

Rethinking I-81



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Preface

For over 30 years, the Onondaga Citizens League has represented an outstanding example of citizen participation in public affairs. Founded in 1978, OCL is an independent and not-for-profit organization that encourages citizen education and involvement in public issues. The OCL's annual study on a topic of community-wide relevance culminates in a report designed to help citizens comprehend the issue and its implications, and give decision-makers recommendations for action.

When the "Rethinking I-81" Study Committee began meeting in early 2008, some committee members had serious doubts about the hypothesis that formed the basis of the study: that through-traffic could be rerouted around the city, and local traffic handled on a surface level boulevard. Even if it were possible from a technical standpoint, would it make an appreciable difference in the area around the Almond Street corridor – after all, isn't Almond Street the real barrier?

After months of study, the "Rethinking I-81" Study Committee came away convinced of the merits of the idea. With the immense potential for positive impact on the community, and the intense interest in the issue, the Onondaga Citizens League hopes that this study report contributes in a significant way to the community dialogue on the future of I-81.

Special thanks are due to Rebecca Livengood, chair of the study committee. We also extend appreciation to the individual and corporate members of OCL who support the work of the League through their membership dues and financial contributions, and to University College of Syracuse University, which provides the administrative and organizational support without which the Citizens League could not function.

The Onondaga Citizens League is open to any individual or organization in Central New York. While some join to become involved in the study process, many become members to support the concept and practice of citizen involvement in public policy issues. More information on OCL is available on our website, www.onondagacitizensleague.org

Sandra Barrett
Executive Vice President
June 2009

Acknowledgements

This study is the result of the dedication, resourcefulness, and insights of the Study Committee members and their ability to wrestle with the complex set of issues that replacing Route 81 brings to the community. I am deeply grateful to them for their commitment to the public interest, their articulate expertise and their passion for redefining Syracuse for the next 50 years.

Special thanks are due to Emanuel Carter for dedicating his class of SUNY ESF Landscape Architecture students to investigation of alternative solutions and to Christine Cappella-Peters for her ability to show us the issues beyond transportation.

Additional thanks go to Doug Sutherland for bringing his passion for Downtown Syracuse and for making a seamless connection with OCL's 2006-07 Study, *Leveraging Better Outcomes for Downtown*.

Bill Egloff provided patient and expert guidance in all aspects of NYS Department of Transportation standards and procedures. Dennis Connors addressed the history of transportation in Syracuse and its effect on the development of the city.

Jim D'Agostino and Nell Donaldson of the Syracuse Metropolitan Transportation Council were extremely helpful in keeping us up to date on the public participation and travel demand model studies they will be managing.

Without Rachel Pollack, our study writer, with her good questions and lively writing and Colleen Karl-Howe, program assistant, with her behind-the-scene arrangements and reminders, this study would never have been completed.

Lastly, as with all OCL studies, Sandra Barrett, OCL's executive vice president, kept everyone on track, announced when we needed to change direction, recruited needed talent and expertise and provided wise counsel every step of the way. The entire community owes her its thanks and acknowledgement.

Rebecca Livengood
Study Chair

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Executive Summary

OCL Study Mission

Due to age and structural deterioration, the elevated portion of I-81 through Syracuse must be replaced, not simply repaired, in the near future. The New York State Department of Transportation (NYSDOT) has begun a detailed review of the physical condition of the interstate and commissioned a public participation project on I-81 concerns. At the same time, a recent University Hill transportation study recommended serious analysis of rerouting I-81 through traffic along I-481 and creating an urban boulevard for local traffic downtown, because of the potential transportation, economic development and environmental benefits to the area.

Other communities facing similar situations have considered alternatives to urban freeways, and many have replaced elevated freeways with at-grade thoroughfares. As it now stands, I-81 is a visual and physical barrier between downtown Syracuse and the growing educational and medical institutions of University Hill – the economic engines of the region. What would be the effects on community renewal and economic development if I-81 were replaced with an attractive, pedestrian-friendly boulevard in the European tradition? The Onondaga Citizens League Rethinking I-81 Study Committee sought to offer a thoughtful review of the relevant issues and the opportunities that a boulevard alternative to the elevated I-81 could provide. The intent of this report is to help prepare the community to provide input in the upcoming public participation process.

Study Methodology

The Committee studied the history and the physical condition of the I-81 corridor, reviewed access issues, and examined cases of freeway removals in American cities. The committee interviewed local and national transportation planning experts and other authorities on traffic, transit, land use planning, and local economic development. The committee reviewed numerous reports and articles on transportation systems and funding, land use, and environmental issues.

I-81 Findings

For both the city and the county, the I-81 project is the most important public planning opportunity since the decision was made to build the elevated I-81 in the late 1950s. While the ultimate decision on the future

of I-81 is several years away, the directions taken now will influence the final outcome. The Study Committee believes that several factors are critical to an understanding of the project.

- The I-81 viaducts were recently put under a special on-going emergency repair contract by NYSDOT, signaling that the aging infrastructure will require an increasing amount of unscheduled repair work.
- The I-81 reconstruction, whatever form it takes, will require a huge amount of public funds and a permanent reconfiguration of some traffic routes.
- In its entire 855 mile length, I-81 bypasses every downtown other than Syracuse, the only place where the speed limit is reduced to 45 mph.
- The I-81 corridor is a significant barrier between downtown and the economic engines on the Hill, devaluing the commercial and residential development potential of property all along the corridor, and limiting the potential for related employment growth in the area.
- A recent transportation study of the University Hill area concluded that tearing down I-81 in the Almond Street Corridor, rerouting all through traffic to I-481, and creating an urban boulevard in place of the viaduct for local traffic might be feasible and would have multiple benefits.
- Removing I-81 from downtown is not likely to hinder emergency vehicle access to the scene of the emergency; EMS vehicles are positioned throughout their service areas and the downtown interstate is not typically used to get to the scene or for access to the University Hill medical facilities.

Lessons Learned from Other Cities and Studies

The Study Committee's research presented evidence that removing freeways from within cities led to improvements in the quality of life and economic prosperity in those cities. In addition, pressures to address public health, gasoline consumption, environmental sustainability and sprawl, as well as changing trends in lifestyle choices, transit use, and transportation options demand that we consider more than mobility of vehicles in community planning.

- A well-crafted urban landscape helps make a city attractive to its young people, and to others looking for a place to work, live and establish roots.

- Cities that removed elevated highways from downtown areas experienced improved connectivity between neighborhoods, stimulated economic growth, and created a more attractive, sustainable, and safe, urban environment.
- Removing a freeway and replacing it with a surface-level boulevard does not necessarily increase congestion levels on city streets; city street grids create additional traffic routes, and head off anticipated gridlock.
- Design of a coordinated urban mobility system, including room for pedestrians, bicycles, and transit, as well as cars, is crucial.
- The transportation system design must be guided by an ambitious community vision, comprehensive master plan, and enforceable design standards.

Conclusions

The OCL study committee's assessment makes a convincing argument that the I-81 challenge is an opportunity to redefine our community for the 21st century. The study committee evaluated the proposition of rerouting through traffic and constructing a boulevard for the use of area traffic by examining known facts about I-81 in the downtown corridor, and exploring similar situations in other cities. The technical studies of NYSDOT and the traffic demand modeling and public participation projects of Syracuse Metropolitan Transportation Council (SMTC) will provide the traffic counts, engineering data, and public input that will inform the choice of alternatives.

The “Rethinking I-81” study committee believes that rerouting through traffic around the city and converting Almond Street to an attractive, pedestrian-friendly urban boulevard is a desirable concept that would benefit the region and recommends this option be given the most serious consideration in the planning process.

The reasons for this conclusion are rooted not just in the experiences of other cities, but in the urgent needs of our own community for revitalization of our core and growth of the new economy. Without a strong core, every part of the region suffers.

- **Competitiveness.** As Bruce Katz of the Brookings Institution said in Syracuse in 2006, “Demolishing the highway and replacing it with a boulevard would not just open up a connective corridor to downtown. It would also send a strong signal that Syracuse is serious about competing in the 21st century economy, and that its leaders and citizens alike have the will, energy, and vision to reinvent the physical infrastructure of their community in a way that leverages its core assets.”
- **Employment Growth.** Our largest, and growing, employers – the educational and medical institutions – need room to develop and expand on nearby development sites. Proximity and physical and visual connectivity create the synergies that spawn growth of the institutions and spin-off services, residential and office development.
- **Economic Development.** Downtown represents the economic, cultural and social hub of the Central New York region, the “calling card” of the region. A troubled core is a drawback to economic development for the wider region. A better connection to the tens of thousands of employees, students and visitors to the University Hill area will spell better business potential for restaurants, shops, museums and galleries, hotels and entertainment venues in the adjacent downtown area.
- **Environmental Concerns.** A coordinated transportation and land use plan, one that gives equitable consideration to transit, pedestrian and bicycle users as well as cars, and incorporates vegetation as well as asphalt, can lead to a reduction in greenhouse gas emissions and a healthier environment.

We urge the community to participate in the I-81 planning process to ensure that we use this opportunity to manage our physical, social, environmental and economic assets in a way that will increase our vitality, accessibility and attractiveness.

I. Introduction

Why I-81 is an Issue Now

For nearly five decades Interstate-81 has run through the heart of Syracuse. But highway viaducts have limited life spans and the bridges of I-81 are deteriorating. Simply repairing the deteriorated steel structure is not a long-term option. Essentially, a new structure must be built. Since highway engineering standards have changed since I-81 was built, an elevated viaduct would probably look very different than the current structure.

The project, whatever form it takes, will require a huge amount of public funds and a permanent reconfiguration of at least some traffic routes. The downtown on- and off-ramps, which do not meet current standards, would not necessarily be replicated.

What if there were alternatives that allow a high-speed through route for those drivers needing to bypass the city and maintain easy access to downtown and University Hill, and also improve quality of life? In the half century since it was built, I-81 has attracted few admirers. It has been called an “eyesore.” Its presence devalues the land around it and discourages connection between downtown and University Hill. The ramps siphon traffic onto and from a few streets, which leads to congestion on those streets.

The process of “Rethinking I-81” has already begun and it demands public participation. The NYSDOT has embarked on the first phase of a review of the physical condition of the Interstate in an “I-81 Corridor Study.” In addition, NYSDOT has contracted with the SMTC, the group that oversees regional transportation planning, to lead a public participation project on I-81 concerns. Each of these studies will take at least two years. SMTC will also conduct a travel demand modeling study, using computer simulation to look at the impact of various highway configurations.

SMTC’s public participation project – “The I-81 Challenge” – will be conducted by a team of consultants and will initially create awareness of the I-81 decision-making process, and spell out the history, functions and condition of I-81. In a second phase of the process, SMTC will engage the community in brainstorming future alternatives for the highway and in narrowing those alternatives into the most feasible and desirable set. The public participation project will use outreach mechanisms such as brochures and newsletters as well as focus groups, open houses, workshops, surveys and a website.

The results of the technical and public studies will be a set of alternatives and strategies to be further developed and studied in depth. Public involvement will be central to this detailed analysis. The ultimate decision on the future of I-81 is years away, but the directions taken now will influence the final outcome.

Factors to Consider

The Onondaga Citizens League believes several factors are important to consider in thinking about I-81.

- **In its entire length, I-81 skirts every downtown except for that of Syracuse.** Scranton, Wilkes Barre, Binghamton, and Watertown are not bisected by I-81. Syracuse is the only city in the entire 855 miles of the I-81 corridor where the highway runs through a downtown area. We need to understand that moving maximum volumes of people in cars at maximum reasonable speeds is fine between cities, but is not actually good within cities, because the systems that make speed possible are bad for local business and economic development.
- **Currently on I-81 north and south, signage already directs through traffic to I-481, although not all vehicles heed the suggestion.** A feasibility study of reconfiguration of the intersections of I-81 and I-481 to allow interstate-speed merging of through traffic could be a first step in planning the future of I-81.
- **There is a growing trend to remove elevated highways from downtown areas.** Freeway removal projects in major cities including San Francisco, Milwaukee, and Portland, Oregon have stimulated economic growth and neighborhood renewal. In San Francisco and Milwaukee, neighborhoods formerly disrupted by viaducts have made a comeback. Low-level uses, like parking lots that frequently line freeways, have been replaced by shops, housing and businesses. In Milwaukee and Portland, the neighborhoods and sites that emerged from freeway removal combined with other careful urban planning steps, have helped to reframe and reenergize the cities themselves. Often the people who fought hard against freeway removal have come to embrace its results.

- **The SMTC University Hill Transportation Study found that removing a portion of I-81, replacing it with a surface-level boulevard, and rerouting through traffic passed a fatal-flaw test – that is, might be feasible.** The consultants recommended an in-depth study of an urban boulevard in lieu of the I-81 viaduct, with through traffic rerouted to I-481. The report predicted that a boulevard option would improve accessibility for commuters, visitors and emergency vehicles, create better connections between downtown and University Hill, increase economic development opportunities, and improve air quality in the area.
- **The I-81 corridor is perceived to be a significant barrier between downtown and the economic engines on the Hill, devaluing the commercial and residential development potential of property all along the corridor.** SUNY Upstate Medical University and Syracuse University are the area's two largest employers. These signature institutions, and others in the area, need room to develop and expand and can generate residential, retail, commercial and additional institutional development. They grow best when they grow organically and are well connected not only by car and public transit, but also by foot and bicycle, and in terms of visual quality.
- **A city maintains its viability by being attractive to its young people, and to others looking for a place to work, live and establish roots.** Residents need to see that the region can offer not only a good range of job opportunities, but also a well-crafted urban landscape that can rival aspects of Boston, New York, Philadelphia and Chicago, match the spirit of mid-size cities such as Columbus, Madison, Providence or Boulder, or compete with such well-known university communities as Berkeley, Ithaca, Burlington, Eugene or University Park. As Bruce Katz of the Brookings Institution said in Syracuse in 2006, "Demolishing the highway and replacing it with a boulevard would not just open up a connective corridor to downtown. It would also send a strong signal that Syracuse is serious about competing in the 21st century economy, and that its leaders and citizens alike have the will, energy, and vision to reinvent the physical infrastructure of their community in a way that leverages its core assets."

Assumptions Challenged

The OCL study committee found that certain common assumptions about freeway removal are not necessarily valid and merit deeper analysis.

- **Removing a freeway and replacing it with a surface-level boulevard will not necessarily increase congestion levels on city streets. When highways are eliminated from the central city, city street grids can be reconnected to create additional traffic routes, and head off anticipated gridlock.** The ability of a street grid to absorb traffic is evidenced in cities such as Milwaukee and San Francisco, where anticipated traffic problems did not materialize when freeways were shut down or removed. Closures of I-81 in Syracuse for construction during the last decade failed to produce major traffic problems, supporting the idea that the urban grid is underutilized. NYSDOT studies will test the assumption that rerouting of through traffic will result in fewer cars and trucks passing directly through the city. Studies will also determine the amount of unused capacity on other streets to absorb local traffic.
- **Removing I-81 from downtown is not likely to hinder emergency vehicle access to hospitals.** EMS vehicles are strategically positioned throughout their service areas; the interstate is not a factor in "access to scene" (unless the scene is on the interstate). Rural Metro and NAVAC, the county's two largest services, by and large do not rely on the I-81 viaduct to get to their hospital destinations, according to their directors. With a boulevard in place of the interstate viaduct for local traffic, "emergency vehicles would be provided more travel route options, which can be critical in cases of congestion or during special events on the University Hill," the University Hill Transportation Study concluded.
- **Creating a surface level boulevard in place of an elevated highway viaduct will not necessarily increase pollution levels.** While rerouting I-81 through traffic to I-481 would add approximately four miles to most long-distance trips, case studies from other cities show that freeway removal projects lead to reduction in the number of auto trips. The reduced road capacity, in conjunction with increased transit use and pedestrian and bicycle trips, could potentially offset the increase in miles on the through route.

No matter what, I-81 is going to change. The question is, will the change detract from, or improve, quality of life for residents of the region? The decision-making process offers the opportunity to explore new visions for the community in terms of transportation efficiency, livability and viability. For both the city and the county this is the most important public planning opportunity since the decision was made to build the elevated I-81 in the late 1950s. As a community, we should ensure that a project with the potential to transform us doesn't just take us where ever the road leads, but instead brings us to where we want to be.

Study Methodology

The focus area of the study is the I-81 corridor in the city of Syracuse between I-481 south of downtown and the I-690 interchanges, with particular attention to the elevated portion from East Adams Street to Erie Boulevard. The committee studied the history and physical condition of I-81 and the condition of the corridor adjacent to I-81, examined case studies of elevated freeway removals in American cities, and reviewed the SMTC University Hill Transportation Study, which addresses the role of I-81 in relation to access issues. Throughout the process, the committee was informed by officials from NYSDOT and SMTC, agencies which will together provide the framework for the I-81 decision-making process. The committee interviewed transportation planning consultants, and other authorities on planning decisions in cities

that have removed or are considering the removal of elevated highways, including Seattle and Milwaukee. Guest speakers included transportation planning consultant Tom Brennan, of Nelson/Nygaard, on the Seattle Urban Mobility Plan, and conference calls with John Norquist and Peter Park, former Milwaukee mayor and planning director, respectively.

SUNY College of Environmental Science and Forestry graduate landscape architecture students in Professor Emanuel Carter's urban design studio consulted on various design and routing options for I-81. Three public sessions were held to allow participants to comment on the studio design project scenarios. The committee interviewed the directors of Rural/Metro and NAVAC ambulance services and Captain Shannon Trice of the Syracuse Police Department Traffic Division to understand possible impacts of temporary and permanent closure of I-81 on emergency services. The committee met with local developers and realtors to understand their views on the development potential for a reconfigured I-81 corridor, heard from CENTRO on transit issues and planning, and considered urban transit trends and projections. Presentations by committee members were made to various community groups during the latter stages of the study. The wider community was made aware of the study sessions through press releases to local media and a study blog that highlighted and explained many of the issues raised during committee sessions.

II. Past, Present, Future

Historical Perspective

Next time you're crossing the intersection at Washington and Almond Streets, try imagining the bridges of I-81 "gone." Now envision a replacement. Let's say a steady flow of urban traffic on a landscaped boulevard, for instance. Tough to picture it, right?

One hundred years ago, standing in that exact spot, you would have been blasted by the force of a massive steam locomotive rumbling by just a few feet in front of your face. There were no flashing lights to warn of an arriving train, no guarding arms to halt the flow of traffic. Accidents were common. The railroad was a dangerous barrier dividing downtown; but for the citizens of Syracuse, railroads were a necessity. The railroad was the way people traveled, just as the car is today. Syracuse residents couldn't have imagined a city without a railroad line as a central artery, just as today, it is difficult to imagine a city without an elevated I-81 carrying cars through the core.

Just as the physical deterioration of the I-81 bridges now necessitates a rethinking of the viaduct's future, one hundred years ago the growing tide of railroad traffic required the citizens of Syracuse to rethink how and where tracks passed through the city. Would trains be elevated and continue to cut through the city center? Or would the route be moved to the outskirts? Dennis Connors, curator of history at the Onondaga Historical Association Museum and Research Center and a member of the OCL study committee, outlined the history of transportation decisions in Syracuse in a presentation to the study committee.

The Erie Canal Era

A good perspective starts with the Erie Canal; not its construction but its demise. While the canal was an economic boon to Syracuse for much of the 19th century, changing technology lessened its value by the late 1800s. The canal divided downtown into north and south, and land-based travelers in downtown had to cross over it numerous times in order to do business in the city. Most of the streets crossing the canal were connected by drawbridges or other non-fixed structures. Street traffic was regularly interrupted to allow canal traffic to pass. The constantly malfunctioning canal bridges were a barrier to the economic efficiency and growth of the city. When an opportunity to re-think the future of the old Erie Canal became possible with the completion of the new State Barge Canal in 1918,

the city had to decide what to do with that outdated transportation corridor through its downtown. Despite the visual appeal seen today in old photos of the canal and its bridges, at the time, the canal was not considered an aesthetic feature. The bridges impeded movement and the city had no interest in assuming maintenance of the locks. The canal was seen as holding back the commercial growth of the city during the booming 1920s. Filling in the old canal was not a controversial decision.

The Railroad Era

As the canal's importance was growing, the railroad joined it as a new transportation system in the late 1830s. If you had stood on Washington Street in those years, your view would have stretched over a few short village blocks and then out into the countryside. That early railroad line made an "intermodal" connection to the canal packet boats, landing just a block away. At that time when trains barely reached 20 mph speeds, the then small-village of Syracuse granted perpetual easements to the Syracuse and Utica Railroad for a minor set of rails down Washington Street. Eventually, S&U RR became a part of the huge New York Central, and the perpetual easements became an urban planning straightjacket. Canal use would fade from importance by the beginning of the 20th century but by then, passenger rail travel had assumed critical proportions for Syracuse.

Decisions about the Washington Street railroad corridor were far more controversial than decisions about the unwanted canal. By 1900, every single passenger train on the New York Central ran down Washington Street and all the DL&W freight trains ran through the Westside. Both of these routes ran at street level. Trying to cross Washington Street, on foot or in a car, could be life-threatening. Opening a window in a nearby building at the wrong time meant a face full of soot and smoke.

Any solution to the growing problem had to involve the agreement of the privately-owned railroads. Two plans were advanced and went to public referendum in 1927. One choice was an elevated track just north of the Erie Canal, on a secondary right of way owned by New York Central. In an era of train travel, having the primary means of transportation downtown seemed logical and the railroad interests preferred this route. The other choice in the referendum was to reroute the trains to the northern edge of the city.

In the public debate over the options, some people envisioned downtown remaining the central hub of community activity, others saw the mobility of autos allowing for services to be more distant. People also saw the elevated tracks in different aesthetic lights. The promise that downtown railroad elevations could be made attractive and not divisive, plus the sense that the railroad interests wouldn't cooperate if the public voted to relocate passenger lines outside downtown, led to the approval of the elevated track. What the public couldn't foresee was how the railroad would almost immediately begin to lose ground and how radically the transportation landscape would soon be altered. By 1962, when passenger traffic had nose-dived, New York Central moved the passenger lines to the northern route, the original rerouting plan for trains, and the route that is still used today. The old elevated tracks became the route of I-690.

Could the radical change in U.S. transportation have been anticipated? Perhaps not, but the lesson in deciding the future of I-81 is to look closely at present and developing trends in transportation needs. The historical precedents also show us that aesthetics and connectivity are among the factors that should be weighed carefully in transportation planning. The design and location of transportation corridors can have long-lasting impacts on how a city develops.

The Highway

The long-term impacts of the I-81 elevated viaducts on downtown and nearby neighborhoods were also unanticipated.

The entire national interstate highway system was part of the post-World War II plan to provide fast ground transportation as a military advantage. The National Interstate and Defense Highways Act of 1956 authorized the biggest public works project in the nation's history, and completely altered the course of America's urban development, which would thereafter be based on the automobile.

As the role of highways became more central to American life, cities, fearing their economic interests would be harmed, sought ways to incorporate the new roadways. The NYS Thruway had avoided going through urban areas when it was complete in the 1950s. That led some Syracuse business interests to complain that the road moved business away from the city center.

The elevated segment of I-81 was originally intended to follow Townsend Street through downtown. Mayor

Anthony Henninger opposed an elevated highway, seeing it becoming an ugly wall dividing downtown (paralleling the debate over the elevated railroads). Henninger and others wanted to depress the highway but place it under a proposed community plaza, a cultural and governmental complex to be built north and east of today's Everson. The civic plaza would be elevated as a giant bridge over the highway. However, the state opposed this idea, viewing the project as costly and difficult to engineer.

In 1958 the city agreed to a compromise moving the elevated I-81 further east along Almond Street and through Syracuse's 15th Ward. The 15th ward, then a primarily black, mixed-use neighborhood, was viewed as a slum area, with substandard housing and commercial structures. The neighborhood had been negatively affected by government-backed mortgage policies, and targeted for Urban Renewal clearance.

OCL study committee member Emanuel Carter, Professor of Landscape Architecture at SUNY ESF, presented the history of how federally-backed government mortgages were promoted under President Franklin Roosevelt's administration as a way to strengthen the U.S. economy. The system that turned a nation of renters into one of home buyers supported suburban development and left the cities behind, particularly those city neighborhoods that housed blacks and recent immigrants. Because of the way the system was skewed, homebuyers couldn't get federally-backed mortgages in "red-lined" black and ethnic neighborhoods, so when the more affluent residents of those neighborhoods did buy homes, they had to go elsewhere. Neighborhoods were depleted of leadership and capital, and lost ground.

There was little opposition to the destruction of these "rundown" neighborhoods. Almond Street bounded University Hospital, but the relationship between the University Hill area and downtown was not a major consideration in the discussion. The institutions were for the most part located farther up the hill. At the time, the late 1950s, downtown Syracuse still had a bustling economy and a link with the University was not a major concern. Downtown business and retail interests could not foresee the benefits of a connection to the expanding institutional complex on the hill.

The city was promised an "artistic and beautiful" elevated highway, an open system of trestle construction compared to the elevated highway along Boston's waterfront, then under construction (and of course now replaced by a tunnel to reconnect the city and the

waterfront). By 1967, Syracuse newspaper editorials were already calling the elevated highway an eyesore, pleading for "... landscaping and beautification of the unsightly route 81 elevated highway and other elements of the ugly Onondaga Interchange now nearing completion in the heart of Syracuse." From a transportation standpoint, in 1973 the Syracuse Herald-American called I-81 through Syracuse a "multi-million dollar mess" and blamed it on "poor planning."

A century ago the city of Syracuse removed the Erie Canal; within just a few years the city was completely changed. This may be a similar defining moment for the city and the region. Decisions made about I-81 within the next few years will have a lasting impact on the community in terms of economic development, aesthetics, transportation options and overall quality of life.

Planning Considerations

Current Transportation Trends

Between November 2007 and August 2008, Americans drove 53.2 billion miles less than they did over the same period a year earlier – exceeding the 1970s total decline of 49.3 billion miles. And while the record gasoline prices driving the downturn in travel did not last, economists warn that increasing global demand is going to make gasoline less affordable over the long term.

Regionally, homebuyers here haven't faced the mushrooming housing prices of homes that have driven residents of other cities far from the center. But lifestyle choices as well as attractive exurban developments have led many to take on longer commutes.

Now some people are seeking alternate ways of getting around. Centro figures for August 2008 show a nine percent jump in ridership over August 2007 with longer, intercity travel showing the greatest increase. The Auburn to Syracuse line showed the biggest spike, with a 14 percent increase in ridership over August 2007.

While some commuters began rethinking how they commute, and how and where they live as a response to high fuel costs, others were already recomputing those factors before prices rose. Obviously, greater use of public transportation, bicycling, carpooling and more fuel-efficient cars are a large part of the equation. The high cost of car travel has also highlighted a growing "back to the city" movement occurring in some urban areas, as well as serious studies of many alternate transit options.

High gasoline prices and quality of life issues are among the factors driving change. But the new attractiveness of many resurgent American downtowns is drawing both younger Americans as well as retirees to urban areas, helping to redefine transportation there.

Some of the current transportation trends include:

- Redesigned streets move cars more safely and provide better pedestrian and bicycle access.
- Sidewalks, well-defined curbs, medians and crosswalks, bicycle and bus lanes are getting more attention in a trend called "complete streets."
- New mobility hubs offer "under-one-roof" access to buses, trains and streetcars, car-share vehicles (think ZipCars, found at SU and CuseCar) and bike-share bicycles (pick up a bicycle at one station, drop it off another for a fee) as well as cafes, newsstands, wireless internet access, maps and up-to-the minute information on when buses, trains and streetcars will arrive.
- Bicycle boulevards increase the number of street miles dedicated to cycling, reinforcing the bicycle commuter option as well as encouraging fitness and lowering carbon emissions.
- Bus prioritization including bus-only lanes, bus rapid transit, signal prioritization and other technologies are engineered to make transit quicker, more convenient and thus a more viable option for commuters.
- Digital signage and cell phone tools allow bus riders to keep tabs on their bus.
- Pedestrian promenades with wider sidewalks, benches, public art and landscaping encourage walking and bring life to city streets.
- New transportation concepts such as Podcars (computer-guided driverless cars on their own track) are being pursued, and old ideas are getting renewed interest (carpooling, 4-day work weeks coupled with telecommuting.)

Other more radical transportation trends, such as congestion pricing (charges levied on cars entering cities during peak travel times), haven't taken hold in major U.S. cities. But they do help us to understand some of the underlying issues associated with city traffic. One problem is that a good portion of time cars spend on streets isn't devoted to getting to a destination; it's spent finding parking. Traffic engineers have found that a large percentage of cars in traffic are looking for parking. Taken out of the picture, cars searching for

parking would decrease road congestion significantly. While it might be thought that more parking spaces would therefore lead to less congestion, the opposite is true. Build parking garages and more drivers will show up to use them, rather than use transit. Adding parking spaces leads to more cars and increased traffic. By allowing free or inexpensive parking, a city creates a temptation for drivers: drive around looking for a space and contribute to traffic rather than pull into the first garage in sight.

In *Traffic: Why We Drive the Way We Do (And What It Says About Us)* Tom Vanderbilt writes about how the city of Copenhagen, Denmark, solved its congestion problem. Over the course of a decade, the city slowly cut out parking spaces, a little bit at a time so it wouldn't be noticed. Bicycle lanes or parks were among the parking replacements. Over that same time period, bicycle traffic rose and the number of cars on the roads decreased.

Modern technology holds a variety of keys to making parking easier. Parking guidance systems that employ electronic signs along main roads can send drivers entering cities to garages with available spaces at any given time, cutting the time drivers spend in the parking hunt. These systems are already employed in many European cities.

Planning and Land Use Principles and Trends

When I-81 was built, downtown Syracuse was still bustling, though it was beginning to lose ground to the suburbs. Business leaders hoped the highway would keep Syracuse shoppers patronizing downtown businesses. As we now know, the combined impact of various government policies and cultural shifts had the opposite effect. The construction of highways and increased mobility, along with federal mortgage policies, local zoning and land use policies, and other factors, led people to live farther from the city center, and retail and jobs followed.

Across the country, highways helped drain resources away from cities, and also cut those cities apart. Elevated highways formed visual walls between neighborhoods and created shadowy areas that discouraged foot traffic. The bleakness of the resulting environment degraded the value of nearby structures and discouraged most types of development. Fast-moving through traffic added noise and air pollution.

Predicting how the highways would affect the use of land and resources, and the development of communities, was like looking into a crystal ball. The concept of a "land use plan" was in its formative stages. Still

there were warnings. Famed industrial designer Norman Bel Geddes was responsible for an interstate highway vision which inspired and excited people all over the country. In the General Motors Futurama exhibit at the 1939 World's Fair, Bel Geddes projected a 1960s world of "magic motorways" with cars traveling on 14-lane superhighways at speeds as high as 160 kilometers an hour. But Bel Geddes warned that interstates should never be permitted in cities.

Today, planners advocate using decisions about future land use as the basis for redesigning transportation systems. The Onondaga County 2010 Development Guide and the Onondaga County Settlement Plan help provide land use and transportation planning principles for this region.

The *2010 Development Guide* speaks to the transportation network in terms of promoting compact development, reinvesting in existing communities, and organizing land use patterns to offer an alternative to adding highway capacity as a solution to congestion. Strengthening the city of Syracuse is one of the goals of the Onondaga County 2010 Development Guide. The plan supports sustaining schools, roads and other facilities to support existing communities, rather than using tax dollars to create infrastructure for diffuse new development. Other guidelines help protect the environment and natural resources and create high-quality urban and suburban design.

The *Onondaga County Settlement Plan* carried the Development Guide a step further to set forth a number of specific policy recommendations for transportation systems planning, from the regional level down to the block level. They include:

- **Intermodal Balance.** Seek to attain a healthy balance among transportation modes, including cars, transit, bicycles, and walking.
- **Mobility vs. Accessibility.** Enhancement of all people's access to their daily needs should be primary goal.
- **Regional Facilities vs. Local Needs.** Regional transportation goals should not be allowed to trump the local need for healthy neighborhoods.
- **The Highway-less Town /The Town-less Highway.** High-speed roadways should not be allowed to pass through neighborhoods. Rural highways should be kept free of roadside development.
- **Traffic Calming.** Redesign streets that are plagued by speeding, and design thoroughfares to lower-speed specifications.

SUNY ESF Design Studio Project

As part of its research, the study committee asked graduate students in the Department of Landscape Architecture at SUNY-ESF to contribute design studies addressing four alternatives for the future I-81 corridor: (1) keeping the current right-of-way and rebuilding a viaduct that meets engineering design standards; (2) putting the corridor in a tunnel from just south of Castle Street to the Nettleton Commons site; (3) putting the corridor at grade through the north/south length of the City, and; (4) re-routing the corridor onto Interstate 481 and developing Almond Boulevard as a new at-grade street between Downtown and University Hill.

The students took into account many of the same findings considered by the study committee and came to the conclusion that an urban boulevard design scheme best holds the potential to connect the assets of University Hill to those of downtown Syracuse and promote economic development in a state-of-the-art environmentally friendly way.

While there are many potential boulevard alternatives, all of which are dependent on detailed technical feasibility studies, for the purpose of illustration the students focused on a specific design scheme. Their plan creates an Almond Boulevard on the familiar Almond Street corridor and both provides access to University Hill and Downtown and creates desirable frontage for potential developments such as campus buildings and quadrangles, office buildings and retail, apartments and condominiums rather than garages, surface parking lots and the blank sides of buildings.

In this particular vision, Almond Boulevard is conceived as a street with four lanes of through traffic, two northbound and two southbound. Two slow traffic/parking lanes designed to allow vehicular and bicycle access to destinations along the boulevard are separated from the through lanes by broad medians planted with large-species trees. The wide sidewalks will also be bordered by trees and allow generous spaces for outdoor restaurants and pedestrians. The intention is to develop design guidelines that call for the Almond Boulevard corridor and its crossing streets to include densely-planted borders of trees, roof gardens, vertical gardens – a green infrastructure network that effectively reduces air pollution, processes storm water in a way that prevents combined sewer overflow, mitigates the heat effect of urban pavement, increases urban biodiversity, and reduces energy costs.

University Hill Transportation Study

More roads and more parking, as discussed earlier in this report, creates a vicious cycle leading to more cars on the road, more congestion, more roadway capacity and ultimately... the need for more roads and more parking. Recognizing that a solution to the growing parking and congestion problem in the University Hill area required more than just a study of parking spaces and vehicle use, the SMTC commissioned a comprehensive assessment of issues including land use and interstate access, as well as transit, parking, bicycles and pedestrian needs.

The University Hill Transportation Study, released in 2008, recommends a system that “moves people, goods and services,” not just cars, to address the parking problem. With four million square feet of planned development by institutions on the Hill over the next two decades, a blueprint for growth without increased congestion is critical. Most importantly for the Hill area, the study recommends implementation of a mixed-use development program by medical and educational institutions that includes retail, housing, office, academic and medical space and creates a walkable neighborhood that serves commuters, residents, employers, employees, and students. Complementary elements of the plan include an improved transit network, the adoption of an integrated parking strategy, and a bike boulevard network to encourage pedestrian, not vehicle, traffic.

The report goes to the heart of the relationship between transportation and land use and the need to reduce the trend toward increased automobile use and parking while helping the institutions on University Hill grow.

Interestingly, one of the ways to improve that relationship is to create just the sort of neighborhood that is drawing people back to urban areas in many parts of the country. Build a mixed-use neighborhood that is livable and walkable, that provides good access for bicyclists and thus puts enough people on the streets to support an enhanced transit system, and the number of cars on the road will decline, the University Hill study reports.

By incorporating intended development projects such as medical offices and academic buildings, as well as parking garages, the study consultants created a coordinated plan that mitigates the transportation impacts of institutional growth and creates a “distinct place,” the kind of neighborhoods that are drawing people to relocate to cities, by following these guiding principles:

- **Build Vibrant Streets.** Streets are not just for cars. Street life is essential to a vital community and well-designed streets draw pedestrians to help create that vitality. Street level facades should attract the eye; windows should let walkers see inside and be seen for a sense of interaction and safety.
- **“Fine-grained mixed-use development”** means condominiums and offices atop street level stores, restaurants and entertainment venues. If a building (such as a parking garage) breaks up the inviting line of storefronts that generates pedestrians’ sense of security and interest, it should be wrapped in retail to maintain the sense of safety and interest, and fit in with the general character of the area.
- **Enhance walkability** and people can move from classroom to cafe to bookstore and office without using their vehicles. Those who choose to live in the area won’t need a car. This pedestrian base is the foundation of a successful transit system, which can further enhance the viability of the area.
- **Foster multi-modalism.** Users can choose from various transportation options or switch from one to another. Integrate transit, bicycles, walking routes and roads to reduce car trips.
- **Create a shared vision** that fosters the goals of each Hill institution, and focuses on good urban design.

To quote the report, “A strong sense of place requires careful planning and managed development over a number of years – it takes time and skill. If development happens without following a planned urban design, sense of place is much harder to achieve.”

As part of the University Hill Transportation Study, interstate access to the area was assessed.

Growth in the core of the city is expected to increase congestion at access points to the downtown/Hill area from I-81, which funnels traffic from I-690 and I-481 as well. While there are a number of possible alternatives to address this increase in traffic, reconfiguration of the Almond Street corridor could be a key element to improving access for those traveling to, from, and around the central city.

Narrowing Almond Street between Adams Street and Harrison Street and constructing modern roundabouts at the Adams Street and Harrison Street intersections are among the short-term measures suggested in the University Hill study to improve traffic flow, pedestrian and bicyclist safety, and increase attractiveness

of the area to institutional and private investment. Both strategies are being studied further.

As a longer-term strategy, the SMTC report suggests study of an Almond Street urban boulevard concept – removal of all or a portion of the I-81 viaduct – in combination with other transportation improvements, for its potential to improve accessibility to and from the area and increase its economic viability. An urban boulevard is described as “a special kind of street designed to move large volumes of traffic expeditiously while providing for high-quality urban frontage.” Creation of an Almond Street boulevard presupposes relocation of I-81 through traffic to I-481, requiring reconstruction of the merges with I-81, which has not yet been studied.

The University Hill Study foresees the boulevard and rerouting option as creating greater accessibility for all modes of travel; better connections to downtown and the area just west of I-81, improvement of air quality in the area, and greater opportunity for mixed-use development in the area around the boulevard.

The University Hill Transportation study provided a first look at “rethinking I-81,” preliminarily answering the question of whether relocation of through traffic to I-481 makes it possible for local traffic to travel through the city on a surface-level boulevard. But there is no single boulevard alternative. Would the surface-level boulevard replace all or just part of the existing viaduct? How many traffic lanes would be necessary? What would be the best design to accommodate pedestrians? The consultants assumed several possibilities, from a small-scale boulevard extending between Burt and Harrison Street, and rejoining the interstate highway system at the I-81/I-690 interchange to a large-scale boulevard requiring reconfiguration of the I-81/I-690 interchange. The options require further refinement and study.

The report concluded that the boulevard concept should be examined as part of the I-81 Corridor study as a long-term transportation improvement with community “placemaking” potential.

Transportation Funding

The funding structure for highway projects is a complex process involving coordination between federal, state and local agencies to develop long-range plans, work programs and funding proposals. Typically, the federal share of National Highway System projects is eighty percent, (although it can be more for some projects such as safety improvements) and the state share is twenty percent.

Although the federal funding mechanism for highway transportation projects may change when the current legislation expires in 2009, it is most likely that any successor legislation will continue transportation planning structure, implemented through statewide planning and Metropolitan Planning Organizations (MPOs) such as the Syracuse Metropolitan Transportation Council. Currently, SAFETEA-LU* mandates that all federal transportation funds in the SMTC study area – which includes all of Onondaga County and small portions of Madison and Oswego Counties – go through SMTC.

SMTC's planning activities are intended to coordinate transportation improvements with state and local economic development and growth and travel demand projections, and are guided by financial assumptions. The process involves creating an updatable, long-range plan for transportation improvements, coupled with a short-term list of specific regional projects for which federal funds are anticipated.

The SMTC develops three key documents that are the components of the transportation planning and programming in the Syracuse Metropolitan Area. The Long-Range Transportation Plan (LRTP) is a blueprint that guides transportation development in the metropolitan area over a 25-year period and is updated annually. The Unified Planning Work Program (UPWP) is an outline of SMTC's planning activity agenda for the coming year. The Transportation Improvement Program (TIP) is a multi-year list of specific projects for which federal funds are anticipated and is the basis for the state budget appropriation for any project. The TIP represents transportation priorities established by SMTC for transit, pedestrian, bicycle and freight-related projects as well as highways.

The funding process requires consensus among SMTC member agencies, which represent a number of city, state, federal and private agencies. **

Physical Characteristics

National Interstate System

I-81 serves both through and local traffic in the core of the city of Syracuse. How well I-81 functions as a local commuter route is questionable, but its role as a link in a system of regional and national roadways is important.

The elevated I-81 that bisects the city is a short segment of the national corridor that extends 855 miles from the Canadian border to just northeast of Knoxville, Tennessee. Together with I-95, I-81 forms the Capitol Corridor, which carries up to 12 percent of the gross national product. According to study committee member Bill Egloff of the New York State Department of Transportation, it sustains 350,000 jobs that depend on transportation and trade with Canada. It is a north-south link in a highway system that provides access across the region from Boston to Buffalo, from Halifax to New York City and beyond. The decisions about the future of I-81 must consider not only local and regional interests but also the federal government, which will look at the future of the interstate from a standpoint of impact on cross-border transportation, trade and security. Whether I-481 has the capacity to provide an alternative route to I-81's downtown segment will only be certain after travel demand and engineering study.

Structural Issues

Whether the I-81 Syracuse city corridor is rebuilt as an elevated roadway or an alternate approach is taken to construction, it will require significant funding and affect traffic patterns for the duration of construction. The area in need of attention is substantial. In the elevated portion of the roadway, there are more than 124 bridge spans totaling 1.4 miles. They cross eighteen city streets carrying a total of approximately 100,000 vehicles a day. The I-81 bridge spans are fifty years old. Over time, the bridge spans have deteriorated and will continue to do so.

*SAFETEA-LU, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, the legislation that has governed transportation funding since 2005, expires in 2009. The 2005 act provided \$244 billion in guaranteed funding with the federal gasoline tax as the primary source for appropriations. Under the act, state transportation appropriations are also supported by state gasoline taxes, excise taxes, fees and tolls; states can issue bonds backed by gasoline taxes or other revenues and federal credit enhancements exist for state bonded projects. SAFETEA-LU provides for the allocation of resources through various funding "buckets" with the primary bucket being the National Highway System Program.

** The SMTC member agencies include:
 Central New York Regional Planning and Development Board (CNY RPDB)
 Central New York Regional Transportation Authority (CNYRTA)
 City of Syracuse Mayor
 City of Syracuse Common Council
 Empire State Development Corporation
 Metropolitan Development Association (MDA)
 New York State Department of Environmental Conservation (NYSDEC)
 New York State Department of Transportation (NYSDOT)
 New York State Thruway Authority (NYSTA)
 Onondaga County Executive
 Onondaga County Legislature
 Onondaga County Planning Board
 Syracuse Planning Commission

As the deck of I-81 has aged, steel reinforcing bars have begun to show through. The piers which support the roadway are deteriorating; joints, bearings and concrete replacement are all issues to be addressed. The I-81 viaducts were recently put under a special ongoing emergency repair contract as the aging infrastructure requires an increasing amount of unscheduled repair work. Although NYSDOT has created a timeline to effect a major overhaul of the roadway, for now the repair process is patchwork and costly. Over the recent three-year period, twenty million dollars was spent on two repair projects.

As expensive as any solution likely will be, the cost of not making a timely decision could be even higher. Where decisive steps are not taken, stopgap measures can lead to years of construction repair. Twenty-three years of “emergency” repair have been recorded in the case of the Gowanus Expressway in Brooklyn. That roadway has been under emergency contract for repair every year since 1985, costing the community not just in terms of construction dollars, but constant inconvenience and delays, and less than ideal safety conditions.

Problems/Design Considerations

Whatever choices are made as to the future of I-81, there is general agreement that in its current configuration, I-81 does not meet today’s safety design standards.

- Drivers on I-81 negotiate a series of “reverse curves,” or “S” curves. While not inherently dangerous, these curves become hazardous in darkness, rain, or any time drivers have difficulty compensating for the road conditions.
- Anyone who has ever struck a curb while driving can understand why highways and other high-speed roads don’t generally have curbs. I-81 does have curbs, and the distance between the travel lane and the curb is just two feet.
- Today’s highways are built for optimal sight lines: Drivers can see a slowdown ahead and have adequate time to reduce speed. Drivers on I-81 ride over “hills” (roadway fluctuations called “vertical curves”) that block those sight lines, both on the roadway and on entrance ramps. Drivers have only a short distance to accelerate to highway speed on some ramps. Consider the Pearl Street entrance ramp: As a driver arrives at the hill’s crest, traffic ahead is not visible; a stoppage directly ahead in the driver’s path is more likely to lead to an accident.

- The I-81/690 interchange is poorly designed by today’s standards. In addition to providing access between highways, there was an attempt to provide access to city streets, which led to poor sight distances and merge/diverge sections that are too short.
- When an accident does occur on the highway, emergency vehicles have a hard time getting to it. The lack of road shoulders and the roadway’s limited width can prevent a quick response time.
- In addition, with no road shoulders and limited lane width, it is difficult for rescue personnel to work around the cars involved in the accident. If a lane is kept open to keep traffic flowing, EMS personnel are typically working in very close proximity to moving traffic, without a safety buffer.
- Snow removal and stormwater draining into city streets add to the problems. Drainage pipes leak and fill with dirt and gravel. The water also freezes atop the piers which causes rebar rust and requires extensive maintenance.
- Repairs must be conducted almost exclusively at night.

Additionally, for local traffic, highway on- and off-ramp traffic can cause congestion “hotspots.” Traffic, rather than flowing through multiple city streets to exit the highway, funnels onto one or two routes. Similarly, exiting highway traffic concentrates cars in one location, slowing cars on the street and the ramp. Backup from the off-ramp can halt traffic in one highway lane, create a slowdown in a center lane, and bring on a bottleneck.

The University Hill Transportation Study projects that by the year 2025, future growth of the medical and educational institutions will exacerbate capacity problems around I-81 access ramps unless changes are made to the transportation and land use systems in the downtown and University Hill area.

Emergency Access

If I-81 is not reconstructed as a viaduct through downtown, will the emergency vehicle access be affected? Surprisingly, the answer could be yes – for the better. Interstate-81 through downtown Syracuse is used less by emergency medical services transport than most people may imagine.

For an emergency vehicle driver, the trip breaks down to two crucial components. The first phase, “response to scene” is most crucial. Patients are often stabilized at the site of the incident or inside the emergency

vehicle; only five percent of patients are rushed to the hospital. For the most part, to minimize the initial response time, emergency vehicles have been prepositioned throughout their service area. Rural/Metro serves the city and inner suburbs; their EMS vehicles travel relatively short distances to the scene and do not use the interstates to get to the scene, Mike Addario of Rural/Metro told committee members. (At any one time, between six and sixteen Rural/Metro vehicles are scattered throughout the city. Their positioning is based on previous call data regarding where and when incidents tend to occur.)

For the second leg of the journey, transport to hospital, Rural/Metro drivers choose not to rely on I-81, said Addario. Highway construction shuts down entrances and exits in an unpredictable way; an unanticipated closure of an on- or off-ramp can significantly slow the journey of a driver traveling to a Syracuse hospital. Rural/Metro is one of 21 ambulance services in Onondaga County but takes roughly two-thirds of the EMS calls, 50,000 a year. Other ambulance services, particularly those serving outlying areas, may be more likely to use highways during their hospital transports. With 6,500 calls per year, North Area Volunteer Ambulance Corp (NAVAC) services Mattydale, Hinsdale, North Syracuse Village, Clay, Cicero, and up to Bridgeport, according to Chris Bitner, the Corps' executive director. While highway routes are not a factor in "response to scene" travel, when transporting patients to Syracuse hospitals, NAVAC drivers generally do use the highway, Bitner said, typically exiting north of downtown, to St Joseph's Hospital.

For travel in the Almond Street corridor, the University Hill Transportation study concludes that "emergency vehicles would be provided more travel route options, which can be critical in cases of congestion or during special events on the University Hill" with a boulevard in place of the interstate viaduct for local traffic.

The power of connectivity and traditional street grid design is being recognized in many different contexts, including emergency vehicle operations. A recently published report on the *Emergency Response & Street Design Initiative*, a partnership of The Congress for the New Urbanism (CNU), the U.S. Environmental Protection Agency (EPA) and fire marshals from across the county, concludes that compared to wider streets with higher speeds, the traditional street grid, "can improve emergency response times by providing several routes to any given address." The initiative, which seeks to reduce traffic injuries and deaths

through better street design, promotes traditional neighborhood design as an alternative to the cul-de-sacs and extensive road networks of suburban sprawl.

Physical Impacts in the Corridor

When Syracuse newspaper editorial writers called for "landscaping and beautification of the unsightly route" that was the newly built I-81 viaduct over 40 years ago, they were not alone in their disillusionment. As freeways were built through cities, it became apparent to many that they defaced the landscape and cut off neighborhoods from one another. Opposition rose at many levels, from grassroots to government. Famed San Francisco newspaper columnist Herb Caen helped stop an extension of the Embarcadero Freeway when he termed it the "Dambarcadero."

The Embarcadero Freeway was replaced with a boulevard in 2002. The conditions that plagued it and other elevated urban freeways exist today in the area around I-81. The I-81 project affected city blocks to the east and west of the roadway for much of its run through the city. The most noticeable impact was the demolition of scores of buildings, interrupting the physical density that defined the city. The resulting physical and visual chiasm created a nondescript, inhospitable streetscape and divided adjacent neighborhoods from one another.

Aerial photographs of the I-81 corridor clearly show how the freeway cuts the city into sectors and creates block shapes and arrangements with limited possibilities for development. In a presentation to the study committee, urban planner and study committee member Christine Capella-Peters pointed to the spaces under the highway and on either side of it as "lost space," not suitable for many uses beyond that of parking lots and garages. The recently constructed hospital parking garage at Almond, Harrison and Adams Streets "turns its back" to the corridor and gives pedestrians and passing motorists the blank face of brick walls. The unappealing physical state of the corridor makes a garage seem a logical choice, as opposed to housing or retail, Capella-Peters explained. With an ideal urban boulevard design, and planning guidelines, parking structures would incorporate commercial space supporting nearby institutions and their employees and visitors.

The few historic and older buildings scattered in these otherwise barren blocks have suffered because of such bleak surroundings and therefore many have been subjected to disinvestment and in some cases

abandonment. The location and design of the limited number of newer buildings enhances the wall-like character of the corridor. And the land itself, whether used for parking or configured as open space is, at best, unkempt and, at worst, actively deteriorating – making the overall view of the city unattractive and disjointed.

The devaluing influence of the overhead expressway leaves historic buildings that are ripe for preservation, such as the row of buildings along Townsend Street punctuated by the Hyman Smith Building, sadly deteriorating. Located to the southwest of the intersection of I-81 and I-690, walled-off by the highways, and plagued by noise and air pollution, these historic buildings present a lost redevelopment opportunity.

The viaduct looms large in the reasons for lackluster development in the blocks on either side of it. Construction of the roadway altered more than the land occupied by the travel lanes and shoulders, entrance and exit ramps, bridges and viaduct. The physical impacts of the pending decision cannot be overlooked, and should be a principal concern in considering the future of the I-81 corridor.

Environmental Issues

Once options for I-81 have been selected for further study, the environmental impacts of each scenario will be studied in depth. Historic buildings, protected sites, noise, storm water runoff, and air quality are covered by various state and federal regulations. An environmental assessment is part of the current NYSDOT I-81 Corridor Study being undertaken by Stantec, an engineering and design consultant. The assessment will provide an environmental inventory of protected sites, including wetlands, streams, endangered species habitats, and historic buildings as a basis for evaluating potential alternatives. The inventory indicates areas to be avoided or where mitigation measures might be necessary. More detailed environmental analyses of specific alternatives will be part of subsequent DOT studies during the I-81 planning process.

Air pollution and its effects on global warming, and on health, are of particular concern in highway projects. Projects should not contribute to an increase in vehicle emissions. Rerouting of through traffic from the current I-81 to I-481/81 could increase total vehicle miles traveled in the region, and increase pollutants that contribute to global warming, if it is assumed that land use and local travel patterns in the University Hill/downtown area or elsewhere in the region do not change. Removing I-81 through traffic from the

Almond Street corridor, however, would have the positive effect of significantly reducing emissions carbon monoxide, nitrogen oxides and volatile organic compound (VOC) within the surrounding area, according to an air quality analysis memorandum in the University Hill Transportation Study.

Research shows that the pollutants in vehicle emissions have negative effects on the health of those living close to freeways. In 2007, the Air Resources Board of the California EPA released a report compiling the work of numerous studies on the health impacts of living close to highways. Among the findings of a ten-year study of 5,500 children:

- adverse effects on lung function growth, asthma, school attendance
- an 89 percent increase in asthma risk
- significant decrease in lung function, measured as worse within 500 meters and 1000 meters of freeway
- five to eight percent increase in risk of acute respiratory infection in schools close to high-traffic roads
- for newborns exposed to high traffic and high carbon monoxide levels in vitro, a 36 percent increase in prevalence of low birth weight, 27 percent increase in prevalence of premature birth and up to three times the risk of cardiac birth defects

Distance from a highway seems to be a mitigating factor. A 2007 University of Southern California study followed 3,600 children over 13 years. The study showed that children living within 500 yards of a freeway (about the length of four football fields or slightly more than a quarter of a mile) had increased lung impairment compared to children living 1500 yards (.85 miles) from the highway. During the course of the study, roughly one third of the children moved to other homes within the same communities. Those who moved farther from the highway suffered less damage than those who remained in close proximity, according to a 2007 article in the *Los Angeles Times*. “The finding is important ‘because it shows that within communities, some children are at higher risk than others,’” Dr. Thomas Sandstrom and Dr. Bert Brunekreef wrote in an editorial accompanying the paper. “Thus, environmental equity is an issue of local rather than regional dimensions.”

Monitoring of air quality in proximity to I-81 in Syracuse demonstrates that points closer to the high-

way have poorer air quality. Understanding how the ambient environment affects the built environment in urban areas is an objective of the Syracuse Center of Excellence in Environmental and Energy Systems (Syracuse CoE), whose headquarters is currently under construction. Field measurements were taken in June 2008 at seven locations around the perimeter of the CoE building site bounded by Almond Street, Erie Boulevard, and Washington Streets, near the intersection of I-81 and I-690. The highways carry about 6,000 vehicles per hour during rush hour, according to NYSDOT. The data show that the concentration of pollutants produced by gas and diesel-powered

vehicles, particularly carbon monoxide (CO), Black Carbon (BC), and Ultrafine Particles (UFP) increased with proximity to the highways within that block.

The University Hill Transportation Study leaves us with this thought: "...it is necessary to examine more sustainable and less cost-intensive options of mobility than what is currently practiced. In addition, it is important to consider the impact of the transportation system on environmental and public health-related issues such as air emissions, obesity rates and asthma rates. This raises the question: 'Is there a more sustainable way to travel to and through University Hill?'"

III. Lessons Learned From Other Cities

The Freeway Removal Alternative: A Growing Trend

The freeway revolts of the 1960s laid the groundwork for the freeway removal projects underway today. As freeways were built to ring around and cut across cities, citizens witnessed the destructive impact of the highways on neighborhoods and mobilized to fight against extension of the system. The way cities were being redefined to serve motorists at the cost of local businesses, residents, and public spaces was wrong, they protested.

In **Vancouver**, the only major North American city without a freeway built through it, freeway opponents

saw an example of a thriving city where roads had been designed to lead people into the city, not to race through it. A proposal in the 1960s to build a freeway through Vancouver was blocked by grassroots neighborhood efforts. **Portland, Oregon** became known as the first city to demolish an existing freeway. In 1968 the city recommended removing a functioning expressway to build a park to enhance connectivity between the city's downtown and its waterfront, and in 1974 Harbor Drive freeway was closed without causing any traffic snarls.

In many cases, action on freeway removal hinges on the physical failures of the elevated freeways themselves. In **San Francisco**, it took an earthquake.

San Francisco

In the last two decades, the city of San Francisco has removed two of its elevated highways: the Embarcadero and Central Freeways.

The Embarcadero, the six-lane, tree-lined boulevard along the waterfront that replaced the Embarcadero Freeway in many ways epitomizes the freeway-to-boulevard movement. The double-decker freeway, which separated downtown from the waterfront, was completed in 1959 as part of an intended freeway system connecting the Bay and Golden Gate Bridges. However San Francisco's "Freeway Revolt," a grassroots rebellion that stopped the building of numerous sections of a planned freeway system, left the Embarcadero Freeway as a one-mile connector to the North Beach and Chinatown areas, carrying 60,000 cars a day at its peak.

The freeway was closed after being damaged in the 1989 Loma Prieta Earthquake, and demolished in 1991 over the objections of merchants in Chinatown. Now a "complete street," serving not just 26,000 cars a day but pedestrians, streetcar riders and other travelers, the Embarcadero has made the waterfront an attractive destination for tourists and locals alike. Since the demolition of the freeway, the area has seen restoration of the Ferry Building, establishment of new residential areas, and other redevelopment, including a flourishing Chinatown.

The demolition of the Embarcadero Freeway is an impressive example of how freeway removal can have a positive impact on the visual environment, and a catalytic effect on development in the right-of-way and even in nearby neighborhoods.

Although the boulevard is broad, it is designed for pedestrians, bikes and transit riders, as well as vehicles, and has provided a connection to the waterfront and the restored Ferry Building. And while about half the traffic on the former freeway was diverted onto alternate routes, traffic was successfully absorbed without disruption.

While the removal of the Embarcadero Freeway spurred economic development in a tourist-oriented, waterfront location, the removal of San Francisco's Central Freeway occurred in a primarily working class, residential neighborhood, and also served to transform it. Like the Embarcadero, the Central Freeway was completed in 1959, envisioned as a part of a larger freeway system that was stopped by a citizen-led freeway revolt. At its peak, Central Freeway carried approximately 100,000 cars a day. Damaged by the earthquake, a segment of the freeway was demolished and engineers began planning a rebuild of the remaining freeway. Citizens and local officials, however, began to consider alternatives. When roadwork closed a segment of the remaining viaduct for four months without causing the anticipated gridlock, a surface boulevard concept gained in favor. In 1999, citizens voted for the boulevard alternative

over the freeway retrofit and the freeway closed for good in 2003.

Octavia Boulevard opened in 2005 with four center lanes for through traffic, landscaped dividers, two side lanes of local traffic and two lanes of on-street parking. The surrounding residential neighborhood has been transformed, green space added, new housing units are planned, and commercial property values in the area have increased. While the boulevard is still heavily used as a through route, traffic in the corridor dropped by half, as some of the traffic moved to alternate routes with sufficient capacity to handle the displaced traffic, and a small percentage of drivers switched to transit.

While it was the 1989 Loma Prieta earthquake that ultimately led to the demolition of the Embarcadero and Central Freeways, it was rejection by the citizens and board of supervisors of the original 1955 freeway plan that kept San Francisco from becoming an automobile-oriented city in the first place. As the city began building the Embarcadero Freeway along the waterfront, and residents could envision the effect of the full freeway construction plan on neighborhoods and businesses, a powerful opposition movement emerged. The neighborhood quality of life and economic development priorities that fired opposition in the 1950s and 1960s came to play again in the 1990s to reject the rebuilding of high-speed expressways through the city.

The Loma Prieta earthquake in 1989 damaged two elevated freeways, forcing closures and a citywide realization that traffic patterns altered to accommodate the shutdowns. Before the earthquake, tear-down proponents had held a referendum to bring down the Embarcadero Freeway. Opponents cried gridlock and the referendum failed. But after the earthquake, when the freeway closed and the feared gridlock failed to materialize, opinion shifted. The Embarcadero and Central Freeways were torn down and street-level boulevards built in their places.

The “earthquake” that is shifting opinions in other cities is less violent, but no less profound. In **Milwaukee**, John Norquist, the grassroots organizer who headed early freeway protests ultimately became the mayor who spearheaded the 2003 removal of the Park East Freeway to reknit the heart of that city.

As other cities begin to examine the costly prospect of rebuilding aging elevated highways, officials are becoming aware that other options exist. In **Seattle**, an earthquake damaged viaduct with a limited lifespan has encouraged thinking on a broad range of alternate transportation choices. As success stories of freeway removal in one city inspire consideration in others,

the idea of freeway removal is becoming closely linked with efforts at downtown and neighborhood revitalization.

A great deal of variation exists in how authorities deal with the freeway removal question, suggest authors of a recent paper “Shifting Urban Priorities? Removal of Inner City Freeways in the United States.” Overall, write authors Francesca Napolitan of Nelson/Nygaard and P. Christopher Zegras of MIT, a “fix-it-first” attitude prevails. “The standard approach when developing alternatives requires a ‘no-build’ option to be considered together with build-rehabilitate options. Perhaps the time has come to add a ‘tear-down’ option; shifting to a more systematic rather than an accidental way of evaluating options.”

Lessons Learned From Other Cities

The study committee took away several findings from the experiences of places that have selected alternatives to rebuilding freeways through their central cities.

Connectivity matters. In the 1970s, Portland, Oregon was the first U.S. city to remove a freeway. Despite the original predictions of traffic engineers that the plan was impossible, officials closed a four-lane, under-

Milwaukee

In 1971, the first section of Milwaukee’s Park East Freeway connecting I-43 to downtown was complete, and a block-wide swath of houses and businesses had been cleared to make way for continuation of the freeway to the lakefront. But neighborhood and environmental activists created sufficient opposition to stop construction of the extension, which would have bisected and blighted a major city park, cutting it off from Lake Michigan.

Thirty years later Milwaukee went a giant step further — they demolished the existing stretch of Park East Freeway, removing a dividing wall that cut through the city’s downtown, opening up 24 acres to development and increasing the development value of the land in the shadow of the former elevated highway.

One of the activists who opposed the freeway plan in the 1970s was John Norquist, a lathe operator and community organizer, who later became a state legislator and then mayor in 1988. As mayor,

Norquist saw the benefits that flowed when the state released the vacant land that had been cleared for the unbuilt section of the freeway. Sold off for redevelopment, that acreage became the East Pointe neighborhood, a mixed-use area of townhouses, condos, restaurants, shops, even a supermarket with pedestrian-friendly entrance on one side and parking lot on the other. The Urban Land Institute, presenting the project an Award for Excellence, noted: “East Pointe represents the culmination of a two-decade struggle to evolve and further damaged a neighborhood into the creation of one of the country’s most successful examples of urban housing.”

Norquist also paid attention when the students of Peter Park, an adjunct professor at the University of Wisconsin, Milwaukee School of Architecture and Urban Planning, explored removal of the freeway in design studio projects. Park was invited to serve as the City’s Planning Director, and worked with Norquist in heightening the importance of comprehensive planning and design standards.

Demolished in 2003 and replaced by a six-lane street level boulevard, the Park East freeway removal has been deemed a success. Traffic congestion was actually alleviated by the reconfiguration of limited access streets which collected traffic from the freeway’s three entry/exit points — the restored city street grid dispersed traffic over many streets and traffic flow improved. Instead of spending \$100 million to rebuild the viaduct, only \$25 million was spent on demolition and at-grade street improvements. And the economic development hoped for has begun to materialize. By 2007 projects totaling over \$300 million in investment had been completed, approved or proposed.

The freeway created negative space in a downtown where there was potential for local growth and neighborhood connection. When the freeway came down, it was replaced by three linked neighborhoods. Ugly surface level parking lots began to disappear and housing, commercial and institutional projects took over, bringing vibrancy to areas where people hadn’t wanted to walk before.

utilized roadway that ran along the Willamette River and cut off the city from its waterfront – to build a park.

The demise of Harbor Drive brought about a connection between Portland’s then less-than-booming downtown and its waterfront. The riverfront park led to the creation of the Downtown Waterfront Urban Renewal Area; since its implementation in 1974, assessed land values in downtown Portland have increased an average of 10.4% annually. Freeway removal became one prescription in a series of bold urban planning moves that revitalized downtown Portland and made it a model studied by urban planners.

The benefits of connection can also be seen through the lens of Milwaukee, a city with economic challenges similar to those of Syracuse. In Milwaukee, the land cleared for the Park East Freeway extension, divided the existing neighborhood. When the State eventually released the land for redevelopment, that acreage became the East Pointe neighborhood, a thriving, mixed-use area of residential, restaurants and shops.

Freeway teardowns stimulate economic growth *within neighborhoods*. The city of Milwaukee has experienced more than \$300 million in economic projects in formerly devalued neighborhoods since the teardown of the Park East Freeway. No longer in the shadow of an urban viaduct, many parking lots near the former freeway have been developed. A Fortune 500 corporation moved its headquarters within a block of the former highway and mixed-use developments are blossoming along the boulevard. According to the Congress for the New Urbanism (CNU), average assessed land values per acre in the footprint of the freeway grew by 180 percent and in the Park East Tax Increment District grew by 45 percent between 2001 and 2006, compared with a citywide increase of 25 percent.

In San Francisco, Hayes Valley, the devalued neighborhood that surrounded the Central Freeway has experienced a similar renaissance. Before the elevated freeway was replaced with Octavia Boulevard, condominium prices were 66 percent of San Francisco

Seattle

How do you replace an unsafe elevated highway when no one likes the alternatives? That problem has been plaguing the city of Seattle. In 2001 an earthquake damaged the Alaskan Way Viaduct, a 1.4 mile section of Highway 99 that divides Seattle’s downtown core from its waterfront. What seemed an opportunity to redefine the city’s transportation system and to link two vital neighborhoods that are divided by the viaduct became mired in divisive politics. Conflict led to a public referendum in March 2007, giving Seattle citizens a choice between rebuilding an elevated highway and constructing an underground tunnel. Residents voted “no” to both.

Ranked #1 on the Congress for the New Urbanism’s “Freeways Without Futures” list, the Alaskan Way Viaduct is a major regional route into Seattle, carrying about 105,000 vehicles a day. The highway was built on fill, so the underground piles have become a problem, and the seawall that hold up the highway is also deteriorating.

After the 2007 referendum, the Seattle City Council called for the Seattle DOT to develop an Urban Mobility Plan – a systems approach, includ-

ing surface road, transit and other improvements – to replace the highway capacity. Tom Brennan is a Portland, Oregon-based transportation consultant, whose firm Nelson/Nygaard, is currently working with the City of Seattle. N/N is developing the Urban Mobility Plan, part of the Center City Seattle Access Strategy – strategic transit service and surface street grid improvements and demand management strategies that together would absorb the current traffic on the viaduct.

In a presentation to the “Rethinking I-81” study committee, Brennan explained that even before the earthquake damaged the elevated freeway, environmental issues, energy concerns, and growth projections were forcing Seattle to take a comprehensive systems approach to moving people and goods to and through downtown. The Vice-Chair of the City Council’s Transportation committee put it this way: “The replacement of the viaduct is a fantastic opportunity to begin the creation of a 21st century transportation system. The car can no longer rule all our decisions. There’s got to be a better way.”

In June 2008, the State DOT released eight proposals for a new roadway, including boulevard, elevated viaduct, underground tunnel and cut-and-

cover tunnel alternatives. The State originally had a \$2.8 billion budget, but had spent nearly half of that on work to stabilize the existing viaduct. In January 2009, the Governor selected the underground tunnel alternative, expected to cost \$4.3 billion and take four years to construct, opening in 2015. The People’s Waterfront Coalition, an association of organizations and citizens continues to promote a “No-Highway” solution based on four strategies:

- Fix missing or broken links in the larger road system and spread Viaduct traffic out;
- Take advantage of excess capacity of the new transit systems coming online;
- Create truck-only lanes on important freight corridors to keep freight moving; and
- Reduce demand with dense, walkable neighborhoods and disincentives for excessive driving.

These improvement projects, they say, could create a more fluid transportation system that in the long-term is a better solution than a costly megaproject without the flexibility to adapt to changing travel needs.

average prices; afterwards, they rose to 91 percent of average prices, with the most dramatic increase in prices along the new boulevard, according to CNU. In instances where intense commercial development has occurred, such as the businesses that line the Embarcadero, (jobs in that area increased by 23 percent), nearby housing has also mushroomed (by 51 percent.)

We are not alone in considering alternative options.

As communities face the need for massive expenditures for reconstruction of aging highways, they are beginning to reconsider the sustainability of current transportation systems, and their impact on other aspects of the community. Though only a few urban areas have actually torn down elevated highways, many other cities are in the process of doing so, and many more are considering the option. In fact, it is now becoming the norm to consider a teardown option in most cases.

The Congress for New Urbanism has included Syracuse in a list of cities they deem the Top Ten “Freeways Without Futures.” Chosen from more than 40 “candidates,” these cities, CNU concludes, present the best opportunities for freeway removal based on factors including the age of the structure, redevelopment potential, potential cost savings, ability to improve both overall mobility and local access, existence of pending infrastructure decisions, and local support. According to CNU, “Cities around the world are replacing urban highways with surface streets, saving billions of dollars on transportation infrastructure and revitalizing adjacent land with walkable, compact development. Transportation models that support connected street grids, improved transit, and revitalized urbanism will make reducing gasoline dependency and greenhouse gas emissions that much more convenient. It pays to consider them as cities evaluate their renewal strategies – and as the U.S. evaluates its federal transportation and climate policy.”

Where highways are eliminated from the central city, city street grids create additional traffic routes, and head off anticipated gridlock.

In Milwaukee, traffic congestion was created by the limited access nature of the Park East Freeway. Just three exits served drivers to the area. When the freeway came down, boulevard access to a dozen streets allowed traffic to flow more logically. Drivers no longer had to use a specific exit and then backtrack to their destination, so underutilized streets absorbed some of the traffic. Bottlenecks that had existed at exit and entrance ramps were no longer an issue. In Seattle, planners are working on an Urban Mobility Plan – including street grid, transit, and parking and traffic management improvements – that can absorb traffic from the crumbling Alaskan Way Viaduct.

Freeway removal is more likely when the community considers values such as quality of life and economic development in transportation planning.

In the case studies, freeway removal became an option when the freeway became underutilized (as in Portland), or in need of major repair or rebuilding, as in San Francisco, Milwaukee and Seattle. There were also individuals, or groups with influence who believed in the freeway alternative. The authors of “Shifting Urban Priorities” concluded that another consideration of importance in those cities is that mobility of vehicles was a lower community priority than other goals such as quality of life or economic development. In Portland, city beautification was important; in San Francisco, the residents valued quality of life over high-speed access; in Milwaukee the economic development potential of the re-knit downtown and waterfront was the higher priority than vehicle mobility. The authors suggest a new framework for evaluating freeway projects that recognizes a paradigm shift away from engineering efficiency to include other community priorities.

Conclusion

Independent voices such as Common Councilor Van Robinson have long spoken out about the neighborhood devastation caused by the construction of I-81 through Syracuse's 15th Ward. Robinson was also an early voice in the call to bring down the elevated highway, a proposal that many dismissed as impossible. But in 2007, SMTC issued the University Hill Transportation Study, a blueprint for area growth in the coming decades. Among the recommendations was one relating directly to the I-81 corridor. The report suggested that with a relocation of through traffic to I-481, an "Almond Boulevard" could replace the existing elevated viaduct, which was already determined by the DOT to be deteriorating beyond simple repairs. The University Hill report suggested further study to confirm that the plan was technically feasible, and outlined several potential benefits.

That recommendation was the starting point for this study. Replacing a high speed elevated highway with a street level urban boulevard, the study committee hypothesized, would be part of an overall plan to regenerate the area and rejoin downtown Syracuse with University Hill. The study encouraged a new way of thinking: Take it down and they will come. With the obstructive, land-devaluing presence of highway I-81 gone, residential, institutional and business growth could happen around the highway corridor. This would create the potential for an attractive urban neighborhood that would provide space for the expansion of the growing hospitals and educational institutions and knit together the Hill and downtown areas.

The OCL study committee proceeded to research the merits of this recommendation. The conclusion: *Rerouting traffic around the city and replacing a section of I-81 with an at-grade urban boulevard is a desirable concept that would benefit the region. The study committee believes this option should be given the most serious consideration in the NYSDOT planning and study process currently underway.*

The committee cannot determine if the plan is technically feasible – that will be left to the NYSDOT engineering studies and the traffic demand modeling studies of consultants.

Initially, there were skeptics on the OCL committee – people who were concerned about emergency transportation routes and clogged city streets, people who raised issues such as "How will we get around the city without I-81?" and "Won't putting a highly trafficked

street-level road through the city actually create a less attractive environment for urban growth?"

We listened to transportation planning experts. We studied what other cities had done. We looked closely at the city and county "land-use plans," the documents most people consider the prescription for what sort of city we want to become in the 21st century. And point by point, we realized that the things that initially seemed like obstacles were not deal breakers. It became clear that the potential positive outcomes outweighed any drawbacks.

The fact that I-81 cannot remain as it is, that it must be rebuilt or torn down, has given the community a chance to explore its options and to realize some of its dreams. A land use plan is an expression of a community's dreams, and the vision expressed in both city and county comprehensive plans calls for a modern, economically viable city and suburban core. To attain this vision, the community must actively participate in the I-81 planning process. Ultimately, the reconfiguration of I-81 needs to be understood not as a transportation issue but as an attempt to achieve other long-held goals:

- **Neighborhood and Job Growth.** SUNY Upstate Medical University and Syracuse University are the area's two largest employers. Together with Crouse Hospital, the Veterans Administration Hospital, and SUNY Environmental Science & Forestry, these institutions need room to develop and expand, which will foster additional employment opportunities. A forward-looking land use plan incorporating an urban boulevard concept can relieve traffic congestion, create attractive development sites, and facilitate area development.
- **Economic Development.** Downtown represents the economic, cultural, and social hub of the Central New York region, the "calling card" of the region. An urban boulevard is the best option to encourage connection to University Hill. A better connection to the tens of thousands of students and visitors to the University Hill area will spell better business potential for restaurants, shops, hotels, museums and galleries, hotels and entertainment venues in the adjacent downtown area.
- **Environmental Improvements.** A coordinated transportation and land use plan, one that gives equitable consideration to transit, pedestrian and bicycle users as well as cars, and incorporates green spaces as well as asphalt, can lead to a

reduction in greenhouse gas emissions and a healthier environment.

Only by achieving these goals can the region aspire to compete in the global economy. Without a strong core, every part of the region suffers. Syracuse must be attractive to the region's young people as well as prospective employees and creative talent. Residents need to see that the region can offer not only a good range of job opportunities but also a well-crafted urban landscape that can rival aspects of today's most successful cities.

Our goal for the community is to see that we meet the I-81 challenge with a vision that is not mired in the past, but clearly anticipates the needs of tomorrow.

Resources

Books

- Vanderbilt, Tom. *Why We Drive the Way We Do (And What It Says About Us)*. New York: Alfred A. Knopf, 2008.
- Fogelson, Robert M. *Downtown: Its Rise and Fall 1880-1950*. New Haven, Conn: Yale University Press, 2001.

Websites Articles

- FHA Office of Legislation and Intergovernmental Affairs Program Analysis Team. 2005. **A Summary of Highway Provisions in SAFETEA-LU**. <http://www.fhwa.dot.gov/safetealu/summary>
- Hecox, Doug. 2008. **American Driving Reaches Eighth Month of Steady Decline**. Press Release U.S. Department of Transportation, Office of Public Affairs. <http://www.fhwa.dot.gov/pressroom>.
- Norquist, John. O. 2000. **Tear It Down**. Blueprint magazine. <http://www.dlc.org>.
- Pierce, Neil. 2008. **Transportation Disputes: 300+ Days and Holding**. Washington Post Writers Group. <http://www.postwritersgroup.com/archives>.
- Polikov, Scott. 2008. **Sustainability Matched: New Economics of Place**. <http://citiwire.net/post>.
- Schalch, Kathleen. 2009. **Americans Driving Less**. National Public Radio. <http://www.npr.org>

Studies and Reports

- CNU Report on Emergency Response & Street Design*, 2009
http://www.cnu.org/sites/www.cnu.org/files/CNUEmergency%20Response_FINAL.pdf
- Seattle Urban Mobility Plan, January 2008, Nelson/Nygaard
- Urban Renewal, the 15th Ward, the Empire Stateway and the City of Syracuse, New York*
Aaron C. Knight May 2007
- Shifting Urban Priorities?: Removal of Inner City Freeways in the United States*
by Francesca Napolitano and P. Christopher Zegras
http://web.edu/czegras/www/Napolitano_Zegras_FreewayRemoval_Final.pdf
- Stent (or Dagger?) in the Heart of Town: Urban Freeways in Syracuse, 1944–1967* Joseph F. C. DiMento University of California <http://jph.sagepub.com/cgi/reprint/8/2/133> -
SUNY ESF Design Studio Project

Websites

- Complete the Streets <http://completestreets.org/>
- Congress for the New Urbanism, Highways to Boulevard <http://universityhillstudy.com/>
- The Preservation Institute, Removing Highways, Restoring Cities
<http://www.preservenet.com/freeways/index.html>
- Streetfilms.org <http://www.streetfilms.org/archives/lessons-from-san-francisco/>
- University Hill Transportation Study, SMTC, <http://universityhillstudy.com/>

Previous OCL Studies

- 1979 *Equality and Fairness in Property Assessment* – Co-chairs: John Searles, Margaret Charters
- 1980 *Young People in Trouble: Can Our Services be Organized and Delivered More Effectively?* – Co-chairs: Jean Reeve, Roberta Schofield
- 1981 *The County Legislature: Its Function, Size and Structure* – Co-chairs: Helen Zych, Elma Boyko
- 1982 *Declining School Enrollments: Opportunities for Cooperative Adaptations* – Chair: Margaret Charters
- 1983 *Onondaga County Public Works Infrastructure: Status, Funding and Responsibilities* – Chair: Samuel P. Clemence
- 1984 *Police Services in Onondaga County: A Review and Recommendations* – Chair: John Kramer
- 1985 *The City and County Charters: Time for Revision?* – Chair: Thomas J. Maroney
- 1986-87 *Blueprints for the Future: Recommendations for the Year 2000* – Co-chair: Robert McAuliffe, Eleanor Shopiro, Helen Anderson
- 1988 *The Role of the Food Industry in the Economy of Onondaga County* – Chair: Kay Benedict
- 1989 *Poverty and its Social Costs: Are There Long-term Solutions?* – Co-chairs: Darlene D. Kerr, Marilyn Higgins
- 1990 *Syracuse Area Workforce of the Future: How Do We Prepare?* – Co-chairs: James J. Murphy, Anne L. Messenger, Patrick A. Mannion
- 1991 *Schools that Work: Models in Education that Can be Used in Onondaga County* – Co-chairs: Georgette Cowans, Gary Grossman, Gerald Grant
- 1992 *Town and Village Governments: Opportunities for Cost-effective Changes* – Co-chairs: Carol Dwyer, N. Thomas Letham, Helen Zych
- 1993 *The Criminal Justice System in Onondaga County: How Well is it Working?* – Co-chairs: M. Catherine Richardson, James E. Introne, N. Thomas Letham
- 1994 *The Delivery of Human Services: Opportunities for Improvement* – Co-chairs: Robert McAuliffe, Janet Starr, Phillip Trainor
- 1995 *Reinvesting in the Community: Opportunities for Economic Development* – Co-chairs: Marcene S. Sonneborn, Michael J. Atkins, Donald MacLaughlin
- 1996 *Building a Non-Violent Community: Successful Strategies for Youth* – Co-chairs: Paula Freedman, Carol Cowles, Jesse Dowdell
- 1997 *Security Check: Public Perceptions of Safety and Security* – Co-chairs: Michael Freedman, Corinthia Emanuel
- 1998 *Onondaga County School Systems: Challenges, Goals, and Visions for the Future* – Co-chairs: Patricia Schmidt, Bethaida Gonzalez
- 1999 *Economic Development: Models for Success* – Co-chairs: Shiu-Kai Chin, Susan Crossett, N. Thomas Letham
- 2000 *Housing and Neighborhoods: Tools for Change* – Co-chairs: John McCrea, Joanne Reddick, Russell Andrews
- 2001 *Civic Leadership for Community Transformation* – Co-chairs: Melissa Hall, Judith Mower
- 2002 *State of the Arts* – Chair: Fred Fiske
- 2003 *Mental Health Services: Access, Availability and Responsiveness* – Chair: Helen B. “Jinx” Crouch
- 2004 *Disappearing Democracy? A Report on Political Participation in Onondaga County* – Chair: Steven Kulick
- 2005 *Strategic Government Consolidation* – Chair: Laurence Bousquet
- 2006 *Fixing the Hub: Leveraging Better Outcomes for Downtown* – Co-chairs: Joseph Ash, Jr., Douglas Sutherland
- 2007 *How Inequality Makes Us Sick: The Growing Disparities in Health and Health Care* – Chair: Betty DeFazio
- 2008-
2009 *Rethinking I-81* – Chair: Rebecca Livengood

Our Mission

The Onondaga Citizens League fosters informed public discourse by identifying and studying critical community issues affecting Central New York, developing recommendations for action, and communicating study findings to interested and affected groups.

