

## ARTICLE

# Sustainability as Livability: Two Community Case Studies in East Texas

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“Livability” studies were conducted of two small cities in East Texas, analyzing them from the perspective of the “triple bottom line” (economics, environment, society) used in sustainability. Livability tends to be a lesser known, less threatening term for conservatives than sustainability. This paper provides background on the use of the term livability in place of sustainability, summarizes the two small city livability studies, and makes recommendations for future research.

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### Introduction

A new research center in sustainable community development began in 2012. The goal was to create a niche program different from other programs in the state, region, or nation. It would address sustainability mostly through the humanities and social sciences, rather than primarily through engineering or natural science disciplines.

The new research center published three anthologies on the human dimensions of sustainability. Named Center for a Livable World, “livability” was chosen as a less contentious term than sustainability, for the purpose of conducting livability

studies of small cities in politically conservative East Texas.

The idea was to assist smaller municipalities, typically with limited planning staff, in analyzing their city through the “triple bottom line” of livability/sustainability. The traditional economic development framework of attracting “big box” stores and large industries would shift to a focus on mutually-reinforcing economic, environmental, and social amenities (McMahon, 2011, 2014; Hammer & Pivo, 2017; Savitz, 2006).

The Center conducted livability studies of two small East Texas cities: Kilgore (pop. ~13,000, in 2012) and

Nacogdoches (pop. ~33,000, in 2014-17). This paper provides background on the use of the term livability in place of sustainability, summarizes the two small city livability studies, notes how livability, sustainability, and the triple bottom line were addressed, and addresses concerns for future Center work.

### Literature Review

The term sustainable development arose in the 1980s, primarily to insert environmental concerns into mainstream economic development. Commissioned by the United Nations, the Bruntland Report outlined a more expansive view of economic development that raised the profile of environmental (and social) issues to more equal status with economics. Concern for the future is also included in their definition summary: "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).

Critiques emerged from the academic and environmental communities, many bemoaning the retained "mantra" of economic growth within the Bruntland Report, a paradigm seen by many as fundamentally incompatible with environmental and social concerns (Daly & Townsend, 1993; Daly & Cobb, 1994; Campbell 1996).

Starting in the 1990s, businesses began adopting sustainability through the "triple bottom line," an idea that economic, environmental, and social values accrue beyond a purely financial bottom line

(Elkington 1998; Savitz 2006). Many firms have since conducted analyses and implemented sustainability measures such as reducing packaging to save costly waste and retrofitting buildings to save on costly energy bills (Hume, 2011).

Triple bottom line performance measures have recently entered the framework of municipal planning, including the comprehensive, 500-indicator STAR Community Rating System (Hammer & Pivo, 2017; STAR Communities, 2016). Examples of the triple bottom line approach also include planning by Salt Lake City in 2011 and the City of Boulder, Colorado in 2007 (The National Association of Regional Councils, 2012).

Triple bottom line efforts have also moved into economic development. Hammer and Pivo (2017) state: "Technically, TBL (triple bottom line) development refers to strong environmental, social, and economic performance, and sustainable development refers to environmental, social, and economic performance that can endure over time. The two terms are often used interchangeably..."

Case studies include a range of development initiatives and projects. One of the more relevant community economic development projects occurred in Newton, Iowa, a town of 15,500, located on Interstate 80 east of Des Moines. Newton lost 3,900 jobs from 2001-2006. An ad hoc council was created by local citizens, which held an open community forum attended by 300. They developed a shared vision and linked with seven counties in a regional development plan (Hammer et al., 2018).

Newton today has 1,100 new jobs, a 39% increase in hotel revenue and \$80 million dollars in new property assessed value. Mixing economic, environmental, and social values, the community diversified its economic base by recruiting companies to fit its renewable energy focus (wind and biodiesel) and by converting a warehouse into a community college training center. Local livability assets like preserved historic buildings, parks, and hike/bike trails helped recruit firms (Hammer et al., 2018).

Despite inclusion of business and economic development concerns, sustainability can still be a contentious word in regions dominated by conservative politics. Some sustainability projects have been deemed by citizens to be attacks on freedom, as part of a United Nations conspiracy to control local communities through government planning (Harman, 2015; Trapenberg Frick 2013; Trapenberg Frick et al. 2015).

### *Municipal sustainability issues in Texas*

A “Tea Party” uprising in the Dallas-Fort Worth area derailed a city’s sustainability plan after major citizen participation had already occurred in many meetings. Foss (2018) compared the failed sustainability effort with a more successful effort in a smaller Dallas-Fort Worth area city. The smaller city (similar to Cedar Hill, Texas) used ad hoc committee meetings with selected members. This combined with regular, open neighborhood outreach events not specifically focused on the plan.

The larger city (similar to McKinney, Texas) had more open public meetings

about its plan, which allowed co-opting by an opposition group. More recent planning documents there no longer contain terms related to sustainability. Foss (2018) suggests future efforts might try to legitimize some conservative concerns and tie the plan to quality of life, a term included in that city’s economic development efforts.

Whittemore (2013) observed “Tea Party” meetings in the Dallas-Fort Worth area, reviewed their out-of-state websites and literature, and interviewed local officials who interacted with them. Some actions planners can take to address conservative ideology include: 1) enhancing property rights (through flexible measures such as “up-zoning”); 2) emphasizing fiscal restraint as counter to subsidized sprawl (publicly funded utilities, roads, etc.); 3) critiquing “crony capitalism” when subsidies link with select developers; 4) including single-family homes when discussing increased housing choice; 5) downplaying non-local best practices and jargon; and 6) highlighting local business in redevelopment scenarios, perhaps through business improvement districts. Energy conservation and mobility choice were other areas of possible overlap.

Grodach (2011) studied fifteen cities in the Dallas-Fort Worth area to determine barriers to sustainability among *economic development* practitioners. The literature review stated, in general nationwide, that “while many cities pursue actions related to sustainability, these practices are often piecemeal, are not pervasive throughout city operations, and are subject to controversy and opposition.” Methods

included review of economic development documents and interviews with practitioners.

Conclusions highlighted six local barriers: 1) a conventional economic development mindset, which emphasizes economic growth over social and environmental concerns; 2) incentive-based practice, which uses the 4A/B economic development sales tax to drive industry toward lower density, peripheral areas; high energy-use industries can also get reduced utility contracts as incentives; 3) lack of resources and staff, leading to a focus on marketing and information rather than innovative initiatives; 4) economic development pursued in isolation from other associated topics such as workforce development; 5) inter-regional competition for jobs and investment, which reduces focus on regional environmental and social issues; and 6) a lack of coordinated regional planning to address such sustainability issues (Grodach, 2011).

Even in a more progressive Texas city like Austin, which implemented sustainability plans with economic and environmental benefits, results can be critiqued. Long (2016) notes that, after 1990s conflicts, the city's culture and leadership has rallied around principles of Smart Growth and won awards for environmental initiatives that help promote the city's image. However, citing critical geographer David Harvey (1996), both Long (2016) and Tretter (2013) note a lack of social equity in Austin resulting from sustainability initiatives, including "green" gentrification. Social equity and justice is often the lowest scoring component in

STAR Community ratings nationwide.

Holman (2014) reviewed sustainability in the context of planning in two larger East Texas cities, Tyler (~ 105,000 population) and Longview (~ 82,000 population), both located on Interstate 20 approximately 100 and 130 miles east of Dallas, respectively. Holman's objective was to analyze sustainability in the context of "hard-to-reach" places, not only away from the cutting edge of progressive planning but where citizens traditionally harbor deep suspicion of government regulation. She reviewed planning documents and meeting minutes and also conducted twenty-five interviews with planners, other municipal staff, active citizens, and long-term residents.

East Texas is a conservative region, illustrated by its Tyler-based congressional representative Louie Gohmert, who has won numerous terms in office. He is characterized as considerably farther to the right than typical conservatives (see GovTrack, 2018). While both Longview and Tyler have a historically oil-based economy, Longview to the east is more blue-collar, while Tyler is more white-collar. Thus, Longview tends to be more skeptical of regulation, while Tyler is more receptive to planning that can address its recent sprawl and related traffic issues (Holman, 2014).

Holman found that, even in more resistant Longview, elements of sustainability were initiated through a simple 2002 comprehensive plan that gave few specifics. Under that context, a historic preservation ordinance and tree ordinance were adopted without use of the term sustainability. The plan showed local

concern about recent piecemeal annexation and sprawl and initiated some receptivity to regulation (Holman, 2014).

Tyler has a long-range plan based on smart growth principles, *Tyler 21*, with a related Unitary Development Code that helped with more specific guidance. Planners and active citizens thought Tyler is a progressive city where residents understood the value of planning. Sustainability as a term was not used in *Tyler 21*, but related elements were adopted more than in Longview, including adaptive re-use, detailed landscape ordinances, and more historic preservation. A key reference for Holman was Tregoning et al. (2002), which cites the ability of smart growth concepts to appeal to “self-interest” rather than “self-sacrifice,” thus making it more palatable to conservatives. Smart growth is still a target for many, due to issues such as increased housing costs. “Quality of life” enhancement was another less controversial term used in both cities (Holman, 2014).

### *Municipal livability issues in Texas*

The term livability has been connected with sustainability. A literature review suggests that livability is less focused on environment and has a narrower strategic mission than sustainability (National Association of Regional Councils, 2012). As an example, the AARP Livability Index, developed by a team of academics, consultants, policy analysts, and practitioners, has environment as only one of seven categories; other categories include engagement, health, housing, neighborhood, opportunity, and

transportation, which could all fall under the social category in sustainability. Their definition of livability follows (AARP, 2015):

For some, a livable community makes it convenient to travel by foot, bike, or transit to access nearby stores, parks, and other amenities. For others, affordable housing or open space is more important. Because people look for different things when searching for a satisfying place to call home, measuring the livability of cities and towns across the United States can be challenging. This Index gives higher scores to communities with diverse features that help people of all ages, incomes, and abilities—not just older Americans. Livability is about realizing values that are central to healthy communities: independence, choice, and security. Livable communities help residents thrive, and when residents thrive, communities prosper.

Livability tends to be a lesser known, less threatening term; less tied to top-down, government-led, “green” planning. Yet the 2012 literature review indicates the two terms were used interchangeably by many researchers: “even though livability and sustainability may operate on different scales, both can achieve similar outcomes.” A common overlap area incorporates livability as support for sustainability programs. A notable case is the multi-agency (US) Partnership for Sustainable Communities, formed in 2009, which

incorporates principles of livability within its framework. The National Association of Regional Councils (2012) states: “The incorporation of the triple bottom line as a goal of the Partnership’s livability efforts...directly ties the two concepts.”

Texas examples include the North Central Texas Council of Governments (NCTCOG), which cited the Partnership for Sustainable Communities and its livability principles in its 2011 transportation plan. The Houston-Galveston Area Council (H-GAC) used language similar to the Partnership in its 2011 Livable Centers program, designed to “facilitate walkable, mixed-use places with multimodal transportation options, improve environmental quality and promote economic development.”

The Center for a Livable World used the term sustainability in its publications, including three anthologies on the human dimensions of sustainability (Forbes and Trusty 2019, Boring and Forbes 2014, Williams and Forbes 2012). More local research, working directly with city governments in East Texas, has used the term livability. Livability studies were conducted with two small East Texas cities: a pilot project in Kilgore in 2012 and a more expansive project in Nacogdoches in 2014-17.

Kilgore is a city of approximately 13,000, located on Interstate 20 in between Tyler and Longview. It lies about 120 miles east of Dallas and 75 miles west of Shreveport, Louisiana. As the central, oil-based “boomtown” in 1930s Texas, the oil industry is very important to its identity. At one time there were 1,100 oil derricks

within its city limits (Chambers, 1933; Clark & Halbouty, 1972; Eason, 1979). Today replica oil derricks dominate the downtown landscape. The oil and gas service industry still dominates the local economy, with Kilgore Junior College (over 5,000 students, home to the “Rangerettes”), satellite communications, some unique retail (such as high-end furniture), and varied manufacturing adding to its diversity (KEDC 2016).

Kilgore was chosen for the pilot project due to its success attracting small industry through its Kilgore Economic Development Corporation (KEDC), in part due to its location on Interstate 20. It also had a pro-active city manager at the time, along with a Kilgore 20/20 Vision Committee citizen planning effort, made up of local leaders.

Issues highlighted before the study included a desire to attract more residents, to help the city become more “livable” and diversify its tax base. Numerous former well sites limited housing development, and many workers lived in larger nearby cities such as Longview. Thus, an externally-financed livability study was of interest.

Nacogdoches is a city of approximately 33,000, located on highways 59 and 259 about 60 miles south of Kilgore and 140 miles north of Houston. Nacogdoches also has a unique historical identity, located on Highway 21, the former El Camino Real connecting Spanish San Antonio to French Louisiana. It bills itself as the “Oldest Town in Texas,” based on an early Spanish mission and (later) trading post at the site of a Caddo Native American

settlement (McReynolds 1978). Nacogdoches is likely more diverse/resilient than Kilgore, with animal feed, chicken farming/processing, a university (Stephen F. Austin State, with over 12,000 students), two medical complexes, heritage tourism, and other manufacturing and services playing major roles (Burayidi, 2013; NEDCO, 2016).

Nacogdoches was chosen for the first “full-scale” livability study as it was easily accessible for university researchers and local issues were familiar to them. Issues highlighted before the study included a high poverty rate, a historic downtown slow to redevelop with attractive businesses, and a lack of economic development funds.

### Research Question

The main research question is: how can a research center best apply interdisciplinary expertise to small, politically conservative cities to help them enhance mutually-reinforcing economic, environmental, and social amenities, through livability/sustainability’s triple bottom line?

### Methods

The National Association of Regional Councils (2012, p. 21) states: “livability programs appear highly tailored to the local communities that are responsible for implementing them.” The World Commission on Environment and Development (1987, p. 39, item 51) states: “no single blueprint of sustainability will be found, as economic and social systems and ecological conditions differ widely...”

Sustainability initiatives can be unique to each community (Wheeler, 2015). Kilgore and Nacogdoches are different and local staff wanted issues addressed that are unique to their communities.

Thus, a flexible approach was applied to the “triple bottom line,” addressing the three categories of economic, environmental, and social issues, yet adapting the study to each site in collaboration with local officials. Some methodology is described in the results section under each city. Due to the many surveys, each individual survey’s methodology is not described, but can be supplied upon request, and the most comprehensive survey is cited (Szafran et al., 2017).

Some approaches to the triple bottom line address environmental, economic, and equity concerns under the “Three E’s” framework (Long, 2016; Tretter, 2013; Campbell, 1996). This framework was not chosen, partly due to the political connotations of equity, but also because researchers were not as familiar with this format. However, equity concerns were addressed under the general social category, especially with respect to Nacogdoches and its poverty issues. Another alternative term for the triple bottom line, 3Ps (people, planet, profit), is closer to the format used here (Hammer & Pivo, 2017).

Several key livability/sustainability indices have emerged both during and after the two livability studies, such as the AARP (2015) Livability Index, the Triple Bottom Line (TBL) Tool (Hammer et al., 2015), and the Sustainability Tools for Assessing and

Rating (STAR) system (STAR Communities 2016). Although the AARP index is partially age-related, the TBL Tool is on hiatus, and the STAR system is time-consuming, the frameworks still provide guidance on the three topics. Efforts are made to address how the methodology/results of this study fit within those three sets of standards.

## Results

### ***Kilgore Livability Study***

The Center for a Livable World conducted its first (pilot) livability study in Kilgore, Texas, from January to December 2012. The Center drew from expertise in diverse academic programs such as economics, health sciences, geography, government, history, and social work. Financial support (~\$10,000) for this pilot project was provided by IHS, Inc. and The Cynthia and George Mitchell Foundation.

The pilot project coincided with a citizen planning effort, termed the Kilgore 20/20 Vision Committee, which sought to enhance diverse aspects of the City of Kilgore over the next 5-10 years, including annexation to include the I-20 area, retail attraction, residential livability, and other amenities.

Nine study areas follow, with three in each of the “triple bottom line” categories. Several of the study areas were selected to respond to specific interests of the city manager, including (under economics) revolving loans, realtor survey, and (under society) a citizen survey about city services. The city manager and staff actively participated in these parts of the livability study.

The other six study areas were chosen through various academic disciplines. All nine study areas fit within categories of the AARP Livability Index, Triple Bottom Line (TBL) Tool, or STAR Community Rating System. Results one year after the project (December 2013) are summarized for each study area:

#### 1) *Economics - a revolving loan study.*

Housing is an important component of both the livability, TBL, and sustainability indices. Housing affordability would theoretically increase with increased housing supply, dropping prices. The city manager had interest in a revolving loan fund to support housing developers, thereby attracting more residents. Revolving loan funds create investment capital that renews by placing returned principal, interest, and fees back into the fund. Such funds are often created by a combination of federal/state grants and private institution or nonprofit funds, for specific public purposes (e.g. housing, environmental cleanup, energy efficiency, small business). This study suggested the City establish a revolving loan fund following basic steps in the report.

One-year follow-up results - the revolving loan fund was then created as a resource for home developers. Two large projects, a 30-unit and 64-unit development, utilized the fund to pay infrastructure costs. The City of Kilgore did the infrastructure work and the developer paid the City back *pro rata* as homes were sold. After the first year, the \$1.5 million fund was largely tapped out, with about \$150,000 paid back.

2) *Economics - a survey of realtors on perceptions of Kilgore livability.* The city manager had an interest in surveying realtors about Kilgore livability, since many reportedly send prospective residents to nearby cities instead. Forty-nine respondents indicated: a) the biggest deterrents to locating in Kilgore are lack of available homes (47%) and properties (47%), poor schools (37%); and lack of shopping (30%), healthcare services (28%), job opportunities (26%), and dining options (26%).

One-year follow-up results - the City started a GIS inventory of potential housing developer properties and constraints to assist builders. The survey was shared with developers and the school district, which stimulated respective responses.

3) *Economics - a location quotient assessment to analyze local economic diversity.* Economic diversity plays an important role in resilience of local economies. It receives some emphasis in the TBL and sustainability index, but far less in the livability index. Location quotient was analyzed to identify what sectors provided a higher or lower proportion of county employment than the national average. Unsurprisingly, oil and gas support firms and (to a lesser degree) manufacturing and construction created the largest sectors. Adverse shocks to these economic bases that pull in money from outside the region can have a disproportionate impact. Underrepresented sectors included information technology, management/finance, insurance, and large retail. These service economy sectors, if able

to access a customer base, can also pull in money from outside.

One-year follow-up results - This assessment was not really used to attract underrepresented sectors. The Kilgore Economic Development Corporation tends to work on recruiting/supporting secondary sector industries. The City's simultaneous contracted study by the Buxton Corporation, a specialist in retail location analysis, also included location quotients. That study attracted site visits by a national store and major restaurant chain, yet trends towards online sales are making retail a less attractive development tool.

4) *Environment - a walkability assessment.* Walkability is a common goal for livable communities. It can increase health, reduce polluting vehicles, and enhance downtown business. Walkability is in three of seven livability index categories and is also in the sustainability index. The web-based Walk Score, sometimes used in the TBL index, indicated Kilgore scored higher overall than cities such as Austin. A field study, using a survey (PBIC 2018) applied in several parts of the city, found generally lower scores in neighborhoods. Kilgore is a "somewhat walkable" community with a clustered downtown, stores/amenities, and a nice park system. Walkability could improve through safety, aesthetics, and connectivity. Funding sources were given for trails, sidewalks, etc.

One-year follow-up results - A year later a sidewalk and bike lane plan was being developed for City streets. Two large projects were underway that incorporate sidewalks/bike lanes: a) adding/rehabilitating sidewalks in a

residential area close to downtown; b) \$600,000 in three new road projects with associated sidewalks/bike lanes.

5) *Environment - an assessment of trail opportunities.* Access to parks and recreation is covered under two of seven livability index categories. Short trails within individual Kilgore parks are popular. Nearby Longview purchased floodplains decades ago, allowing longer, linear trails with greater health benefits. Easements may be acquired, but grant programs may not fund facilities on easements, requiring City bond measures. A large loop trail was proposed from Meadowbrook Park north to the annexed area on I-20, back downtown and east back to the Park. A leg was also proposed south to the new school complex along with an extension from I-20 to the Sabine River.

One-year follow-up results - A city-wide proposed trail map was presented to the City Council. A grant application was submitted to the Texas Parks and Wildlife Department for \$195,000. \$350,000 was also requested from the Economic Development Corporation to partner with \$100,000 of City funds to acquire a key 75-acre bottomland property north of Meadowbrook Park. These efforts would facilitate a two-mile section of 10-foot wide concrete, multiple-use trail running north-south through the heart of town. A two-mile section of mountain bike trails was also mapped out on the north end of town.

6) *Environment - Ecosystem services and habitat corridor (greenway) opportunities* The dollar value that nature's services provide is an obvious area of overlap between economy and environment. It is

addressed in the TBL and sustainability indices, but not in the livability Index. The highest ecosystem service values are typically in urban flood storage capacity. Bottomland habitats slow storm water runoff that would otherwise necessitate expensive flood control structures. Based on assessments in other Texas cities, Kilgore's bottomlands could save nearly \$3 million per year in flood control structure costs (American Forests, 2000, 2006). A habitat map was provided.

One-year follow-up results - Efforts to create trail opportunities coincide with floodplain/greenway protection, such as purchase of the 75-acre property and the mountain bike trail, both of which will engage citizens with bottomland forests.

7) *Society - A report on Kilgore school district programs.* Good schools not only prepare the local workforce but attract business. It is covered in the sustainability index but received low emphasis in both the livability and TBL indices. Kilgore ISD staff were interviewed and the district's webpage, TEA reports, and board minutes were reviewed. Among the findings: 100% of teachers were highly qualified; the decreasing dropout rate was below the state average; the district won a Readiness Award in 2011; a home liaison was established to help with parent involvement; attendance exceeded the state average; and most scores on standardized tests were either at or slightly above the state average. Several staff suggested Kilgore ISD is the "best kept secret in Gregg County."

One-year follow-up results - A new superintendent came with aggressive new

district goals. A follow-up was planned to see how valuable the project report was.

8) *Society - A citizen survey on livability and city services.* Governance is a key aspect of the TBL and sustainability indices.

Various city services align with key amenities in the livability index. The city manager wanted to get feedback on city services. A survey was sent in June water bills. The 346 responses did not provide a rigorous, representative sample of the population but still provided valuable feedback. Findings include: general satisfaction, with 91% satisfied with living in Kilgore, 90% consider the city safe, 74% satisfied with responsiveness of City government, 79% satisfied with traffic control, 76% satisfied with local sense of community, and 62% satisfied with recreational opportunities. Highest spending priorities were streets (94%), water and sewer (87%), healthcare facilities (87%), and attracting large retailers (70%); high satisfaction existed with the Main Street Program, Kilgore Economic Development Corporation, curbside recycling, park appearance, and natural areas; more shopping and dining are needed (50% of discretionary funds were spent in Kilgore, 30% in Longview).

One-year follow-up results - The mayor used this survey in election efforts, as it indicates 91% of citizens are satisfied with City services. It was also used to set priorities on projects, as citizens indicated their highest priority was street improvement, which the City was working on. Another high priority for citizens was water and sewer improvements – in

response, an \$8 million water project was to be completed.

9) *Society - Reports from focus groups held with diverse local citizens.* While all three indices address social services, only the sustainability index specifically covered minority groups. Focus groups were held with a) local social service providers; b) employees at a small local business; c) a church of mostly white members; d) a church of mostly black members; and e) Hispanics, the latter through informal surveys.

a) *Local service providers* brought up limited financial resources for local non-profits; lack of reliable transportation for certain groups, which endangered health needs; limited access to mental health services; lack of engaging opportunities for ages 15-18; absence of skilled volunteers; a weak networking system among local agencies; a limited pool of available housing and home repair resources, and lack of a homeless shelter. They considered community support for non-profit organizations adequate; low crime rates could be attributed to an active police department and a neighborhood watch program.

b) *Employees at a small local business* noted activities are offered that promote involvement, including Main Street concerts, a Shakespeare Festival, Pump Jacks, and Downtown Days. Community familiarity promotes a sense of safety and improved services. Lack of housing causes some workers to live elsewhere, losing business from income earned locally. Kilgore benefits from proximity to larger cities, allowing residents a “small town”

atmosphere, while enjoying big city amenities; goods and services are less expensive, lessening financial strain; a revived spiritual/emotional well-being improves quality of life; a commitment to buy locally increases sense of reciprocity.

c) *Predominantly white church members* expressed high overall satisfaction, with services, jobs, and housing in close range, which positively affects quality of life. Members feel safe because of familiarity, but a “transient” population brought some insecurity. Volunteer options are many, creating outlets for individuals and reciprocity among members. Many options exist for children to succeed, adding to parents’ sense of satisfaction. A large wage discrepancy exists for men and women with a high school education or lower – an example is oil field work available for men but not for women. Members were concerned about future housing and workforce for the oil industry.

d) *African-American church members* suggested spirituality has been the community’s anchor, especially for rural elderly; this was the key to enhancing quality of life. Members believed social injustice and discrimination remain sensitive areas for African Americans, which negatively affects their quality of life. Resentment and lack of forgiveness may create division among races and are certainly impacting equal access to services; yet social capital and cultural diversity are major assets. More interactions could foster solidarity among groups. More cooperation among churches could help the elderly with depression/isolation. More school/organization social workers could

offer services more sensitive to needs of the African American culture. A study on African American males could help understand their needs. Schools/churches could teach youth farming.

e) *Hispanic community members* were surveyed. Four recent migrants (day-laborers) indicate Kilgore is a decent place to live but without work they will move to bigger cities. Many lack transportation and private quarters, lack food when there is no work, and lack electricity and entertainment when no one works. Two long-established immigrants (15 years) like the tranquility but lack fresh foods. They miss Mexico but not the danger. There is generally little work for females, yet most locals are friendly.

One-year follow-up results - The City has not done much with various focus group input as it is up to social service agencies to take the lead on such recommendations. The City is continuing Neighborhood Watch and other community policing not related to the study. Community activities mentioned as positive aspects are also continuing.

A recent, supplementary result came from use of the web-based AARP (2015) Livability Index, which rates communities instantly based on algorithms tied to publicly available data sources. Kilgore scored 49, based on a national average of 50. Of eight categories, higher scores were in opportunity (inclusion, possibilities) at 61, housing (affordability, access) at 56, environment (clean air, water) at 55, and transportation (safe, convenient options) at 54. The high housing score was surprising – the index may include housing in nearby

cities such as Longview. Lower scores were in health (prevention, access, quality) at 22 and neighborhood (access to work, life, and play) at 42.

In summary, study recommendations each reinforce more than one of the three “triple bottom line” categories. An example is walkability/trails, which supports greenways (environment), attracts residents (economics), and fosters social interaction and health (society). Publicizing ISD programs fosters community pride (society), leads to more qualified workers (economics), and attracts residents (economics).

The Kilgore city manager believed the Center for a Livable World’s livability study provided strong justification to get things done that citizens could not get done beforehand. Out of a long list of possible project areas, the study, along with efforts of the Kilgore 20/20 Vision citizen planning group, helped identify what is most important. It helped greatly that the Center report was shaped around identified needs of the City. The study helped provide buy-in for important, large projects. Many positives also came about through initiative of City of Kilgore staff and citizens. Although the city manager is not sure he would have funded such a study, the pilot project was viewed as a success.

### ***Nacogdoches Livability Study***

The Center for a Livable World was awarded a \$35,500 contract by the City of Nacogdoches in fall 2014. The objective was to enhance the community’s ongoing efforts to improve quality of life. As in the Kilgore pilot project, issues were addressed under

the economic, social, and environmental “triple bottom line” framework. However, more expansive survey techniques were used here to determine issues and related projects.

### *Phase One*

The study was divided into two phases. The first phase included review of previously commissioned studies; existing data; and academic literature. Three opinion surveys and eighteen focus groups were also conducted. Faculty then constructed a related “menu” of initiatives and project options for City leadership to prioritize.

Previously commissioned studies included a 2003 comprehensive plan, main street plan, two retail reports, and four tourism studies. These studies, while valuable in recommending action such as downtown revitalization, business attraction, and tourism direction, did not fully clarify implementation methods (Phase Two was to address this).

The Center also gathered local demography from the census, business activity from the Nacogdoches Economic Development Corporation, real estate market analytics from Charles Pool Real Estate, and school performance from the Texas Education Agency. Data show areas of stress (poverty, racial segregation, weak retail market) and accomplishment (wide medical access, low unemployment rate, broad education options).

Academic literature on community development revealed a movement away from big box stores to downtown “place-making” and local entrepreneurship (Artz

& Stone, 2011; Lambe, 2008; Markuson, 2006; McMahon, 2011, 2014; Murray, 2011).

Three audiences were surveyed: the community at-large, university students, and faculty. Each survey instrument was different in terms of format and questions because the audiences were sufficiently unique and only marginally overlapped. Extraordinary effort was devoted to soliciting participation of minority segments of the population to achieve a representative sampling of community-wide interests (see Szafran et al., 2017).

Survey results provided two sets of information about community attitudes: (1) existing strengths and weaknesses of the City - higher ranking *strengths* included (in descending order) religious life, downtown, (low) crime, recreation, appearance of city, and health care; lower ranking *weaknesses* included (in ascending order) shopping, entertainment, new businesses, job opportunities, public transit, and public schools; and (2) aspects of community life that matter most to residents – top ranking aspects included crime, job opportunities, health care, traffic flow, restaurants, and city appearance.

In contrast, focus groups delve deeper into the beliefs and attitudes of individuals than an opinion survey (Green 2015, Vincent 2015). The focus groups included discussion by a small set of individuals (6-12), guided through pre-determined questions by a moderator – what are community assets and issues, and what projects might best address the issues? Eighteen gatherings were assembled: retail business operators; service sector employers; retirees; African-

American community; Hispanic community; recently hired faculty members; long-term faculty members; public school teachers; public school parents; artistic community; religious leaders; heritage tourism operators; heritage tourism public at-large; health care practitioners; bike-pedestrian enthusiasts; natural heritage experts; parks, trails, garden enthusiasts; and community resilience activists.

A list of initiatives, based on literature, focus groups, and surveys, was provided under the three categories: economic, environmental, and social, in summer 2015. Initiatives, each with a list of short-term/long-term project options (total 101), included:

*Economic* - Initiative #1: Ensure the local climate supports business development. Initiative #2: Develop policies that attract/retain types of businesses that drive economic development. Initiative #3: Identify and leverage local comparative advantage.

*Environmental* - Initiative #1: Beautify entry corridors into the City; Initiative #2: Expand sidewalk network and create a bike lane network; Initiative #3: Promote natural history and eco-tourism (see Forbes et al. 2007); Initiative #4: Grow and improve trail system; Initiative #5: Encourage energy efficiency and reduce waste and sprawl.

*Social/Cultural* - Initiative #1: Revitalize downtown by making it a destination for arts and arts-related business; #2: Connect to the El Camino Real National Trail; #3: Create linkages between university arts and local cultural offerings; #4: Cross promote, bundle events and

tourism services; #5: Develop/market financial incentives for cultural and heritage development; #6: Encourage development in minority neighborhoods.

*Three over-arching issues*

Three *over-arching* areas emerged outside of the triple bottom line categories:

*Workforce:* Surveys, focus groups, and economic data highlight the need to address the high poverty rate and low-skill workforce. It is a community-wide problem requiring sustained, inclusive (rather than piecemeal) efforts, involving key actors.

*“Town-Gown” relations:* the local university is a leading employer; faculty and students are a large part of the population; and spending by the university and its personnel are a major economic engine. Fostering “town-and-gown” interaction can include: service learning, service provision, faculty involvement, student volunteerism; and applied research to address local problems (Martin, Smith, & Philips, 2005; Curwood, Farrar, & Mackeigan, 2011; University of Minnesota, 2018).

*K-12 Education:* Surveys and focus groups noted discipline is undermining education, a national issue (Maryland State Board of Education, 2012). Frequent rotation of leadership (superintendents, principals, etc.) is also preventing implementation of change. Performance on state-mandated tests is making the community an undesirable relocation destination for families and businesses (Weiss 2004). Research indicates school principals are key to performance, rather than school systems (Perry and McDermott 2003; Miller 2015). A study was

recommended to look at three school districts isolated by the Texas Education Agency that mirror NISD in rural context, poverty rate, minority student body—yet perform well on standardized exams.

Another, more recent supplementary result came from use of the web-based AARP (2015) Livability Index, which rates communities instantly based on algorithms tied to publicly available data sources. Nacogdoches scored 46, based on a national average of 50. Of the eight categories, higher scores were in housing (affordability and access) at 63 and environment (clean air and water) at 56. Lower scores were in health (prevention, access, and quality) at 32 and opportunity (inclusion and possibilities) at 37.

*Phase Two*

Phase Two of the livability study was to focus on *how* to implement prioritized options, including funding sources. Yet response to Phase One was not immediate in summer 2015, with concern over negative survey results and the K-12 education issue. City staff surveyed citizens again, electronically, to help prioritize the 101 project options. Over one year later (autumn 2016), a list of priority projects emerged, with new project categories and options, several tied to existing City plans (such as a food truck ordinance and parks plan). Many of these overlap with categories in the livability, TBL, and sustainability indices. However, the triple bottom line format was removed with environment minimized. A related action plan was developed in spring 2017:

*Economics* – Formulate a plan to target small business growth and fund it by finding local investors; Build financial literacy services and alternate financing options to support business creation; Review City food truck ordinance to make operation easier. Small business development and economic literacy receive strong emphasis in the TBL and sustainability indices, but less in the livability index.

*Arts and Culture* – Formulate a plan to restore downtown along the lines that mirror the Nacogdoches brand and accentuate small town charm. Designate downtown as an official Texas Cultural District and create a community music series. Arts and culture get strong emphasis in the livability and sustainability indices, and some in the TBL tool.

*Tourism* – Develop regional tourism where Nacogdoches is the “hub” for smaller destinations; Develop tourism itineraries, maps, and guides; Create eco-tourism package deals combining outdoor activities. Surprisingly little emphasis is given to tourism in the three indices, despite potential for ecotourism to overlap with business and environment.

*Built Environment* – Create a complete streets master plan for the City, with priority sidewalk and bike lane routes; Create a parks/trails master plan; Pass a flexible sidewalk ordinance that will encourage more sidewalks at new developments. The term “built environment” is one of eight categories in the sustainability index, while parks, walkability, and access are highlighted in

the livability index, but less so in the TBL tool.

Several implementation meetings then occurred between City planning staff and Center leadership. Much downtown redevelopment, once a priority, is severely challenged by historic structure renovation costs. A South Street business/beautification initiative became a priority for remaining study funds, as it could build on existing business initiatives (many Hispanic) and tie that transportation artery to the historic downtown, acting as an impetus for entrepreneurship and development. South Congress Street in Austin was suggested as a model. Debate emerged over this shift in focus.

Center leaders have many other university duties and had a desire to efficiently complete the project. Many prioritized options were already being handled by City and CVB staff. With more delays on the horizon, it was decided to return remaining study funds (~\$25,000) to the City so they could implement initiatives more efficiently.

## **Discussion**

The research question was: how can a research center best apply interdisciplinary expertise to small, politically conservative cities to help them enhance mutually-reinforcing economic, environmental, and social amenities?

Feedback from city staff, though somewhat limited, can help answer the question. The Kilgore pilot project was considered a success by their city manager. It supported several emerging city initiatives, occurring in all three areas of the

triple bottom line. However, it was externally financed. The city manager indicated that he would not likely use city funds to pay for such a study. Also, issues with social services were outside the duties of the city government, so they were not addressed in implementation.

City staff in Nacogdoches had several valuable critiques. A first project “update” meeting was deemed unnecessary by one staff person, which led to the next update being given when Phase One was complete. More regular “check-ins” were later suggested by another staff member. Erring towards more updates is probably advisable.

City staff were also concerned with valid public representation in the focus group format, with attendances ranging from six to twelve. A more open meeting format was suggested after the fact. This could have resulted in project shut-down by conservatives, as described in the literature (Foss 2018). The citizen survey, representative of different ages, incomes, and ethnic groups, could be a replacement (Szafran et al. 2017). It allowed for comments but not open discussion. Results contained lower ratings from minorities.

The K-12 school issue was not something city staff were charged with fixing; a more private discussion could have lessened controversy. Another critique was a lack of funding sources provided to resolve some issues. As an example, linking SFA alumni with investment to revitalize downtown did not materialize, disappointing some city staff.

Center leaders were dismayed by the one-year delay between submitting Phase

One and beginning Phase Two. After submitting a draft of Phase Two, another delay was perceived, which made most (not all) of them want to end the project. One Center advisory group member suggested the Phase One report itself could be worth up to \$100,000 (about \$10,000 had been spent). Center leadership felt under-appreciated.

Two important lessons emerged from the City-Center relationship. One was about the *presentation* of community issues. An asset-based community development approach may have reduced some of the negative reactions. The approach emphasizes existing community assets (strengths) first, creating a positive “snowball” effect, with weaknesses not ignored but dealt with later (Kretzmann and McKnight 1993; Haines 2015).

A second lesson was about *prioritization* of community issues and potential projects. The city took a year to prioritize proposed projects, partly to poll citizens. Yet some prioritization was already done through focus groups and surveys, and the city council represents locals. The triple bottom line prioritizes economics, environment, and society equally. Yet the city poll results did away with this *foundation* of the study. Minorities (by definition) are less likely to dominate surveys that prioritize projects. The Sustainability Tracking and Ratings System (STAR Communities 2016) has a comprehensive framework of 7 goals, 45 objectives and 500+ outcome and action measures. Social equity and justice are often the lowest scoring STAR components. Future studies might prioritize a project for

each group and ensure each is implemented.

Environment/nature can also often be left without a voice. The main impetus behind sustainable development was a need to put environment on more equal status with economy. As Leopold (1949) stated...

The first ethics dealt with the relation between individuals...Later accretions dealt with the relation between the individual and society...There is as yet no ethic dealing with man's relation to land and to the animals and plants that grow upon it...The extension of ethics to this third element is...an evolutionary possibility and an ecological necessity.

Community development can be a complex field, fraught with issues such as social capital, power relations, integration of disparate concerns, and personal one-on-one relations (Hustedde, 2015, LaChappelle, 2015). Habermas' (1987) communicative action theory offers a bridge between "rational" technological expertise and the everyday *lifeworld* of community members, through continuous dialogue. Extending discussions beyond project timelines may yield more understanding and shared vision.

Comprehensive, holistic planning is typically preferable to piecemeal efforts (Grodach, 2011; Holman, 2014). This may suggest continuing such efforts to help cities under the triple bottom line planning format, but the immense effort put into Phase One may have been unwarranted.

The format was eventually undone by the city for Phase Two, although some suggested projects still overlapped with two or three categories.

Conservative politics did not seem to play a major factor in the implementation of either the Kilgore or Nacogdoches study. This could have been due to less open public input formats, or the less controversial term livability in place of sustainability (Foss 2018). Holman (2014) notes progress in some measures of sustainable development in two conservative East Texas cities without use of the sustainability triple bottom line, simply due to some acceptance of planning. Nacogdoches may eventually have to follow the example of Tyler, if a new Interstate 69 brings significantly more growth as expected.

Holman (2014) and Whittemore (2013) both cite energy conservation as a possible area of overlap between conservatives and sustainability planning. Alternative energy development was also cited as a key strategy in the example of Newton's revitalization under the triple bottom line in Iowa, a conservative state (Hammer et al., 2018). The topic did not gain much traction in discussion with the oil-based city of Kilgore, but wind and solar prices were higher in 2012.

Future such triple bottom line livability studies might expect: a call to include existing City initiatives in recommendations; skepticism among minorities that City initiatives will benefit them; and defensive reactions to negative survey results.

Based on mixed results in both Kilgore and Nacogdoches, the Center for a Livable World will consider a change in focus (and name) to address how specific sustainability initiatives can be implemented in small cities. Center leadership is assisting two local non-profits in applying for grants to offset energy bills with solar panels.

A Center for Sustainable Community Development or Center for Community Sustainability Initiatives would see how

such projects would fit under existing comprehensive (or other) plans, then more efficiently assist in directly implementing such energy initiatives. This would combine with new service-learning study abroad courses, working on ecotourism initiatives in villages bordering nature reserves, to foster high-impact learning experiences and outcomes for both students and community members.

## References

- American Association of Retired Persons (AARP). 2015. Livability Index. <https://livabilityindex.aarp.org/> (access March 2018)
- American Forests. 2000. *Local Ecosystem Analysis: Garland, Texas. Calculating the Value of Nature*. Washington, D.C.: American Forests.
- American Forests. 2006. *Urban Ecosystem Analysis: Town of Flower Mound, Texas*. Washington, D.C.: American Forests.
- Artz, G.M., and Stone, K.E. 2012. Revisiting Wal-Mart's impact on Iowa small-town retail: 25 years later. *Economic Development Quarterly*, 26 (4): 298-310.
- Burayidi, M. A. 2013. *Resilient Downtowns: A New Approach to Revitalizing Small- and Medium-City Downtowns*. New York: Routledge.
- Campbell, S. 1996. Green Cities, Growing Cities, Just Cities? Urban Planning and the Contradictions of Sustainable Development. *Journal of the American Planning Association*, 62 (3): 296-312.
- Chambers, W. T. 1933. Kilgore, Texas: An Oil Boom Town. *Economic Geography*, 9 (1): 7284.
- Clark, J. A., M. T. Halbouty. 1972. *The Last Boom: The Exciting Saga of the Discovery of the Greatest Oil Field in America*. New York: Random House.
- Curwood, S., A. Farrar, M. Mackeigan. 2011. Building effective community-university partnerships: Are universities truly ready? *Michigan Journal of Community Service Learning*. Spring: 15-26
- Daly, H. E., J. B. Cobb, Jr. 1994. *For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future*, p. 75-76. Boston: Beacon Press.
- Daly, H. E., K. N. Townsend. 1993. *Valuing the Earth: Economics, Ecology, Ethics*, p. 267. Cambridge, MA: MIT Press.
- Eason, A. 1979. *Boomtown: Kilgore, Texas*. Kilgore, TX: Chamber of Commerce.
- Elkington, J. 1998. Accounting for the Triple Bottom Line. *Measuring Business Excellence*, 2 (3): 18-22.

- Forbes, W., J. Lowry, C. Runnels, M. Legg, T. Coble, K. Seal, T. Kerr, S. Lin, A. Lambert, S. Price, Z. Farrar. 2007. Ecotourism Promotion in East Texas: Changing Perceptions of the Piney Woods. *Sustainable Communities Review*, Vol. 9: 42-50.
- Forbes, W., T. Trusty, eds. 2019 (in press). *Rethinking Aldo Leopold's Land Ethic: Emerging Cultures of Sustainability*. Nacogdoches, TX: Stephen F. Austin State University Press.
- Foss, A. 2018. Divergent responses to sustainability and climate change planning: The role of politics, cultural frames and public participation. *Urban Studies*, Vol. 55 (2) 332–348.
- GovTrack. 2018. Louie Gohmert profile. [https://www.govtrack.us/congress/members/louie\\_gohmert/400651](https://www.govtrack.us/congress/members/louie_gohmert/400651) (access Feb. 2018)
- Green, G. P. 2015. Community Asset Mapping and Surveys. In, *Introduction to Community Development*, 2nd ed.; R. Phillips, R. H. Pittman, eds. NY: Routledge.
- Grodach, C. 2011. Barriers to sustainable economic development: the Dallas-Fort Worth experience. *Cities*, 28 (4): 300-309.
- Haines, A. 2015. Asset-Based Community Development. In, *Introduction to Community Development*, 2nd ed.; R. Phillips, R. H. Pittman, eds. NY: Routledge.
- Hammer, J., G. Pivo. 2017. The Triple Bottom Line and Sustainable Development Theory and Practice. *Economic Development Quarterly*, 31 (1): 25-36.
- Hammer, J. G. Pivo, I. Goldstein, M. McCullough. 2015. *The Triple Bottom Line for Economic Development: A Practitioner's Guide*. Triple Bottom Line Tool. [http://www.tbltool.org/files/tbl\\_framework\\_practitioners\\_guide.pdf](http://www.tbltool.org/files/tbl_framework_practitioners_guide.pdf) (access 3/18)
- Hammer, J., J. Babcock, K. Moosbrugger. 2018. *Casebook - Putting Concepts into Practice: Triple Bottom Line Economic Development*. Triple Bottom Line Tool. [http://www.tbltool.org/files/CUPA\\_Casebook.pdf](http://www.tbltool.org/files/CUPA_Casebook.pdf) (access March 2018)
- Habermas, J. 1987. *The Theory of Communicative Action, Vol. 2. Lifeworld and System: A Critique of Functionalist Reason*. Boston, MA: New Beacon Press.
- Harman, G. 2015. Agenda 21: a conspiracy theory puts sustainability in the crosshairs. *The Guardian*, June 24<sup>th</sup>. <https://www.theguardian.com/sustainable-business/2015/jun/24/agenda-21-conspiracy-theory-sustainability> (access March 2018)
- Harvey, D. 1996. *Justice, Nature and the Geography of Difference*. Oxford: Blackwell.
- Holman, N. 2014. Like Mixing Oil and Water? The Take-Up of Sustainability in Hard-to-Reach Places - an East Texas Case Study. *Journal of Planning Education and Research*, Vol. 34 (4): 420–432.
- Humes, E. 2011. *Force of Nature: The Unlikely Story of Wal-Mart's Green Revolution*. New York: Harper Business.
- Hustedde, R. J. 2015. Seven Theories for Community Developers. In, *Introduction to Community Development*, 2nd ed.; R.

- Phillips, R. H. Pittman, eds. NY: Routledge.
- Kilgore Economic Development Corporation (KEDC). 2016. Key Industries. <http://www.kilgore-edc.com/key-industries> (access March 2018).
- Kretzmann, J.P., J. McKnight. 1993. Building Communities from the Inside Out: A Path Toward Finding and Mobilizing a Community's Assets. *Chicago: ACTA Publications.*
- LaChappelle, P. R. 2015. Perspectives on Current Issues. In, *Introduction to Community Development*, 2nd ed.; R. Phillips, R. H. Pittman, eds. NY: Routledge.
- Lambe, W. 2008. *Small towns, big ideas: Case studies in small town community economic development.* Chapel Hill, NC: Rural Economic Development Center.
- Long, J. 2016. Constructing the narrative of the sustainability fix: Sustainability, social justice and representation in Austin, TX. *Urban Studies*, Vol. 53 (1): 149–172.
- Markuson, A. 2006. An arts-based rural development policy. *Journal of Regional Analysis and Policy* 36(2): 47-49.
- Martin, L., Smith, H. & Phillips, W. 2005. Bridging 'town and gown' through innovative university-community partnerships. *The Innovation Journal*, 10(2): article 20  
<http://www.innovation.cc/volumes-issues/martin-u-partner4final.pdf> (access Feb. 2018).
- Maryland State Board of Education. 2012. *School discipline and academic success: Related parts of Maryland's education reform.* Report of the Maryland State Board.  
<http://www.marylandpublicschools.org/stateboard/Documents/StudentDiscipline/SchoolDisciplineandAcademicSuccessReport0712.pdf> (access February 2018)
- McMahon, E.T. 2014. The Secrets of Successful Communities. *Planning Commissioners Journal*, January.
- McMahon, E.T. 2011. The End of the Strip? *Planning Commissioners Journal*. No. 82.
- McReynolds, J. M. 1978. *Family Life in a Borderland Community: Nacogdoches, Texas, 1779-1861.* History Dissertation. Lubbock, TX: Texas Tech University.
- Murray, D. J. 2011. How the arts and culture sector catalyzes economic vitality. American Planning Association. Briefing Paper.  
<https://www.planning.org/research/arts/briefingpapers/vitality.htm> (access Feb. 2018)
- Miller, W. 2015. What reform? Principals matter, too. *New York Times*, April 17th  
<http://www.nytimes.com/2015/04/17/opinion/want-reform-principals-matter-too.html>
- National Association of Regional Councils. 2012. *Livability Literature Review: A Synthesis of Current Practice.* Washington, DC: National Association of Regional Councils. <http://narc.org/wp-content/uploads/Livability-Report-FINAL.pdf>
- Nacogdoches Economic Development Corporation (NEDCO). 2016. Community Profile.  
<http://www.nedco.org/community-profile/community-profile> (access March 2018).
- Pedestrian and Bicycle Information Center (PDIC). 2018. Walkability Checklist.

- [http://www.pedbikeinfo.org/cms/downloads/walkability\\_checklist.pdf](http://www.pedbikeinfo.org/cms/downloads/walkability_checklist.pdf) (access 3/18)
- Perry, G.S. and McDermott, J. 2003. Learning and leading: Rethinking district-school relationships. *New Horizons for Learning Online Journal*, Vol. IX, No. 4.
- Petersen Boring, W., W. Forbes. 2014. *Teaching Sustainability: Perspectives from the Humanities and Social Sciences*. Nacogdoches, TX: Stephen F. Austin State Univ. Press.
- Savitz, A. W. 2006. *The Triple Bottom Line*. San Francisco: John Wiley & Sons.
- STAR Communities. 2016. Our Framework. STAR Community Rating System 2.0. <http://www.starcommunities.org/about/framework/> (access March 2018)
- Szafran, R., W. Forbes, W. Cordova, J. Montoya. 2017. Restoring Order: When Efforts to Obtain Minority Respondents Yield Greater Than Expected Returns. *Journal of Applied Social Science*, Vol. 11(1): 60-69.
- Trapenberg Frick, K. 2013. The actions of discontent: Tea Party and property rights activists pushing back against regional planning. *Journal of the American Planning Association*, 79 (3): 190–200.
- Trapenberg Frick, K., D. Weinzimmer, P. Waddell. 2015. The politics of sustainable development opposition: State legislative efforts to stop the United Nation’s Agenda 21 in the United States. *Urban Studies*, 52(2): 209–232
- Tregoning, H., J. Agyeman, C. Shenot. 2002. Sprawl, Smart Growth and Sustainability. *Local Environment*, 7 (4): 341–47.
- Tretter, E. 2013. Contesting sustainability: ‘SMART Growth’ and the redevelopment of Austin’s eastside. *International Journal of Urban and Regional Research*, 37 (1): 297–331.
- University of Minnesota. 2018. BCED’s Role in Community Impact and Economic Development. Office of Business and Community Economic Development website. <https://diversity.umn.edu/bced/node/15> (Accessed January 2018).
- Vincent II, J. W. 2015. Community Development Assessments. In, *Introduction to Community Development*, 2nd ed.; R. Phillips, R. H. Pittman, eds. NY: Routledge.
- Weiss, J. 2004. Public schools and economic development: What the research shows. Cincinnati: Knowledge Works Foundation. [http://ourusaschools.com/weiss\\_book.pdf](http://ourusaschools.com/weiss_book.pdf)
- Wheeler, S. M. 2015. Sustainability in Community Development. In, *Introduction to Community Development*, 2nd ed.; R. Phillips, R. H. Pittman, eds. NY: Routledge.
- Whittemore, A. 2013. Finding sustainability in conservative contexts: Topics for conversation between American conservative elites, planners, and the conservative base. *Urban Studies*, 50 (12): 2460–2477
- Williams, J., W. Forbes. 2012. *Toward a More Livable World: Social Dimensions of Sustainability*. Nacogdoches, TX: Stephen F. Austin State University Press.

World Commission on Environment and Development. 1987. *Our Common Future*. Report of the World Commission on Environment and Development. G. H. Brundtland, (Ed.). Oxford, UK: Oxford University Press.

