

Southeast Tennessee Valley SDAT

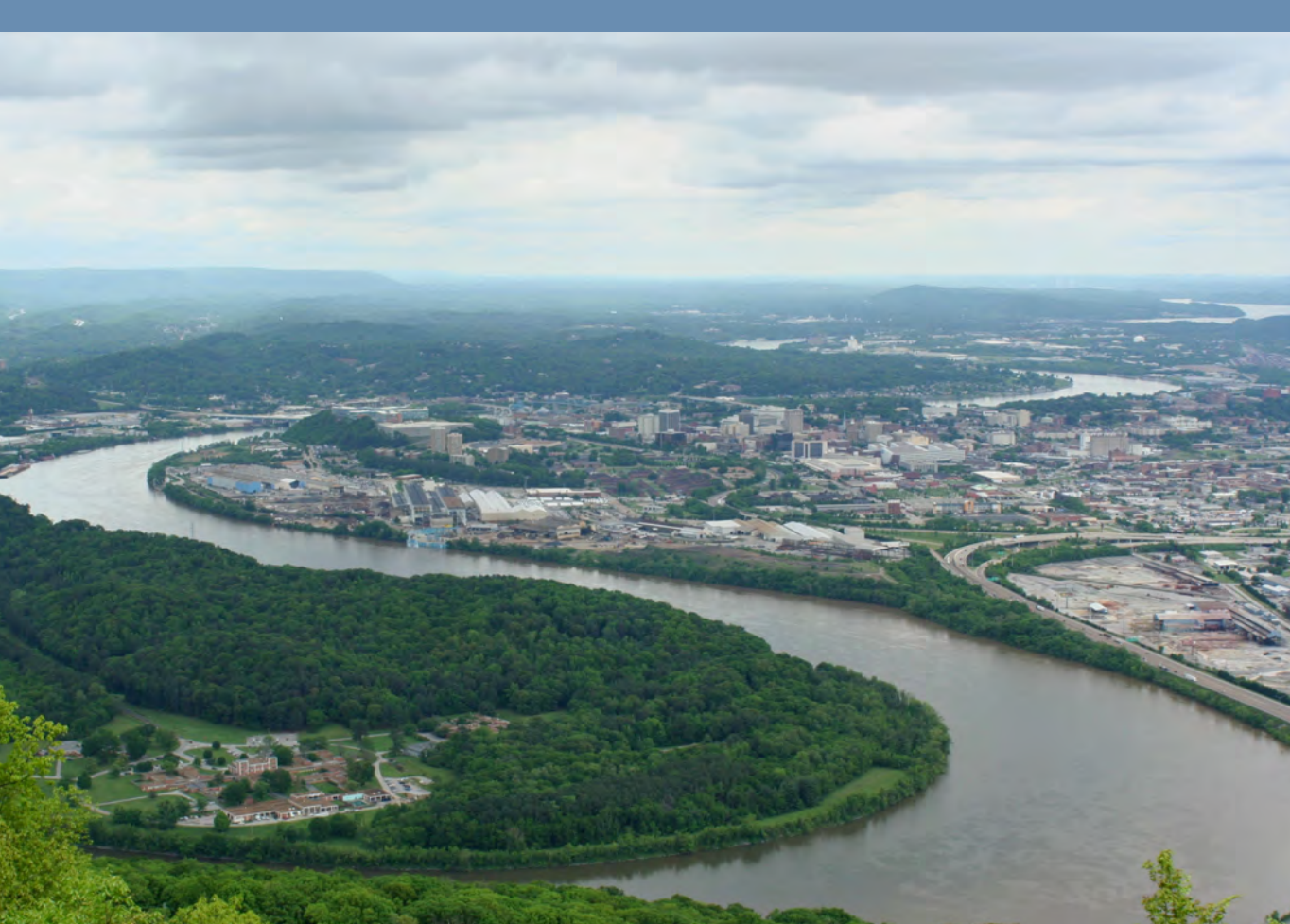




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Introduction

In November 2008, the Southeast Tennessee Valley submitted a proposal to the American Institute of Architects (AIA) for a Sustainable Design Assessment Team (SDAT) to assist the region and its citizens in addressing key issues facing the area's future. The issues included planning and land use, regional collaboration, transportation and environmental issues. The AIA accepted the proposal and, after a preliminary visit by a small group in February 2009, recruited a multi-disciplinary group of volunteers to serve on the SDAT Team. In May 2009, the SDAT Team members worked closely with local officials, community leaders, technical experts, and citizens to study the community and its concerns. The team used its expertise to frame a wide range of recommendations, which were presented to the community in a public meeting. This report represents a summary of the findings and recommendations that were presented to the community.

The Sustainable Design Assessment Team (SDAT) Program

The Sustainable Design Assessment Team (SDAT) program focuses on the importance of developing sustainable communities through design. The mission of the SDAT program is to provide technical assistance and process expertise to help communities develop a vision and framework for a sustainable future. The SDAT program brings together multidisciplinary teams of professionals to work with community stakeholders and decision-makers in an intensive planning process. Teams are composed of volunteer professionals representing a range of disciplines, including architects, urban design professionals, economic development experts, land use attorneys, and others.

Today, communities face a host of challenges to long-term planning for sustainability, including limited resources and technical capacity, ineffective public processes and poor participation. The SDAT approach is designed to address many of the common challenges communities face by producing long-term sustainability plans that are realistic and reflect each community's unique context. Key features of the SDAT approach include the following:

- Customized Design Assistance. The SDAT is designed as a customized approach to community assistance which incorporates local realities and the unique challenges and assets of each community.
- A Systems Approach to Sustainability. The SDAT applies a systems-based approach to community sustainability, examining cross-cutting issues and relationships between issues. In order to accomplish this task, the SDAT forms multi-disciplinary teams that combine a range of disciplines and professions in an integrated assessment and design process.

- **Inclusive and Participatory Processes.** Public participation is the foundation of good community design. The SDAT involves a wide range of stakeholder viewpoints and utilizes short feedback loops, resulting in sustainable decision-making that has broad public support and ownership.
- **Objective Technical Expertise.** The SDAT Team is assembled to include a range of technical experts (planners, architects, economists and others) from across the country. Team Members do not accept payment for services in an SDAT. They serve in a volunteer capacity on behalf of the AIA and the partner community. As a result, the SDAT Team has enhanced credibility with local stakeholders and can provide unencumbered technical advice.
- **Cost Effectiveness.** By employing the SDAT approach, communities are able to take advantage of leveraged resources for their planning efforts. The AIA contributes up to \$15,000 in financial assistance for each project. In 2008, each SDAT project is estimated to cost between \$20,000-\$30,000 total. The SDAT team members volunteer their labor and expertise, allowing communities to gain immediate access to the combined technical knowledge of top-notch professionals from varied fields. Finally, the SDAT process employs a compressed schedule and the application of innovative public participation techniques to leverage resources effectively and produce timely results.
- **Results.** Many communities want to become more sustainable but are immobilized by conflicting agendas, politics, personalities, or even the overabundance of opportunity. Further, many communities have not yet taken stock of their current practices and policies within a sustainability framework; others have identified issues of concern but desire assistance in laying out a plan of action to increase sustainability. The intense SDAT process and compressed schedule allows a community to capitalize on SDAT information quickly and build momentum for implementation of its plan. The SDAT includes the delivery of a formal report and recommendations.





SDAT Program Communities

Communities that have participated in the SDAT program include the following:

Alexandria Township, NJ	Syracuse, NY	Windsor, CA
Oklahoma City, OK	Northeast Michigan	Tampa, FL
Northampton, MA	Lawrence, KS	Detroit, MI
Pittsfield, MA	Hagerstown, MD	Fort Worth, TX
Forest City, NC	Tucson, AZ	Leon Valley, TX
Cache Valley, UT	Englishtown, NJ	Morristown, NJ
Reno-Tahoe-Carson Region, NV	Dubuque, IA	Parma, OH
New Orleans, LA	Culver City, CA	Kauai, Hawaii
Longview, WA	Central City, LA	Fellsmere, FL
Guemes Island, WA	Albany, NY	

The SDAT program is modeled on the Regional and Urban Design Assistance Team (R/UDAT) program, one of AIA's longest-running success stories. While the R/UDAT program was developed to provide 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 help communities plan the first steps of implementation. Through the Design Assistance Team (DAT) program, over 500 professionals from 30 disciplines have provided millions of dollars in professional pro bono services to more than 150 communities across the country. The SDAT program leverages the pivotal role of the architectural community in the creation and support of sustainable livable communities.

The following report includes a narrative account of the Southeast Tennessee Valley SDAT project recommendations, with summary information concerning several principle areas of investigation. The recommendations are made within the broad framework of sustainability, and are designed to form an integrated approach to future sustainability efforts in the region.





REGIONALISM

The SDAT team was impressed with the transformations that have taken place in downtown Chattanooga and its waterfront, and the efforts made by other municipalities and counties to build community. These efforts have had profound impacts. The Chattanooga metropolitan region was the only one to lose population in the 1980s, but regain it in the 1990s. It is now enjoying solid growth, attracting substantial new business investment, such as the Volkswagen manufacturing plant, as well as new residents, including seniors and retirees. According to one participant in the SDAT process, the “elephant is not only dancing but doing well.” The team was equally impressed with some of the initial efforts to address challenges that cut across adjoining neighborhoods, jurisdictions, and entire regions of varying sizes and characteristics. The team found much evidence that the capacity exists for the region to take on its new challenges.

Defining Regional Parameters

How we define regionalism can vary considerably. It can equate to south side neighborhoods coming together to rebuild a commercial area. It can apply to cities and counties getting together to prepare a vision and plan for future development, such as Chattanooga and Hamilton County and now Cleveland and Bradley and the jurisdictions in Catoosa County. It can mean two transportation planning organizations in the 6 county standard metropolitan statistical area developing short and long term transportation plans. It may also apply to the regional development districts designing economic development strategies to especially build, and rebuild, the economies of more rural counties. In the case of the Southeast Tennessee Development District this means 13 counties, and in Georgia’s Coosa Valley Regional Development District it means 10 counties. Regionalism can apply to the development of a plan to address the region affected by the new Volkswagen plant, or to plans for transportation corridors, watersheds, airsheds, or even foodsheds that affect the quality of air, water, and other aspects of livability that impact even more counties. It might cover shared service agreements between jurisdictions, such as 911 service between cities and counties, and workforce development on a tri-state level. Definitions of regionalism change with each of the challenges being addressed. Therefore, the regional dynamic makes efforts to build the capacity to cooperate more complex.

Defining Regional Success

The SDAT team has defined regional success as having the capacity to address any challenge -- either opportunity or threat -- facing the region, confidently. It means having the capacity to identify emerging challenges, convene the appropriate stakeholders, design practical strategies, finance their implementation, get priority actions into implementation, monitor progress, and engage the full range of community leaders and citizens in the process.



The Regionalism Imperative

The SDAT team heard consistently that VW and future development will require community leaders and citizens to broaden their sense of the region and build stronger capacity to cooperate. The team was told that there cannot be assumptions that everything will work out, as the Southeast Tennessee Valley faces truly regional challenges, and may end up with uncompetitive development. The team was also told that there is “scar tissue” from experiences in other counties that did not plan for the future. Taking some of these experiences elsewhere into account, having the capacity to cooperate effectively will have a major influence on the future competitiveness and livability of the region. A recent survey of sample regions found that the ones which had the best statistics for competing globally and thriving locally were the ones with the greatest regional cooperation – the link to success is clear. The rest of the world is making similar investments in regional cooperation with the knowledge that it will pay big dividends. For instance, almost all of the economic assistance provided by the European Community flows through regions (tens of billions in Euros annually).



Building the Capacity to Collaborate

First, regional success requires bringing “unlikelies” together to discuss “unmentionables” and do “unheardofs”.

It all starts with getting the ‘unlikelies’ together. During the SDAT process, groups of public officials from jurisdictions across the region found themselves in the same room together – sometimes for the first time. The region should move forward as if there is another process occurring every week and engage in similar conversations. It can begin with convening like-minded individuals, such as regular (or irregular) meetings of planning directors, elected officials, public works directors, fire chiefs, social service agency directors, school superintendents, hospital administrators, and others across the region. It should expand from such beginnings, and particularly strive to incorporate the next generation of regional leaders in the conversation. Bringing together organizations such as the young professionals group of Chattanooga with counterparts across the region will have huge returns on future decision making.

Special attention should be paid to be inclusive of the broadening regional diversity by including Latino, German, White, Black, and new immigrants in the dialogue. In one comparable example, the local Chamber in the Roanoke region jump-started regional cooperation by hosting weekly luncheons of “unlikelies.” It only took a few meetings before cooperative initiatives were being discussed and pursued. Successful regional cooperation is like an effervescent spring where new ideas can bubble up in almost any gathering of two or more.



Second, educate everyone on becoming a practicing regional citizen.

Everyone the SDAT team met emphasized the importance of educating citizens about regional cooperation. It is important to move forward with that work, to help shift from “closet” regional consumers, utilizing what the region has to offer, to becoming regional stewards, helping to assure regional success. The team heard a lot of ideas for education about regional cooperation, and believes that several initial steps should be taken to move those ideas forward.

Building the Capacity to Cooperate

- **Regional success requires bringing “unlikelies” together to discuss “unmentionables” and do “unheardofs”**
- **Educate everyone on becoming a practicing regional citizen**
- **Launch the planning project to explore the regional impact of the VW plant (employment, land use, housing, transportation, infrastructure, services, etc.)**
- **Pursue regional initiatives that offer the potential of early success**
- **Focus regional attention on local distress**

share regional cooperation successes

We heard about quite a few successes in conversations, but the team did not get the sense that anyone knows the extent of existing regional cooperation, and the resulting benefits that have accrued to the region. The Ochs Center for Metropolitan Studies is making important contributions to regional thinking through its State of the Region reports. The team felt that these reports could be broadened to a wider regional audience and play an important role in regional benchmarking and the facilitation of collaboration on shared issues.

facilitate using regional information

Use the region's information assets to foster economic development strategies and design regional initiatives. Compile and digitize regional data and make it accessible and user-friendly to facilitate greater collaboration across the region. Compile studies that explore the benefits, and costs, of regional cooperation.

launch a regional leadership program

Broaden the Chattanooga Leadership Program to include participants region-wide and educate on all aspects of regional life. We recommend consideration of a regional citizenship program to provide short-term introductions to becoming regional citizens.

train students on becoming regional citizens

Start with civics classes in earlier grades, and launch regional projects for high school seniors, bringing students together across high schools to work on regional challenges.

Third, launch the planning project to explore the regional impact of the VW plant (employment, land use, housing, transportation, infrastructure, services, etc.)

It appears that the VW plant has peaked the interest of the entire economic region. The team heard that many of the region's jurisdictions, as well as homebuilders, and others are conducting analyses of the impacts. Those reports will not be worth the paper they are printed on unless the impact across the region is known. In addition, this fragmented approach could cause the region to miss opportunities to launch initiatives that require cooperation to succeed, such as a regional SWAT team to assist smaller jurisdictions to deal with development challenges. Ask local foundations to put up a challenge grant (to be matched by public, private, and non-profit interests, as well as the states and TVA) to catalyze the process. Design the project to not only address the impact of VW, but also to explore a model/or models for regional cooperation.



Make part of the report a recommendation for institutionalizing the capacity to cooperate, first to guide implementation of the recommendations of the analysis and, second, to address new challenges as they emerge. For instance, the emerging need to preserve ridgelines and other natural resources and shape future growth to reduce development costs could be addressed. The perceived cost of development will not prevent ridgeline development. This is not a unique case either. The Flint Hills region is currently working on a regional planning process to address common challenges as a result of a similar event – the expansion of Fort Riley.

By being proactive about addressing the region's capacity for cooperation, the Valley can avoid reinventing the wheel every time a new regional challenge emerges. One easy place to begin might be a contest to brand the region with an identifiable and meaningful name. The selected winning entry could be used to rebrand the region and market it to the world. It can also help give the airport and other regional assets a regional identity.

Consider a regional workforce development initiative. The new VW facility and associated industries will bring many additional job opportunities for the region. However, these will likely be highly skilled jobs. Significant job training will be needed to harness the employment opportunities for current residents of the region. Relying on VW to provide all the training will result in many lost opportunities. The level of educational attainment in Chattanooga and Southeast Tennessee has been on the rise. Taking advantage of this trend will serve the region well. However, in order to fully maximize the employment opportunities, job training programs must consider all human resources in the region. Reaching across boundaries will be key to successful job training that takes full advantage of the opportunities offered by the VW plant.

Success will also depend on the ability of regional efforts to bring job training to the people who need it rather than requiring individuals to come to the training. The most successful program will be a regional effort with local implementation. The first step toward this strategy is to identify neighborhoods where training will be needed the most. Diversity – on all levels -- is the key. Not only do training programs need to reach a diverse group of people from throughout the region, but there must be multiple delivery methods with flexible and accessible schedules. Most importantly, it is critical to keep in mind that the majority of jobs will not be connected with VW. Rather, a range of skills for multiple industries must be emphasized.



Fourth, pursue regional initiatives that offer the potential of early success. The best way to guarantee continuing interest in regional cooperation is to have quick successes.

One approach is to convene regional stakeholders on specific topics and design a strategy to address them. For instance, a lot of regions prepare annual regional legislative agendas to pursue with state and national governments. They usually select only a couple of initiatives, but they agree to make them a common priority in conversations with state/national governments. It is far more complex in a multi-state region, and often requires look-a-like legislation, regulations, and programs, but it is not impossible. In fact, most of the U. S. population lives in multi-state regions. Another common issue is economic development collaborations, in which there is an agreement to share economic development prospects region wide to avoid losing prospects to another region. In many cases, this may only involve sharing prospects that a jurisdiction knows won't locate 'at home'. It might even be possible to establish a finder's fee for successful location in the region.



Fifth, last but not least, focus regional attention on local distressed areas within the region.

The region is no stronger than its weakest link. Distressed areas can turn away anyone considering locating in region. Even worse, they are a sure sign that the region is not using local assets effectively - people, buildings, neighborhoods and others. The responsibility is often imposed on the jurisdiction where distress exists. However, it is impossible to eliminate distress in neighborhoods, and even entire counties, unless the region shares part of the responsibility for their success. You cannot deal with inequity jurisdiction-by-jurisdiction. There are many mechanisms to engage the whole region effectively from establishing regional partnerships to promote the use of local agriculture to regional mechanisms, such as housing trust funds.



REGIONAL PLANNING

Most people are unaware that planning in the United States has been primarily a civic and not a government driven activity. All the early “heroic” plans, from Burnham’s Chicago Plan to Regional Plan Association’s (RPA) first Regional Plan were privately created and relied on the power of persuasion and private investments for their implementation. There was no government planning at the time. There continues to be no credible government planning at the regional scale in most metropolitan areas nationwide, which explains why independent regional planning groups like RPA and others continue to exist and indeed thrive after all these years.

Locally, it is logical to venture a guess that both the Chattanooga park system plan developed early in the 19th century by John Nolen – an early planner and landscape architect and a very prolific consultant – and the later Harland Bartholomew plan for the city were both spearheaded by local civic groups, and not the result of government action. Chattanooga is also very fortunate to have a number of engaged local foundations that have supported (and continue to support) many of the more effective local planning initiatives over the years and that have resulted in such a remarkable turnaround in the fate of the downtown, riverfront and other areas. In Chattanooga, there is proof positive that good, intelligent planning leads to very positive results and wealth creation.



The Current Challenge for Regional Planning

The SDAT Team read with great interest the economic and fiscal analysis of the anticipated impacts to the greater Chattanooga region of the location of the new Volkswagen production and distribution facility. The decision by VW and Wacker Chemie AG to locate their high-tech facilities in the region will represent billions of dollars pumped directly into the regional economy, and many billions more through other firms that participate in the supply chain, as well as the indirect and induced impacts. The highly qualified labor pool assembled by these and other industries will be a tremendous benefit to the region.

However, it appears that no substantive thinking has gone into evaluating the many other impacts of these developments. Where will the labor force live? Where will their children go to school? Where will they shop, go to worship and go to the movies? How will they move around the region – entirely in single-occupancy vehicles, reinforcing an already highly auto-dependent system, or conversely will they help support existing and new forms of public transit? What type of land use and circulation patterns will emerge from this new demand for housing, retail and other forms of development? Will the added demand translate into new compact, walkable and transit-friendly neighborhoods and communities or primarily into single-use, low density sprawl?

The consequences of these choices can be modeled and evaluated. Planners have developed the tools to do this type of analysis not just at the level of specific sites for individual projects but for entire regions and even entire states. For example, the state of New Jersey has had a growth management plan since 1992. The legislature required an independent evaluation of this plan, to make sure it was in the best interest of the state. This impact analysis assumes the same population and employment growth numbers, but very different spatial and functional allocations according to a “trend” scenario versus a “plan” scenario. This “full spectrum impact assessment” looks not just at the economic and fiscal impacts of these two scenarios, but also at areas such as inter-governmental cooperation and quality of life. This impact analysis has predicted considerable savings to both public and private sectors from implementation of the far more compact plan scenario:

- Savings of \$160M/year to towns/counties/school districts
- Savings of \$870M in local road costs
- Savings of \$1.45B in water and sewer
- Saving 122,000 acres of land
- Saving 68,000 acres of prime farmland
- Saving 45,000 acres of environmentally sensitive land
- 40% less water pollutants





These types of impact analysis have been carried out all over the nation. They are based on reliable and accepted methodologies. A similar exercise could be conducted for the Chattanooga region, as a way to showcase and highlight the choices and consequences the region faces.

The team was very concerned that the region may not have put in place the types of frameworks and controls that, in the long run, can guarantee that you reap all the benefits from these very significant private and public investments in economic development. For example, the team was told that in Tennessee – unlike most other states -- the planning enabling legislation does not require the adoption of master plans as a basis for zoning. This is a reason for concern. Zoning is regulatory, but without the benefit of a planning justification, it may make no sense. Why a particular zoning designation in one location, as opposed to another? Without a planning justification, zoning is arbitrary and can be easily challenged.



Sprawling and inefficient land use patterns are already beginning to impact livability in the region.

Lack of Planning and Zoning Controls

The team was also informed that parts of the region are not subject to any type of planning or zoning controls. This is of great concern because a free-for-all in land development rarely results in places that function well and where people want to be. Zoning was created in Germany in the late 19th century for two purposes: to protect people against the public health threats posed by noxious uses located near sensitive uses (such as a steel mill next to housing, a school or a hospital) and to protect property values from similar situations. These considerations are still valid today. Zoning should not be viewed as an intrusion of government into private property rights, but rather as a way for private property owners to minimize the risk of adverse land use decisions made by their neighbors.

The Danger of Sprawl

The very significant investments made by VW and others in plant and other facilities should be protected from the detrimental effects of poor land use decision making by way of a planning rationale and zoning regulations that seek to create a coherent and balanced regional framework. In the absence of such a planning and regulatory framework, the resulting sprawl land use pattern is likely to compromise and perhaps squander the valuable opportunities created by these significant public and private investments, destroying valuable natural resources and over time leading to a dysfunctional land use and circulation pattern that will undermine the region's competitiveness and destroy the very values and resources that attracted the private investments the region is now justifiably so proud of.

Partner for Regional Planning Success

A sound regional planning framework for the Chattanooga region would almost certainly provide considerable benefits for all involved and all interested stakeholders. Building on models derived from a host of available examples, this framework can be created by a public-private partnership involving the various governmental jurisdictions as well as business, industry, residents and other relevant stakeholders. Funding for this effort can be raised locally, through contributions from the interested parties, in addition to any state or federal funding that is available – now or in the future -- for this important type of work.



Examples of inefficient growth patterns proliferate across the southern end of the regional landscape



One Story of Regional Planning

Founded in 1922, the Regional Plan Association is the oldest independent regional planning organization in the United States. Its mission is to promote regional planning as a tool to guarantee economic growth, social equity, environmental preservation and quality of life for the tri-state NY-NJ-CT region. RPA was founded by people and organizations with a wide range of interests. Some were interested in humanitarian and social issues, and in the role planning could play to improve people's lives. The Russell Sage Foundation provided generous support to the initial effort, largely underwriting the \$1 Million it took, over 10 years, to develop the first Regional Plan. However, RPA has always been supported by business groups – banks, insurance companies, industrialists, construction companies, and developers – who were concerned at the time with how the NY region was developing and with the absence of an overall planning framework. The primary motivation for all was to develop a plan to guide the future of the region that would provide some level of certainty to corporations and investors with interests in the region, as well as the general public, while at the same time maintaining individual equity.

Part of the challenge of regional planning is to help the region develop a distinct identity which residents and employers find salient. If people only identify with their local jurisdictions it is difficult to think regionally. The first Regional Plan used innovative and compelling graphics and visualizations to help people see beyond the limits of their neighborhood or municipality. Today they have a whole host of high-tech visualization and public engagement techniques which can fruitfully be used for these purposes.

RPA's first Regional Plan proposed a vast network of investments in regional infrastructure, including regional transit, bridges, a regional highway system, water and sewer, as well as housing, neighborhoods and schools and a regional open space system. The plan was unveiled in May of 1929, just a few months before the stock market collapse plunged the entire country into the Great Depression. While this may appear to some as a most inauspicious time to unveil such an ambitious plan – which after all, anticipated a region with a population of over 20 million, (which indeed was reached decades ago) – in fact, and with hindsight the first regional plan was unveiled at just the right time. Its success over the years was linked, to a large extent, to the "original" Federal stimulus package, the New Deal which President Frederick Delano Roosevelt marshaled through. RPA's first Regional Plan provided the framework for far reaching investments in infrastructure in the NY region which placed it ahead of other regions where no such frameworks existed because regional planning did not exist.



Indeed, the success of RPA's first Regional Plan – and the vast Federal investments that implemented many of its proposals – cannot be attributed solely to the family relationship between President Roosevelt and Theodore Roosevelt, his cousin and chairman of RPA's Board – but rather to the coherent plan for public investments in infrastructure and private investments in land development which RPA had independently developed and which no other region had in place.

Since 1922, RPA has championed many major investments -- both in terms of development and conservation -- in the tri-state metropolitan region. Some of its accomplishments include:

- The George Washington, Triboro, and Verrazano Narrows bridges
- JFK Airport and Airlink
- Creation of Metro-North
- The Merritt Parkway and the Long Island State and Palisades Interstate parkway systems
- \$75 billion in infrastructure investments since 1999
- 1 million acres of protected open space
- Acknowledged experts on assessing the regional impact of major development projects in the region
- Community designs to promote sustainable growth locally

The first Regional Plan provided a physical planning framework that supported growth in the NY region for the next 50 years. While many of its recommendations were not implemented, enough were to maintain and enhance the region's competitiveness. RPA has released two subsequent regional plans, one in the 1960's and another in the 1990's. Each plan has been instrumental in focusing public attention on key aspects of the region's needs. Some projects championed by RPA have had to wait decades before they are carried out – for example, the new passenger rail tunnel under the Hudson, first promoted by RPA in the 1960s, is only this year breaking ground.

Regional planning does not have to cost millions of dollars or take 10 years to bear fruit. With advanced information systems, GIS and the wealth of data available today, regional planning can be done on a budget and in much shorter timeframes. However, planners must resist the temptation to deluge the public with facts and statistics. One of the most critical roles the regional planner can play is to help the public and stakeholders understand the real choices the region faces, the real trade-offs and consequences of both doing nothing and of taking action. Frequently, this is best accomplished by simplifying what are often complex systems and presenting the public with a view of the “big picture” in diagrammatic or cartoon form. Seemingly complex situations can usually be pared down and -- once all the distractions and superfluous materials are removed from the picture -- distilled down to simple choices which everyone can understand.

One Example

The illustrations below demonstrate this approach as applied by RPA to a regional transportation study for a five-county area in New Jersey. While the study's stated purpose was to look at 5 miles of a highly congested state highway, RPA's analysis highlighted – using a series of diagrams that dramatically simplified the land use/transportation system and the existing pattern of development – the very serious discontinuities and poor functionality which have resulted over time from choices made with poor judgment by all levels of government, acting individually and without a regional vision. As a result, there is now a renewed interest in closing the missing links in the regional circulation and in developing the infrastructure to allow people to move around in other ways – by bus, bicycle and on foot.



Mapping Regional Choke Points



Future Build Out and Land Use/Transportation Links

Regional Transportation Planning

The SDAT Team found that the region has many wide arterials and freeways that are underutilized, with virtually no congestion. The team heard that 45 minutes was probably the longest commute, which in the Chattanooga region probably makes for a huge commute shed, and so not surprisingly, the region is almost completely auto-dependent, even within city limits. There was little belief that mass transit has a real place in the region because of the prevailing low densities across the area.

However, there is an existing culture that has facilitated some transit innovation. The electric bus shuttle is a model program, with an innovative system of battery maintenance. The free service is funded mainly through parking fees, aims for 5 minute headways, and provides a high quality service, although the team heard that it carries limited ridership. The city of Chattanooga's passage of a climate action plan, and its interest in developing an incentive-based strategy to develop climate-friendly behaviors, lends itself to possibly focusing on regional initiatives with passenger vehicles by incentivizing high fuel-efficiency and alternative fueled cars.

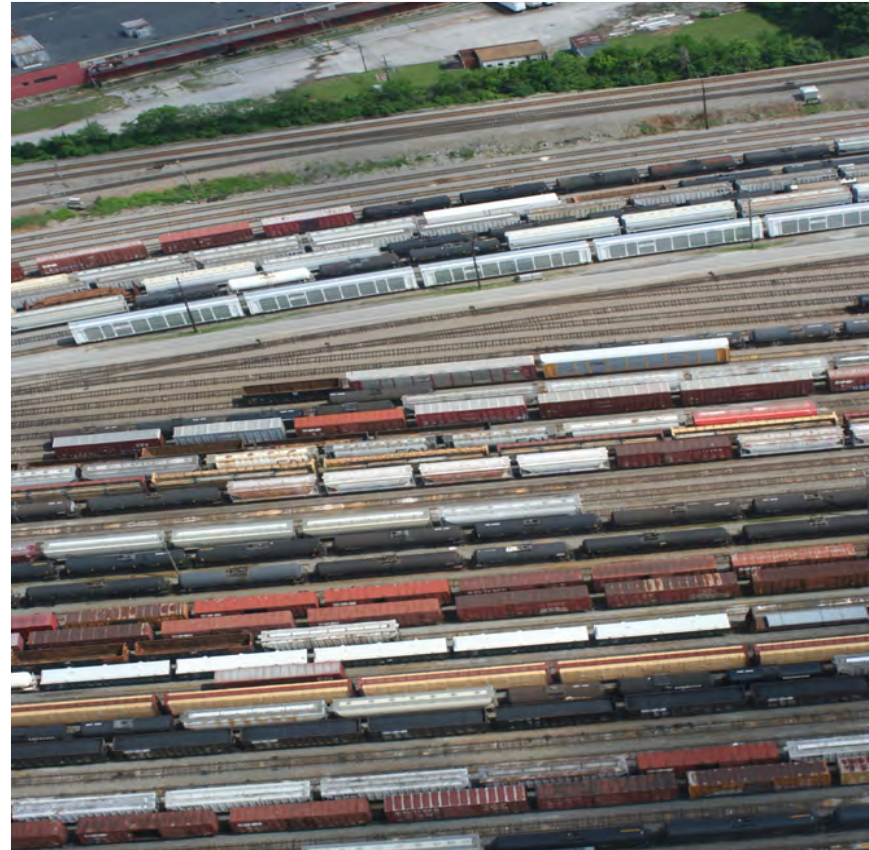


Address the Volkswagen Issue Directly

Given the location of the VW plant and the likelihood that 58 will be the main thoroughfare to gain access to jobs at that site, it seems that, while densities are low, it could be a candidate for early fixed route high quality bus transit (at least as an intermediate step). The team heard that 58 is under consideration for a complete streets initiative as well. A transit service could be commuter-oriented and run higher quality service during peak hours, directionally given the flow of traffic to and from the site and the various residential centers. It could serve as a starting point for higher quality transit throughout the region (assuming land use development behaviors are altered to accommodate it). The team felt that this approach could be used to direct transit-oriented development—which can be lower density to maintain the existing feel of the region, but high enough to support some level of bus transit (6-9 du/acre for maybe 15-30 minute bus headways). The region needs to develop a strategy that is focused on transit corridors—develop one or two corridors where there could be feasible ridership that serve as the first steps toward building a larger regional network to knit the region together. The region should also collaboratively approach Volkswagen as a partner on transit. For comparative purposes, in Montgomery County and Frederick County Maryland, there have been partnerships with Johns Hopkins University to provide development contributions for a new light rail (or Bus Rapid Transit line) circulator that serves a new JHU research site there.

Study Other Potential Models

The region should also look to other models that attempt to provide effective transit in sprawling land use contexts. Prince William County, Virginia's OmniLink, which is an innovative transit solution for low-density suburban areas, is one good model. Environmental Defense listed the model in a report on the 10 most innovative transit solutions in America (<http://www.edf.org/page.cfm?tagID=35609>).



Make the Land Use Connection

Finally, the region should come together to make the land use connection. Ultimately, the transportation issue is controlling land use growth. The region needs to work on identifying a strategy to implement regional activity centers and grow in a more coherent fashion that inhibits sprawl.

THE ENVIRONMENT

When we speak of the “environment,” the focus is usually on a set of indicators related to natural resources. Environmental conditions, however, have a direct bearing on human health. For the analysis and recommendations in this Sustainable Design Assessment, we will discuss those environmental conditions needed for healthy, sustainable natural communities and human health. As the region grows, what is needed to maintain and improve human and environmental health?

To understand current conditions, we turn to the 2008 State of Chattanooga Region reports produced by the OCHS Center for Metropolitan Studies. In the State of the Chattanooga Regional Report on the Environment, the focus is on carbon emissions, land use and conservation, air quality, and water quality. The OCHS Center report focusing on health describes health care conditions, health risks, and health outcomes.

Parks and Physical Activity

The Chattanooga region enjoys an abundance of natural and cultural resources, including local farms and orchards. With an average of 70 acres of parks and open space per 1,000 people in Hamilton County, plus over 23 miles of greenway trails along the Tennessee Riverwalk, South Chickamauga Creek Greenway, and North Chickamauga Creek Greenway, Chattanooga provides many opportunities for outdoor recreation. Nevertheless, access to parks and trails is not uniform throughout the region, with six subregions having less than one acre of park or open space per 1,000 residents. Increasing park acreage in the regions with the least park space and improving access to parks is a major tool in the fight against obesity and the associated negative health outcomes.

In the six county metro region analyzed in the OCHS Center report on health, health risk characteristics most relevant to the environment are the level of obesity, reported to be 28%, and physical inactivity, reported to be 31%. The State of Tennessee has the sixth fattest population and the second most sedentary in the United States; the Chattanooga metro region has slightly better levels of these indicators than the state as a whole. Negative health outcomes resulting from physical inactivity and obesity include heart disease, cancer, stroke, and diabetes. In the Chattanooga region, the prevalence of all four of these diseases is higher among African Americans than among Whites.

Recommendations: Use the Chattanooga region’s abundant parks and trails to create a culture of fitness. Increase acreage and access to parks in low income, minority communities to reduce health disparities in those communities. Use marketing campaigns to popularize outdoor recreation. Increase or begin park programs emphasizing both organized sports, such as tennis and basketball, and so-called passive recreation activities, such as biking and hiking. Focus park programs in underserved communities.



Greenhouse Gas Emissions and Air Quality

Based on a study by the Brookings Institute, the Chattanooga region has the 12th worst per capita greenhouse gas emissions – 3.1 metric tons per year per capita - of the 100 largest metropolitan areas in the United States. The size of the regional carbon footprint is attributed to land use (sprawl) and transportation (high vehicle miles traveled per capita). Yet the Los Angeles metropolitan region, with its legendary sprawl and commitment to car culture, was reported to have the 2nd lowest per capita greenhouse gas emissions in the same study. Areas for improvement, as identified in the Chattanooga Climate Action Plan, include increasing residential and commercial energy efficiency and installation of renewable power sources.

In 2007, the Tennessee Valley Authority (TVA) reported that it generated 0.02% of its energy from renewable sources plus 5.8% from large hydroelectric sources. In the same year, California generated 11.8 percent of all electricity renewable resources such as wind, solar, geothermal, biomass and small hydroelectric facilities, and 11.7% from large hydroelectric plants. In California, a series of state mandates beginning in 2002 with Senate Bill 1078 established the Renewable Portfolio Standard program, requiring 20% renewable energy by 2017. In 2006 Senate Bill 107 accelerated the deadline to 20% by 2010, and in 2008 Governor Schwarzenegger issued an Executive Order requiring an additional goal of 33% renewables by 2020. While state mandates may not be tenable in Tennessee at this time, working with TVA to reform its energy mix to include more renewable resources is necessary to reduce the region's carbon footprint. In addition, increasing the amount of renewables and decreasing fossil fuels in the power mix used by the TVA would benefit the region as a whole with respect to air pollutants and toxic emissions.

Air quality is also a concern for the region. Although air quality is generally good, more stringent EPA standards for ozone and particulates require additional work. The coming increase in manufacturing will result in higher pollutant loads and make compliance with federal regulations even more challenging.

Recommendations: Work aggressively with state and federal regulators, businesses, and community groups to ensure the State Implementation Plan takes all necessary steps, incorporating expected increases in air emissions from manufacturing, to maintain and improve air quality while at the same time reducing greenhouse gas emissions. Work with state and federal legislators to develop mandates to increase energy efficiency and renewable energy sources in the power mix used by the TVA.



Farming and Food Security

Food production is our Nation's wealth – for farmers, who can thrive through hard work; for consumers, who are secure in the knowledge that our food is produced according to our food security laws; and for communities, which interact with the farm economy, from providing supplies to farmers to buying food direct at farmer's markets and farm stands. America's farms provide Americans with greater food security and safety. When we can buy our food direct, which can only happen if the farms are close to our cities, we can choose riper, fresher food and are better informed about farming practices.

Agricultural lands are desirable for development because these lands are usually flat and well drained; in addition 86% of all farmland is near metropolitan areas making them vulnerable to conversion. In Hamilton County, large parcels are subdivided into smaller parcels at a high rate and farms are being sold for residential development. While some loss of farmland is inevitable, if preservation of the rural character is a priority, then the region needs to use all available tools to retain local farms.

Recommendation: Tools to preserve farm lands include planning, zoning, tax incentives, and use of agriculture easements, working with groups such as the American Farmland Trust, the Trust for Public Land, and local conservation organizations.





Water Quality, Water Supply, Flood Control and Development

Water quality, water supply, flood control and development. Water quality in the region's streams and lakes is generally poor and worsening over time. As development increases, water quality will continue to worsen unless development patterns and methods are changed. Similarly flooding is apparently a regular phenomenon, as observed during the SDAT site visit in early May. Flooding is often caused by urban and rural development and associated loss of tree cover, leading to erosion and siltation of rivers. Clear cutting on mountain tops and ridgelines is particularly harmful as sediment flows down steep slopes. Flooding – stormwater runoff – introduces urban and agricultural toxic chemicals into water bodies and puts structures at risk.

Controlling stormwater runoff and flooding has received much attention in recent years, as has the question of whether it is safe to infiltrate stormwater. Low Impact Development is a comprehensive land planning and engineering design approach with a goal of maintaining and enhancing the pre-development hydrologic regime of urban and developing watersheds. Many cities are building and retrofitting "green streets" to eliminate flooding problems by detaining and infiltrating stormwater. Maintaining LID landscape features requires training and commitment.

A resource for incorporating LID strategies into urban planning with the support of municipal officials is found in the Ahwahnee Water Principles: A Blueprint for Sustainable Development, which lays out nine principles addressing growth, water-friendly site design, and water supply, and five implementation principles. The Ahwahnee Water Principles discuss the importance of zoning in planning for growth, suggesting, for example, the use of form-based codes to specify how development and redevelopment should serve the community as opposed to traditional zoning with its emphasis on use and density.

Finally, studies have also answered the question of whether it is safe to infiltrate presumably polluted stormwater to augment groundwater used for drinking supplies. The Los Angeles Basin Water Augmentation Study is a long term research project to explore the potential for reducing surface water pollution and increasing local water supplies by increasing infiltration of urban stormwater runoff. After six years of monitoring six sites through the Los Angeles Basin, including two industrial sites, the study found no negative impacts to ground water quality from infiltration.

Recommendation: Use a systems approach to planning for regional sustainability such as recommended in the Ahwahnee Water Principles. Require the use of Low Impact Development strategies in development and redevelopment projects.



Planning Tools

Integrated regional water management is a tool being used in California to address not only water quality and water supply, but also flood control, loss of open space, and inadequate park space. While by no means perfect in its conception or implementation, the IRWM was passed into law in 2002 and amended in 2006 as a grant program to encourage diverse stakeholders, including but not exclusively those with water management responsibilities, to work together to solve water and land use problems. Keys to the success of the IRWM program are identification of the appropriate region for planning; getting the right people to the table through extensive outreach and keeping them there through ongoing public outreach; planning that results in setting quantified goals; announcing an open call for projects to get all of the best ideas on the table; adoption of the plan by all the participant's agencies, boards, and councils; and ongoing inclusive and open governance to adopt the plan.

A similar program is underway in the European Union, called the SWITCH Consortium, to develop new ways of managing water for the city of the future. SWITCH is based on so-called learning alliances, in which they bring together city stakeholders and researchers "to bring about a paradigm shift in urban water management away from existing ad hoc solutions to urban water management and towards a more coherent and integrated approach."

Funding needs for planning and implantation on an integrated regional scale are not insignificant. Widespread acknowledgement of the scale of the issues will be necessary to attract the needed resources and bringing everyone to the table. Education and outreach programs, such as the National NEMO network, can help to educate local land use decision makers about the links between land use and natural resource protection.

Recommendations: Work on the Tennessee River watershed scale to develop an integrated regional water (or watershed) management plan. Track success through developing a suite of indicators, such as hydromodification, to measure progress. For example, work with the OCHS Center to expand its State of Chattanooga reports with indicators specific to your plan goals and objectives. Form a NEMO group, if one does not already exist, to assist in education and outreach, especially for municipal officials.





Regional Cooperation

The SDAT Application requests that the Team “consider the region’s development of green strategies and recommend community growth policies and possible incentives to achieve a sustainable, high quality future for the region” (p 11). The report authors note that while the city of Chattanooga has made impressive gains in reducing pollution and revitalizing its downtown, “regretfully the visionary, participatory and sustainability initiatives that have found success in the city have not found their way into the development patterns that surround the city” (p 5).

In order to achieve sustainable growth, those with a stake in the future of the region must come together and develop integrated regional plans that generate multiple benefits. The scale of the regional plans will vary with the problem to be tackled, but there is no issue identified in this report that will be solved by city-level planning alone. And there is no issue that will be solved by one agency working to achieve its mission in isolation from other stakeholders with similar interests. Thus, when looking to solve problems, identify all stakeholders and bring them together to generate solutions.

The solutions must be integrated and generate multiple benefits. The days when it is acceptable to build a wastewater treatment plant that is only a wastewater treatment plant, for example, are gone, not only because of limited financial resources but also because of interest in cost-effectiveness calculations incorporating all costs, including those not traditionally considered. The nationwide trend is to look for additional benefits that can be gained and incorporate those benefits into capital improvement projects. Just as the concept of complete streets to improve urban neighborhoods is growing in popularity, so too Low Impact Development and green streets strategies are increasingly used to reduce pollutant loads to streams and lakes from stormwater runoff, to increase native habitat through the use of native plants, and enhance neighborhoods through use of traffic calming features.

Recommendations: Focus planning efforts on the largest scale appropriate for the problem, irrespective of jurisdictional boundaries, with multiple stakeholders. Generate solutions that are integrated across traditional disciplines and generate multiple benefits.

Resource: *The Ahwahnee Water Principles for Resource-Efficient Land Use*

Preamble

Cities and counties are facing major challenges with water contamination, storm water runoff, flood damage liability, and concerns about whether there will be enough reliable water for current residents as well as for new development. These issues impact city and county budgets and taxpayers. Fortunately there are a number of stewardship actions that cities and counties can take that reduce costs and improve the reliability and quality of our water resources.

The Water Principles below complement the Ahwahnee Principles for Resource-Efficient Communities that were developed in 1991. Many cities and counties are already using them to improve the vitality and prosperity of their communities.

Community Principles

1. Community design should be compact, mixed use, walkable and transit-oriented so that automobile-generated urban runoff pollutants are minimized and the open lands that absorb water are preserved to the maximum extent possible. (See the Ahwahnee Principles for Resource-Efficient Communities)
2. Natural resources such as wetlands, flood plains, recharge zones, riparian areas, open space, and native habitats should be identified, preserved and restored as valued assets for flood protection, water quality improvement, groundwater recharge, habitat, and overall long-term water resource sustainability.
3. Water holding areas such as creek beds, recessed athletic fields, ponds, cisterns, and other features that serve to recharge groundwater, reduce runoff, improve water quality and decrease flooding should be incorporated into the urban landscape.
4. All aspects of landscaping from the selection of plants to soil preparation and the installation of irrigation systems should be designed to reduce water demand, retain runoff, decrease flooding, and recharge groundwater.
5. Permeable surfaces should be used for hardscape. Impervious surfaces such as driveways, streets, and parking lots should be minimized so that land is available to absorb storm water, reduce polluted urban runoff, recharge groundwater and reduce flooding.
6. Dual plumbing that allows graywater from showers, sinks and washers to be reused for landscape irrigation should be included in the infrastructure of new development.
7. Community design should maximize the use of recycled water for appropriate applications including outdoor irrigation, toilet flushing, and commercial and industrial processes. Purple pipe should be installed in all new construction and remodeled buildings in anticipation of the future availability of recycled water.
8. Urban water conservation technologies such as low-flow toilets, efficient clothes washers, and more efficient water-using industrial equipment should be incorporated in all new construction and retrofitted in remodeled buildings.
9. Ground water treatment and brackish water desalination should be pursued when necessary to maximize locally available, drought-proof water supplies.

Implementation Principles

1. Water supply agencies should be consulted early in the land use decision-making process regarding technology, demographics and growth projections.
2. City and county officials, the watershed council, LAFCO, special districts and other stakeholders sharing watersheds should collaborate to take advantage of the benefits and synergies of water resource planning at a watershed level.
3. The best, multi-benefit and integrated strategies and projects should be identified and implemented before less integrated proposals, unless urgency demands otherwise.
4. From start to finish, projects and programs should involve the public, build relationships, and increase the sharing of and access to information.
5. Plans, programs, projects and policies should be monitored and evaluated to determine if the expected results are achieved and to improve future practices.



Citizen Education for Sustainability

In all of the meetings we had across the region, the need for education was emphasized. Since the region will need to make many changes to accommodate the growth from the ensuing VW plant and related development, most participants in the discussions thought that residents of the region needed education about alternatives to the status quo. The need was identified in two ways. First, some participants emphasized the need for individual behavior changes which would require educational outreach efforts. Second, policy changes would be needed that also require citizen education so that residents can support the difficult political decisions that will be needed.

Relying on education alone is a risky choice. Education for sustainability must include two dimensions for success. First, the educational effort must be in concert with a policy change that makes the desired behavior an easy choice for residents. People can know a lot about a problem, even know how their decisions will influence that problem, but still choose to take the most convenient action. Second, engaging citizens in the decision making with creative and meaningful participation efforts can be a corner stone to an educational outreach program.

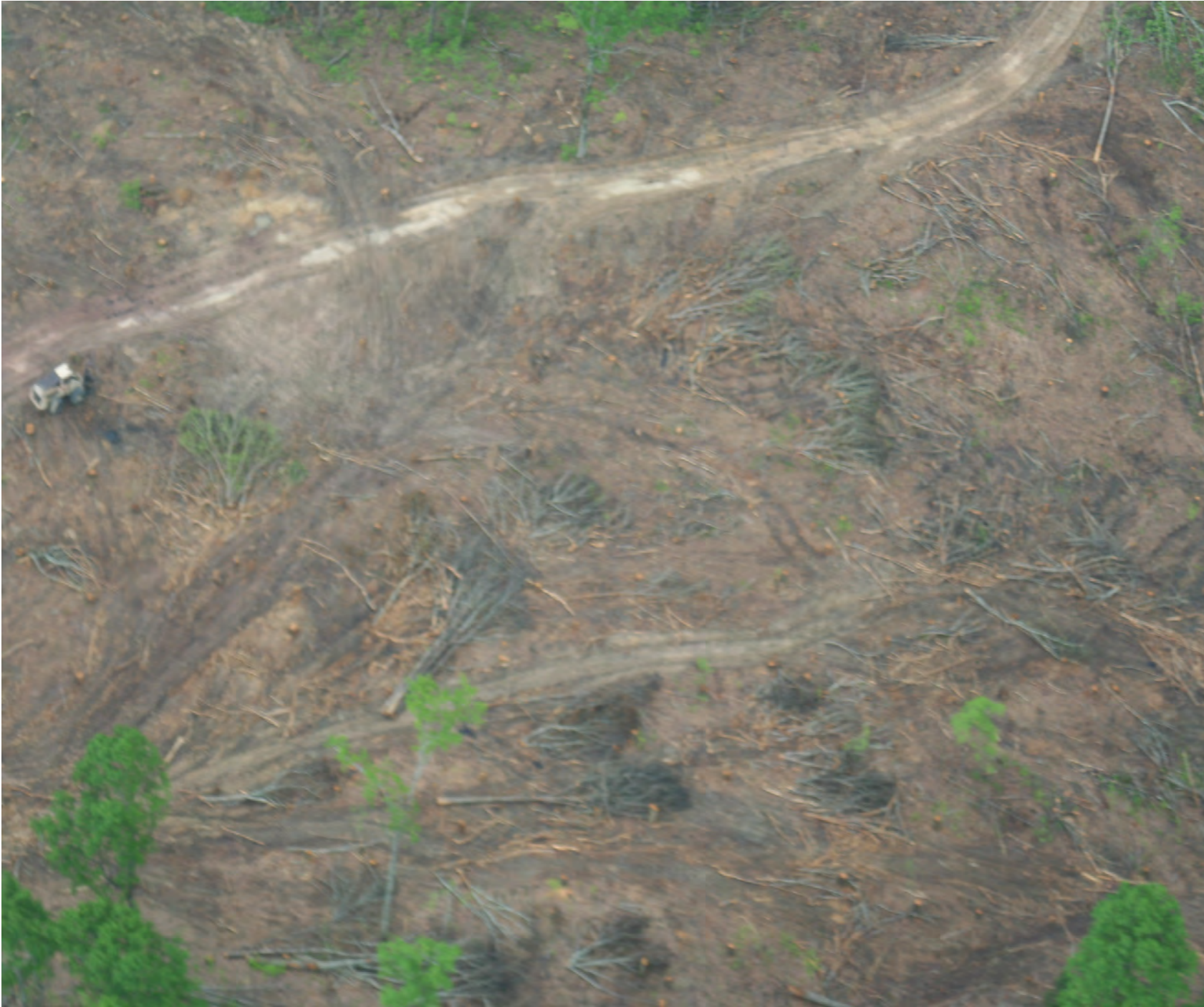


School-based Environmental Education

Infusing environmental education into formal school curriculum has many advantages. There are many states that have adopted environmental education requirements (i.e. New York and Maryland). Others have taken the school district approach with individual districts creating a full environmental education set of requirements.

Schools can become a focus for sustainability efforts, which has added benefits to a locale attempting to make a shift toward more sustainable practices. Not only does this approach allow for creative curriculum in environmental education, it also builds community support for sustainable practices and engages full communities and families in efforts. Boston is one city that has made major strides in this area. With their Green Schools program, they have transformed school buildings and school yards, educated the city's youth about a wide range of sustainability issues, and engage local community in sustainable practices. At the same time, this effort built support for changes that the city made to its building code and zoning code that supported more sustainable urban development. The Green Schools program also saved the school district money on heating and cooling costs.

In Baltimore, a smaller scale program with schools at the center of sustainability efforts in neighborhoods has been started. As part of an effort to implement non structural best management practices in one "watershed" (actually a "sewer shed") in the city, the project has developed significant support for major changes in the neighborhoods. The idea is to use the school as a demonstration site for BMPs in collaboration with a variety of educational programs. The asphalt is removed, rain gardens and rain barrels are built, curb cut outs are created, and other strategies are introduced. In many cases, students are central to the work and maintenance of the projects. Then, the choice of location for various treatments is determined with a GIS mapping system. Vacant lots, curb cut outs, street trees, and other projects are done in places that connect to the school, like spokes to a wheel. This principle of a school as the node with tentacles of sustainability practices moving outward in all directions could easily be applied to other issues, not just storm water management. The result is an integration of education in schools, outreach and public education, changes in city practices, and it could even include job training.



CONCLUSION

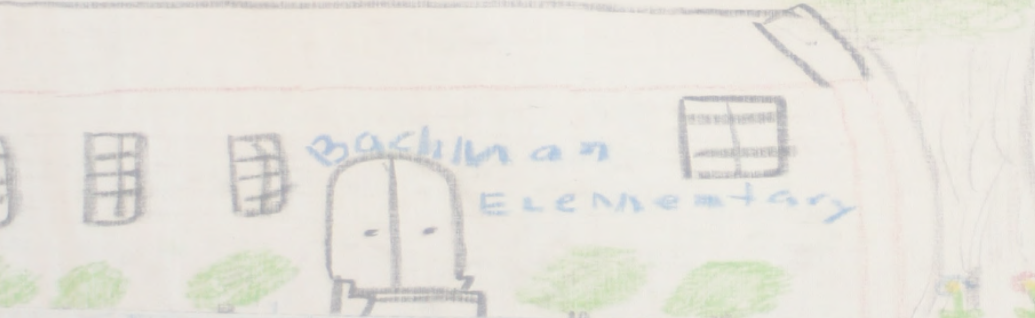
During the SDAT process, the team held meetings all over the region. The team met with economic development representatives in the northern suburbs of the region, held regional meetings of public officials in Chattanooga, met with the business and philanthropic community, and representatives of several non-profit organizations. The team also met with many citizens through its public workshops. The SDAT Team traveled to Northern Georgia for additional meetings with county representatives in the southern part of the region as well. It was clear from the team's discussions that a wide variety of communities make up the region. Some of the evident challenges include a diverse array of municipal approaches to governance, a wide variety of issues facing municipalities, and more importantly, widely divergent local civic cultures and civic capacities for collaboration and engagement.

Exporting the 'Chattanooga Process' to the Broader Region

Chattanooga holds an importance place in our nation's narrative about sustainability and environmental transformation. In the 1970s, Chattanooga was labeled the "dirtiest city in America," and faced profound challenges regarding the health of its watershed and the future of its downtown. In 1984, Chattanooga's leaders came together to create Chattanooga Venture, an unconventional partnership that spawned the Vision 2000 process – engaging citizens in a bold campaign around 40 goals for the future of the city. Civic leaders were so successful in institutionalizing a collaborative approach to public work that one writer labeled it the "Chattanooga Process," explaining that it had become the "normal approach to dealing with issues in Chattanooga." By 2000, many of the original goals had been realized. Chattanooga is now known as "The Scenic City" and in 2008, the city was named by Outside Magazine as one of the best places to live in the US. No one doubts the value of the Chattanooga Process in the results that have been realized during the last few decades.

As a result, one of the most exciting developments the SDAT Team observed during the process is the emergence of the next generation of civic leadership as represented by the Chattanooga Stand initiative. Chattanooga Stand was created in 2008 by a diverse group of citizens to facilitate a shared vision for the future of the region. Using a survey-based engagement model developed in Calgary and utilized in Portland, Chattanooga Stand's stated goal is to implement the "largest survey-based visioning campaign in the world." The SDAT Team had an opportunity to meet with some of Chattanooga Stand's representatives during the process, and were excited to see another civic initiative come forward outside of government. Since the SDAT, the Stand initiative has engaged over 25,000 citizens in the process, with plans to release the results of its work in 2010 and facilitate citizen-led collaboration across a host of issues at the neighborhood, city, and regional level. The SDAT Team considers this an exciting development, not only for the Chattanooga region, but for the continuing narrative of community transformation that the area represents. We are hopeful the reinvention of the Chattanooga Process will make an important contribution to a shared civic culture in the region, as well as a contribution to our collective knowledge of the sustainable communities movement in America.

The SDAT Team believes the Southeast Tennessee Valley can once again produce a valuable story of transformation for the rest of the country. Regionalism is hard work, requiring extraordinary and unconventional partnerships over extensive periods of time to realize success. We believe the resources exist to develop a regional capacity for cooperation in the Valley, and we look forward to following the next chapter in its great narrative on sustainability.



THE SDAT TEAM

Thomas W. Rounds, AICP, SDAT Team Leader

Thom Rounds is the Manager of Community Planning and Urban Design, leading a group of 13 planners, landscape architects, urban designers, and architects for URS in Colorado. He is also the Business Line Leader for the Development Services practice for URS in Colorado. In this role he is responsible for business development and coordinating the delivery of planning and engineering services development and redevelopment projects for public and private sector clients.

Mr. Rounds has 30 years experience in public sector and consulting planning. He has worked directly for municipal and county government planning departments. He has consulted to local governments, state and federal agencies, and private sector clients. Mr. Rounds' project experience includes operation of local government planning and engineering functions, land use planning, design and regulation, capital improvement planning, programming, and finance, and integration of land use and transportation.

Mr. Rounds has extensive experience in working with citizen groups to identify issues and concerns affecting land use and transportation decisions. He has received training in "Choosing By Advantages" and is certified by the National Charrette Institute as a Certified Charrette Planner. Mr. Rounds is a member of the American Institute of Certified Planners.



Eileen McGurty, PhD, Johns Hopkins University

Eileen McGurty, Ph.D., serves as Associate Chair of the Environmental Sciences and Policy program. Dr. McGurty's research examines the origins, development and structure of environmental justice movement and its impact on environmental policy and economic development policy making. Her book, *Transforming Environmentalism: Warren County, PCBs and the Origins of Environmental Justice* (Rutgers University Press) explores the crystallization of the environmental justice movement and its influence on contemporary environmentalism. Current work also includes examining methods of infusing analyses for potential environmental injustices into permitting processes at the state level. She also researches waste policy, and her current study of waste management in New Jersey examines the influence of waste-related policies on neighborhood and community development, as well as the differential social effects of the waste-related policies. She has published in *Society and Natural Resources*, *Journal of Planning History*, *Environmental History*, *Journal of the American Planning Association*, and *Planning Network*. She received a Ph.D. in Urban and Regional Planning from the University of Illinois at Urbana-Champaign and has worked extensively in community development and environmental planning in Illinois, New York, New Jersey and Maryland. Prior to joining Hopkins, Dr. McGurty coordinated the Environmental Studies concentration for the international Liberal Studies degree program at Long Island University, working with students and faculty in England, Costa Rica, India, China, Japan, Israel, and Kenya.



Monica Bansal, AICP

Monica Bansal is a transportation planner with the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG). The Department of Transportation Planning serves as staff for the Transportation Planning Board (TPB), which is the Metropolitan Planning Organization (MPO) for the National Capital Region. Ms. Bansal works largely on developing environmental efforts of the TPB, such as climate change scenario planning, land use and transportation project planning, and consultation on the development of the long-range transportation plan with natural resource and environmental agencies. Ms. Bansal received a Master of Science in Urban Planning from Columbia University and a Bachelor of Arts in Environmental Science and Policy from the University of Virginia. Prior to coming to COG, Ms. Bansal worked on congestion pricing and public health with the Living Cities Program at the Environmental Defense Fund, urban air quality remote sensing at the World Resources Institute for Sustainable Transportation, international sustainable energy and transportation development at Columbia University's Earth Institute, and LEED building certification at a consultancy in Rockville, Maryland.

William Dodge

Among American regionalists, William R. (Bill) Dodge is regarded as a lead thinker and facilitator — a man who's worked effectively over three decades to help regional communities identify their critical challenges and build collaborations that address a whole range of tough challenges, from balanced growth to fiscal and ethnic disparities to creating effective regional decision-making networks. In the mid-1990s his book, *Regional Excellence: Governing Together to Compete Globally and Flourish Locally*, provided critical assistance to public and private leaders seeking to improve regional decision making in the citistate age. He is currently writing a book on the seven key components to building successful regions for all, including becoming excellent regional citizens, connecting regional decision-making networks, and negotiating regional cooperative growth compacts.

In the late-1990s, as Executive Director of the National Association of Regional Councils, Dodge brought regional leaders and their organizations together, in annual Regional Summits, to help advance a National Regional Agenda. He also guided the preparation of the first National State-of-the-Regions report and represented the interests of regional councils before the U. S. Congress and federal agencies.

Later, as Principal of Regional Excellence Consulting, and continuing in his individual capacity, Dodge helps public, private, academic, foundation and civic leaders to strengthen their regional decision-making. He analyzes regional challenges, guides regional visioning processes, and helps create new regional organizations. He also makes presentations on the latest tools and techniques for addressing regional challenges and conducts regional workshops for community leaders and citizens.

Dodge recently served as the Interim Town Administrator for Silverton, Colorado, guiding the preparation of the annual budget, pursuing key infrastructure and recreation improvements, and helping to recruit a new Town Administrator. He is active nationally as a Fellow of the National Academy for Public Administration and the Institute for The Regional Community. He serves on the Growing Smart Directorate of the American Planning Association. He is the 2001 recipient of the Don Stone Intergovernmental Cooperation Award of the American Society for Public Administration.





Søren Simonsen, AIA, AICP, LEED AP

Søren Simonsen is an architect, city planner, and environmental educator. His company, Community Studio, works to create beautiful, meaningful and sustainable places for people throughout the western United States. He has spent the past 25 years in design, construction and development, and has received over 30 awards recognizing his contributions including LEED Platinum Certification for the Swaner EcoCenter (2009), the AIA Young Architect Award (2006), Salt Lake Chamber Small Business Award (2006), the AIA Utah Firm of the Year Award (2000), and three Best of State™ Gold Medals for contributions in community development. Søren is a frequent speaker and lecturer on topics of urban design, business development, community and sustainability, and environment.

Søren is active in professional and community affairs. He was elected to the Salt Lake City Council in November 2005, and serves on the Transportation, Planning, Communication & Outreach, Budget & Finance and Small Business legislative subcommittees. He served in 2008 as chair of the Regional and Urban Design Committee for the American Institute of Architects (AIA), and has also served on the national AIA Advocacy Committee and Sustainability Task Force. He is a former chair of the Salt Lake Historic Landmarks Commission, chair of the Salt Lake Mayor's Environmental Advisory Committee, chair of the Utah Arts Festival Board of Directors, chair of the Parley's Trail Advisory Committee, and Fundraising Committee Chair for the Center for Documentary Arts, a founding partner of The Leonardo at Library Square in Salt Lake City.

He is an active participant and contributor in the American Institute of Architects, American Planning Association, Urban Land Institute, US Green Building Council, National Trust for Historic Preservation, Utah Heritage Foundation, and Local First Utah. Søren is married, with two children, and also enjoys cooking, photography and outdoor recreation.



Nancy Steele

The Watershed Council is a collaboration of agencies, elected officials, community organizations, businesses, and academics working together to solve land and water issues in Los Angeles. Prior to joining the Watershed Council, Nancy was manager of Retrofit Implementation at the California Air Resources Board, where she developed and implemented regulations to reduce emissions from in-use heavy-duty diesel trucks and buses. In her environmental career, Nancy has also enforced California's hazardous waste control laws; researched environmental lead contamination from lead-acid battery recycling plants, compared the health and environmental costs of recycling and waste management of electric vehicle batteries, and identified the potential health and environmental impacts of leaf blowers; written regulations to reduce the threat of childhood lead poisoning; and served as the ARB's Deputy Ombudsman for southern California.

Nancy is a member of the board of the Marine Conservation Research Institute; Vice-Chair of the Upper Los Angeles River Steering Committee; member of the Leadership Committee of the Greater Los Angeles Integrated Regional Water Management Plan; member and past vice-president of the Women's Environmental Council; and member of the ad hoc committee to draft a hillside protection ordinance to amend the Altadena Community Standards District. She was an appointee to the Santa Monica Mountains Conservancy Advisory Board, representing unincorporated communities of Altadena and Crescenta Valley, and member of the Altadena Crest Trails Restoration Working Group.

Nancy currently is president and founder of the Altadena Foothills Conservancy, a nonprofit land trust which is expanding to become the Arroyos & Foothills Conservancy. In addition, she and her husband manage about 150 beehives for pollination and honey & beeswax production. Dr. Steele earned her Doctorate of Environmental Science and Engineering from University of California, Los Angeles; her Master of Science degree in Zoology from Arizona State University; and her Bachelor of Arts, Biology, from Occidental College.

Carlos Macedo Rodrigues, AICP, PP

Carlos is Vice President of the Regional Plan Association. Before joining the RPA, he was Director of Planning for the Princeton Office of Looney Ricks Kiss Architects, where he managed a large portfolio of projects involving both redevelopment and new communities throughout the New York metropolitan region. His clients ranged from Fortune 500 real estate development companies to universities, local governments, and non-profit community development corporations.

Prior to that, he spent 10 years with New Jersey State Government – as Acting Director and Manager of Plan Implementation for the New Jersey Office of Smart Growth – where he was responsible for physical planning and design issues statewide. Carlos led a multi-pronged effort to elevate the role of physical planning and design in the state through public presentations, educational initiatives (such as the NJ Mayors Institute on Community Design, in partnership with RPA), demonstration projects and both print and virtual publications, such as the award winning *Designing New Jersey* and *Employment and Community*. He is the primary author of significant sections of the 2001 New Jersey State Development and Redevelopment Plan.



AIA Center for Communities By Design Staff

Joel Mills, Director, Center for Communities by Design

Joel Mills provides process expertise, facilitation and support for the Center's Sustainable Design Assistance Team (SDAT) and Regional and Urban Design Assistance Team (R/UDAT) programs. In this capacity, he works with AIA components, members and partner organizations to provide technical assistance to communities across the country on sustainability and urban design.

His experience includes community-based technical assistance, process design, facilitation and training across a number of fields including juvenile justice reform, local government, education, family strengthening, civic media and emergency management. During the 1990s, Mr. Mills spent several years supporting international democratization initiatives by providing technical assistance to parliaments, political parties, local governments, civic and international organizations. His scope of work included constitutional design and governing systems, voter and civic education, election monitoring and administration, political party training and campaign strategy, collaborative governance, human rights and civil society capacity building. He maintains active memberships in the International Association of Facilitators (IAF), the International Association for Public Participation (IAP2), and the Mid-Atlantic Facilitators Network. He also serves on several public and private boards.

Marsha Garcia, Center for Communities by Design

Marsha Garcia joined the American Institute of Architects in 2005 as a Project Manager on the Knowledge Communities team where she was responsible for managing a variety of projects, products and activities for AIA National's Committee on the Environment, Design-Build Knowledge Community, and Center for Building Science and Performance. She worked closely with volunteer leaders to develop knowledge in these areas of architectural specialty, and to plan and develop projects related to conferences, publications and workshops. In 2008 she began working with the AIA's Center for Communities by Design as the Outreach Manager, responsible for selected initiatives involving community outreach, education and training at the local level to foster leadership opportunities for AIA members, AIA local components and the public at large.

Previous to the AIA, Marsha was the Senior Coordinator of Professional Development at the University of Oregon's Ecological Design Center at the School of Architecture and Allied Arts. Prior to that role, she worked as the Assistant Manager, LEED Workshops at the U.S. Green Building Council. She has also worked as an interior design assistant at Bartelomei & Co., a high-end residential firm in Georgetown, and as a meeting planner for the National Wildlife Federation. Marsha holds a Bachelor degree from Drew University in New Jersey and recently attended the University of Oregon for graduate studies in Architecture. She is currently pursuing her Master of Environmental Science and Planning degree at Johns Hopkins University.

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- Karen Hundt, Co-Chairman
- Heather Adcox
- Blythe Bailey
- Roger Boaz
- Bruz Clark
- Jon Coddington
- Dave Dalton
- Tom Dugan
- Tiffany Gibby
- Teresa Groves
- Gary Hilbert
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- James Sherrill
- Roger Tudor
- Dan Wade



Finally, we'd like to extend our special gratitude to Steve Hasse, AIA, for his leadership of the Steering Committee. Steve contributed innumerable time to the process and provided continuous support to the team's operations during their visit. We would also like to extend our sincere gratitude to the Lynhurst Foundation for their important leadership and support of this project.

