-school-for-green-chemistry-and-engineering.


Id.

Id.

Id.


34. Calculating or placing a numeric value on the level of intensity is obviously difficult. For purposes of this chapter, however, it is more relevant to recognize the benefits of increasing the intensity of the collaboration to the benefit of both town and gown.


36. Id. at 1, 2 (while the University and City are the primary drivers, additional parties, including banks, realtors, and the school district, are part of the collaborative).

37. Id. at 4.

38. Id. at 3–4.

39. Id. at 1.

40. Id. at 5. [[Q: Please confirm edits in this note and next with author.]]

41. Id. at 9.

42. We find the challenges facing collaborations, including questions of efficiency, see, e.g., Mancur Olson, The Logic of Collective Action: Public Goods and the Theory of Groups (1965), to be less persuasive in this context. The relationship between town and gown creates a limited and clearly defined number of participants, who are confronting similar challenges, from similar perspectives, and seeking similar solutions.


44. Id.

45. Id.


47. Id.

48. Id.
49. The authors are aware of accreditation issues at Paul Quinn. The accreditation issues do not alter the point that Paul Quinn has requested mild support for adequate food options from Dallas, which would improve the health of the community.


53. Water Treatment: Distribution, CITY OF ANN ARBOR, available at http://www.a2gov.org/government/publicservices/water_treatment/Pages/pressuredistricts.aspx (last visited September 21, 2011); UNIV. OF MICHIGAN, supra note 52, at 13 (The percentage of water usage attributable to the University of Michigan was calculated by dividing the average daily demand of water, 14 million gallons, for the city of Ann Arbor by the average daily demand, 3 million gallons, for the University of Michigan).

54. UNIVERSITY OF MICHIGAN, supra note 52, at 13.

55. Id.


58. Id.

59. For instance, the Environmental Protection Agency has recently awarded $6.6 million to universities to study the role(s) of black carbon “global to local scale climate and air quality.” Award recipients include the University of Illinois at Urbana-Champaign; Carnegie Mellon University; University of California, Irvine; University of California, Riverside; University of Iowa; University of Washington; University of Wisconsin-Madison; and Rutgers University. See U.S. Env’t Prot. Agency, Black Carbons Role In Global To Local Scale Climate And Air Quality, available at http://cfpub.epa.gov/ncer_abstracts/index.cfm?fuseaction/recipients.display/raa_id/533/records_per_page/ALL (last visited Nov. 11, 2011).

students-at-the-university-of-findlay-focus-on-living-green-in-campus-houses.aspx; Ad Students’ Cam-

umt.edu/urelations/ForUM/archive/082211.aspx (last visited Sept. 17, 2011). {{Q: Please provide date
for original article in citation. Notes 61, 62, 63, 64, 65, 72}}


wwp.php (last visited Nov. 11, 2011).

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