



LAWRENCE SDAT

Honoring Our Past
and Shaping Our Future

A Sustainable Design
Assessment Team Report

Lawrence, Kansas
November 1–3, 2006



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EXECUTIVE SUMMARY

Lawrence's bounty is rooted in its intrepid citizenry and proximity to agricultural lands and through the conduits of railroads accessing nearby navigable rivers, ultimately reaching across the entire continent. The city is well situated between the urban, commercial hub of Kansas City and the state capital, Topeka. Given this blend of population-center proximities and its own intrinsic gifts, Lawrence has grown confidently through its history. The founding of the University of Kansas in 1866 on Mount Oread was transformational in establishing Lawrence as a national center of academic excellence in the Great Plains, in inspiring a culture of innovation, and raising the threshold for the entire community's quality of life. In fact, the outstanding institutions of higher learning in Lawrence present opportunities to leverage its reputation as a center of excellence for diversity, knowledge, and innovation.

Moreover, the city is a repository of authentic cultural diversity rooted in the original Native American population and reflected in the role that Lawrence's citizens played by challenging slavery through their participation in the Underground Railroad for which they paid repeatedly at the hands of antiabolitionists. This essential blend of historic identity and educational mission has rendered Lawrence with a rich, cosmopolitan character that would be the envy of many cities several times its size. But even as it enjoys its multifaceted heritage, it does so in the context of broader demographic and economic changes sweeping the nation and its region.

As Lawrence's government, business, civic, and neighborhood groups deliberate over increasingly complex issues, a clearly articulated vision is demanded that prioritizes goals, identifies resources, and affirms commitment to implementation. In many aspects, Lawrence suffers from an "embarrassment of riches" as a city replete with cultural, economic, and natural advantages, some of which appear untapped. Although this report addresses many of these issues and posits efficacious initiatives, it also touches upon fundamental ways for Lawrence's broad community to frame discussions that may offer more creative approaches to resolve what might initially seem to be intractable problems.



The report highlights five significant elements that hold enormous potential for helping effect a viable future:

- Economic sustainability
- Sustainable downtown and neighborhood development
- Transportation and connectivity
- Cultural sustainability
- Tools and processes

INTRODUCTION

In January 2006 Lawrence, Kans., submitted a proposal to the American Institute of Architects (AIA) for a Sustainable Design Assessment Team (SDAT) to assist the town and its citizens in addressing key issues facing the community. The issues ranged from bringing the neighborhoods a stronger sense of inclusion in critical decisions affecting their communities to leveraging greater economic opportunity through the competitive advantage of the University of Kansas; from conserving precious watershed habitats to facilitating workforce housing; from preserving the iconographic character of Massachusetts Street to connecting the entire city more effectively through multimodal means of movement.

The AIA accepted the proposal and, after a preliminary visit by a small group in August, the SDAT members arrived in Lawrence on November 1, 2006. For three days, the team members, working closely with local officials, community leaders, technical experts, and citizens, studied the community and its concerns. During those three days, the team came to understand the issues and used its expertise to frame a wide range of recommendations, which was presented to the community in a public meeting on November 3, 2006.

This report is a more detailed version of the findings and recommendations that were presented to the community on November 3. After a brief overview of the SDAT program and process, and a short discussion of Lawrence and the issues it is facing, the report covers

- Economic sustainability
- Sustainable downtown and neighborhood development
- Transportation and connectivity
- Cultural sustainability
- Tools and processes

Each of these topics is the theme of a detailed elaboration in this report, which leads to the SDAT's composite recommendation to Lawrence for a sustainable community.

What is the SDAT Program?

The SDAT program is an interdisciplinary community assistance program that focuses on principles of sustainability. Launched in 2005, the program represents an exciting new chapter in the AIA's history of supporting communities with volunteer design expertise.

The SDAT program is modeled on the AIA's R/UDAT (Regional and Urban Design Assistance Team) program. While the R/UDAT program provides communities with specific design solutions, the SDAT program provides broad assessments to help frame future policies or design solutions in the context of sustainability and helps communities plan the first steps of implementation. The SDAT program is based on an understanding of design as a process that

- Is integrative, holistic, and visual
- Is central to achieving a sustainable relationship among humans, the natural environment, and the place
- Gives three-dimensional form to a culture and a place
- Achieves balance among culture, environment, and economic systems

The SDAT program is grounded in the AIA design assistance team values, which call for a multidisciplinary approach, objectivity of the participating team members, and broad public participation.

Why is the SDAT Program Valuable?

Many communities are immobilized by conflicting agendas, politics, personalities, or even the overabundance of opportunity. Many communities have not yet taken stock of their current practices and policies within a sustainability framework, while others have identified issues of concern but desire assistance in developing a plan of action to increase sustainability. The SDAT process ensures that alternative solutions are given a fair hearing and that options are weighed impartially. The SDAT process

- Informs the community of opportunities and encourages them to take action to protect local and regional resources
- Helps the community understand the structure of the place at various scales and contexts—from regional resources to the neighborhood scale
- Explores and articulates the larger contexts and interactions of ecological, sociological, economic, and physical systems

- Visualizes potential futures
- Recognizes and describes the qualities of a place by preserving the best elements of the past, addressing the needs of the present, and planning for the needs of future generations
- Identifies and describes choices and consequences
- Connects plans and actions
- Advances the principles of quality sustainable communities
- Helps the community define the roles of various stakeholders
- Develops a roadmap for the implementation of more sustainable policies and practices.

The key to SDAT success is diversity and participation; the process involves multiple disciplines and multiple stakeholders. The SDAT process includes not only the expert team but also government agencies and officials, private businesses, schools and students, community members, and other parties as appropriate.

Who are the Key Participants in the SDAT Process?

SDATs bring a team of respected professionals, selected on the basis of their experience with the specific issues facing the community, to work with community decision-makers to help them develop a vision and framework for a sustainable future. Team members volunteer their time to be a member of the SDAT. To ensure their objectivity, they agree to refrain from taking paid work for three years from the date of completion of the SDAT project. A distinct team is assembled for each project based on the project's unique features. The team consists of a leader, five to seven members, and a staff person from the AIA Center for Communities by Design.

The professional stature of the SDAT members, their independence, and the pro bono nature of their work generate community respect and enthusiasm for the SDAT process which, in turn, encourage the participation of community stakeholders. The passion and creativity that are unleashed by a top-notch multidisciplinary team of professionals working collaboratively can produce extraordinary results.





Local Steering Committee

The steering committee is the key organizing group for an SDAT project. It is responsible for assembling local and regional information, organizing the preliminary meeting and SDAT visit, and generating local media coverage during the entire project. After the SDAT visits, the steering committee typically evolves into a group that is dedicated to implementing the SDAT recommendations.

Local Technical Committee

The local technical committee is the technical support group for the SDAT project, including local design professionals, environmental professionals, economists, and others whose skills and experience parallel those of the SDAT members and who bring with them detailed knowledge of local conditions, issues, and information resources. Their presence magnifies the effectiveness of the team.

Citizens

In the end, the citizens of the community are the critical players, both for their insights and observations during the team visit and for their support for the new directions that emerge from the SDAT process.

On behalf of the Lawrence SDAT and the American Institute of Architects, it is hoped this report will be a useful guide to the Lawrence community as it charts its future for the coming years and for coming generations.

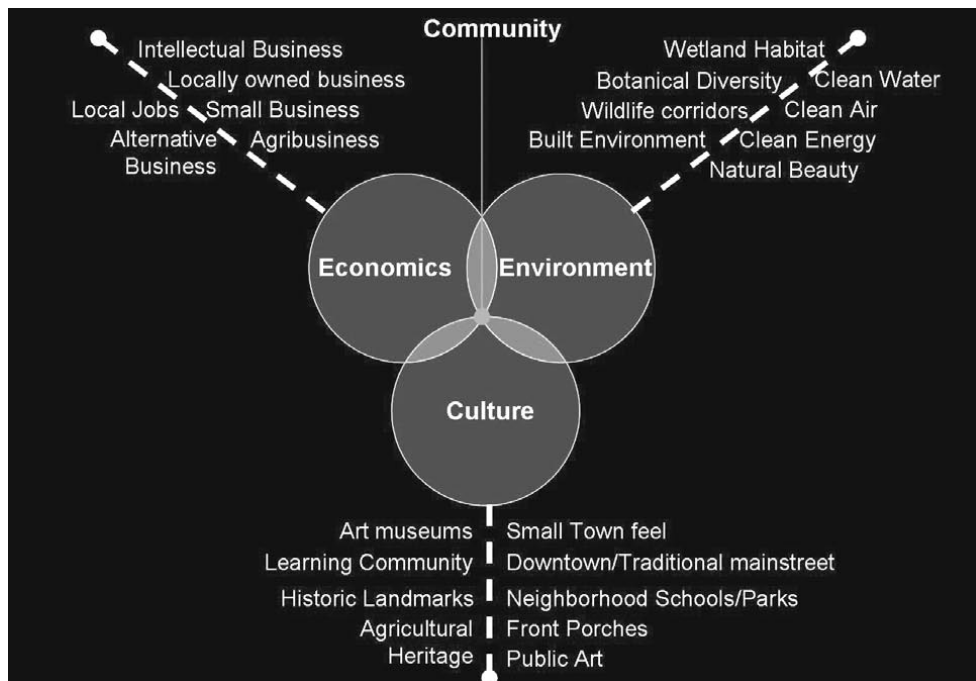
LAWRENCE TODAY

Situated geographically and metaphorically at a crossroads in the American landscape, Lawrence is near the continental center of the United States in northeastern Kansas. The city showcases more than 150 years of a community embracing the land while serving its citizens in the greatest tradition of broadmindedness and inclusion. Surprising many visitors, the topography is typified by hills and valleys that largely determined the settlement patterns and land uses characterizing generational patterns of residential, commercial, and agricultural development. The Kansas and Wakarusa rivers frame the landscape in which this rich fabric of habitation grew, establishing Lawrence's watersheds as the city's defining environmental attribute.

With internal and external pressures increasingly affecting its quality of life, Lawrence recognized this propitious moment to examine its policies and operations in the context of development outcomes and sustainability. Given the level of citizen engagement, the quality of community discussion, and suggestions from the numerous Lawrence constituencies during the SDAT visit, it is hoped this report will encourage further focused action toward crafting Lawrence's vision of a sustainable future.

Analysis

In a community of such demographic, commercial, and institutional diversity as Lawrence, three themes emerged through the SDAT analysis that organized the team's perceptions: culture, environment, and economics. The themes were induced through studying specific projects, policies, or programs under way in Lawrence that exhibited varying degrees of success and, more important, through the conversations we had with Lawrence's people. Within these thematic affinities, the city exhibited apparent strengths and weaknesses upon which the team built its recommendations.



Strengths

Cultural

- A diverse population authentically representing a range of interests, history, and talent
- A strong and varied intellectual base anchored to excellent educational institutions, but also extending beyond university or college affiliations
- A growing population
- A community that supports culture in numbers robust enough to sustain attractive amenities for visitors
- An engaged and committed leadership across elected, civic, and business sectors

Environmental

- Beautiful natural settings along the Kaw and Wakarusa valleys
- Tremendous biodiversity
- Variety of land forms and topography supporting a range of conservation and development options
- Clearly differentiated neighborhoods, landscape, and demography that reflect the community's diversity
- An intimate, yet varied physical scale of buildings and civic spaces
- Natural paths existing through developed areas
- Central location nationally; proximate location to major regional cities



Economic

- University of Kansas serving as a major employer in the state
- University of Kansas being among the top national grant recipients in areas that have potential for business incubation and spin-off
- Market for consumer-based retail that may support reinvestment strategy in urban core
- Strong market demand for affordable housing delivered to enhance neighborhood sustainability and encourage neighborhood-based retail
- Market for agribusiness and related enterprises
- Downtown farmer's market reflecting the regional character of northeastern Kansas
- Strong entrepreneurial spirit





Challenges

Cultural

- Insufficient mechanisms for grappling with change, in general, and with growth, in particular
 - Paucity of celebration or deliberate nurturing of diversity
 - Increasing perception and real trends toward becoming a “bedroom community”
 - Disconnected cultural assets in “silos of separation”
 - Underutilization of heritage and history for economic development and tourism
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- Unarticulated strategy for sustaining older neighborhoods
 - Unarticulated vision between the University of Kansas and surrounding neighborhoods
 - Unarticulated vision between Haskell University and surrounding neighborhoods
 - Lack of recreational opportunities downtown (although opportunities appear abundant)
 - Unexplored synergy among government agencies and institutional entities to achieve outcomes
 - Inconsistent measurements for progress — lack of definition and consensus on what progress means and how to gauge it



Environmental

- Unclear or nonexistent wayfinding to assist movement across city and region
- Lack of citywide trail system linking major activity centers as trailheads, which could enhance and support private investment
- Perceived distance to get from one activity node to another
- Lack of multimodal options for movement through city
- No articulated differentiation of conservation areas within the city from other open space
- Inconsistent design of retail signage and storefront along Massachusetts Street
- Unclear or nonexistent design standards for newer retail area that differentiate it from any similar strip developments in nation

Economic

- Lack of working consensus built on shared vision that would allow each constituent (developer, conservationist, preservationist, fitness enthusiast) to understand how land should develop through consensus
- Bureaucratic processes that confound the public's expectations from private development in their neighborhood
- Bureaucratic processes that confound the development sector's expectations of what will be allowed in neighborhoods
- Regulations that lead to unintended consequences of sprawl, increased development costs, or unwelcome response by community to projects
- Limited information exchange and data analysis to inform public decision makers of best options for development projects
- Development guidelines that do not reflect the specific nature of Lawrence or address sustainability
- Lack of clearly understood incentives to align with development goals
- Educational institutions untapped as instruments of economic growth within Lawrence city limits
- Lack of workforce housing
- Downtown vulnerable to changing market and impact of big-box retail or other peripheral development

- No clear economic strategy to assist entrepreneurs to incubate spin-offs from research at university to establish businesses (i.e., turn research or related activity into businesses)

Focusing on these themes, the SDAT projected its recommendations to leverage Lawrence's strengths and mitigate its weaknesses through new policies and attitudes for better outcomes. The specific recommendations are presented in the report. Given the extent of collaboration in this process, most recommendations reflect the input of the entire team.

Although the recommendations were formulated around the three themes, many policies and practices recommended for Lawrence by the SDAT overlap these groupings and will reappear across sections of this report within the context of the specific topic.

ECONOMIC SUSTAINABILITY

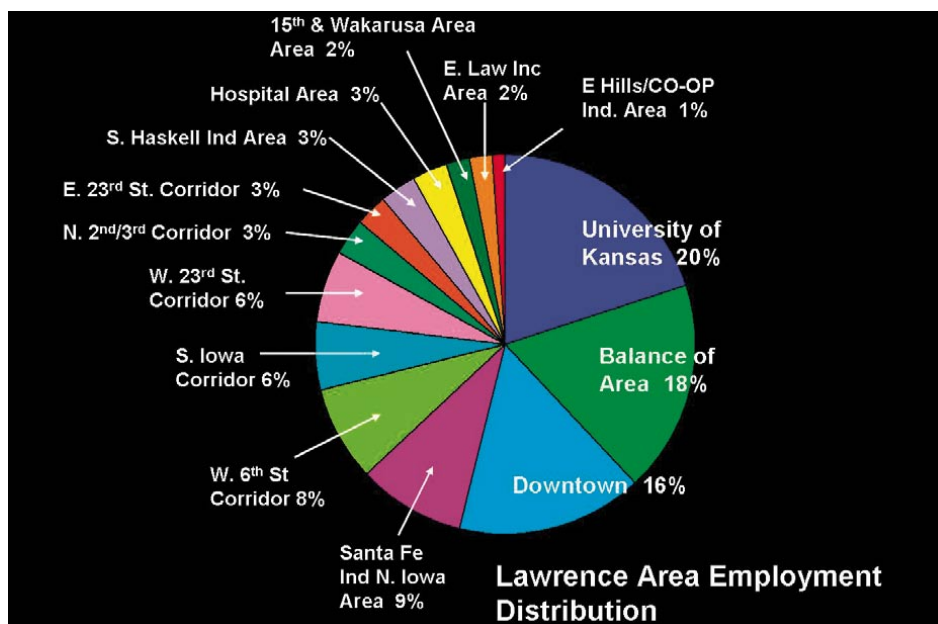
Economic development is creating wealth in a community through job creation, job retention, quality of life improvement, and tax base enhancement.

—International Economic Development Council

The economic viability of any community is one of the prime determinants of its sustainability. As defined above, a sustainable economy multiplies benefits throughout a community through its direct payment of wages, its multiplier effect through spending, and its generation of public funds through tax revenues. Lawrence should look for sustainable economic growth by retaining those businesses that are suited to its unique offerings in the marketplace and encouraging the development of those that will complement its assets and values, such as life-long employment in a diverse economy linked to a major research institution.



Traditionally, Lawrence has developed around education, government, agriculture, industry, and retail. Employment distribution depicts Lawrence's economic base with more than 65 percent of its workforce in white collar jobs. The geographic distribution of the workforce is also illustrative of the major employment centers with the University of Kansas topping at 20 percent, downtown at 16 percent, and the balance of employment along the commercial and industrial corridors.



Key Recommendations for Economic Sustainability

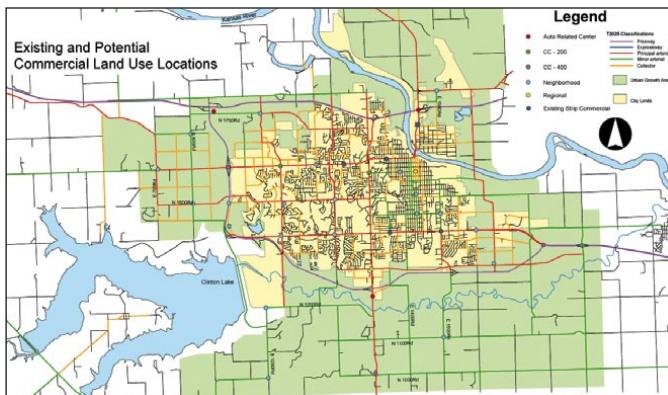
Industrial Development

Industrial development continues to serve as an important tax base to generate revenue, particularly as residential development increases demand additional public services. While industry still will be a sought-after market opportunity, such businesses are also constrained by land availability and infrastructure in Lawrence. Newer models of green industries that can assemble into planned industrial parks would be well suited for Lawrence and should be incubated and recruited to enhance market synergies with University of Kansas research efforts.

An overall strategy of business clusters should be explored that vertically integrate the range of businesses that can supply as many goods and services to the region's major economic engines as possible. If a local enterprise can be established to serve a major Lawrence business and be economically competitive with others outside the region that are supplying that major business, particularly if that major business has a national or international market, then the Lawrence public and private economic development strategy should include the creation of such businesses.

Land has been cited as the primary resource constraint for industrial development within Lawrence's city limits. In this regard, Lawrence should conduct an inventory of property to determine how much industrial development is possible under current zoning. This development availability should be assessed against market demands for industrial land and a policy adopted to retain enough inventory of this land to accommodate the forecast market demand. Lawrence should resist the tendency found in similar communities with expanding populations to "downzone" from industrial uses to residential while there is still an industrial market to serve. It is virtually impossible to rezone for more intensive uses once "downzoning" occurs. The industrial land-use category must be seen as a precious resource for future revenue generation in the com-

munity and to absorb the potential innovations in green and more traditional industrial development.



Additional capacity for industrial development will be created with the advent of the new sanitary sewer treatment facility in Lawrence. Even as green industry develops in this region, new roads and power access to these parks will also be necessary and should be developed along sustainable guidelines for construction and maintenance.

While Lawrence should preserve its inventory of industrial land for the businesses that need to locate away from the city center in a “greenfield,” research-related enterprises whose space needs and operations integrate well with different land uses can co-locate to create mixed-use districts in Lawrence that activate and support a walkable district between the University of Kansas and downtown. The selective location of businesses along this criterion can aid in the revitalization of the city center and conserve industrial land for businesses that truly need them.

Retail

Lawrence’s pull factor is approximately 0.98, which implies that the city is just holding its own in retaining its local purchasing power as opposed to its residents making their retail purchases in other jurisdictions. Within such a market profile, an existing vacancy rate in Lawrence might suggest a great opportunity to capture an underserved segment or niche with new retail that supplies what the local population may be going elsewhere to buy. In pursuit of this strategy, Lawrence has one key advantage to leverage that its competing neighbors do not have: its authentic downtown.

Massachusetts Street is the iconic and traditional retail core of the city. For many citizens, it embodies all the attributes of a “town square in a linear configuration.” With this rare asset, Lawrence should look to examples like those offered through the National Historic Trust for Historic Preservation’s Main Street Program to manage the recruitment of new retail establishments that recapture Lawrence’s peripatetic retail consumer. Such a coordination program can also assist in staging events that are targeted to draw the public to the retail market along Massachusetts Street, develop themed advertising to bring the region’s shoppers downtown, and help to establish a compelling brand for the district with consistent graphics and wayfinding information. Such a coherent graphic program for the entertainment and retail center for Lawrence can also become an important node in a network of heritage trails throughout the city, region, and state.

Small Business Incubation

Lawrence is an ideal hub for the development of small businesses that make good neighbors. Given the entrepreneurial culture of the city and the emerging demographic of many retiring baby-boomers redefining retirement who will seek entrepreneurial opportunities themselves, Lawrence is wonderfully situated to absorb a retirement-age population and encourage their interest in business creation as a windfall. In this regard, it would be beneficial for the city not to look at increased residential population as synonymous with transformation into a bedroom community. Rather, a proactive marketing program that portrays Lawrence as a place that supports the entire range of business, including live/work environments, would serve this city well.

Here again, Lawrence's competitive advantage in emerging as a center for postretirement entrepreneurs as well as other small business enterprises can be linked to health-related technologies that serve a national if not global market place and are fortified by the proximity of an intellectual resource for research and innovation like the University of Kansas.

University of Kansas

Many universities and cities nationwide are attempting to score big in the biomedical market. From Cambridge, Mass., to the bay area in California, the competition is fierce among grant awards, business start-ups, and commercial/academic partnerships. The University of Kansas has a distinct advantage in this arena, given its centers of excellence in pharmacology and environmental studies. The University of Kansas also enjoys the distinction of being in Lawrence and should see the city as one of its major amenities for recruitment and retention. So in addition to the incubation opportunities cited previously in this report, an alliance would be valuable among the city of Lawrence, Douglas County, and the business leadership to recruit mature ventures that can benefit from the University of Kansas's intellectual resource. This consortium of innovation should be marketed and showcased internationally for any foreign business that might be seeking a U.S. presence. The central location of the university and the city should be among their strongest selling points in addition to the quality of research and its market applications through well planned start-ups.

The concept of cluster businesses is discussed in the industrial section of this report, but those opportunities should be explored for every major business sector to investigate the opportunity for secondary or tertiary businesses to link with primary economic engines. In such an approach there is usually an added benefit of diversification through

the range of cluster businesses that also strengthens a local economy. Essentially the three elements necessary for success are

- A major business that has strong export market share and growth curve or major business that imports clients/market from well beyond its immediate region (such as the University of Kansas's draw for students and research dollars extending beyond Lawrence and even Kansas)
- That major business needing to acquire its factor inputs, materials, and equipment from outside sources
- Financial support and capacity for local businesses to supply what that major business needs to operate

The outcome of successful development where the major business is a research-related academic institution is typically measured by business start-ups and reinvestment. Other universities with which cities have economic partnerships include Harvard University and Massachusetts Institute of Technology in Cambridge, Mass.; Brown University in Providence, R.I.; Savannah College of Art and Design in Savannah; and the University of Pennsylvania in Philadelphia. These urban academic institutions have come to recognize their role and obligation in providing entrepreneurial opportunities for their cities and as well as their parts as economic engines for their revitalization. Positive symbiotic partnerships between the city and the university showcase their mutual benefits by attracting and retaining excellent faculty and students, who may ultimately become permanent residents.



In addition to its scientific and laboratory-based research, the University of Kansas is a robust resource for planning and design excellence that can explore opportunities before they have been clearly enough defined to translate into a professional scope of service for a private firm. The University of Tennessee's design center in Chattanooga is an exemplary model of how a university can directly engage a community's needs as evidenced by the major role it played in the development of the Tennessee Aquarium. Birmingham, Ala., has a similar relationship with Auburn University's Center for Architecture and Urban Studies.

Residential Market

Even as Lawrence struggles with its transformation as a greater residential population lives in the city and commutes elsewhere, this market is an important component to a diverse and sustainable community. The population of Lawrence is 87,000 people, which shows a healthy 8.75 percent increase over the 2000 census. Lawrence should encourage the development of more mixed-use development that includes market rate and affordable housing and allows for live/work residency. This pattern of use should mitigate much concern about the dilution of commercial use to residential development, particularly if there is an opportunity to recapture commercial and retail needs that Lawrence's citizens are heading out of town to satisfy.

The targets for new residential markets nationally are empty nesters and retirees. Moreover, in a market such as Lawrence with a strong academic presence, nontraditional families and younger couples and singles will also be part of the expanding residential market. Each of these demographic affinities shares an interest in experiential amenities in making their primary determination of where they choose to live. According to a recent presentation at the Urban Land Institute, retirees are most attracted to communities with trails and bike paths, not golf courses and waterfronts as is often assumed. Lawrence is uniquely poised with its potential network of outdoor paths and trails to appeal to this market and other demographic segments.

Finally, an aspect of economic development that should not be overlooked is Lawrence's cultural and heritage inventory. With such a locus of authentic, historic venues in addition to natural vistas and local biodiversity in its inventory, Lawrence should enhance its attractiveness for tourists by offering them a system of trails, way-finding, interpretive markers, and district designations that allow true appreciation of the varied beauty and unique story that Lawrence alone can relate. From visiting the architectural treasures of Massachusetts Street, the nestled venues that housed Langston Hughes and Gordon Parks, the Native American community of Haskell Indian Nations University and its environs to relishing the wetlands and waterways of this beautiful region, the entire city can tell its own story in a way that reverberates to the growing niches of cultural and ecotourism.

SUSTAINABLE DOWNTOWN AND NEIGHBORHOOD DEVELOPMENT

Creating a Sustainable Downtown

Downtown Lawrence is experiencing varying degrees of decline as a result of competing shopping centers and changing consumer habits. Downtown Lawrence's ability to compete with neighboring suburban commercial centers and its own fringe developments has long been a growing concern of the downtown merchants and all who care about this distinctive district. As residential development continues to push outward away from the downtown core, the consequential shift in "rooftop distribution" will continue to create pressure for commercial development closer to the residential areas developing at the fringe.

Community leaders recognize the dynamics of the marketplace that have directed investment along the outlying routes will continue and that the best way for downtown to thrive is to leverage its competitive advantage by developing its own strategy as a destination offering a broad range of goods and services—in a place that is the authentic and unique symbol of the region. Its historical character and accessibility from all points of the community give downtown Lawrence a distinct advantage over any other commercial center in the region if proper transportation systems are in place to allow for the multimodal movement among citizens and for efficient transitions from car or transit to pedestrian enjoyment of the downtown district.

Businesses that can thrive in a pedestrian environment should be recruited to downtown for its centrality of location and ease of access to major thoroughfares, serving the entire community and surrounding region. These same characteristics make downtown Lawrence a desirable housing environment, including opportunities for market rate and workforce housing to serve those with limited mobility and the need to be close to a concentration of goods that may not exist in convenient proximity in other more suburban parts of Lawrence. However, the city along with its public and private partners must overcome real and perceived barriers to development and redevelopment opportunities using accelerated permitting, infrastructure improvements, and financial incentives to induce downtown business and housing in Lawrence.

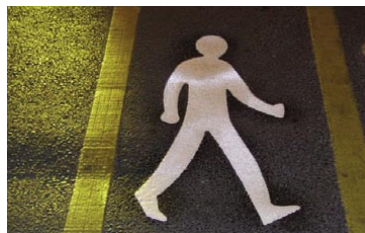
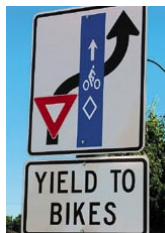
To enhance downtown Lawrence as a viable and sustainable place to live, work, learn, and play, the following initiatives should be considered:

- *Enhance gateway and streetscape.* Improve access and visual character by focusing on approaches and gateways to the downtown area in order to convey to residents, visitors, and travelers alike they are entering a special part of Lawrence. An integrated approach that employs the use of signs, including directional and wayfinding



signage, landscaping, banners, lighting, and architectural elements, will help enhance the sense of place and arrival in downtown Lawrence from routes 40 and 59 as well as along key intersections at 9th, 15th, and 19th streets.

- *Overcome perception of inadequate parking.* Provide pedestrians with a more stimulating and visually interesting experience between a parking space and their destination to ease the perception. Provide more gathering areas, including open spaces, parks, and plazas, to provide visual relief along with special walking surface treatments (e.g., pavers) to enhance the pedestrian experience. Office uses require significant parking to accommodate customers and employees consuming significant parking capacity within the downtown area. Office uses also add a significant number of workers to the downtown area and result in retail and service stability of the existing economic base of downtown. A detailed parking assessment should be performed to determine if any deficits in parking exist and, if so, determine strategies for identifying suitable alternatives, including conversion of surface lots to structured parking to address such deficiencies to minimize the perception of insufficient parking.
- *Provide a strong connection to Kansas River.* Create and celebrate the proximity of the Kansas River to downtown Lawrence. Enhance the construction of greenbelts and trails to include a promenade or public plaza emphasizing pedestrian comfort, access, and movement that overlooks the riverfront with direct connections to the many streets oriented north and south terminating on the Kansas River.
- *Enhance pedestrian and bicycle access to downtown.* While vehicular access and circulation within downtown is important, it is equally and perhaps more important to encourage people to walk between activities and services. Although significant investment has already taken place in downtown and most sidewalks in downtown are in good to fair condition, there are areas where repair and replacement of sidewalks to neighborhoods directly adjoining downtown will be necessary to reestablish pedestrian “connectivity” to downtown from adjoining neighborhoods.



Bike racks should be provided at common destination points of interest. To expand upon the “experience” of downtown living, a system of linear walkways and pocket parks should be developed to create a network of open spaces to enhance the pedestrian experience.

- *Increase promotion of downtown.* A permanent organization focused upon the promotion of downtown as well as the development of communitywide activities and programs that would draw great numbers of people to downtown Lawrence is essential to this area continuing to be perceived as a viable part of the community. A broader focus that brings together downtown businesses, residents, and governmental entities to forge a public/private partnership to promote downtown will be essential to creating the organizational accountability needed to ensure adequate public and private investments are provided. Ideally, community leaders would like to have the downtown be self-sufficient but, like many other communities, the downtown remains an endangered space that will require continued special support and measures to keep it viable and vital. City officials should consider allocating a secured source of funds mainly to pay for full-time staff and capital investments to promote and facilitate downtown revitalization that leverages public investment with its downtown partners.

During the SDAT visit, it was apparent that only limited market analysis information existed for the downtown. Obviously, promotion and the establishment of special event programs aimed at attracting people into downtown will generate business for downtown retail and service providers. However, this activity in itself will not create the more desirable, long-term, and sustainable solution needed to increase the self-sufficiency of downtown. To accomplish this goal, Lawrence must create opportunities for people to live, work, shop, and be entertained in the downtown. Coupled with the right investment in transportation and pedestrian infrastructure is the right mix of office, retail, housing, entertainment, as well as activities and special events and venues such as a farmers market. Understanding customers and the forces at work in the marketplace is essential to attracting and retaining businesses to downtown. A market analysis will provide stakeholders definable actions to be undertaken to revitalize the downtown, focus fiscal resources where appropriate and needed, and capture identified market opportunities.



- *Create opportunities for downtown housing.* A 1998 survey conducted by the Brookings Institution and the Fannie Mae Foundation found that one of the fastest growing segments of the nation's housing market is downtown housing. For example, Houston expects its downtown population to quadruple by 2010. Cleveland expects its downtown population to triple. Denver, Memphis, Birmingham, and Seattle all anticipate doubling the number of downtown residents in the next 10 years.

The growth in downtown housing is not restricted to large cities. Many smaller cities and towns are also seeing a growing market for downtown housing. Asheville, N.C.; Portsmouth, Va.; Burlington, Vt.; Dayton, Ohio; Bangor, Maine; and Sheboygan Falls, Wis., are just a few examples. So what accounts for the growing demand for downtown housing? The following are some of the more notable reasons for growing demand for downtown housing:

- *Access.* Downtowns usually have the largest concentration of jobs in a metropolitan region, and downtown housing makes walking to work an attractive option. Downtowns also have the most public transportation facilities. Even when downtown residents have to drive, reverse commuting is an attractive option.
- *Amenities.* Virtually every downtown has amenities not typically found in suburban neighborhoods—museums, waterfront parks, colleges, theaters, unique views,



and interesting, contextual architecture. While the quality of primary education remains a concern for families with school-age children, only one-third of American households fall in this category, so a balanced approach toward creating sustainable amenities is critical.

- *Pedestrian-friendly environment.* Older downtowns are walkable. They evolved during a period when development was compact, dense, and pedestrian friendly. Senior citizens, in particular, like the option of being able to walk to church, the post office, or shopping. Downtown housing also gives them access to public transportation that is viable due to higher demand. Many cities have converted abandoned hotels, old schools, and vacant industrial buildings into housing for seniors, many of whom are innovating new ways of living as groups in models, such as “co-housing,” which is explained in greater detail later in this report.

What do these trends and patterns mean for Lawrence? Improving and stabilizing housing in existing downtown neighborhoods and identifying and creating opportunities for new housing should be considered high priority for city officials. Stabilizing and improving existing housing stock is only part of the equation—housing opportunities in the downtown must expand to take advantage of convenience and easy access to a wide variety of goods and services. Creating opportunities for mixed-use development that combines ground floor commercial and office with upper-story residential in downtown should be encouraged and supported. Residential development will lead to an increase in pedestrian traffic that will, in turn, improve the existing business environment, attracting new businesses, and providing more stability in the economic base—all leading to a more self-sufficient downtown. Lawrence’s street pattern can support this housing and mixed-use strategy. The greatest intensity for mixed use and density should occur on or near Massachusetts Street, decreasing in density and mixed-market viability the further away one locates east or west.

East of Massachusetts Street, the character of streets such as New Hampshire and Rhode Island lend themselves to higher and more commercially compatible design styles that can provide housing with a range of mixed uses.

A subtly different intent might be tested for the area bounded by downtown (Massachusetts Street) and the University of Kansas (using a border defined as east of Louisiana Street, south of 9th Street, and north of 14th Street) that could provide a range of housing styles and densities that work off of the activity nodes and still feel more quietly residential even when designed for multifamily development.

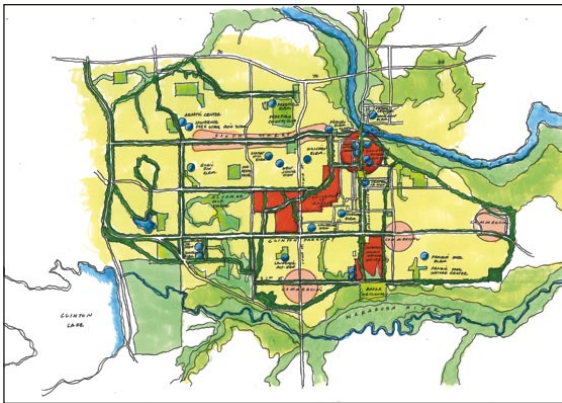
With both of these areas, specific attention must also be given to stabilizing existing downtown residential neighborhoods by encouraging the restoration of existing housing stock and the construction of infill housing that preserves and strengthens the architectural and historic context and integrity of the downtown. Infill development is less likely to be successful if conditions in the surrounding neighborhood are not properly addressed, i.e., consistent code enforcement practices are essential to restoring confidence in investing in existing neighborhoods by developers and future residents.

Neighborhoods — Changing Character

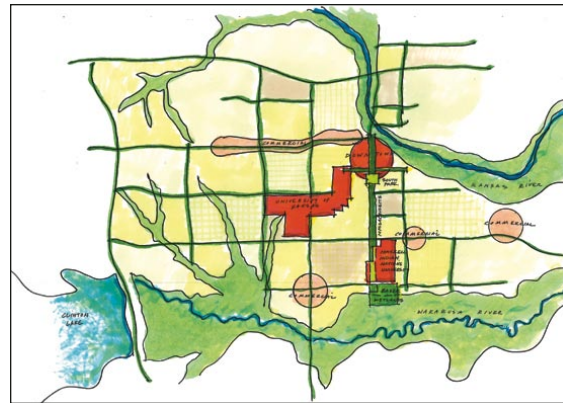
Neighborhood design in Lawrence has evolved from tree-lined, pedestrian-friendly streetscapes containing a variety of homes and land uses to predominantly auto-dependent homogeneous residential communities separated from commercial, office, civic, and recreational opportunities. Streetscapes in many of the oldest neighborhoods found

in Lawrence serve as a unifying element bringing residents, pedestrians, and a sense of place to each neighborhood and district making up many of the oldest parts of Lawrence.

Many residents participating in the SDAT process expressed a desire to see Lawrence return to its traditional neighborhood design qualities as a means of reclaiming and reestablishing community values and identity while also strengthening aesthetic character with primary emphasis on pedestrian-friendly streetscapes. The use of traditional neighborhood design and sustainable development practices can provide in part the regulatory tools to create the desired neighborhood fabric that integrates pedestrian-friendly streetscapes with timeless architecture; a mix of land uses meeting the daily needs of residents; and opportunities for civic, recreational, and educational experiences in close proximity to homes and businesses.



View of existing features such as major streets, community amenities, and environmental systems.



An open space system links the existing features.

Residents noted the need to integrate open space into the fabric of the community. When asked what form such open spaces should take, most indicated open spaces should provide a variety of experiences, from the most intensive recreational experiences such as a recreation complex to the most passive of recreational experiences involving natural areas and trail systems allowing pedestrians the opportunity to visit and experience nature in its most native of settings such as the biodiverse creek systems winding south or the Kansas River. In response to this desire, the city should initiate a public/private partnership process that identifies the many open space opportunities within and surrounding Lawrence. One of the greatest enhancements for property values in the country are trails that connect destinations, both developed and natural.

Parks and open space should therefore be integrated and linked to each residential community throughout Lawrence to provide residents the opportunity to walk and experience such recreational opportunities while also promoting a healthier lifestyle for all residents. Like the pearls that make up a necklace, the city should seek opportunities

to tie such pearls together through an interconnected series of trails and open space corridors that use streams, rivers, ridgelines, wetlands, floodplains, and other sensitive habits. The Urban Growth Area and Potential Future Parks Zones plan for Lawrence features existing parks and open space throughout Lawrence but, more important, the plan identifies an opportunity to identify, preserve, and protect select open spaces in areas that will experience future growth and development where integration of such open space will be essential to allowing residents the opportunity to have contact with wildlife and natural settings.

Interconnectivity between neighborhoods is essential to “building” community and establishing and reinforcing a sense of continuity and “connection” for residents. Many of the oldest parts of Lawrence contain streets with sidewalks affording pedestrians the opportunity to walk between neighborhoods as well as to desired destinations, including parks, schools, civic buildings, and shopping areas. Developing areas within Lawrence were found in some instances to lack such interconnectivity between neighborhoods and destination points requiring residents to access such destinations only by automobile. Interconnectivity should be required between all development, including those containing varying or mixed land-use patterns to encourage pedestrian-oriented access. The use of buffers and other physical separation techniques should be discouraged and instead land uses integrated into a sustainable mixed-use land-use pattern much like that found in many older parts of Lawrence where residences, businesses, civic, and recreational opportunities could be found within convenient access of one another.

Schools were once an integral part of the physical character in the residential neighborhoods of Lawrence. According to residents, children walked to school each day and parents interacted with school staff and participated in school activities. Schools served as a focus and gathering spot for parents, teachers, students, and the community at large. In recent years, however, schools in Lawrence appear to have been planned and constructed as “stand-alone” facilities often lacking the opportunity for “community-based” programs and use. School facilities now occupy large expanses of land with buildings oriented inwardly toward the core of the site resulting in physical isolation from surrounding residential areas. Community-based schools should be explored in Lawrence to incorporate not only neighborhood-oriented design principles, but provide the means to accommodate and promote interaction between the school and its immediate surrounding community, creating a focal point that reinforces a mutual sense of pride and investment between community and school. Daily activities at school evolve into afternoon and evening activities that draw residents, young and old, to the school to facilitate life-long learning opportunities and interaction with the community.

Community-based schools can also provide for a cooperative “shared-campus” approach to combine elementary and middle school as well as community parks and recreation facilities that can be used by students and faculty during the day and by the community in the evening and weekends. The educational missions of American communities are increasingly defined by life-long learning, which keeps workforces trained and retirees active. Lawrence’s potential to create models of life-long learning in rich physical settings as partners with its great universities is compelling.

Development patterns emerging in Lawrence in recent decades have resulted in the physical separation of land uses originally found mixed within its core and downtown areas. Residential patterns are now isolated and separated from commercial, office, and institutional uses whereas many years ago such uses were often found in close proximity to one another. Many residents expressed the need to have convenient access to goods and services from residential areas as well as places of employment. To provide convenient access to goods and services, the city must be receptive to mixed-use development that integrates horizontally as well as vertically a combination of residential, commercial, and institutional uses within the community.

Neighborhood Recommendations

To create sustainable neighborhoods within Lawrence, development and redevelopment practices must be cast to provide the following:

- Plan and design neighborhoods for a healthier lifestyle by requiring sidewalks and interconnectivity between neighborhoods and the community at large
- Remove barriers to physical activity for a more sustainable neighborhood development pattern by integrating parks and other forms of open space and greenways into the design of neighborhoods that create opportunities for interaction between residents as well as recreation venues
- Require a mix of housing choice in development and redevelopment projects that address a variety of housing choice and price ranges to meet the diverse needs of residents, including affordable and workforce housing blended into the fabric of the neighborhood rather than segregated into a stand-alone neighborhood or enclave
- Revise land-use policies to allow for more convenient access to goods and services rather than requiring such uses be separated and buffered from residential areas; thus removing the dependency upon the automobile and creating a more self-sustaining development pattern not unlike that found in Lawrence many decades ago

Barriers to Sustainability

Some of the more notable barriers to sustainability for communities include

- Separating land uses
- Auto-dominated community design
- Perpetuating large-lot development
- Overlooking the human scale

Emerging land-use patterns in Lawrence suggest that regulatory provisions encourage separating land uses rather than mixing land-use patterns to create mixed-use development that offers opportunities to live, work, learn, and play in a compact urban form within the same community. The lack of interconnectivity between neighborhoods and commercial districts is prevalent resulting in an auto-dominated community design and land-use pattern. Many new residential neighborhoods in Lawrence contain predominantly mid- to large-sized single-family residential lots rather than a mix of residential uses and typologies. Design appears to overlook the human scale in consideration of ease of accessibility for motorists.

Affordable and Sustainable Housing

With a populace composed of working professionals, students, young families, and aging retirees, creating housing that will fit the needs of all residents and economic groups can be challenging. Throughout the three-day SDAT process, residents and housing providers indicated the need to maintain diversity of housing choices throughout the community to meet the variety of housing needs emerging in Lawrence. Coupled with the need to maintain varied housing choices, residents and providers also raised strenuous concern about affordability and whether “the next generation will be able to afford to live in Lawrence.”

Residential development should not only satisfy the needs of a variety of lifestyles but also provide opportunities for residents to secure housing whether it is owner-occupied or rental. Rising land values and construction costs will continue to challenge the ability of developers to provide the full spectrum of housing choices, including affordable and workforce housing. However, the city should seek opportunities to work cooperatively with other public and not-for-profit agencies as well as the private sector to provide the necessary mix of housing choices within existing as well as developing areas of Lawrence.

The many organizations attempting to build and provide affordable housing in Lawrence are meeting only a small portion of the growing need for affordable and workforce housing. Affordable housing can be provided in a variety of forms, ranging from single-family detached to attached and multifamily housing as well as accessory units. Lofts over ground-floor retail can also be introduced in close proximity to employment opportunities to minimize commuting costs for workforce occupants. Regardless of the type of housing provided, the housing choices should be mixed throughout the fabric of the neighborhood to create a more vibrant, economically and culturally diverse community for its residents. The 2005 Lawrence/Douglas County Community Housing Assessment Team report has provided the community with recommendations for meeting Lawrence's affordable housing needs; implementing these findings as well as further expanding upon and exploring points raised within the report should be a priority for the city.



Lawrence's growing population and the subsequent need for additional housing also provide an opportunity to promote the development of sustainable housing. Increasing energy efficiency and finding sustainable alternatives to traditional development models were identified as core concerns within the Lawrence SDAT application. The escalating costs of energy as well as our increasing knowledge of the negative impact that

our current energy practices are having upon our environment have created a climate in which the promulgation of sustainable building practices can reach the majority of the community rather than being limited only to high-cost developments as in years past.

Defined as planning, designing, and building dwellings that are more socially, environmentally, and economically sustainable, a sustainable house is safe, secure, and universally designed while also being efficient in the use of water and energy resources and in waste minimization. A sustainable house is cost-efficient over time, comfortable, cheap to maintain, and complimentary of the environ in which it exists. Sustainable housing provides multiple benefits—environmental, social, and economic—for the life of the home as well as for the occupants and the community at large.

The city and the many public and private entities that are attempting to introduce affordable housing to Lawrence should consider the Energy Efficient Mortgage (EMM) program as a possible vehicle to help deliver affordable, sustainable housing to various parts of Lawrence. The EMM is a federally recognized program that finances energy-saving improvements as part of the initial mortgage or in stretching the debt-to-income qualifying ratio on loans. Lowered monthly energy cost savings can be applied toward a larger loan repayment for more slender pocketbooks. The program is particularly effective in the resale market but can apply for new construction as well. A U.S. Department of Energy recommended Home Energy Rating must be conducted to determine eligibility for an EEM at a cost of \$100–\$300. Since mortgage interest is tax deductible, the cost of energy improvements is doubly cost-effective.

Lawrence can additionally rely upon the efforts and examples set by other communities that are working to create models for affordable and sustainable housing development. *Building Innovation for Homeownership*, a publication by the U.S. Housing and Urban Development's Partnership for Advancing Technology in Housing and the Building Innovation for Homeownership program, profiles 63 award-winning low-cost housing developments that include innovations such as modular construction, energy-efficient design, structural insulated panels, innovative site design and development, steel framing, panelized construction, masonry construction, green design, and HUD-code manufactured housing. Many of these strategies produce more cost-effective housing with sustainable elements.

The cohousing movement might also provide a viable paradigm for Lawrence. Cohousing is a trend toward integrated village-like shared housing. It has demonstrated that achieving high levels of sustainability is possible through dedicated community decision-making and planning. Some cohousers have accepted government funding that opens units within the development for lower-income households, but these are a rarity.

A Cambridge, Mass., 85-unit cohousing development includes two units purchased for low-income rental by the Cambridge Housing Authority. Going one step beyond conventional wisdom, the group is committed to a super-healthy indoor environment, the reuse of industrial sites for housing, solar energy, access to and use of public transportation, and diversity. Their energy costs are projected to be 60 percent less than the average. Cohousing communities in Denver and Ithaca, N.Y., are working to create communities that preserve the neighborhood structure while also developing unique strategies to promote ecological and social sustainability. The Web site of the Cohousing Association of the United States contains additional information and case studies pertaining to this movement and can be found at www.cohousing.org.

TRANSPORTATION AND CONNECTIVITY

Transportation is a central component of a sustainable community, not simply as a network of movement among destinations but also as a functional complement to land use. The distribution, density, and characteristics of development are clearly related to how transportation serves people and property. Even demographic settlement patterns can result from the routing, rates, and frequency of buses in a system. Transit planners and engineers introducing options to areas that have come to depend on cars exclusively as their transportation mode are also discovering that design is a key to induce use of bus or rail cars in communities.



The first rule of a transit strategy should be to make choices easy and visible. The availability of options will influence behavior: if there are sidewalks people will walk; if there are bicycle lanes, people will bike. The community needs to know that these choices are supported by investment and maintenance. In Nashville and Davidson County, Tenn., a telephone survey in 2003 revealed that the residents would make more trips on foot if safe, convenient sidewalks were in place. The plan used the concept of the transect (the transect concept is discussed in further detail on page 48 of this report) to establish zones that support a range of transit modes. The zones included

- Core
- Center
- Neighborhood
- District
- Suburban
- Rural reserve

Such an organizational model would work well in establishing sustainable transportation in Lawrence given the city's distinct development patterns that reflect these groupings radiating from the densest core to the open rural reserve. This pattern lends itself both to analysis and regulation around the transect concept.

An audit of policies, practices, and investments for internal or operational biases in modes is critical. Many investment and enforcement policies can either send the wrong signal in terms of transit priorities or, more critically, encourage an adverse outcome. For example the widening of roads too far in advance of funding buses to use the lanes can induce more vehicular traffic and inelasticity of demand when buses are finally put on the road. Also, whenever a city funds roads but forces property owners to build sidewalks adjacent to their parcels—even when the sidewalk is in the right of way—there is an implicit message the sidewalks are not as important a public concern as roads.

As stated previously, transportation has a direct impact on land use and that impact begins with the design of the road itself. Unfortunately many urban streets, particularly when funded through state coffers, end up with the intimate charm of an oversized flume. Alan Jacobs, in his book *Great Streets*, illustrates the importance streets have as the basic armature of a city's form and how they can establish the first impression of a neighborhood, district, or individual building. Given the primacy that the street enjoys in serving functionally and aesthetically, the design of the streets must be deliberate for place-making. Road and street design should not be approached as an exercise solely with vehicular conveyance and “preventive isolation” in mind.

The management of parking is a multifaceted affair, including differentiated parking fees downtown, municipal parking facilities, limited on-street spaces, employer assisted-transit, and supporting alternate modes like providing bicycle users showers and lockers at work. In Lawrence the greatest opportunity to apply the multimodal approach is in downtown but certainly the University of Kansas, and even some of the fringe-located employment centers, should explore opportunities to grant employees and customers the most convenient choices for access.



In establishing benchmarks for the application of these techniques, a level-of-service benchmark is critical. Such benchmarks should be set for all modes of travel and parking, not just the automobile. The necessary investments for bikes, buses, and trails can therefore be measured toward by their efficacy toward specific utilization goals. Transportation benchmarks should also be linked to the range of development across Lawrence, as both land use and density will influence trip generation. Ultimately any system's success is measured by the number of people moved, so this should form the basis of benchmarking as opposed to the number of vehicles moved. This measure will lead to more rational decisions on multimodal investments in transit that will also be more readily supported by the Federal Transit Administration.

The benefits associated with this type of approach in transit planning are myriad. Sophisticated economic modeling can capture not only the obvious linkage between initial transportation investment costs and the ultimate level of service, but can also measure

- Economic development
- Maintenance cost
- Expansion opportunities for higher and denser development
- Health improvements (lower obesity, accidents)
- Related environmental benefits (stormwater benefit from contextual design methods)
- Opportunity costs of turning more property to development as opposed to surface parking
- Mixed-income housing supported by commute or other travel savings (20 percent of housing income goes to transportation)

With all the benefit to gain from a well-deployed multimodal transportation system in Lawrence, the physical design of the roads, bike paths, and trails becomes the next opportunity for sustainable implementation. If the transportation system on average takes about 17 percent of a community's land area, then the means and methods of construction and their impacts on the natural environment, particularly the watershed, become a critical concern.

Alternative standards for low-impact design and context sensitive design should always be investigated. In that same spirit, the soil and erosion ordinances and road design details should look at performance criteria first rather than go with a uniform, prescriptive detail applied ubiquitously. In combination with the transect, this approach can yield brilliantly sustainable options for road and path construction that address the specific conditions as they change across the city.

Municipal projects can be the test case for this new approach for model “green streets,” but then can be brought into regulations overseeing all development in the city.

All of these approaches should culminate in achieving a maximum total impervious coverage within the Lawrence watershed. In tandem with other clean water compliance, such as the National Pollution Discharge Elimination System, Lawrence can become a showcase of context sensitive urban design in service of citizens and environment.

CULTURAL SUSTAINABILITY

The cultural element of sustainability is that fabric that weaves together processes and elements to promote social interaction and cultural enrichment, reifying and defining the quality of life at the individual and community levels. Any successful approach toward implementing this element means that a community must have the ability to maintain and build its resources while developing the resiliency to address unforeseen issues in the future.

Lawrence has a tremendous social fabric that is physically constituted of

- Natural systems
- Built systems
- Historical landscape

The natural environment, which consists of river basins, floodplains, wetlands, and wildlife corridors, provides enriching experiences to its citizens and tourists. Whether these natural resources provide inspiration to an artist or a poet or whether they are resources that provide a functional connection with nature, these systems add to the experiential quality of life and, thus, need to be identified as important elements of the social fabric. The built elements on the other hand are clearly the community's physical infrastructure that provides its citizens with the opportunities to maintain a quality of life that is progressive and may be compared to other communities around the country. These "cultural jewels" are elements such as universities (Kansas, Haskell Indian), parks, museums, downtown, civic spaces, and music halls. The historical landscape of Lawrence is best defined on Lawrence's Convention and Visitor Bureau Web site: "Our Fiery History—The seed behind the underlying spirit and pride of Lawrence citizens can be found by looking to the past." Mount Oread, Kansas River Valley, and Wakarusa River Valley are examples that speak to the rich historical context of Lawrence as a place. It is the history of the place that defines the "progressive and persevering" nature of the citizens of Lawrence.



It is quite evident that Lawrence has the social fabric that defines its quality of life. It appears that Lawrence has been that hidden jewel that only insiders knew about and the outsiders loved to have. It would be quite easy to maintain status quo. But in an inevitable changing economy, wherein mobility of people is becoming more common, it is important to organize the social fabric that would continue to sustain its quality while grappling with change. Any successful organization of the city's assets must envision and relate a story of Lawrence that leaves behind a legacy for future generations.

This organization of the social fabric may fall under some key sustainable guiding principles, namely

- Identifying and knitting the cultural landscape
- Experiencing the cultural landscape
- Celebrating the cultural landscape



Identifying and Knitting the Cultural Landscape

It may be beneficial to the community to identify all the elements within the cultural landscape that are crucial to creating a social fabric and develop strategies for connecting these elements. These identified elements may be categorized as natural systems (river basins, flood plains), built systems (cultural jewels), and historical landscape elements discussed above. These systems may then be connected to develop a pattern of the social structure based on a series of frameworks:

- Framework for community identity (Kansas University, downtown, art museums)
- Framework for conservation (watersheds, river basins)
- Framework for preservation (Haskell Indian Nations University)
- Framework for education (basketball history, Native American history, Civil War history)



Some examples of a rich, cultural landscape and infrastructure developed around the country that may be used as a guiding framework are Emerald Necklace in Boston, Minneapolis Open Space System, the Gas Lamp District in San Diego, Portland Cultural Heritage System, and the Lowell Historic District in Lowell, Mass.

Experiencing the Cultural Landscape

It just does not end with knitting the cultural landscape. Creating a framework that enables the community to experience the culture of a place is key to the creation of a sustainable social fabric. Some of these guiding frameworks are

- Landscape for health (bike tours, trails, water recreation)
- Landscape for mental and spiritual growth (art walks, historic walking tours)
- Landscape for sustenance (trails, parks)

Celebrating the Cultural Landscape

Various key words have been used to describe the community of Lawrence. Some of the words that best described the community are “free thinkers, unique, spirited, independent, young at heart, artistic, intellectual, diverse, democratic, progressive, eclectic, and tolerant.”

These words truly illustrate the vibrancy of a place. It speaks of a culture that could be contagious when shared. Continuing on the organization of a series of events such as the annual parades and annual Eagles Day go a long way in creating a culture of long sustaining traditions.

One of the most important aspects of the community celebration is the ongoing commitment to participation and inclusion among the broad constituency that is Lawrence. Throughout the SDAT’s meetings with the community, there was frustration on the part of many segments of the community that they were not notified of important public hearings or even cultural events. This repeated complaint led the SDAT to two observations:

- Lawrence must have an ongoing and reliable system to convene all citizens
- This system needs to be a vehicle through which any issue of public concern may be discussed and its outcome related to any other party whose interest connects to community support

One recommendation is to establish a neighborhood association or community organization that is decentralized enough that its units can be the forum for localized concern but under a system of aggregation. The Neighborhood Association of Birmingham, Ala., is an example of a system in which every square inch of the city is a part of a neighborhood unit. There are many other such organizations in cities and towns throughout the country and information can be garnered through Neighborhoods USA.

However it is structured, Lawrence needs to bolster the community's sense of engagement frequently and consistently, so those citizens do not only feel included whenever their support is explicitly needed. They need to be heard on any issue of policy before it goes before one of Lawrence's formal bodies of government.

Thus Lawrence does appear to have a very strong innate social fabric and there are many things that the community is doing well collectively if episodically. However, a coherent and sustainable framework and a system for measuring consequential performance and inclusion across the community are lacking. As an example of an organizational exercise for social sustainability, the goal may be defined as "Create a place with an enduring culture and heritage." Some frameworks for achieving this goal have been discussed above. A good measure for gauging how the community is doing in terms of social sustainability would be to set up a timeline for the various frameworks and evaluate these on an annual basis.

TOOLS AND PROCESSES

In one year, Lawrence will celebrate 150 years of growth, change, and development since its 1858 charter. Lawrence's diverse history has propelled positive growth throughout those 150 years. Lawrence could not have developed its historic treasures and overall beauty without shared values of how to build. Even as codes developed through legal precedent and responses to life safety, a regulatory model tempered by values and practicality usually ensured better development. The best codes respected the current as well as future visions of a community and achieved their goals through a combination of statutory clarity and practical administration. For Lawrence to fully unleash its potential and support its citizens, contemporary beneficial codes and ordinances must be implemented and administered consistently to ensure positive, sustainable growth. When those policies, codes, and ordinances no longer serve the vision of Lawrence, they must be scrutinized by the community and acted on accordingly by leadership to be more responsive either through changes in content or delivery.

Codes and Quality of Life

The mission of Lawrence is concise: "We are committed to providing excellent city services that enhance the quality of life for the Lawrence community." That simple commitment to excellence recognizes the duty of



the municipality to serve its residents and visitors by enhancing the quality of life through regulations that will shape Lawrence's present as well as its future. Two challenges must be addressed to successfully realize that commitment: balancing intensity of use and administering regulatory balance. The intensity of use currently varies and includes uses that vary from downtown commercial, retail sprawl, campus life, and, most recently, the bedroom community and "suburban" type of growth to the west. To accommodate all forms of development, the regulatory model must focus on performance rather than prescriptive standards. One of the attributes of successful sustainable development is change based on appropriate factors. The leaders of the community must constantly strive with public officials to develop policies and ordinances that will perform well despite a potentially unknown future. Balanced regulation should become synonymous with "excellent city services" as codes become more responsive to market reality even as they safeguard the health, safety, and welfare that laid the foundation for previous ordinances, codes, and rules.

Regulations must also be responsive to changing communities. Demographic change in Lawrence can be found in various manifestations, including age, race, profession, and household composition. Demographic changes have helped push the current demand for mixed use. At the peak of the baby boom, the nuclear family represented 50 percent of households in the United States; two parents plus one or more children under the age of 18. Today, census data state that less than one-quarter of the households fit this description, and well over one-half include one or two adults living without children. It is within this context of changing demographics that the city services must adapt themselves as partners in developing Lawrence's future.

Existing Tools

The SDAT process acknowledged the efforts to address a manageable growth model based on Horizon 2020, the citizen-driven process of creating a plan to provide policy and strategic direction to guide Lawrence/Douglas County to the year 2020. This comprehensive plan is designed to provide a vision for the community. It is used as a policy guide that identifies the community's goals for directing future land-use decisions. The plan is also used by property owners to identify where and how development should occur; by residents to understand what the city and county anticipates for future land uses within the community; and by the city, county, and other public agencies to plan for future improvements to serve the growing population of the community. Specifically, the city and county use the comprehensive plan to evaluate development proposals, coordinate development at the fringes of the county's cities, form the foundation for specific area plans, project future service and facilities needs, and meet the requirements for federal and state grant programs. The comprehensive plan allows the decision makers to look at the entire community and the effects of land-use decisions on the community as a whole to determine whether individual proposals are consistent with the overall goals of the community. The plan must respect the changes that Lawrence has experienced since its inception and the process that created Horizon 2020 must renew to move the event horizon of the plan beyond 2020.

Positive perceptions of sustainable development policies can be fostered through Lawrence's regulatory model provided it addresses manageable growth, efficient plan review, and practical compromise. From that commitment the leaders of Lawrence can protect the public interest through planning, zoning, and regulation while keeping an eye on the horizon of the community's future. The push toward this synthesis is evidenced in the most recent zoning ordinance, chapter 20, "Development Code of

the City of Lawrence, Kansas” as well as in the *Community Design Manual*, section 2, “Commercial Development.” Established under the policy recommendation of Horizon 2020, both updated regulatory documents are responsive to the current and future challenges facing Lawrence. The existing site plan review and approval processes are the first practical steps that owners and developers can rely on to realize a project that will meet their needs as well as recognize the community’s vision. The citizen-driven process of creating a plan to enact policy and provide strategic direction coupled with the regulatory tools and committed staff should ensure the permitting and development process reflects the articulated vision for the future of Lawrence.

Confounding some positive perceptions for future opportunities are the negative experiences from ineffective regulation and previous historical policy decisions that did not deliver balanced outcomes. A recent example of a perception of obstruction in Lawrence concerned the proposed construction of a “big box” project. That proposed project raised several concerns specific to the consistency in administering the review and approval process in light of the planning ordinances adopted in the spirit of Horizon 2020. The perception by many left in the wake of that specific case highlighted the fact that since its adoption in 1996, the document has been subject to many amendments. Those amendments are often perceived to be the result of administrations’ inconsistency to follow the original intent of the regulations, e.g., the controversial adoption of the Development Code of the City of Lawrence, Kansas, specifically section 20.1107. Moreover, the *Community Design Manual*, which strives to offer both policy and guidance ends up working to the detriment of both objectives and confuses matters further by making predictable outcomes more elusive.

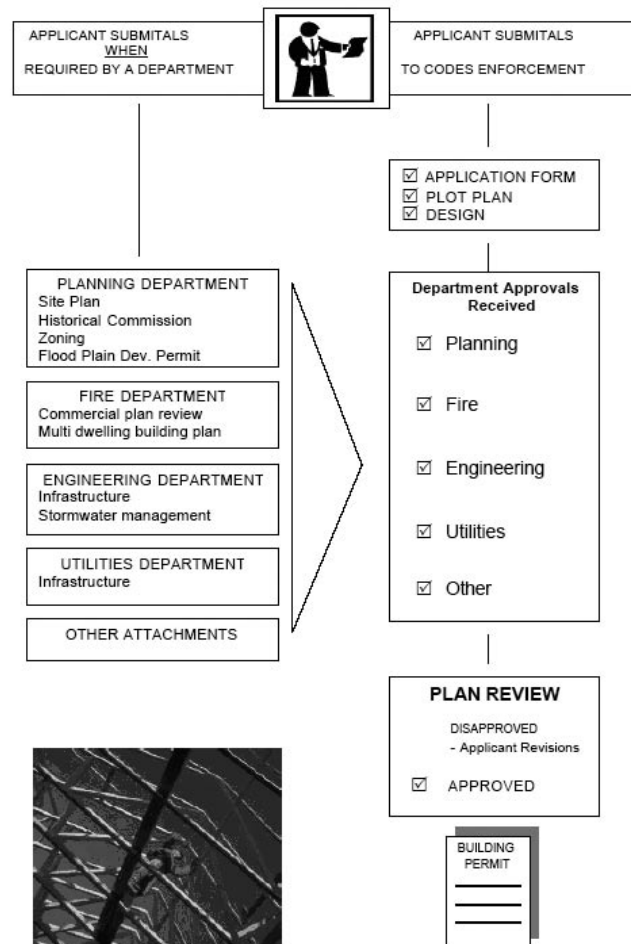
The ineffective regulation model that is perceived by individuals wanting to build in the city might be attributed in part to the lack of adherence to Horizon 2020. Without stricter stewardship, a tool developed to serve as the foundation of the community’s future begins to lose the very meaning behind its original intention. The city is committed to building a community on the principles of equality, respect for the environment, and a strong economy for the future. This is not perceived by community members or developers as guiding principles of growth in Lawrence. Permit moratoriums, based on what appear to be arbitrary decisions, have slowed growth and created the perception that Lawrence is not consistently interested in economic development for the future, sustainable or otherwise.

Streamlining the Existing Permit Process

The projected median growth for Lawrence is approximately 15,000 residents on a 10-year cycle, ultimately resulting in a population of more than 125,000 people in 2030. Employment, housing, services, and entertainment are directly related to this projected growth, which in turn is related to the planning, review, and permitting process. Currently the Neighborhood Resources Department Building Safety Division processes approximately 2,500 to 2,700 permits per year. From January to September 2006 the Building Safety Division had recorded 2,068 permits with a total valuation of more than \$120 million. The projected population increase will create an increase in construction as well as associated permit and inspection activity. This increase in volume will necessitate improvements to the current review and permit process. One suggestion already being studied is the combining of the planning department and building safety division. This has been done with great success in cities like Birmingham, Ala., and Atlanta.

This streamlining approach is currently being explored by numerous jurisdictions across the nation. Streamlining means identifying and removing barriers to effective and efficient delivery of services to the public. Streamlining modifies or restructures the day-to-day operations of an agency. This is to eliminate or significantly reduce areas of duplicative work, overlapping and conflicting rules, regulations, processes, and procedures that might be confusing or that add unnecessary time and cost to the delivery of services to the community. Streamlining looks at both public purpose and process of agencies. For building departments, the objective is more effective and efficient administration and enforcement of the building codes and standards adopted. Faced with the potential combination of the planning department and building division, Lawrence shall have the opportunity to evaluate the entire delivery model. In combining the planning and permitting process, Lawrence has undertaken the first step toward a more streamlined process. Like any other successful implementation, however, expectations for performance must be stated and achieved. For example, if a 10-day turn around for commercial building permits is the commitment, Lawrence must manage all processes to support that outcome.

BUILDING PERMIT PROCESS



Updating Current Codes

The current codes used as the regulatory tools of Lawrence must be updated. As the country continues to embrace a uniform suite of model codes, Lawrence should evaluate, modify as necessary, and adopt. Contemporary codes alleviate countless challenges the city may face based on the administration of outdated regulatory tools that are not coordinated technically or even aligned for intent. For example, the city should update its minimum property maintenance code for residential, commercial, and industrial areas and review its codes in order to

- Meet objectives in allowing the economical conversion of existing historic buildings through special building code provisions for the adaptation of existing structures

- Respond to technological advances in new types of building construction materials which reduce construction costs and yet maintain the overall quality and safety in construction and design
- Compile all separate codes and ordinances relating to development into a single unified development code, including regulations regarding subdivision, zoning, housing, building, traffic and access, and other related codes

Using Performance-Based Codes

One consideration when developing codes and rules that will guide Lawrence to a sustainable future is to focus on performance-based regulation rather than prescriptive codes. Owners and designers should be given the opportunity to explore and propose a variety of design solutions that result in the expected result rather than restrict design and imagination that shapes the character of the community. Those regulations must be administered with the utmost consistency. The most recent disparity uncovered regarding the perception of inconsistent application can be found in the debate over “Development Code of the City of Lawrence, Kansas,” specifically section 20.1107. The primary purpose of the CC200 category as described in Horizon 2020 is to provide for the expansion and redevelopment of existing community commercial centers. This same concern is addressed by the second category of community commercial centers being the CC400 Center. Although these centers usually average 150,000 gross square feet, they may be as large as 400,000 gross square feet of retail commercial space if justified by an independent market study. According to the guidelines outlined in Horizon 2020, new design standards should better integrate the centers into the surrounding neighborhoods and create a focal point for those who live nearby. They should include elements that reflect appropriate and compatible site design patterns and architectural features of neighboring areas. Site design and building features should be reflective of the quality and character of the overall community and incorporate elements familiar to the local landscape. The language found in the new development code represents the perceived double standard. The new design standard (*Community Design Manual*, section 2, “Commercial Development”) is not only a standard but a guideline that opens the door for inconsistent administration especially with the current commission form of governing.

In response to a changing community, zoning can be used in a positive way to not only recognize but encourage mixed use. More housing must be encouraged and developed in the downtown area to promote a vibrant city center. By including mixed use and housing in the rubric of zoning, density can be recognized as a benefit and not an

obstacle to Lawrence's future. The city has the ability to enhance the ease and outcome of flexible and adaptive development through a performance-based zoning ordinance.

One of the most recent tools adopted by Lawrence is the *Community Design Manual*. This document states that commercial design that is out of scale, poorly designed, or of low quality can undermine the character of a community and is less likely to succeed economically over the long term. This powerful statement would suggest recognize the potential for harmonious growth and respecting the innovation of the design community. Currently designed as a guidance as well as policy tool, it should be further developed to realize consistent design standards as a valuable and important tool in achieving a sustainable and attractive community.

A Plan for the City Lawrence Wants to Be

Several planning rules have been shaped by the geography of Lawrence in conjunction with the popular theories of the time in which they were developed. According to Horizon 2020, streets in Lawrence can be divided into two distinct patterns based upon the time in which development of the area occurred. These different patterns present different problems for the community and often require different solutions. A grid street pattern, in which streets are oriented in straight lines, typifies the older core area of the city, which was developed between the late 1800s and the 1960s. The core area is dissected by numerous streets, with approximately 8 to 10 east/west streets and 10 to 12 north/south streets in each mile. It was thought at the time that the straight streets encourage higher traffic speeds. That theory resulted in the curvilinear and cul-de-sac residential streets, intended as traffic deterrents. Today we recognize that cul-de-sac neighborhoods where the only access is from arterial streets or roads should be avoided. Cul-de-sac neighborhoods force people to move along busier arterial streets in order to leave the neighborhood. These planning patterns typify the newer development areas of Lawrence. In some areas where only a portion of a section has been developed, the street system remains discontinuous. The built and natural environmental pressures of density and sprawl and the resulting expansion to the western part of Lawrence that brings with it the social disconnect from the city center can be addressed with appropriate regulatory tools.

According to Horizon 2020 the comprehensive plan anticipates the need for at least one additional elementary school in the Lawrence Urban Growth Area (UGA). As the community grows into the UGA, a substantial concentration of new households is anticipated, as is the creation of one or more new neighborhoods. Depending on

the ultimate density and scale of development in these areas, one or more elementary schools may be needed. These schools should be planned and developed consistent with the other developmental goals for walking, conservation, contextual design, and multiple uses for the community.

Creating a Transect

Among the most robust tools being used to codify and enforce the breadth of development objectives in a community that has already established an identifiable land-use pattern is the “transect” (see the section on transportation). Derived from a term that is applied to a path along which one records or counts occurrences of phenomenon of characteristics, this term has been given new application to understanding how cities have developed along any of their axes and how those patterns suggest future growth, reinvestment, and sustainability. Given the distinctive pattern of its landscape, land use, history, and architectural districts, Lawrence is a prime candidate for the application of the transect as an organizing framework for clustering compatible uses to group buildings and the public domain in ways that are compatible and mutually sustaining. Rights of way and street design are also included in its current application, rather than being defined through separately adopted and enforced subdivision regulations. By incorporating the right of way with building design and land use under the transect, development regulations can foster the new development that supports the essential character of a place. Elected officials and the community at large can also have a better grasp of the consequences of precedent-setting rulings. In addition to the transect, a need might still exist for Cartesian overlays in historic or other special districts. With the focused combination of a strong transect, form-based zoning ordinances, and international building codes, Lawrence will go a long way to clarify and set expectations on development across the city for all parties. More on the theory and application of the transect can be sourced through the Congress for the New Urbanism.

MOVING FORWARD

*Asking “Why?” can lead to understanding...
Asking “Why not?” can lead to breakthroughs.*

—Daniel Pink, *A Whole New Mind*

Lawrence’s greatest asset in moving forward toward a sustainable future is its people. For three days the SDAT interviewed and observed the citizens in this city, whose populace displayed a bounty of passion, intellect, and perseverance. The community is more than equipped with the capacity and skill set to actuate the recommendations of this report. The SDAT gleaned that the various constituencies were informed and engaged in every aspect of public concern we broached: housing, infrastructure, “town and gown issues,” government services, land use, economic development, historic preservation, conservation, and education, just to name a few.



However, citizens of all description and interest also cited too many accounts of attempts to work through vetted processes that disappointed or frustrated them. In many cases, worse impactions resulted from the constituents’ engagement. Such accounts flowed independent of whether the community forum to address a matter was structured or informal. During our site visit, the community cried out repeatedly to the SDAT for more hopeful processes and outcomes, particularly as they embark toward a new vision. To improve the public’s participation in the critical decisions that shape policy, as well as affect individual projects, the SDAT recommends Lawrence look at a new model of framing its issues to yield positive, creative conclusions; a model that does not settle for a compromise toward mediocrity—or worse, no action—but rather conveys an inspired result among the interested parties toward the mindset of asking, “Why not?”

In his book, *A Whole New Mind*, Daniel Pink asserts that many of the challenges presenting themselves as polemic choices can, in fact, be conceived as complementary conditions that can actually give birth to inspired proposals. In the past, such constructs for positive negotiations have been expressed as the “third way,” which became a popular theme in the 1990s, or as “win-win,” promulgated through the writings of Stephen Covey.

Pink offers examples in his book of issues posited as “irreconcilable conditions” that, by exposing the false dichotomies through conjoining the stated objectives, the opportunity can yield a creative outcome that satisfies both “divergent” criteria. He calls it the “But Out” approach, a simple illustration he offers being:

I’d like to spend more time with my family, but I travel a lot for my job...

He conjoins the two thoughts into one and posits a simple solution:

I’d like to spend more time with my family, and I travel a lot for my job so I need to find ways to bring my family along during some of my travels.

Simple, yes, but even in Lawrence’s complex array of land use, politics, community, and investment, there are real opportunities to redefine the challenges to foster real cooperation, creativity, and commitment. In the case of Lawrence, an overarching conjunction of goals might be result in the statement:

The real struggle is not about whether to grow but how to maintain the essential character and identity that enhances what the community values.

An example of a real Lawrence challenge that seems irreconcilable is the Southwest Lawrence Trafficway, a project that can be defined as an extension of infrastructure jeopardizing conservation or as conservation stifling growth. In summary, one might frame the dichotomous positions:

If you build the road, it will kill the wetlands, ruin important cultural site, incite unwanted development but...

If you do not build the road, it will worsen traffic congestion, stifle development, and hinder the economy

However, by synthesizing objectives, both of these goals might be combined into a statement of positive outcomes for each constituent interest. Such a statement of intent might read:

To develop a means to preserve environmental and cultural resources and reduce congestion and provide mobility

Given the energy, awareness, and commitment of Lawrence’s community, this approach for negotiation could place the city among the most noted nationally for successful outcomes and be a model for other communities nationwide. It should not be assumed that this modality comes easily after years of acting out a traditional “win-lose” dynamic.

Initially public, civic, and business leaders may even need training as facilitators for the first rounds of public hearings conducted under this model. Even smaller meetings, when appropriately convened, can be more productive under this approach of synthesizing interests into one, achievable goal statement.

The contributions the people of Lawrence have to make toward crafting and implementing their vision is far too important to squander in faltering models of discussion that hobble the process and inherently create discord. The SDAT trusts this different approach would get the important conversation of vision off to a truly hopeful start while still honoring the integrity of all parties' respective positions as stakeholders. If mastered, this negotiating skill set can be used at all levels of interaction by the citizens of Lawrence for their common good.

With this approach toward analyzing issues, Lawrence must undertake the following steps:

- Define core values: What are the things most valued by Lawrencians: why they live here, stay here, and without which Lawrence would lose its identity?
- Determine specific policies: What are the specific goals and common directions that will preserve the values and identity?
- Adopt an action agenda: What tools, strategies or activities directly implement the policies and move toward the defined goals?
- Benchmark measures of success: How will Lawrence assess the affect of actions and determine course corrections? Are actions actually maintaining the core values?

Initial Goals

The SDAT recommends Lawrence work from the following goals as a baseline to frame its visioning exercise. Each goal will obviously need greater articulation and detail that must be the result of an outcome-driven process of creative engagement described above. Under each goal, examples of supporting actions are offered, which are not meant to be exclusive but are meant to focus activity for progress.

Goal: Ensure the availability of clean air, clean water and viable land in perpetuity

- Update development regulations, adopt conservation policy, use transportation to reduce vehicle dependence, create open/civic spaces to promote health, use land banking for range of land uses, develop and use transect

Goal: Create a dynamic place where people live, learn, work, play, and visit

- Improve inclusiveness of participation, encourage multiuse development, adopt urban design standards, adopt district designations, support historic and environmental tourism, set trails, design parking to encourage pedestrian movement, include youth in planning



Goal: Create a place with economic opportunities spanning generations

- Develop strategic relationships among academic institutions, government, and business; encourage green industrial park development; use national and global recruitment; cluster business development; train skilled labor



Goal: Create a place with an enduring heritage

- Encourage historic district designation, develop interpretive trails, develop wayfinding, manage events, promote regional heritage tourism, explore and expose diversity

Goal: Gain participation by all segments of community, predictability of public processes

- Update development regulations, appoint ombudsmen who understands city processes, create neighborhood associations for every square inch of Lawrence, develop incentives for merchant associations as well as downtown and peripheral retail corridor, change approach to problem definitions for creative outcomes

Goal: Create a place of continual educational enrichment and life-long learning.

- Engage and support all academic institutions to address needs across demographic range, set strategic educational partnerships for business needs for skilled labor, develop curricula that reflect local character as “living laboratory”

If there is one area that left the SDAT concerned about Lawrence’s future, it was the uneven and, in many cases, nonexistent participation in our interviews by the African-American, Native-American, Hispanic, and Asian-American communities. This deficiency must be addressed if Lawrence’s visioning process is going to be viable by any objective measure. The lost opportunity for input by the entire community could have significant consequences, particularly in addressing basic city needs, as well as in identifying what makes Lawrence unique for sustainability. Any process will suffer a serious credibility gap if the inclusion of a representative base of the population is left unattended. Given the rich and specific history

that Lawrence enjoys in its fundamental respect of the individual, and its sacrifices over history to show that respect, the city's future vision must be founded on every individual's participation.

The three most urgent actions to be taken in anticipation of the next visioning process are

- Establishing a forum for encouraging and including all citizens to be aware and participate, whether through a formal neighborhood association or an interim system that delivers on community involvement and provides a means of getting reliable information to the community for civic, private, and governmental initiatives.
- Updating development regulations to reflect the real market opportunities and to enhance the aesthetic, environmental, and cultural authenticity of Lawrence, guarding against a slow transformation to Anywhere USA. Initiate the use of transects to develop an inventory of the city's development patterns. In addition to the adoption of new international building codes, an ombudsmen should be appointed who understands the construction industry and code review processes but whose primary role is to assist all citizens to understand the regulatory management at City Hall. A thorough review of the city's land-use decision and appeals process should be undertaken to minimize the override of boards and agencies once clear guidelines have been adopted.
- Engaging the community in a new approach toward defining problems and creative solutions, rather than allowing false dichotomies to restrain the vital creativity needed to meet the real challenges and wonderful opportunities awaiting this great American city.

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