



SYRACUSE SDAT

Communities Making Connections
at the Crossroads of Upstate New York

A Sustainable Design
Assessment Team Report

Syracuse, New York
December 4–6, 2006



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EXECUTIVE SUMMARY

The intersection of Interstates I-81 and I-90 marks the geographic centers of New York State, Onondaga County, and the City of Syracuse. Syracuse, understandably and deservedly, is the cultural, economic, and educational hub for a seven-county region forming Central New York. Its natural beauty, a combination of rolling hills, plains, streams, and lakes, provides a rich setting for its intact historic urban core, vibrant pockets, and 26 surrounding culturally distinct neighborhoods. As industrial jobs continue to leave the region, Syracuse has reestablished itself as a service economy by investing in Syracuse University and the State University of New York (SUNY) College of Environmental Science and Forestry. Syracuse has the physical setting, geographic location, urban fabric, established infrastructure, formidable public and private institutions, and necessary work ethic to secure for itself an economically viable and environmentally sustainable future. However, despite these assets and the city's potential, Syracuse is charting an unsustainable trajectory and is faced with serious challenges to its future. Consider the following:

- Syracuse has lost 57 percent of its population since 1950
- Infrastructure has increased since 1950, creating a high infrastructure cost per resident
- The labor force has shrunk by 5 percent since 1990
- The county benefits from the city's assets with minimum tax contribution
- Onondaga Lake is one of the most polluted lakes in the United States
- Syracuse has a 35 percent poverty rate, which is concentrated in pockets
- Sixty percent of Onondaga County's poor live in Syracuse
- Eighty-five percent of Syracuse's high school graduates come from poverty
- Urban planning policies are overlapping, inconsistent, and not enforced
- Effective cooperation between city and county does not exist
- A unified voice, strategically guiding the city does not exist

Syracuse covers more than 26 square miles; Onondaga County adds another 750 square miles. Aerial photography and census data since 1950 provide compelling evidence of sprawl without growth. Building and maintaining an infrastructure system without justifiable densities is an unsustainable model. Finite resources spread too thinly have minimal possibility to effect change. Syracuse must either make difficult decisions

and establish sustainable priorities, or accept that it will continue to decline. Priorities should be determined by their ability to create catalytic opportunities to grow the pie concentrically, eventually enveloping the entire city.



Syracuse's substantial human resource component and its willingness to work hard for a common good were evident when the Sustainable Design Assessment Team (SDAT) met with representatives of more than 35 organizations and the aggregated agenda of several hundred objectives. Regrettably, the ratio of effort to effectiveness was low, principally because one well-meaning group unnecessarily and frequently unknowingly cancelled out the work of another well-meaning group. Discussions at SDAT town meetings revealed previously unrecognized and unaccepted overlap between the government, community, and ad-hoc organizations represented. Though unanimous consensus among these organizations is unlikely, it is also unnecessary. Recognizing, supporting, and advancing the overlapping 10 percent is adequate to begin positively leveraging the human asset toward making Syracuse sustainable.

Finding ways to create catalytic partnerships between Syracuse's principal institutions and other institutions, new or old, public or private, big or small, appears to be Syracuse's best vehicle to strategically reposition the city and its population for a sustainable future. Unfortunately, multiple generations of bad decisions, disinvestment, sprawl without growth, environmental exploitation, ineffective and bifurcated government, concentrated poverty, serious social inequities, fiscal imbalances, aging infrastructure, systemic skepticism and mistrust, and the general failure to prioritize its objectives have combined to create an environment that significantly impedes Syracuse's ability to capitalize on its opportunities.

After reaching this initial assessment, we asked, “Why is Syracuse in decline?” Its situation is not unique, mirroring Buffalo; St. Louis; Akron; Erie, Pa.; Flint, Mich.; and other cities. Although it may be comforting to not be in the soup alone, it doesn’t help Syracuse. Shifting markets, new inventions, globalization, complacency, new transportation routes, short-sightedness, and bad policies all contributed to the current state. Syracuse must be careful, however, not to allow these factors to become excuses that dangerously and incorrectly suggest circumstances outside the city’s control caused the problems, and therefore its solutions must wait for help to come from outside the city. Syracuse must address its continued failure to develop processes that enable it to nimbly respond and adjust to change. Syracuse must be the one to help Syracuse.

There is no brilliant chess move to undo bad ones. The challenges facing Syracuse are serious ones created by many factors over a long time; correcting them will take time, energy, focus, and the commitment of many people at macro and micro levels. Syracuse’s window of opportunity closes as the further erosion and deterioration of its ecology, economy, historic fabric, infrastructure, and population logarithmically increase the difficulty of building a sustainable future. The time to reposition is now.

Recommendations

- Establish and empower a representative implementation team to lead other organizations and advance recommendations of the SDAT report.
- Build success around a strategic, disciplined, consistent, cogent voice. Create trust and show steady progress. Reject attempts to fragment team, lose sight of objectives, or overextend resources.
- Commit and codify SDAT priorities to fortify Syracuse’s downtown, University Hill, and lakefront areas with focused investment zones (FIZs); establish an urban plan to physically connect the FIZs; establish a model neighborhood FIZ in a challenging neighborhood; actively pursue public/private partnerships as catalyst to stimulate FIZs; and develop a comprehensive master plan connecting Onondaga Nation to Onondaga Lake.
- Act at macro and micro levels to elect officials committed to goals and reorganize community organizations around new priorities.
- Assess progress and adjust as necessary.

INTRODUCTION

In January 2006 Syracuse submitted a proposal to the American Institute of Architects (AIA) for an SDAT to assist the city and its citizens in addressing key issues facing the community. The issues ranged from forging connections between existing initiatives and programs to analyzing the current and future opportunities for encouraging sustainability and environmental balance.



The AIA accepted the proposal and, after a preliminary visit by a small group in October, the SDAT members arrived in Syracuse on December 4, 2006. For three days, the team members, working closely with local officials, community leaders, technical experts, and citizens, studied the community and its concerns. During those three days, the team came to understand the issues and used its expertise to frame a wide range of recommendations, which were presented to the community in a public meeting on December 6.



This report is a more detailed version of the findings and recommendations that were presented to the community on December 6. After a brief overview of the SDAT program and process, and a short discussion of Syracuse and the issues it is facing, the report covers

- Economic development and governance
- Environment
- Transport systems and urban form

A closing section offers some thoughts on how the community can best move forward to address the range of issues and recommendations covered in the report.

What Is the SDAT Program?

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

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

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

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

Why Is the SDAT Program Valuable?

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

- Informs the community of opportunities and encourages them to take action to protect local and regional resources
- Helps the community understand the structure of the place at various scales and contexts—from regional resources to the neighborhood scale
- Explores and articulates the larger contexts and interactions of ecological, sociological, economic, and physical systems
- Visualizes potential futures
- Recognizes and describes the qualities of a place by preserving the best elements of the past, addressing the needs of the present, and planning for the needs of future generations
- Identifies and describes choices and consequences

- Connects plans and actions
- Advances the principles of quality sustainable communities
- Helps the community to define the roles of various stakeholders
- Develops a roadmap for the implementation of more sustainable policies and practices

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

Who Are the Key Participants in the SDAT Process?

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



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

Local Steering Committee

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



Local Technical Committee

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

Citizens

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

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

ECONOMY AND GOVERNMENT

Syracuse's economy and its greater region have been under constant change and evolution since the city was formally incorporated in 1848. The first major industry to locate in the area was salt mining. When the Erie Canal, a visionary piece of transportation infrastructure responsible for making New York the "Empire State," was built it cut right through Syracuse, setting the stage for the birth of a diversified manufacturing economy. Manufacturing remained a mainstay of the local economy long after the canal ceased to be the primary means of moving goods from the East Coast to the Midwest, replaced first by rail and then by highways, specifically the New York State Thruway. Notable manufacturers who have called Syracuse home include Carrier, Bristol-Myers Squibb, and Lockheed Martin.

Manufacturing in Syracuse has followed a trajectory similar to other northeastern cities, affected first by the migration of production activities to the American South and West, and later by the shifting of manufacturing overseas. For those industries that stayed, productivity gains spurred through automation and process improvements have decreased the number of workers necessary to create a given quantity of goods, resulting in further declines in manufacturing employment share. Manufacturing now employs the same share of the local workforce as the national average, roughly 13 percent, down from about 18 percent in 1990.

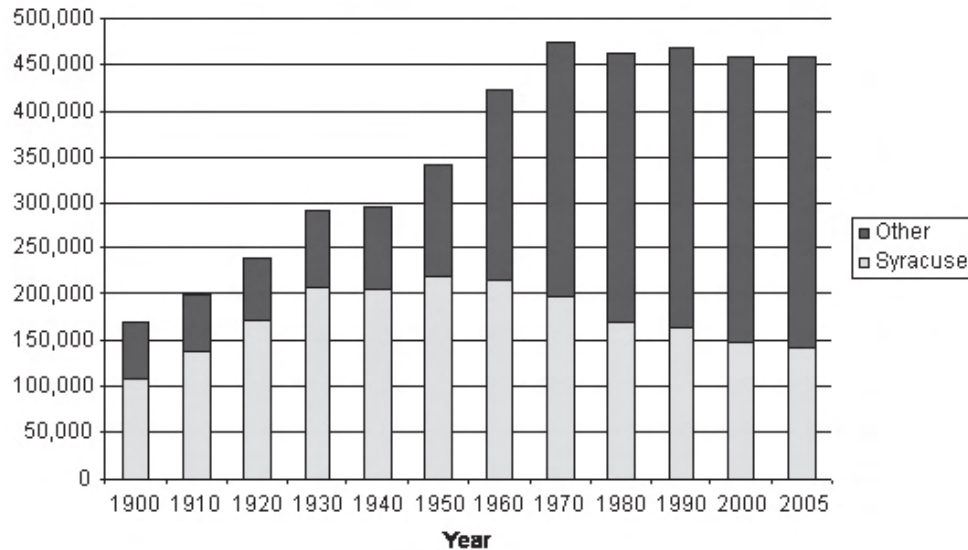
Manufacturing jobs are different from other types of jobs in that they pay middle-class wages without the need for a post-high school degree. Workers displaced by the loss of manufacturing jobs find it particularly hard to adjust, as their skill sets do not translate readily into other occupations, and their subsequent jobs typically result in lower wages. Former manufacturing centers have therefore typically been beset by population loss as large segments of the workforce migrate elsewhere.

Fortunately, the Syracuse region was better positioned than some other regions to weather these downturns, as major sectors of its economy are more rooted and less affected by larger shifts in the national economy. The higher education sector includes Syracuse University, the largest employer in the region with about 7,400 employees, as well as a branch of SUNY-ESF. Syracuse's hospitals are major teaching hospitals that serve a broad swath of Central New York.

Sprawl Without Growth

Syracuse's population reached its peak in 1950 and since then has declined each census year. Although households migrated in and out of the region during the 50 years from 1950 to 2000, on a net basis the city's loss has been the suburbs' gain. This is illustrated in *Chart 1*, which shows the city's share of the county's population falling in each postwar census tally.

Chart 1: Population Trends in Onondaga County



Although the county's overall population (including Syracuse) continued to grow between 1950 and 1970, it has been generally stagnant or declining ever since. On balance, population loss in the city has been balanced by a roughly equal population rise in the county outside of Syracuse. This rearranging of a stagnant population base (sprawl without growth) has profound consequences for the future of the entire region.

The county's modest population decline is largely a consequence of the trend toward smaller households. This is not so in the city, where household declines have averaged about 250 households per year. Each lost household in Syracuse translates into a housing unit for which there is no longer any demand, leading to widespread tax delinquency and abandonment throughout the city. This is coupled with an equal amount of low-density development elsewhere in the region, where new infrastructure is required to serve it. At a rate of 250 abandoned residential properties a year, the city is caught on a treadmill that requires ever-greater expenditures of effort on the part of the city's community development arm just to keep

the city's neighborhoods from sinking deeper into decline. At the county level, increased expenditures are required for roads, sewers, water lines, and other infrastructure necessary to adequately serve the redistributed population, with the attendant fiscal and environmental implications.

A Diversified Economy

The Syracuse region has a well-diversified economy, an attribute that has helped it maintain employment levels even as manufacturing employment declined and which helps buffer the region against cycles of recession and expansion. The region's stagnant long-term job creation, however, has led to a declining labor force. Coupled with the "brain drain" from local universities, the lack of dynamism in the local economy has negative consequences for the sustainability of the economy over the long term.

Chart 2: Employment by Major Sector

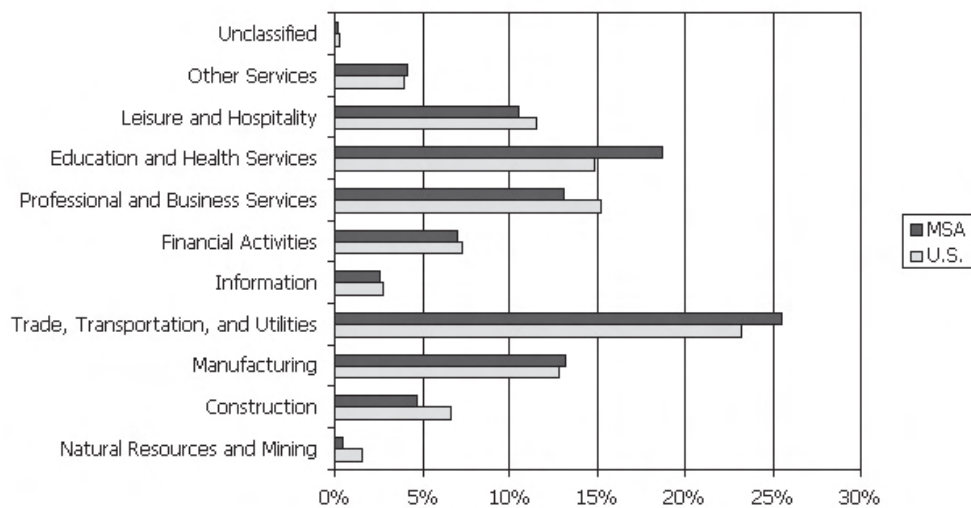
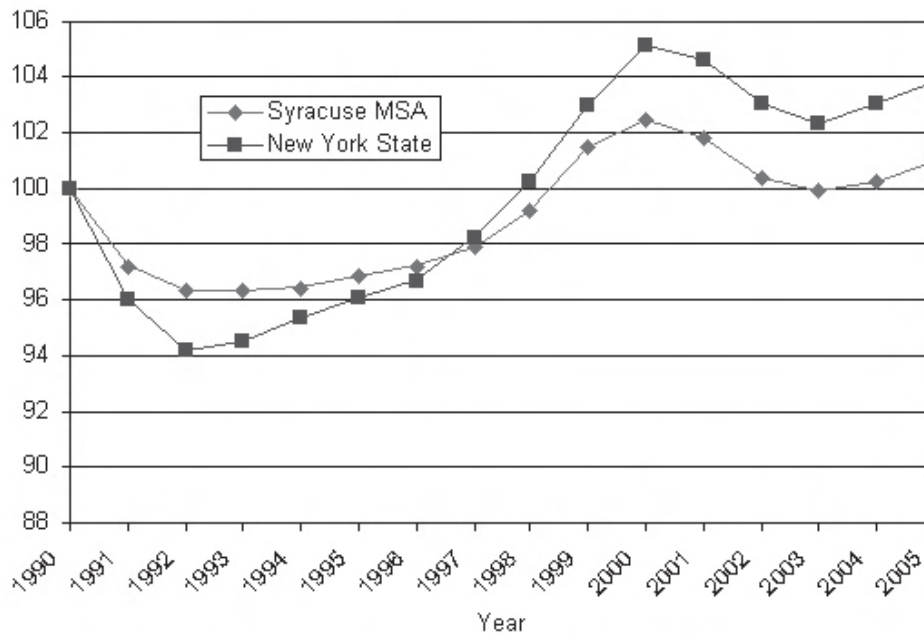


Chart 2 shows the major components of employment in the Syracuse metropolitan statistical area (MSA) as compared with the nation as a whole. The region's economy has particular concentrations in education and health services, explained by the presence of regional hospitals and institutions of higher learning, including Syracuse University and SUNY-ESF; as well as trade, transportation, and utilities, as explained by the region's employment concentrations in transit and passenger ground and courier and messenger services, the latter of which includes air courier services such as FedEx.

Chart 3: Employment Trends: Syracuse MSA

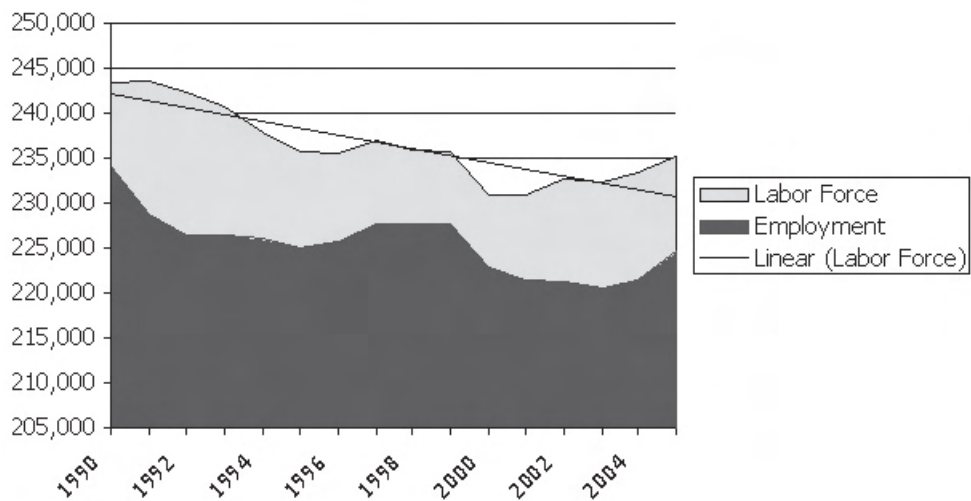


Because a significant share of the region's economy is made up of sectors—such as education and health care—that rely in part on governmental transfers and are less prone to boom and bust cycles, the regional economy tends to show more modest employment losses during periods of recession but also less employment growth during periods of expansion. *Chart 3* shows a time series index of employment in the Syracuse MSA as compared with New York State. The peak and trough of the graphs is clearly less severe than the statewide average. Also of note is the fact that overall employment has been generally flat—as of 2005, the total number of jobs in the region was only about 1 percent higher than the 1990 figure.

The concentration of higher education in the Syracuse region and in greater Central New York, combined with spending by corporate research and development departments, results in significant research and development spending in the region—estimated at some \$2 billion by the regional Chamber of Commerce. This level of spending presents an opportunity to use technology transfer as a tool to help incubate and launch local technology businesses. Syracuse University's Center of Excellence in Environmental and Energy Systems provides an excellent model in this regard.

In spite of modest job growth in the region, the local labor force has been in decline over the same time period, as shown in *Chart 4* (note that jobs are recorded by place of work; labor force statistics by place of residence). The labor force consists of all those individuals who are either working or are registered with the Employment Security Commission and actively looking for work. The decline in the labor force means employers in the region must increasingly hire employees from outside the region to fill available positions, resulting in longer commute times and greater difficulties in recruiting employees. Unemployment, represented by the upper area of *Chart 4*, is currently running at about 4.5 percent. This is moderate by New York State standards but the fact that it is not lower indicates some degree of mismatch between local labor force skills and available job opportunities.

Chart 4: Labor Force Trends, Syracuse MSA



Fractured Local Governance

New York State has a highly fractured system of local governance, made particularly complicated by the different types of municipal corporations (villages, towns, cities), each with different powers; and the fact that local school districts typically cut across municipal boundaries. Add in other special purpose districts (e.g., fire, lighting, utility) and the result is a balkanized system of tax collection and service delivery that makes regional cooperation and collaboration extremely difficult. It is an archaic system that may have made sense in colonial times but which is increasingly out of step with contemporary needs and economic realities.

Nowhere is this more evident than in Onondaga County and its surroundings. Just within the county, there are 36 different jurisdictions with land use authority: the county, the city of Syracuse, and 34 towns and villages. There are 24 school districts with boundaries that cross municipal borders, each with its own taxing authority. There are many more special-purpose taxing districts. Coordinated land-use planning is all but impossible, the efforts of the county notwithstanding; and the “fiscalization” of land use created by interjurisdictional competition often serves to undermine basic planning principles.

When taxing jurisdictions are small, it creates a climate of unhealthy competition for revenue-generating land uses. Modern developments such as shopping centers have regional impacts but generate property tax revenue only for the jurisdictions in which they are located (sales tax revenue is collected by the county and can be distributed regionally). This gives individual towns and school districts the opportunity, if they are lucky, to reap close to 100 percent of the fiscal benefit of a new development while sticking their neighbors with a significant share of the public costs. Over time, the inequalities are further enhanced through the sorting of the population into richer and poorer jurisdictions, abetted by land-use policies that affect housing availability and affordability. The system is tailor-made to create regional inequities.

These inequities are amply apparent when Syracuse is compared with the county in terms of tax base. Although Syracuse accounts for 30 percent of the county’s population, and 60 percent of its impoverished population, it has only 18 percent of the county’s full valuation of taxable real property. Accordingly per capita real property value in the city is only \$24,000, compared with nearly \$50,000 in the county outside the city limits. This leaves the city increasingly reliant on intergovernmental state and federal transfers to fund basic services to an underserved population.

Table 1

Fiscal Inequities in Onondaga County			
	2005 Population	Full Valuation of Taxable Real Property (millions)	Per Capita Taxable Real Property Valuation
Onondaga County	458,053	\$19,003	\$41,486
Syracuse	141,683	\$3,416	\$24,110
Percent	30.9	18.0	
County less City	316,370	\$15,587	\$49,268

Source: New York State Office of the Comptroller (2005)

Governmental consolidation and/or regional tax base sharing agreements can help address these issues. Although such mechanisms have been successfully implemented in states ranging from North Carolina to Minnesota, however, they have little or no track record or even precedent in New York State. The only alternative, obviously, is to reverse the historic decline of Syracuse's tax base—a project that likely will take decades to achieve given the scope of the undertaking. In the meantime, absent bold action from regional leaders to address fiscal inequities, the fundamental problems of the current system will continue unabated. Only action at the state level to reform New York's municipal laws and taxation system will be sufficient to meaningfully address the problem.

A Lack of Social Equity

Syracuse suffers from a state of concentrated poverty—both within the city generally and specifically in particular neighborhoods. Sociologist William Julius Wilson defines an “extreme-poverty” census tract as one with a poverty rate of 40 percent or more. At this threshold, the negative impacts of poverty multiply and feed on themselves, making social issues within such tracts more difficult to address than when poverty is less concentrated. Twenty-one percent of Syracuse's census tracts are extreme-poverty tracts, and 20 percent of the city's population lives in these tracts. The citywide poverty rate is about 33 percent as of 2005, and about 60 percent of the county's impoverished population lives in Syracuse.

Like many older industrial cities, this concentrated poverty traces back to a history of racial discrimination and segregation that persists today. With about 30 percent of the county's population as of 2005, Syracuse accounts for 88 percent of the county's black population and 69 percent of its Hispanic population. Poverty rates are higher, and incomes lower, for these groups than for the population as a whole. The poverty rate among blacks residing in Syracuse, for example, is nearly 38 percent compared with 25 percent for the entire population.

The macro-level segregation described above also is manifest at the tract level within the city limits. Although blacks comprise 23 percent of the city's population, 42 percent live in tracts where they comprise more than 50 percent of the population and 22 percent live in tracts where they comprise more than 75 percent of the population. The overall “dissimilarity index” of blacks versus whites is 60 percent, corresponding to the percentage of the black population that would have to move to achieve perfect integration in every tract.

Need for Subsidies

Static population in the region and declining population in the city have led to a depressed real estate market. Combined with the high cost of rehabilitating the city's grand historic structure, a legacy of contaminated sites requiring significant remediation, and typical urban issues related to site assembly and preparation, the result is that large numbers of properties in the city are financially "upside-down" in the sense that the expenditures necessary to bring these properties back into productive use exceed the economic return that would be generated. For the foreseeable future, many worthwhile economic development projects will require some form of public participation, or subsidy, in order to be feasible.

Subsidies have long been a mainstay of economic development and urban revitalization, and the results have been mixed. In part, this is because investments in real estate projects always involve some risk—even projects with no public participation can and do fail. Subsidy programs, however, have the added disadvantage of often being shielded from both market discipline and public accountability. Those administering the programs lack the acumen necessary to truly assess the market risks involved. The New York State Comptroller's recent study of the disappointing cost-effectiveness of the state's Empire Zone program illustrates a history of large expenditures and low returns.

In New York State, many forms of public/private partnership available elsewhere, such as tax increment financing, are not available. The common tool available to municipalities and counties is some form of tax abatements, usually mediated through an Industrial Development Authority or its equivalent, and implemented through payment in lieu of taxes (PILOT) agreements.

One of the primary reasons municipalities pursue economic development is to enhance the real property tax base, and PILOT agreements clearly can diminish this benefit depending upon the terms of the deal. A PILOT agreement that does not cover increased municipal service costs or increase off-site property values keeps taxes high for everyone else, begetting the need for additional PILOT agreements for future projects. An economic development policy reliant on subsidy that does not decrease the future need for subsidy is by its very nature unsustainable.

Finally, as public dollars are limited, the nature of all subsidies is that some economic actors will receive them and others will not. This immediately raises issues of fairness and, in the absence of a transparent process, public controversies. Charges of back-room dealings and favoritism are sure to arise for any project of sufficient size to attract public attention. DestiNY USA, a proposal to expand the Carousel Center mall into a Mall of America–scaled “shopper-tainment” behemoth, provides a case in point. The large tax breaks requested by the project developer have been debated in the existing policy vacuum, leading to much public controversy and an unproductive exchange of accusations on both sides of the debate.

Economic Strengths

- A diversified economy, more able to withstand recessions
- Modest job growth, indicating continued regional economic vitality even in the face of a declining population and a shrinking labor force
- A concentration of higher education resources, including major research universities
- Significant inflows of research and development dollars into the greater region
- Strong connections to the greater upstate economy and beyond through the interstate highway system, a major airport, and a location on Amtrak’s Empire corridor

Economic Weaknesses

- Sprawl without growth, leading to inner-city abandonment and growing infrastructure and service costs
- Concentrated poverty
- A depressed real estate market (both commercial and residential), particularly in Syracuse, requiring subsidy for many worthwhile economic development projects
- A fractured system of regional governance, with attendant regional inequities
- A shrinking regional labor force

Economic Opportunities

Based on the foregoing analysis and the three days of workshops, interviews, and meetings conducted over the course of the SDAT process, four key economic opportunity areas have been identified, covering four different levels of geography: the greater region; Onondaga County; Syracuse; and, within the city, its downtown and neighborhoods. The focus on these multiple levels of geography recognizes their mutual interdependence and the need for success to be achieved at each level of focus for true economic sustainability to be achieved. The four opportunities are

- A regional job creation strategy, to enhance the entire region's economic competitiveness
- A county and city policy framework for public/private partnerships as a tool for guiding future public investments in economic development projects
- A focus on downtown Syracuse as the location where public investments can generate their greatest multiplier impacts
- A neighborhood wealth creation strategy to ensure that the benefits of economic development are widely shared

A more detailed discussion and specific recommendations for each of these opportunity areas follow.

Regional Job Creation Strategy

While much of this chapter focuses on Syracuse, from an economic development standpoint, the region is the most important economic unit. Companies looking to relocate, start up, or expand in the Syracuse area will look at sites throughout the region, evaluate the quality of the regional labor force, and assess the entire region's package of amenities and assets. They will then settle on whatever site offers the best combination of attributes attuned to their particular needs which is available in an appropriate time frame.

Job creation occurs through three mechanisms: the relocation of a firm from outside the region to the region, the expansion of an existing enterprise within the region, and the start-up of a new enterprise in the region. The first mechanism is the focus of many economic development professionals—the relocation of a famous corporation is met with local news headlines, often written using the metaphor of landing a particularly large fish, accompanied by much local congratulating and backslapping. Unfortunately

for Syracuse, its status as a nongrowth market, located in a state with above-average tax burdens and utility costs, makes it an unlikely candidate to compete on the national and international stages for corporate site location decisions.

On the other hand, the Syracuse region is potentially well positioned to start up and grow businesses, particularly those that can take advantage of the region's educated labor force. The \$2 billion in research and development flowing into the greater Central New York region provides an environment in which technology transfer programs and business incubation strategies could yield significant dividends. The skilled local labor force gives the region a competitive advantage. Moreover, firms that start in the greater Syracuse area are more likely to stay local over time, as their founders have ties to the community.

The major barrier to local business growth is the lack of a local pool of highly skilled professionals in marketing and financial services, who can help take a small company and grow it into a major employer. This deficit requires a creative approach, discussed below.

Recommendations

- **Build on the model of the Syracuse University Center of Excellence in Environmental and Energy Systems to launch other technology transfer programs**

Such programs could include partnerships not only with Syracuse University and SUNY but also other Central New York institutions such as Cornell University. Technology transfer has been a major growth engine in such regions as the Research Triangle in North Carolina, where North Carolina State University, the University of North Carolina, and Duke University are located. Many large state university systems, including California and Florida, operate offices of technology transfer and technology licensing to facilitate the commercialization of university research.

Renewable energy research, as identified elsewhere in this report, represents a major opportunity for this region and many others that will be making a play for the industry. Venture capital is already flowing in this direction, spurred by the threat of looming energy scarcity created either by nature (geology, peak oil) or public policy (carbon taxes, cap-and-trade schemes to address climate change). Syracuse would be smart to position itself out front on this issue but competition will be great. Syracuse's efforts should be part of a larger effort across the upstate economy, spurred by recent state commitments to address global warming.

- **Partner with the regional Chamber of Commerce to develop and implement a program linking local businesses with New York City marketing and financial talent and services**

As noted earlier, the Syracuse region is too small to have this talent living locally—instead, it must be imported. The city’s location some six hours from the largest concentration of such specialists in the United States argues for creation of a unique program to bring people with these skills to Syracuse on a part-time basis. The major barrier, of course, is that these are busy people with deals to do closer to home. Individual businesses do not form a large enough market to attract their interest but a regional, or even multiregional, effort orchestrated through the chamber might create a sufficient mass of opportunity to create the basis for a unique partnership. Additional research is needed to identify precedents for this sort of undertaking, and the chamber, which initially brought this issue to the team’s attention, is a logical leader.

Policy Framework for Public/Private Partnerships

As discussed in the assessment, economic development in the city, county, and region often requires some form of subsidy to make the project “pencil out”; yet a poorly designed or ad hoc process for determining which competing projects receive subsidies often leads to poor outcomes, public resentment, and the perception of unfairness. The following recommendations form an outline for a more rational and transparent process, similar to ones that have been implemented in municipalities ranging from Hartford to Charlotte.

Recommendations

- **Use public dollars to create public benefits**

Looking at subsidies in terms of their opportunity cost makes it clear that subsidy dollars are public funds. Public funds should only be expended when a truly public benefit is to be realized. Jobs and tax base are often the targeted public benefits but these are ephemeral—companies move away, property values decline, and occasionally projects completely fail. When subsidizing projects, a key question should be, “What benefit is produced beyond the project itself?” Examples might include a project that results in the renovation of a prominent historic building creates a key benefit—historic preservation—that endures even if the original development project changes form or fails to materialize; a project that includes a public amenity, such as a waterfront park, that provides broader benefits to help improve the livability, hence competitiveness,

of the entire community; or a project that occurs on a brownfield site and thus solves an environmental problem by putting land that would otherwise lay fallow back to a productive use, even if that use changes in the future.

- **Formulate and adopt at the county and city levels project-scoring criteria to remove politics from economic development funding decisions**

A joint city/county policy on the use of economic development subsidies would go a long way toward resolving fairness issues, real and perceived. A sound policy starts with the identification of the public goals to be achieved. In Syracuse these might include

Goal	Measurements/Targets
Direct and indirect economic impacts	Subsidy dollars per job created Direct tax base increases “Crowd-in” or synergistic impacts Potential for economic spin-off
Revitalized targeted areas	Downtown impacts Neighborhood commercial corridors Lakefront Other locally identified focus areas
Improved image/competitive position	Improvements of civic spaces and gateways Significant public amenities High-quality design
Implementation of adopted plans	Conformance with city and county plans
Promotion of sustainable communities	Affordable housing units Accessibility of new jobs to low-income populations Environmental impacts Transit supportive/transit accessible

The above goals and measures can be converted into a scoring system for evaluating projects, similar to such systems in use by Charlotte; the Metro-Hartford Millennium Project; the Waterbury, Conn., Partnership for Growth; and others. Such scoring systems inevitably mix quantitative (jobs and tax base) measures with more qualitative concerns. Yet they bring clarity and rigor to the process of allocating scarce public dollars, provide a framework for the debate, and deemphasize politics in favor of a discussion over the particulars of how well a project implements the goals codified in the policy and scoring matrix.

A Focus on Downtown

To focus on downtown revitalization is almost a cliché in economic development. Yet Syracuse's downtown—with its grand public spaces, treasure trove of historic and magnificent buildings and edifices, and human-scaled streets—is a gem that can and should be the pride of the entire region. Plus, with its mix of uses that promote walking (the most carbon-neutral form of transport), public transit accessibility, and large fixed investment in infrastructure, a vital and growing downtown is even more important as cities work to redirect themselves onto a sustainable path.



There is a further economic imperative behind a downtown focus. Syracuse, with one-third of the region's population and many of its major employers, is still the center of the region. The region cannot thrive if the city is ailing. Syracuse's health is in turn tied up with the health of its neighborhoods. One key competitive advantage that Syracuse's neighborhoods have that others lack is their proximity and accessibility to the city center. These concentric rings of geography (downtown, neighborhoods, city, county, and region) are a legacy of the region's historic growth patterns but remain fundamental to planning for its economic future. Investments that catalyze genuine downtown renewal will create ripple effects that will propagate throughout the city and region.

A multiple-pronged strategy for downtown should include the following components.

Recommendations

- **Emphasize pedestrian-scale planning and placemaking throughout the downtown and as a part of each downtown project**

The success of Armory and Franklin squares, in the face of considerable market liabilities, demonstrates the value created by great urban places that provide cohesive, walkable environments of sufficient scale to function as both neighborhoods and destinations. The same winning strategy needs to be extended throughout the downtown, with each new development and rehabilitation seen as part of a larger project of repairing the urban fabric of Syracuse. Downtowns across the country differ in terms of scale and character but all successful downtowns have one thing in common—they are great walking places.

- **Emphasize preservation and rehabilitation**

One of downtown's key competitive assets is its stock of historic and architecturally significant structures. Putting these edifices back into productive use will have great multiplier effects. Historic rehabilitation typically uses local contractors, while new construction projects often use outside contractors and a transitory labor force. The reuse of historic buildings is consonant with the recommendation above. Further, the reuse of older buildings is inherently more sustainable as it makes use of, rather than squandering, the embodied energy of existing construction.



- **Undertake a comprehensive access strategy for downtown**

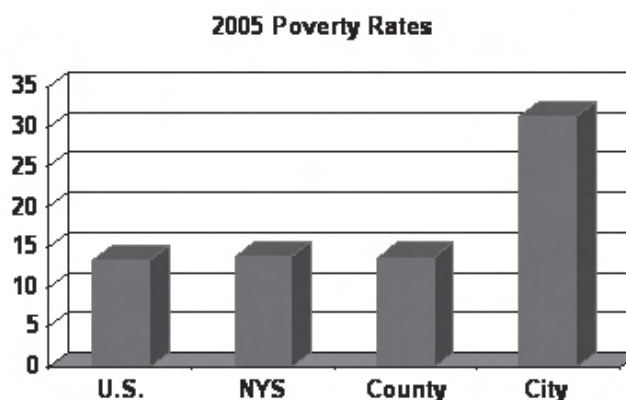
Office buildings, retail stores, and cultural uses all need to be accessible by the people who work in and patronize them. In the suburbs, accessibility begins and ends with highways and surface parking. In a downtown, accessibility is multi-modal and must encompass pedestrians, transit, and autos. A diversified approach is necessary because a dense downtown is not, and can never be, parked at the same spaces-to-building

ratio found in suburban locations, where it is common for parking areas to exceed by 25–50 percent or more the floor area of the buildings served. It is simply too expensive to accomplish this in parking decks, and even if it was affordable it would destroy the downtown's pedestrian quality. Components of such a strategy might include improved transit connections to nearby neighborhoods to provide an amenity to these areas as well as to capture a greater share of riders most likely to use transit. A comprehensive parking strategy aimed at maximizing use of downtown parking resources might include overselling of monthly parking permits at all municipal garages to achieve higher occupancy rates (around 90 percent peak); differential pricing of public parking facilities based on convenience to raise the use of more remote alternatives while preventing overuse of the best-situated facilities; performance-based pricing of on-street parking to efficiently allocate a finite supply of curb parking to competing users, as well as to generate funds for downtown improvements; reforming parking regulations to “unbundle” parking from its primary use, permitting owners of parking facilities to rent spaces to any users; partnering with downtown employers (including government) that provide free or subsidized parking to implement a parking cash-out program; and ongoing attention to the pedestrian realm connecting parking facilities and transit stops with downtown destinations.

Neighborhood Wealth Creation Strategy

Addressing the concentrated poverty in Syracuse requires intervention at the neighborhood level. Moving out of poverty requires access to a job that pays above-poverty-level wages but also requires the financial skills to save money and build wealth. Education, counseling, and assistance with regards to job readiness and money management will be needed. It is logical to start with an institution already in every neighborhood—Syracuse’s public schools.

A full strategy will require fleshing out among local partners and implementers. The following are some initial suggestions to get the discussion rolling.



Recommendations

- **Partner with Syracuse’s public schools to provide job readiness and financial literacy classes open to every interested neighborhood resident**

Schools provide a meeting space and resources close to people’s homes. Classes can be held for neighborhood residents after hours on evenings and weekends. Staffing can be provided by local volunteers with experience in money management and professional staff from local job training and placement service providers.

- **Foster local entrepreneurship through a joint program with the Whitman Business School at Syracuse University**

A high-quality business school located within the city is an important asset for Syracuse. Professors from the Whitman School could be tapped on a volunteer or honorarium basis to lead sessions supporting prospective entrepreneurs. Similar efforts, such as the Spanish-language entrepreneur seminars sponsored by the Greater Waterbury Chamber of Commerce in Connecticut, have generated significant interest and attendance, with a portion of graduates later going on to start successfully small businesses.



- **Target small business niches that fit with local needs: retail in areas that are underserved and building trades in areas where building rehabilitation is taking place**

Small businesses, although individually modest in their impacts, collectively provide greater multiplier effects as the combination of local markets and local ownership means that a greater share of dollars spent with such businesses recirculate within the community in terms of successive rounds of consumer and business purchasing and spending.

Logical places on which to focus small business energy are niches that serve obvious needs in Syracuse. One idea is retail—Syracuse’s neighborhoods have abundant vacant retail space with low rents but potentially high upfront costs. Untapped spending power in these communities provides the business opportunity, with start-up financing being the largest barrier.

Another potential area of focus is the building trades. Because of the age of its building stock, Syracuse is a potentially large market for specialty contractors specializing in rehabilitation as opposed to new construction. Unlike, homebuilders and shopping mall contractors, rehab contractors are more likely to be small and locally owned and employ local labor. An example is Hudson, N.Y., where a wave of reinvestment created a booming local business in building rehabilitation, creating annual growth specialty contracting of 4 percent per year, with the resulting jobs paying higher-than-average wages for the region.

Models

Several models exist for the recommendations outlined above, some of which have already been mentioned. These include

- Charlotte and Hartford, which have implemented project scoring systems as part of a policy regarding subsidy mechanisms and public financial participation in development projects.

- The California university system, a leader in technology transfer programs. Examples abound of successful downtown revitalization efforts, including Pasadena, Calif., which revitalized its traditional downtown in part by using parking meter revenues to finance public improvements and enhanced public services; Providence, which owes its success to many factors, including a reopened and reconceived waterfront, a context-sensitive downtown mall (Providence Place), and unique special events such as WaterFire; and Denver's emphasis on housing, historic rehabilitation, and adaptive use, which have helped spark a significant renewal in the city's central business district.
- In Connecticut, the Department of Economic and Community Development has helped fund the UCONN Small Business Development Center in Waterbury to establish an Entrepreneurial Training Initiative, whose goal is to empower inner-city residents to take advantage of self-employment opportunities. The four-part program includes a 10-week entrepreneurship training workshop, a four-week computer training workshop, and specialized one-on-one bilingual technical assistance.
- Closer to home, the National Foundation for Teaching Entrepreneurship (NFTE) is an international nonprofit based in New York City. NFTE introduces low-income and at-risk young people to the world of business and entrepreneurship by teaching them how to develop and operate their own legitimate small businesses. More than 38,000 students have participated in NFTE programs to date.

Implementation

The foregoing recommendations will need to be implemented by a variety of actors, including the city and county governments, major institutions such as Syracuse University and SUNY-ESF, local nonprofits, and the regional Chamber of Commerce. The capacity to implement much of these recommendations already exists but in other cases additional capacity at the county and city levels is needed, particularly in the form of a reconstituted planning function within Syracuse. A preliminary list of implementing entities is provided below.

Opportunity	Implementing Entities
Regional job creation	Greater Syracuse Chamber of Commerce Syracuse University SUNY-ESF Metropolitan Development Association (MDA)
Public/private partnership policies	Onondaga County Economic Development MDA Syracuse Community Development
Downtown strategy	Reconstituted Syracuse Planning Department MDA Major downtown employers and property owners Syracuse University
Neighborhood wealth creation	Syracuse public schools CNY Works/Onondaga Workforce Investment Board JobsPLUS! (Onondaga Community College and Onondaga County Department of Social Services) Whitman School of Business at Syracuse University

ENVIRONMENT

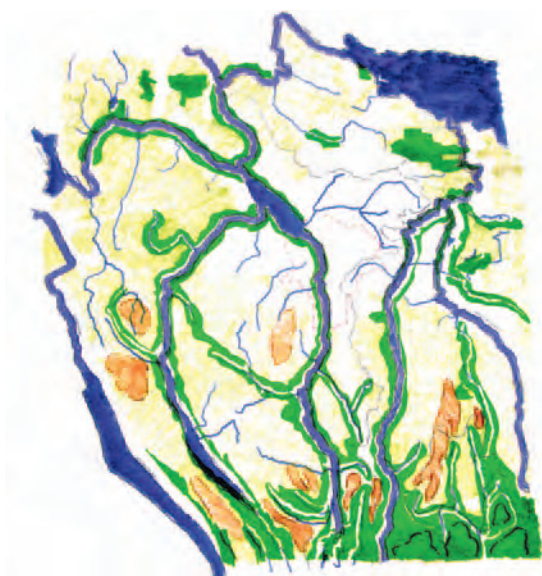
The economic expansion that Onondaga County witnessed during the past 40–50 years created new communities farther and farther away from Syracuse. Unbeknownst to the region, each new development further eroded the integrity of the underlying ecosystem. This generation is slowly realizing how this gradual deterioration has come at a price that is above and beyond the typical costs of rural and suburban developments. By converting agricultural lands to residential or commercial developments, these projects have been irreversibly affecting the region’s food production capacities, even as world population and food demand increase exponentially. Where they have replaced wetlands, these developments have directly compromised the region’s ability to absorb rainwater, minimize flooding, and clean urban stormwater run-off. As these practices continue, their impact on the region becomes more evident. At the same time the costs of mitigating these negative impacts becomes more prohibitive. If Syracuse wants to reduce its burden on future generations, the region will need to overhaul its relationship to and understanding of the surrounding ecosystem and plan for a full integration of the natural and built environments.

Waterways and Watersheds

Syracuse lies within the rich and complex natural ecosystem of the Lake Ontario Plains. As a part of the lower Northern Appalachian Plateau, it is surrounded by drumlin fields and the Finger Lakes waterway system. Eight of these river basins and their associated wetlands lie within Onondaga County. They filter stormwater; provide a significant habitat for many different plants, animals, and marine life; and act as short-term stormwater catchments, reducing the likelihood of flooding and allowing for the graduated release of fresh water into the Great Lakes. In addition, they recharge natural aquifers and the regional water supply; help maintain the lakes’ salinity and pH levels; and support a variety of industries, including fishing and agriculture. Their important roles, however, are often dismissed summarily because there is little understanding and appreciation for the tremendous “free” services rendered by these natural systems. Fishes that dominate the waterways include bass, walleye, yellow



perch, northern pike, and emerald shiner, primarily in warm-water streams. Brown trout, brook trout, coho salmon, and chinook salmon can be found in the colder streams. Some amphibians and reptiles characteristic of the area include the American toad, leopard frog, snapping turtle, northern water snake, garter snake, and milk snake.



Hills and Forests

The banks of the rivers and wetlands were once heavily vegetated, with hardwood forests of beech-maple and elm-ash on the plateau. Black bears are occasionally spotted in the upland forests. The lower reaches of the waterway system also were vegetated but are now mostly reduced to farm woodlots. They provide habitat to many different species, including the cottontail rabbit, white-footed mouse, and white-tailed deer. Birds commonly spotted around Syracuse include the green-backed heron, bald eagle, mallard, American kestrel, American woodcock, mourning dove, downy woodpecker, eastern wood-peewee, red-eyed vireo, and northern oriole. These hills and forests are not only important habitats but play an important role in carbon-sequestration, offering great vistas and recreational opportunities.

Places and Passages

Syracuse lies in the core of Onondaga County, at the crossroads of transcontinental rail lines and highways. The airport connects the region to international destinations. The Erie Canal once provided access to shipping industries and was an important connection to Lake Erie and international ports. Syracuse is well connected to an efficient network of transportation resources.

Current Challenge

Past development patterns that were facilitated by a well-developed transportation network have paved over large swaths of the regional ecological infrastructure. As this infrastructure is paved over, urban run-off along with its associated pollution is drained directly into the Onondaga Creek. From there, it makes its way to Onondaga Lake and ultimately to Lake Ontario. Aquatic systems have been disturbed by channelization, ditching, and the introduction of industrial waste, sewage, and soil into the region's waterways. Urbanization has greatly modified wetlands that have been drained and forests cleared to accommodate new homes and businesses. All these activities have aggravated flooding in the region.

In the past, the approach to the natural environment was one of “control and conquer.” Natural resources were “harvested” or “exploited” to support an aggressive suburban building expansion that started in the early 1960s. City building was based on a linear process of extracting resources, consuming what was necessary, and dumping the residue (or what was once called waste) into landfills, air, or streams. We now know that this waste never actually dissipates and has been accumulating for the past several decades in water, landfills, bodies, and the atmosphere.

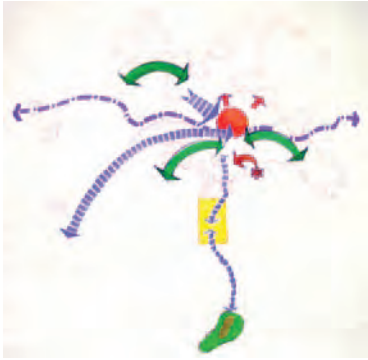


For instance the Skaneateles Lake was connected to Syracuse to provide its residents with water to drink and for toilets, washers, and dishwashers. Other rivers were pumped directly to provide water to industries. The wastes from these activities were discharged, largely untreated, back into the region's waterways. This also raised the pollution levels in Onondaga Creek and Onondaga Lake significantly above U.S. Environmental Protection Agency (EPA) standards. Now billions of tax dollars are being expended to reverse the deliberate polluting processes of the past 50 years. In other words, today's taxpayers are underwriting the clean-up and, in effect, subsidizing the damaging building spree that continues even today.

Similarly, farm and animal husbandry products are shipped to urban areas. Biowaste from farms, urban gardens, and kitchens end up in remote landfill sites. Natural solid waste from the city is sent to the Onondaga County Resource Recovery Agency Waste to Energy Plant for incineration. While the cellulose in the biowaste is converted to heat to generate electricity, a certain amount of particulate matter is released into the atmosphere.

In the “control and conquer” development paradigm, Syracuse and its urbanized hinterlands are valued for their consumption abilities and not necessarily their environmental sensibilities and stewardship.

Vision for a New Paradigm for Syracuse



Syracuse is now poised to review its past practices with an eye to a sustainable future. The city’s new identity is not exclusive of but an integral part of the ecological framework. The earlier notion of city building is modified to incorporate environmental stewardship and conservation rather than pilferage and exploitation. The city begins to operate as the natural environment where, in William McDonough’s words, “There is no waste.” The city begins to transform “waste” into a “resource.” More important, the cultural identity of the city is now not separate from but tied to its ecological framework. Therefore, not only does cultural production in cities and suburbs celebrate the rich natural heritage and ancient cultures that once pervaded the region but the natural infrastructure and cultural heritage are celebrated through interpretive trails that criss-cross the region. Syracuse’s identity begins to blend seamlessly with its surrounding natural framework. Native forests that once dotted the lowlands are woven into the city’s open space network, parks, and urban forestry program. The city’s form is concentrated around its core and this dense urban core is framed by a generous greenbelt. Syracuse exemplifies a community that is in harmony with and not in competition with its environment, establishing connections to and furthering the conservation of its ecosystem.

To build upon the above vision, three key projects within and around the city are suggested to build on the concept of the city’s reintegration into its ecological and socio-cultural framework:

- The Erie Canal Interpretive Trail
- The Onondaga Lake Recreational and Rehabilitation Master Plan
- The Onondaga Creek Basin Cultural Master Plan



Each project revolves around and celebrates the region's valuable resource: water. Water is without doubt a powerful draw for the human psyche, and historically human settlements developed around water bodies. While technology now allows users to draw water across regions through a sophisticated system of pipes and pumps, the need to see and touch water remains a powerful human draw. Development prices proximate to water bodies or that have a water view are, in any market, 50–200 percent higher than similar development nearby. The three water bodies referenced below are unique resources that might provide the necessary incentives to reverse the outward urban flight and attract development interest back into Syracuse. Scientists warn that within the century fresh water might become a scarce and therefore invaluable resource. By adhering to stronger environmental stewardship standards, Syracuse, with its abundant streams and lakes, can attract development to the city and region, when aquifer levels drop, streams are polluted, or eutrophication devastates freshwater lakes elsewhere in the country.

The Erie Canal Interpretive Trail

The Erie Canal was completed in 1825, and, at that time, connected Albany to Buffalo through a 40-foot-wide and four-foot-deep canal. The 360-mile-long canal negotiates a 600-foot elevation change from one end to the other through 50 locks. This massive public infrastructure undertaking was instrumental in bringing much wealth to New York and opening up the Midwest to new development and farming. In 1918 the New York State Barge Canal replaced the Erie Canal as the state's most important navigable waterway. The new canal replaced much of the original canal but abandoned the section between Syracuse and Rome. Moreover, soon after the construction of the national railroad and the highway network, canal use further declined. Within Syracuse, parts of the old canal were filled in to create Erie Boulevard. Other sections are in varying states of disrepair and disuse.

Yet the canal is an important cultural and economic icon in the region and should be celebrated as such. It offers a framework for reconnecting Syracuse to the region and connecting the rural areas of Onondaga County and beyond to the suburban and urban context of Syracuse. While the feasibility of cleaning up and returning the canal to its native conditions should be explored, the canal right-of-way offers the opportunity to

create a regional interpretive bike and walking trail, along the lines of the Katy Trail in Missouri. The historic alignment stretches close to the Center of Excellence, the planned Intermodal Center, and other destinations. This trail not only offers recreational opportunities but, if designed appropriately, could serve as a regional link for bicycle commuters as well. Through the erection of interpretive signs that celebrate the old canal's history, creation of experiential "events," and gateways at key sections of the trail, this public investment could be a powerful mechanism for reconnecting some of the disparate areas in the region. In addition, a reclaimed waterway can engage the surrounding developments, enhance the value of those neighborhoods, and thereby generate greater value and tax revenues for the city and county.

The Onondaga Lake Recreational and Rehabilitation Master Plan

Billions of dollars have been committed to cleaning up Onondaga Lake. Although the current focus is primarily on improving water quality, this interest and investment could be leveraged toward the development of an original master plan for the area surrounding the lake. This planned development could help regain many of the lake's natural edges and further the natural processing and cleaning of the lake's waters. Replacing some of the marine life in the lake would help rebuild the natural ecosystem that once flourished there, including native fish. The city can reverse the decades-long aquatic life decline and return the water body to its earlier role as a fishing and recreational destination. This "new" role will require infrastructure that can be incorporated into said master plan. This additional infrastructure, including access roads, new docks, and marinas, can then be tied to other nearby public amenities such as the New York State Fairgrounds and existing trails. A broad holistic review of the area and a bold plan for the future can transform this derelict public amenity into another regional destination and economic generator for the city.

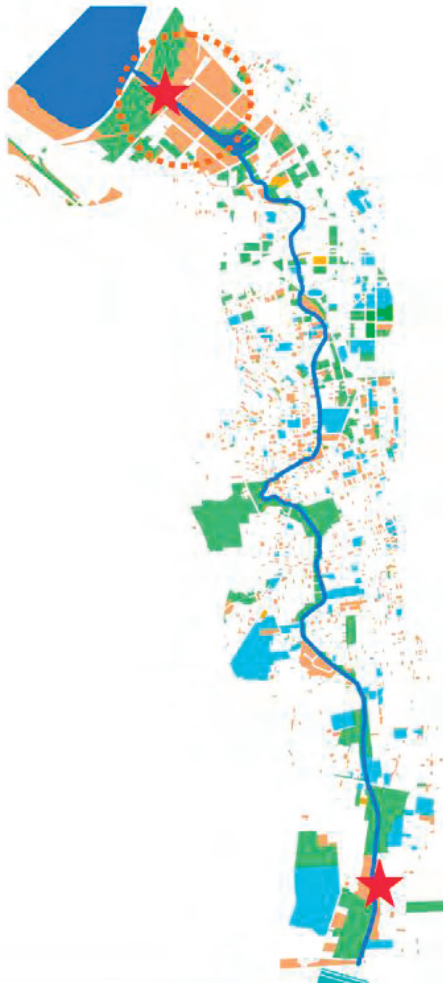
The Onondaga Creek Basin Cultural Master Plan

The Onondaga Creek is an important part of the region's cultural heritage. It connects the Iroquois Nation to Onondaga Lake and from there to Lake Ontario. It also gave structure to the city's early form. This amenity offers an immediate opportunity to link the most discordant areas in the city, central Syracuse, with its western and southern reaches. The waterway alignment links several major opportunities: several public schools that are slated for major reconstruction, institutions, vacant property, the Iroquois Nation, Onondaga Lake, and downtown Syracuse.

Two major historic districts adjoin the creek: Onondaga Park and Armory Square. More than any other major civic project, this project has the potential to create a new civic identity and amenity that could possibly reverse the severe disinvestment in this part of the city, create new cultural linkages, and entice new development into the city. Leveraging the investment being poured into the school renovations, a detailed master plan for Onondaga Creek could direct the public acquisition of properties along its length; attract private investment and redevelopment; and reinstate much of the waterway's natural edges and functions, thereby providing a coherent image to the waterway. Great new parks and public amenities could be constructed along this waterway. It can, in effect, become the city's new cultural heritage corridor.



This project would build upon the location of many educational institutions along its length and include learning opportunities for local schools and colleges throughout the project's (planning, construction, and operation) lifecycle. Cities across the world, from Amsterdam and Venice to Chattanooga, Kansas City, Mo., and San Antonio, have discovered the ability of water to stimulate and anchor development and create a draw for people and activities where it might not have existed before. Bike and walking trails would offer an alternate way of not only reaching destinations along the waterway but can link neighborhoods along its length to the downtown business district and the industrial area by Onondaga Lake. For all this to occur, the city would need to change its perception of the river from that of an urban drain to an important natural economic resource. Not only would combined sewers that drain into the waterway have to be separated out, or the water properly treated before it is emptied into the



creek, but urban runoff that currently flows directly into the waterway would have to be diverted and filtered before it drains into the creek. The cultural master plan and construction of the Onondaga Creekwalk has the potential to address most of the concerns raised during the SDAT exercise, particularly reversing the loss of population from the city's inner core to outlying areas.

In addition to these three large civic projects, for Syracuse to be completely sustainable, it needs to fully review its current approach to resource extraction, consumption, and waste. This will require an evaluation of not only institutional programs such as waste management, recycling, and public purchasing programs but also the region's strategy for its food systems, health, and above all, energy consumption.

Energy Resources

Farms to City to Farms Initiatives

- A lot of waste and inefficiencies are inherent in the traditional 21st-century food distribution system. Over the last century farming has moved further away from its client base, urban centers. Larger farms that require more inten-

sive mechanized processes, complex distribution systems, and fertilizer production are estimated to account for 15 percent of total farm cash expenses. Totalling \$27.4 billion in 2005, this included \$12.8 billion for fertilizers, \$11.2 billion for fuels and oils, and \$3.4 billion for electricity. Compounded with the increased tax implications of encroaching development and falling aquifer levels across the country, the future of agriculture in the country looks grim. The city and region will benefit if meaningful efforts are made to support the agriculture sector. There are many strategies for reducing Syracuse's impact on rural areas. An effective tool for not only prudent infrastructure outlay but for clean air, and the protection of agriculture as well as forest lands, is a "greenbelt" program, whereby cities and regions collaborate in designating and purchasing the development rights for greenbelts around cities. Compounded with carbon tax offsetting programs whereby cities actually pay these perpetual green areas for their performance as carbon sinks, such programs could greatly provide the financial motivation and wherewithal to protect agricultural and forest areas around Syracuse.

- Developing relationships between urban areas and their food sources is not only a source for learning and developing early stewardship among school children but also can provide financial support through programs such as farm cooperatives that set up partnerships between farms and their potential consumers.
- Establishing programs that promote early healthy eating habits, by delivering farm-fresh foods directly to schools, is another way to ensure not only an appreciation for fresh foods and local markets but to build an early partnership between students and their food sources.
- Other ways to expand on this relationship are setting up more farmer markets and exploring opportunities to use churches as local distribution services for local farms.
- As interest in and the financial feasibility of organic farming grow, smaller farms, manual labor, and direct farm-to-consumer delivery programs, on the model of the Seattle area's Pioneer Organics, will be critical in maintaining the momentum of this relatively fledgling effort.
- At the other end, many cities with large abandoned properties are working with absentee and missing property owners, or nonprofit organizations are outright purchasing properties, to set up pea-patch and community garden programs. More than 80 communities across the country have established community gardening programs; in other communities similar gardens are operated or managed by nongovernmental agencies. The American National Gardeners Association estimates that approximately 35 million people are growing their own food. This informal economy is said to be worth about \$12–\$14 billion per year.

Waste to Energy (Urban and Rural)

- Approximately two-thirds of municipal waste consists of organic or natural materials called biowaste (e.g., cardboard, paper, food waste, textiles, wood). Syracuse may want to explore programs that convert this so-called waste into energy (biomass) or compost this material for use as fertilizer. The fertilizer from composting can in turn be returned to farms to replenish farmlands (composting or vermiculture).
- If biomass-fueled power plants are smaller in size and located fairly close to Syracuse, these could be designed for cogeneration so that waste heat from these facilities is captured and recycled back to residents for heating and cooling.

- Certain biofuels programs optimize lands that otherwise would lie fallow during the winter to produce switchgrass and other plants that have high cellulose content, for conversion into biofuels.
- Methane gas that would otherwise escape into the atmosphere can be tapped from landfills and composting pits, for modest electricity generation.
- Some other programs use traditional waste products, such as tires, for fuel.
- Since all the above programs involve incineration of some type, it will be critical for Syracuse to establish regulations that will require superior filters for these mini-power plants, to capture the harmful particulates and gases that are released through the above aerobic processes.

Water Conservation and Health

- By some estimates 2–3 percent of the world’s energy is used to pump and treat water for consumption by urban residents and industry. There is not only a strong energy imperative behind water conservation but also an urgent environmental rationale. Scientists are predicting that water pollution and the eutrophication of freshwater bodies will continue unabated during this century. Eutrophication occurs when the draining of lakes for irrigation and pollution of the same bodies with farm wastes, sewage, and nitrogen fallout from fossil fuel burning causes excess algal and plant growth that in turn depletes oxygen levels and kills marine life in lakes. This process is made worse by rising global temperatures that are predicted to slow down the natural purification process. Eutrophication is said to plague more than half of the lakes in Europe and Asia and more than 28 percent of lakes in North America.
- Therefore it is likely that the pressure on all freshwater supplies throughout the country will increase over the next few decades, and Syracuse with its abundant freshwater sources will attract households from other parts of the country. In anticipation of future challenges to water supply, Syracuse needs to develop a detailed water conservation and management program. This will entail not only a comprehensive upgrade of its pipes and water treatment programs but active ways to recharge local water supplies and underground aquifers and minimize the impact on regional waterways to protect the quality of the region’s streams and lakes. Many regions in the country are requiring greater onsite retention or filtration of rainwater, or using other programs such as permeable pavements, bioswales, and green roofs, to slow the progression of rainwater to local streams.

Energy Efficiency

- To address Syracuse's energy dependency, the problem must be tackled at the environmental level first. One of the important issues Syracuse must address is its urban heat island. The city needs to investigate ways to reduce its ambient temperature to greatly reduce its cooling load in the summer. An aggressive urban forestry program, planting deciduous trees in the city, would provide shade during the summer to reduce the air-conditioning load and not block the winter sun, to help reduce the heating load during the cold months.
- The city could explore ways to reduce the number of single-occupancy vehicle trips. A well-knit transit network, coupled with expanded bike and walking trails, would help to gradually reduce the city's dependence on automobiles.
- The city should work with large development concentrations, such as the downtown area and the university, to set up means for local district energy production, as well as any opportunities for cogeneration plants such as at the waste recovery plant.
- The industrial site being developed around the Center of Excellence should integrate and demonstrate the financial prudence and environmental benefits of district heating.
- The city could establish low-interest revolving programs for increasing insulation in homes and other buildings; this would have a significant impact in reducing the energy load.
- The city should also initiate discussions with local utilities to provide incentives for onsite generation through solar panels or geothermal heating and cooling. Programs such as net metering can help offset the costs for connecting all these unit generators to the grid.
- Other means of cooling buildings, such as local water bodies, should be explored.
- The city should initiate programs to review and reduce its own energy consumption and fossil fuel dependence.
- The city could set up an educational program that targets businesses and residents to promote green building and practices.

TRANSPORT SYSTEMS AND URBAN FORM

The nation is at a major crossroads in regards to transport systems. The interstate highway system is 50 years old. By 2010 the national Highway Trust Fund will no longer keep up with the system's repair costs. What once was the largest federal public infrastructure project ever may be trumped by its own major overhaul needs. In February 1955 then-President Eisenhower forwarded the Clay Committee's report, *A 10-Year National Highway Program, to Congress*. The transmittal letter stated:

The Nation's highway system...is a gigantic enterprise but 'is (currently) inadequate for the nation's growing needs.' The need for action was inescapable....

The original interstate highway system was intended to serve as a public transportation network. As city development and planning has evolved over the past 50 years, the need for a paradigm shift regarding public transportation has become necessary. The urban planning principles of previous generations ultimately led to urban sprawl, increased development of greenfield properties, and the separation of transportation systems and land use. As cities look toward the future, sustainability best practices call for a reduction of the carbon footprint, a cessation of sprawl without growth, and a consideration of the transportation and built environment needs of a variety of demographics, whether those are urban dwellers reliant upon multimodal transit opportunities or suburban residents accustomed to automobiles. Within the next few years, the existing aging infrastructure systems will require significant upgrades and mass reinvestment in order to continue serving cities.

Now is the time for Syracuse to

- Take a close look at its infrastructure and plan for comprehensive, sustainable long-term change
- Work regionally to provide and maintain such infrastructure in a sustainable way
- Lobby at the state and national levels for monies to be focused on future public works projects that will sustain the country for the long term

Assessment

The 1999 *Rand McNally Places Rated Almanac* declared Syracuse 41st of 354 metropolitan area transportation facilities, based on daily commuting time, public transportation navigability, interstate highway convenience, air service, and Amtrak passenger service. Hancock International Airport, 15 minutes from downtown, hosts seven major airlines, along with commuter service, with approximately 250 daily arrivals and 2 million passengers annually. The city is also served by the CSX intermodal facility and the deep-water Port of Oswego and the New York State Barge Canal system provide access to the Great Lakes.



The city is bisected by I-690 and I-81, with I-481 as a major eastern interstate loop around the city. A network of local, subregional, and regional roads serves the greater Syracuse region, with great connectivity to the heart of the city.

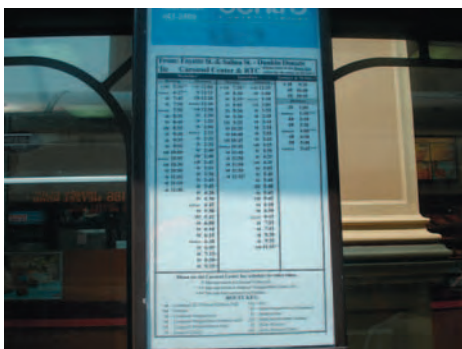
I-81, elevated as it bisects the heart of the community north to south, is in need of major improvements. I-690, as the major east-west interstate, also is elevated as it passes through the core of the city. This interstate provides indirect access to the universities via Teall Avenue.



Several streets are one way within the city's core. In general, one-way streets are bad for visitors and those unfamiliar with a community and have been proven to reduce the viability of retail. One-way streets increase speeds, as their purpose is to solely move cars rather than address roadways' all-important multifunctional aspects, to balance vehicular use with transit, bicycles, and pedestrian movement.

Several individuals who were interviewed during the panel criticized the Central New York Regional Transportation Authority (CENTRO) transit system, particularly

- The lack of good route maps
- The lack of readily available and up-to-date timetables
- The lack of frequent headways



These factors all deter ridership. When the panel met, the downtown transfer station was to be relocated to a more permanent location toward the south end of downtown. The main reason for finding a more permanent setting was to alleviate some idling and the extensive on-street network that presently occurs in a core area of the downtown. Regional Greyhound buses also serve the community.

Overall the community has “great bones,” meaning the historic block structure, even given the undulating terrain, is for the most part connected, providing choice, alternative movement patterns, and good connectivity within the community. However, specific recommended improvements to this system were identified during the panel and are specified in the following paragraphs.

Recommendations

Several transport recommendations are proposed to help improve the community’s short-term economic viability and foster the future long-term health and viability of the city’s and the region’s transport systems. Note that several of these recommendations are also listed in the Economy and Government section of this report, substantiating the critical nature of how good policy and adequate, balanced transport systems improve a place’s economic viability.

Multijurisdictional Cooperation Is Encouraged

It will be critical for Syracuse to join forces with its immediate subregional neighbors, as well as with larger Upstate New York in terms of planning for, lobbying and seeing through to fruition the long-term need for regional transit serving these major communities and connecting to New York City and the west. In addition, this regional cooperation and a close relationship with the New York Department of Transportation (NYDOT) will be required for discussions surrounding any proposed modifications to the interstate system.



Create a Pedestrian Environment

Everyone is a pedestrian at some point in any journey, whether they are at some point on transit, on a bike, or in a car. Therefore, the pedestrian experience is paramount in any multimodal transport decision making.

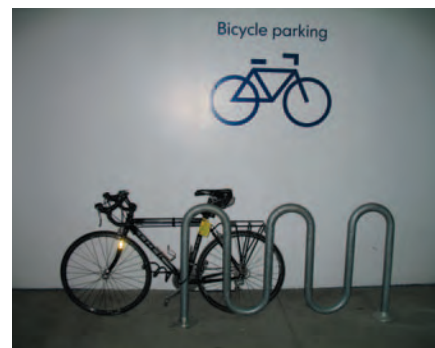
- Provide adequate sidewalks, crosswalks, signalization, and safety zones for pedestrians in the design of any street.
- Consider Barnes dance (diagonal pedestrian) crossings at key downtown and campus intersections to allow pedestrian-free movement with all traffic stopped. Denver offers a good example of how these can be used..
- Provide for minimum sidewalk width standards (and require sidewalks in any development or redevelopment) within code and policy if these are not already in place.



Create Bikeways, Trails, and Recreation Opportunities

Many regional recreational trail improvements are mentioned in the Environment section of this report but to reiterate their importance they are listed here again, as well as local improvements:

- Continue implementing the local trails and bikeways plans
- Expand and continue regional coordination in trail planning, funding, and implementation
- Provide adequate maintenance for bikeway facilities, particularly striped routes leading into downtown and the university area
- Assure that zoning and other policies require adequate bicycle facilities
- Provide adequate bicycle facilities as part of any street reconstruction/streetscape project
- Encourage bike-to-work programs for civic and private employers as seasonally appropriate
- Provide adequate bike maps and signs and an up-to-date and interactive Web site for such routes



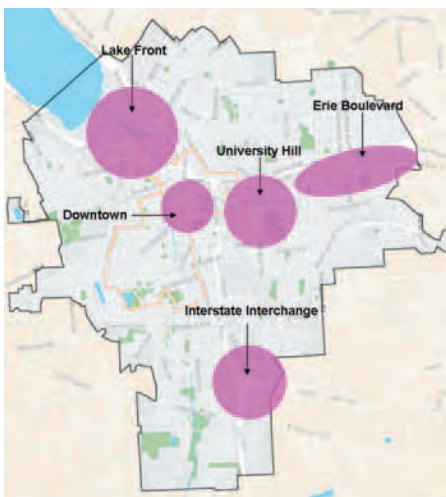
Offer Alternative Means of Transit

As gasoline prices continue to soar, families continue to struggle to find alternative means of transport that fit within their budgets, and both empty-nesters and young professionals in particular want choice in mobility. Now is the time for Syracuse to begin to set the framework for a new paradigm for transport systems:



- Begin to strategize on national, superregional, and local commuter rail systems in collaboration with other upstate New York communities
- Continue to lobby for support of and continued Amtrak service to the community
- Begin strategic planning for a regional multimodal station, ideally to be located in northeastern downtown or Northwest University Hill to provide access to the central business district and the universities; a complementary station could be located in western downtown where other rail lines currently converge
- Update CENTRO's long-range plan to assure that land use and transport connections are adequately employed (put the routes where they are needed, plan the routes where density will be)

- Use smaller buses with more frequent headways to help sustain, increase, and promote ridership
- Create new transit maps and assure their easy use and availability on the Internet, in libraries, and at stations
- Consider cooperative carsharing (e.g., Zipcar) programs for the university and downtown neighborhoods, as Philadelphia is doing
- Consider transit pass programs whereby employers provide lower-cost transit passes to employees, as Denver's Regional Transit District is doing



Districts

Transport and identity recommendations for each of the four FIZs begin by identifying nodes, corridors, and gateways for each zone. These basic principles also apply to the special corridor discussed below.

Special Corridor: Interstate 81

The underlying message for looking at any future roadway decision as it impacts the city is to preserve regional connectivity

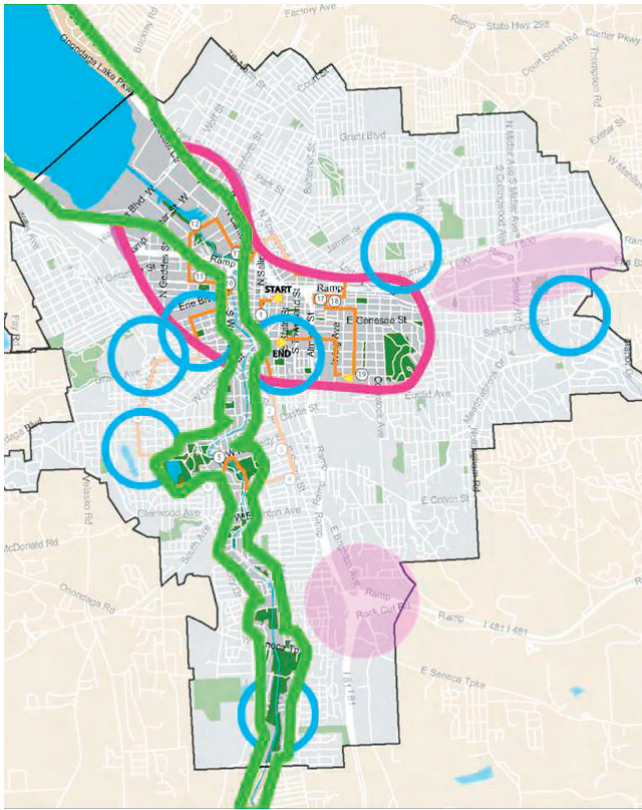
while balancing local access. Providing regional and interstate connectivity often reduced local access and prosperity in communities across the nation. Syracuse should begin planning now for the inevitable need for reconstruction of I-81, and should seriously think about how it wants this armature of connectivity to work as a regional connector and a local access provider. I-81 currently bisects the community, particularly downtown and near south neighborhoods in the University Hill area.

Secretary Ickes, in a letter in the *Washington Post* on February 20, 1935, suggested “the (interstate) roads should be landscaped until they were the most beautiful in the world....” Unfortunately this often was not the reality. But major infrastructure upgrading presents the opportunity to create at-grade boulevards that provide gateways, identity, ease of access, and choice. Perhaps Syracuse’s future includes beautifully landscaped roads that balance beauty and identity with provision of regional connectivity and local access.

I-81 could become a grand at-grade multiway boulevard (the corridor) between Genesee and Adams, providing entry to the core of the community at these key intersections (gateways). Historic examples include Avenue Montaigne in Paris, Passeig de Gràcia in Barcelona, the Royal Parade/St. Kilda Road /Victoria Parade in Melbourne, the Avenida da Republica in Lisbon, the Esplanade in Chico, Calif., and the Ocean and Eastern parkways in Brooklyn. Recent examples of implemented multiboulevards, particularly connected with interstate reconstruction include the Embarcadero and Octavia boulevards in San Francisco, the Big Dig in Boston, and the Park East Corridor in Milwaukee. This reconstruction, if designed correctly to provide new and improved access, could also spur reinvestment in the aging public housing straddling I-81 toward what would be the southern gateway. This key site could be redeveloped into a vibrant mixed-income, mixed-use urban development.

This single big move for the community, which should occur within the next 10 years, would heal the currently disconnected city center and forever enrich Syracuse’s character and identity.

There are 46,000 miles of interstate in the United States, all competing for significant attention and dollars in the coming years. The city, region, and state may also want to consider privatization of some interstate corridors to improve and maintain them over the longer term. Numerous examples of this are occurring in the United States today, including efforts in Indiana and the recent privatization of the Chicago Skyway.



Downtown FIZ

Many transport, access management, and parking recommendations for the downtown core also are listed in the Economy and Government section of this report. Syracuse must continue to enhance and support public realm and private reinvestment in the nodes and corridors around downtown's two existing historic districts.

- Create and maintain boulevards at downtown's edges: I-81 as previously discussed, Adams to the south, and the West Street Arterial to the west
- Create perpendicular access boulevards to downtown: Salina Corridor as a southern gateway and Genesee from the east
- Create new gateways: Adams/I-81,

Adams/Salina, Salina/I-690, Genesee/I-81, West, Erie Boulevard West/N. West Street, and Fayette/N. West Street as core gateways, among others

- Convert one-way streets to two-way in the downtown core to allow flexibility and ease of movement
- Develop and implement a parking management strategy for downtown (see the Economy and Government section)

University Hill FIZ

Primary nodes in the University Hill district include the University and Genesee intersection. A key future node once the boulevard is implemented is around Adams/I-81 or Almond Street. Primary corridors include Genesee St. (the connective corridor and key reinvestment street) Adams St., and University Ave. Important gateways to the district include Genesee/I-81, Adams/I-81, Columbus/I-690, and University/I-690 (future; see below)

- Consider placement of a regional multimodal center to the north between I-690 and Fayette St. and I-81 and Crouse Ave. to provide a 10-minute walk from the future station to the heart of both the University Hill campus area and the core of downtown. (A secondary option or smaller transfer facility could be implemented on the rail spur along the west edge of downtown.)
- Research with NYDOT the feasibility of implementing a university exit from I-690 (approximately 0.5 miles from exit to the east) for direct access to the campus core.

Lakefront FIZ

Onondaga Creek is a portal for this area, while Onondaga Lake Parkway serves as the primary corridor. Gateways to this area include Van Rensselaer/Spencer, Spencer/Clinton, and Bear and Hiawatha streets.

- Take advantage of regional waterways access
- Take advantage of regional transport access
- Provide public access to the water's edge
- Do not construct any more elevated and/or superregional transport networks at the water's edge
- Increase grid penetration toward the water's edge, discouraging super blocks

Neighborhood Investment Zones

The core nodes have been identified around the schools within the neighborhoods, particularly as a reinvestment focus. Other nodes naturally occur around areas of commerce within neighborhoods.

- Improve public infrastructure (roads and utilities) as other reinvestment within neighborhoods occurs.
- Various gateways exist for each neighborhood. Reinforce these gateways with modest markers and/or intersection treatments at these key intersections.

Other

The city should also employ intelligent transportation systems (ITSs) to help identify factors such as areas of congestion, full parking structures/lots, accident locations, and street closures. This should first be employed within downtown and around the universities and on NYDOT highways that provide access to the city.

The Future of Transport Systems in Our Communities

As cities struggle with crumbling infrastructure, difficult discussions of how to reconstruct, maintain, expand, and improve such infrastructure will surely command many agendas for the next decade. Bond issues, tax increases, service privatization, and more traditional but less available grants and other state and federal funding will be considered. But more important is what is being budgeted for. As the cities of the future are planned, leaders must reflect on the past and preserve the best. Leaders must look to the future, assume bold moves, and identify a new infrastructure archetype for their community that will provide for inevitable growth while minimizing the carbon footprint of this growth.

MOVING FORWARD

Residents in Syracuse understand the seriousness of their situation and have ideas of how to fix their pet issues; there is no dearth of ideas, causes, committees, organizations, foci, hard workers, or intelligence. Rather, they are missing a strategic, disciplined, and focused prioritization of the issues they most solve in order to become a vital and sustainable community.

There are significant impediments to establishing a cogent, unified agenda for Syracuse: the systemic lack of trust between rich and poor, black and white, city and county, environment and economic development, and private enterprise and government combine to create an environment that views success by one party as the thwarting of another's initiative. This pessimism, coupled with the reality that Syracuse's root problems are scattered over a large geographic area encompassing a significantly diverse population, make any prioritization a volatile issue.

If these impediments serve as an excuse to accept the status quo, Syracuse's challenges will continue to erode its core assets and retard its potential to successfully reinvent itself.

It is a fact that Syracuse has limited resources, a large geographic region, and more needs than resources to fulfill them. Spreading efforts too thinly solves nothing. Solving nothing is unhelpful. Accepting this reality is the basis for establishing a prioritized agenda. The purpose of a prioritized agenda is not to pick favorites but rather is the necessary step toward sustainability. By organizing collective energy and resources and applying them strategically to achievable, incremental, and scaleable projects, Syracuse's core assets will be refortified and will serve as the sustainable templates that spawn subsequent projects.

The SDAT members thought Syracuse officials should focus on three initiatives in three areas. These three initiatives would become the prioritized agenda and would have the support of the community, officials, city, and county, running on a platform supporting these initiatives. Regulators would modify policy as necessary to accomplish them; economic development funding would be based on criteria that supported them; and volunteers would embrace them.

The design of these initiatives will be serious efforts led by an empowered implementation team. Each initiative will be designed to establish a sustainable, equitable, and inclusive solution that encompasses the fortifying of core historical and institutional assets while improving quality-of-life issues; stimulate new business; maximize opportunities for public/private partnerships to educate, two ways, across social and

economic divides; and cross-pollinate students, citizens, politics, business, urban planning, and the environment. Until sustainable, these initiatives would remain Syracuse's undiluted focus. Projects that do not support this objective would not be promoted.

Roughly corresponding to the Roman Cardo and Decumanus, we recommend the following prioritized geographic areas and related initiatives:

- Decumanus: Develop clear physical connections that leverage the major assets of the city located between University Hill and the downtown core, and the creekfront. Though obvious and predictable, this connection is vital to the region's long-term sustainability; it will be hard to attract new population and new businesses to the region without a thriving, energetic core. Suggestions for this initiative include mixed uses to create an environment capable of providing a positive and consistent pedestrian experience from University Hill to the creekfront. Historical properties should be incorporated with contemporary ones, the universities should be extended further into the core, and parking strategies should be reconsidered.
- Roman Cardo: Running north to south and connecting multiple neighborhoods to the city and the creekfront, develop an environmental corridor along Onondaga Creek that supports neighborhoods, the city, and the land. This long-term initiative should begin with an enlightened planning effort that carefully considers the traditional Iroquois wisdom to make decisions for the seventh generation.
- Strategic Outpost No. 1: In the impoverished neighborhood south of the city's core, between the West Seneca Turnpike and Sentinel Heights, adjacent to Onondaga Creek Corridor, create a pilot program that systemically rebuilds the community around an existing school that serves as an afterschool community center. Develop a educational exchange program with Syracuse University's and SUNY-ESF's business and design schools; teach business and skilled labor by preserving strategic historic houses; and teach environmental education and community service with working urban farms on vacant land and along Onondaga Creek.

A good example of how this can work is Auburn University's Rural Studio; a program in Hale County, Ala., one of the poorest regions of the southern United States. The program was created by a professor working with a group of architecture students in Greensboro, Ala. The students, teaming with the citizens, transfer culture, develop bonds, solve problems, and build houses, parks, bridges, community centers, fire stations, and just about anything else needed by the community. The project has survived multiple leaders, continues to spawn more outposts, and is considered to be an international success.

All these initiatives are all readily achievable with existing resources. A reasonable deadline to design these initiatives should be a six-month timeline. Phase One implementation should begin in spring 2008.

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