Introduction

Local governments provide a variety of services that affect the allocation and use of public resources. From transportation and solid waste collection to zoning and land use, they are uniquely positioned to promote sustainability through policy and program initiatives. *Our Great Region 2040*, developed by H-GAC in conjunction with partners across the Houston-Galveston region, can serve as a guidebook that local governments may use to define their sustainability goals and preferred implementation strategies. The plan is not intended as strict protocol, rather it should be viewed as a resource for local governments and their constituents to use in determining policies and practices that best support local needs and desires.

The purpose of this paper is to highlight elements of *Our Great Region 2040* that those local governments interested in developing more sustainable processes and practices can replicate as appropriate in their jurisdictions. It provides examples of sustainable practices in terms of policies and initiatives that local governments across the nation have embraced. It is not intended as an exhaustive list but rather an indicative list of the options that may be available to local governments in the Houston region. For purposes of this discussion, local government is defined as local taxing or assessment entities including counties, cities, townships, and special districts.¹

Four Actions for Achieving a More Sustainable Community

Our Great Region 2040 highlights four actions necessary for local governments to demonstrate commitment to sustainable development and to achieve results: Plan, Implement, Evaluate and Educate.

1. PLAN

Sustainable community planning and development begins by asking what communities should achieve; by initiating a goals-oriented process of planning and development; and by maximizing the existing development tools and local decision-making process.

Set Goals

The development of Our Great Region 2040 began with an extensive public outreach effort that involved public meetings throughout the region, surveys, focus group meetings, and social media tools. From that process, regional sustainability goals and objectives were developed. Rather than replicate such an extensive outreach process, local governments could begin with the adoption of a policy statement that supports the concept of sustainability as defined in the plan and/or the guiding principles that it articulates. From there, they could work with their constituents to tailor the regional goals and objectives to better reflect local concerns.

¹ Special districts include municipal utility districts, independent school districts, transit authorities, management districts, port authorities, water authorities and other taxing entities.

Develop a Plan

Public input on the supporting resolution can lead to the development of a comprehensive or strategic sustainability plan for achieving local goals. This plan should detail the specific objectives established in the goal setting process, the time frame for accomplishing them, the process through which they will be accomplished, people who will be involved, and ways to build support and publicize accomplishments. Focus should be placed on the local plan as the leading policy document and tool to help achieve sustainable outcomes.

Our Great Region 2040 serves as the regional "playbook" for developing sustainable communities throughout the region. As with the goals setting process, the plan can be modified to serve as the local plan or used as a resource in the development of a local plan. Regardless of how the plan is developed, throughout the process it is important to maintain open lines of communication with the public, and keep the process accessible and flexible. Members of the public can provide "buy-in," but even more importantly, they can afford constructive, grassroots advice about necessary changes or adaptations to the plan.

Identify Strategies

Our Great Region 2040 includes a variety of strategies that local governments may employ to reach their sustainability objectives. Local governments may choose those strategies that best suit local circumstances. In some cases, local governments may need or want to modify the regional strategies to better suit their communities or substitute new, locally developed strategies for those in *Our Great Region 2040*. The point is that strategies for implementation must be included in local plans in order to move forward.

Examples

<u>Pima County, Arizona</u>

In 2007, the Pima County Board of Supervisors passed a resolution "supporting sustainable development and the continual emphasis on sustaining a livable community." The resolution outlines the Board's objectives in several areas including water conservation and land use policies. The Board's action was prompted by concerns over rapid growth in the Tucson metropolitan area and its impacts on the Sonoran Desert conservation area.

http://www.naco.org/programs/csd/Lists/GGLinksNew/Attachments/378/Pima%20Co unty,%20AZ%20-%20Sustainability%20Initiatives%20Resolution.pdf

El Paso, Texas

Plan El Paso, the comprehensive plan for the City of El Paso, provides a flexible framework that can be updated, revised, and improved upon over time "to stay relevant to the issues the City must confront as well as the ambitions the City chooses to pursue." This plan is designed to serve as a tool to evaluate new development proposals and direct capital improvements and to guide public policy in a manner that ensures that El Paso continues to be the community that its citizens desire it to be. The plan includes an implementation matrix that defines the goals of the plan, the policies that support the goals, and the city departments responsible for implementing the goals. http://www.planelpaso.org/

Greensburg, Kansas

On May 4th, 2007, an EF-5 tornado hit Greensburg, a town of 1,389 in Southwestern Kansas. Over the last four decades this small rural farm town has been declining in population with a struggling economic base. In the wake of the disaster it became apparent that big changes would have to occur to sustain the town for future generations. The community set forth to rebuild a prosperous future through sustainable community design.

http://www.greensburgks.org/residents/recovery-planning/sustainablecomprehensive-master-plan/view

2. IMPLEMENT

Local governments can identify the day-to-day decisions and procedures that will implement sustainability both incrementally and over the long term. The tools of sustainability include development guidelines, capital budgeting, comprehensive planning, zoning, subdivision regulations, codes, and other aspects of the community's planning process. It is important to integrate policies and procedures across the spectrum of local governments services and the departments responsible for them.

Government Structure

• Organizational structure

Implementation requires coordination between many departments including solid waste, public works and utilities, public health, planning, and air quality management. Governments must decide whether to task sustainability to one employee, a department, or a contractor. If a position is created, the local government must decide where to locate it and how the employee(s) will interact with multiple departments and disciplines. Funding for a sustainability officer position or department may come from a combination of sources including general revenues and grants. Research shows that 55% of local governments that house a sustainability officer or department pay for them with general funds.²

Example

City of Boston, Massachusetts

The office of sustainability is called the Mayor's Office of Environmental and Energy Services. It reports to the Mayor and sits in the Mayor's office. Funding is directly tied to specific implementation priorities and not pooled as a general source of funding. Staff and operations are funded through operating budget and grants at approximately \$750,000 per year Capital funding, partnerships with other agencies and outside grants fund sustainability implementation. In 2009 alone, the City of Boston secured over 100

http://www.icleiusa.org/library/documents/ICLEI_Sustainability_Funding_Fact_Sheet.pdf

² Fact Sheet: How 38 Local Governments Fund Sustainability Staff and Operations (March, 2011). Retrieved on February 6, 2013 from

million dollars for energy efficiency, green affordable housing, wind and solar installations, water conservation, low impact development infrastructure, and other sustainability investments.³

• Integration of programs, departments and services

A review of sustainability programs in other areas of the nation show that there are six primary areas in which local governments have been successful in incorporating sustainability practices and principles. These are purchasing, transportation, landscape management, building practices, waste reduction and land use planning. Tools and processes can include one or a combination of approaches, such as ordinances, contracts, financial incentives, employee benefits, training exercises and education across all areas of government jurisdiction.

The matrix that accompanies this paper illustrates the overlap among those six government functions and provides examples of strategies that can have benefits in multiple functional areas.

Example

San Antonio, Texas

The City of San Antonio adopted its Environmentally Preferred Purchasing Policy and guidelines in 2010 as part of the city's adoption of the *Mission Verde Sustainability Plan.* One of the unique features of the program is that it outlines responsibilities for all of the city's departments and employees in implementing environmentally responsible purchasing and use practices. The Purchasing and General Services department and the Office of Environmental Policy coordinate with other departments to: collect data for performance tracking and evaluation of the city's environmentally responsible purchasing program; compile records for the purpose of producing an annual summary of the city's environmentally preferred purchasing actions; and, for evaluating the effectiveness of these actions in reducing the environmental impacts of city procurement.

http://www.sanantonio.gov/Purchasing/eppp.aspx

• Pilot Programs

A manageable starting point for many local governments interested in pursuing sustainable development is a relatively small pilot project. Public feedback from Our Great Region 2040 may indicate a type of program or project that local residents would support. Based upon the results of the public outreach effort conducted for the plan, a local government may determine that there is broad public support for neighborhood recycling programs or sustainable landscaping plans for a neighborhood parks. Initiating a pilot project for one of those areas may generate interest in and support for further sustainable efforts in the local community. Regardless of the type of project, once it has been initiated, care must be taken to explain its objectives, measure its progress and report on the outcomes.

³ Sustainable Cities Institute Selected City Profiles, (n.d.). Retrieved February 5, 2013 from http://www.sustainablecitiesinstitute.org/view/page.basic/city_profile/content.city_profile/City_Profile_ Boston_MA

Funding Mechanisms

Annual Budget

It is the local government's budget that determines what public priorities will be addressed each year and how public funds will be generated and who will pay. Most often, the local government budget reflects the overall health of the local economy and is the place where public scrutiny is focused. The budgeting process is where a local government can set its priorities for sustainable practices and development. For example, if a position for a sustainability coordinator or a sustainability department is to be created, funds must be allocated through the budgeting process for that purpose. Similarly, the budgeting process could identify cost savings as sources of revenue from and for sustainable programs.

• Capital Improvements Plan

Prior to undertaking the development of the CIP, the government entity will want to define the criteria for what kind of projects or equipment are to be included and organize a process for developing the plan. Cost effectiveness analyses are used to determine the economic viability of new projects and programs. Taking a more expanded view of the CIP process may lead to more sustainable outcomes. For example, sustainability initiatives often include high up-front costs and a slow payback over time. Life cycle cost analysis looks at the costs of a system or equipment over its entire life span. For example, some energy efficient products may initially cost more to purchase but because they use less energy, they cost less to operate over their lifetimes than products that cost less to purchase but are more expensive to operate. This calculation is important when evaluating the payback period of any sustainability investment.

Many, if not most, sustainability strategies provide more than one type of benefit, often referred to as "co-benefits." Including an analysis of the implications, where feasible, of co-benefits can help to decide whether a particular strategy is cost-effective overall. For example, when deciding whether to undertake water efficiency retrofits for agency facilities and operations, it is important to consider not only the cost savings from decreased water use that may accrue, but also the related energy cost savings.

Some local governments have opted for a CIP project evaluation process that includes environmental and social considerations as well as economic calculations. This approach is intended to provide a more comprehensive analysis to guide the decision-making process. While it may be more time-consuming to evaluate projects, it may result in more sustainable public outcomes.

Examples

Olympia, Washington

The City of Olympia evaluates capital improvement proposals in terms of strengths, weaknesses, opportunities and threats in four different areas: Natural – impact on environmental health; Individual – impact on well-being of citizens and workers; Community – impact on livability, social justices and effective governance; and Economy – costs now and over the long-term and impact to local economy.

http://olympiawa.gov/~/media/Files/PublicWorks/Sustainability/SAM-Parking-Fines.ashx

Victoria, British Columbia

The City of Victoria issued a unique Request for Proposals in 2004 for the 12-acre Dockside Lands area. The City wanted a project that was innovative and felt that a typical bidding process would not achieve its goals for the brownfield site. The RFP used Triple Bottom Line accounting (focused on value according to social, environmental and economic criteria) to assess the relative costs and benefits of the proposals. The resulting project, Dockside Green, is a dynamic environment where residents, employees, neighboring businesses and the broader community interact in a healthy and safe environment, reclaimed from disuse and contamination.

http://www.docksidegreen.com/Sustainability/TripleBottomLine.aspx

Tax and fee structures

Communities should also consider how public finance —tax and fee structures — affect growth patterns. State and local finance policies can be important drivers that either work for or against sustainability goals. The ability to change tax and fee structures is very jurisdiction specific: some local governments have greater flexibility than others. But whether or not a local community has the direct ability to change finance policy in the short term, it is important to understand how that policy works to shape growth. For example, preferential assessments are a form of ad valorem property tax in which certain types of uses, such as agriculture, are taxed at a lower rate across the board. The tax policy is intended to encourage the preservation of agricultural lands. The reality is it may encourage more development in areas far from existing activity centers. Developers often buy land years before they plan to develop the land. In the interim, the local government receives less tax revenue on land that in practice is no longer agricultural land.⁴

Grants

Grant opportunities for local governments are available from a number of federal and state agencies as well as foundations and other not-for-profit organizations. While grants can provide valuable seed money for new projects and programs, it can be a time consuming and confusing undertaking for novices. Having dedicated staff responsible for that activity may be more efficient than simply assigning the task to an available person. For that reason, seeking grant opportunities and responding to them are often among the duties of a sustainable initiatives officer or department.

3. EVALUATE

In order for a local government to ascertain the effectiveness of its strategies, it must monitor and evaluate progress in terms of reaching its objectives. This information is critical in developing sustainable practices and programs that prove to be good uses for limited local government resources.

⁴ Linda Hoke et al., Choices for a Growing South (Southern Growth Policy Board, 2001). Retrieved on February 6, 2013 from http://www.efc.unc.edu/publications/2001/SCUPSOToolsBooklet.pdf

Adoption of a comprehensive set of sustainability indicators provides one vehicle for a local government to report on accomplishment of multiple and often interlinked local goals, programs and projects. This transparency and accountability to community members about sustainability work fits well with educating and engaging community members as partners in envisioning and building a more sustainable community.

Gathering data, establishing a baseline and continually updating data can be labor intensive. For this reason, local governments may want to rely on *Our Great Region 2040* for much of this function. The plan includes a list of regional sustainability indicators that are related to specific objectives. These indicators can be monitored over time to assess to progress in reaching objectives. From the list in *Our Great Region 2040*, local governments can choose a limited number of regional indicators that best reflect local objectives.

It is particularly important to evaluate new programs or pilot projects. Factors such as ease of implementation, cost effectiveness, and internal and external support should be evaluated. Tracking progress on sustainability and regular feedback to decision-makers and the public can be used to ensure sustainability is on course, and if not, to point to opportunities for midcourse corrections. The data from measuring and monitoring helps sustainability leaders communicate with and educate stakeholders. Local practitioners should try to explain the sustainability effort to stakeholders in terms they understand and appreciate. If the audience is focused on money, push the cost savings. If they think it's a moral responsibility, push the environmental savings.

Examples

Grand Rapids, Michigan

Grand Rapids has been rigorous in its measurement and tracking of sustainability goals, viewing this as key to transforming city operations. In 2008 the city measured the plan's success through the Community Triple Bottom Line Indicator Report, which used 34 indicators to assess progress toward sustainability goals and targets. Following this report, a new sustainability plan was adopted in 2010 for FYs 2011–2015. In addition, the city has created strategies and plans that address other elements of sustainability, including the 2009 Energy Efficiency and Conservation Strategy that includes a greenhouse gas emissions inventory, and Green Grand Rapids, a city-wide green-infrastructure master planning process. The city makes information about sustainability initiatives available on its Transparency and Accountability Gateway. The public can monitor the progress being made by both the city and the community toward meeting sustainability goals.

http://grcity.us/enterprise-services/officeofenergyandsustainability/Pages/default.aspx/

Santa Monica, California

The City of Santa Monica publishes its Sustainable City Report Card annually. The report card measures the entire community's progress toward meeting the Sustainable City Plan goals, which were developed by the community during a fifteen-month process in 2001-2002 and adopted by City Council in 2003.

http://www.smgov.net/Departments/OSE/Categories/Sustainability/Sustainable_City_ Report_Card.aspx

4. EDUCATE

Local governments are uniquely positioned to provide education, training and leadership in advancing sustainability goals. Even relatively small local government entities have a wealth of resources at their disposal. These include staff expertise in various areas, knowledge of the local areas and constituents, and management of public dollars. These resources should be engaged in an effort to inform and involve all stakeholders as part of the implementation process.

Stakeholders

• Local government staff and officials

Managers and assistants responsible for budgeting, planning, and overseeing constructions projects are crucial to the success of ordinance implementation and policy changes. Train employees about both the environmental and economic benefits of sustainable programs like environmentally preferred purchasing or ridesharing. This might take the form of a training seminar or through internet training or conversations with other practitioners. Train decision-makers and front-line workers to recognize areas where costs may be saved. This education is also helpful during the budget process, to educate other managers who have the power to approve budget decisions and major purchases. Communicating the financial, environmental, and health benefits of sustainable projects and practices is crucial to their success. Shared knowledge among managers, council members, and budgeting staff will provide a foundation for their successful implementation.

Changes in construction practices and building processes may require changes in training or job requirements. Staff approving site plans, inspecting projects, and maintaining structures will likely require additional training or instruction about products and practices. Involving such players in the decision-making process is another way of gaining support.

Create employee-based incentives where possible. An extra vacation day, for example, for meeting an established sustainability goal can promote buy-in for the program. Competitions between departments can generate enthusiasm for new policies and programs and help overcome internal resistance.

Examples

Dallas, Texas

To assist City department staff with environmental and health and safety worker training, the Office of Environmental Quality teamed up with Human Resources to develop a day of seminars in the fall of 2006. With a variety of seminars starting every hour on the hour from 9 a.m. to 4 p.m., City employees were exposed to everything from traffic safety, blood-borne pathogen training, and property inspections, to storm water inspections, waste management, and pollution prevention techniques. The seminars were delivered by City staff and outside experts from agencies such as the

Texas Commission on Environmental Quality. More than 800 City employees participated in the training.

http://www.icleiusa.org/action-center/engaging-your-community/outreach-and-communications-guide/identifying-reaching-your-target-audience/municipal-employees

Philadelphia, Pennsylvania

Philadelphia and PhillyCarShare instituted a novel car sharing system that includes both local residents and government employees. The program replaced 330 municipal vehicles and saved the city \$2 million each year. In the community, 1,200 citizen vehicles were replaced, saving residents \$5.5 million in costs and reducing vehicle travel by 8.2 million miles. The measure provided an opportunity for municipal employees to more directly interact with local residents, thereby bolstering the public's perception of the positive steps the city was taking to reduce its emissions.

http://www.icleiusa.org/action-center/engaging-your-community/outreach-andcommunications-guide/identifying-reaching-your-target-audience/municipalemployees

Vendors, contractors and other businesses

Businesses in the community who contract with local governments must understand new policies or preferences. Requesting information from suppliers about the sustainability of their products, or product choices may encourage competition among vendors and bring prices down. Ample information on local government policies and regulations should be made available to businesses seeking contracts with the government entity. Though it is difficult to impose the same restrictions or purchasing criteria on outside businesses, it is important to communicate cost savings and environmental concerns to others providing services in the community.

Community

Frame sustainability issues to resonate with the community. Explain how the local government can achieve significant cost savings by implementing sustainability policies or initiatives that address inefficient operations. Express the variety of operations that can be improved to generate these savings, including operations surrounding building energy consumption, internal waste, fuel consumption, and purchasing, among others.

Local governments must document and publicize results and successes, and recognize those people who have assisted in achieving those results. Public events, news articles, and website spotlights are all ways to enhance community knowledge about sustainable practices. Publicizing a municipality's efforts in reducing its impact on the environment can be accomplished through a quick blurb in the local government newsletter or a section of the organization's website. Hosting open houses or other media events bring attention to projects and their savings. If the community has purchased hybrid and alternative fuel vehicles they should be clearly marked to make them visible throughout the community.

Example

Williamson County, Texas

The Office of Emergency Management (OEM) assists Williamson County (TX) in preparing for, responding to, and recovering from disasters. OEM uses Facebook for emergency preparedness, education, alerts and warnings, recruiting volunteers, advertising training and events, promoting situational awareness (e.g. asking people during a wildfire to report only fires, not smoke), dispelling rumors and correcting disinformation, helping organize and monitor recovery efforts, managing community expectations, soliciting donations, mitigating hazards, and promoting ongoing work. During the 2011 Central Texas wildfires, OEM's use of Facebook and Twitter helped the organization successfully reach residents of affected areas and people who were concerned about protecting their homes.

http://www.albanysustainability.org/documents/DE%20Guidebook%20-%20Web.pdf

CONCLUSION

Increasingly local governments, from cities to school districts to transit authorities, are looking at ways to institute practices, programs and policies that lead to more sustainable outcomes in their areas of influence. Some of the strategies will require extensive communication in order to overcome public concerns and/or internal resistance. The value of communication, training and education in developing sustainable programs cannot be overlooked. Local leaders must be clear about what they are trying to accomplish and how it benefits those that they serve. They must make a case for sustainability over business as usual practices in terms of tax dollars saved, cleaner air and water, expanded economic opportunities for residents, or all of the above.

Our Great Region 2040 can provide valuable insight into community concerns and desires as well as options for local governments to consider. It includes a wealth of information and resources that can save local governments time and money when embarking on the path to more sustainable development.

Successful implementation of a sustainable path for future growth requires a vision for the community, continuous engagement of stakeholders and information sharing. It is a long-term prospect but it does not have to be accomplished all at once. Local governments can start small by committing to one change in local government practice that is related to the goal of sustainable growth. Based upon the outcome of that effort, the local community can evaluate its support for additional efforts.

Additional Sources

Ashley, Jacqueline Hartman. "From Commitment to Action: Lessons Learned From Local Government Sustainability Efforts." University of North Carolina at Chapel Hill, 2008. Accesses on January 10, 2013 at

http://www.efc.unc.edu/publications/2008/JackieCapstone_LocalGovSustainability.pdf

Ferguson, Daniella et al. "Digital Sustainability Conversations: How Local Governments Can Engage Residents Online." Urban Sustainability Directors Network, March, 2012. Accessed on February 20, 2013 at http://www.albanysustainability.org/documents/DE%20Guidebook%20-%20Web.pdf

Hughes, Jeff. "Paying for Green Government: Funding Models and Financial Analysis Techniques." UNC School of Government, n.d. Accessed on February 6, 2013 at http://www.efc.unc.edu/training/2009/Western_GG/Funding_models.pdf

Savara, James H., Anna Read and Evelina Moulder. "Breaking New Ground: Promoting Environmental and Energy Programs in Local Government." IBM Center for the Business of Government, Conserving Energy and the Environment Series, 2011. Accessed on January 10, 2013 at http://www.businessofgovernment.org/sites/default/files/Promoting%20Environmental%20and%2 OEnergy%20Programs%20in%20Local%20Government.pdf

Sustainable Cities Institute. National League of Cities. Accessed on February 4, 2013 at

http://www.sustainablecitiesinstitute.org/view/page.basic/casestudy/feature.casestudy/Case_Stud y_MA_EPP_Program:jsessionid=034A1EC87C667DC40426C5644A0C90B0

Sustainable Business.com. Accessed on January 21, 2013 at http://www.sustainablebusiness.com/index.cfm/go/news.display/id/21100

University of South Florida. National Center for Transit Research. Accessed on January 10, 2013 at http://www.nctr.usf.edu/programs/clearinghouse/commutebenefits/

United States. Department of Energy. Database of State Incentives for Renewables & Efficiency (DSIRE). Accessed on February 4, 2013 at http://www.dsireusa.org

United States. Environmental Protection Agency, Environmentally Preferable Purchasing (EPP). Accessed on January 10, 2013 at

http://www.epa.gov/epp/pubs/about/about.htm#e