The preparation of this report was funded by The CUNY Institute for Urban Systems (CIUS). This document is disseminated under the sponsorship of The City University of New York (CUNY) in the interest of information exchange. The City University of New York assumes no liability for its contents or use thereof.
# Fiscal Year
## 2002 - 2003

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message from the Chairman and the Director</td>
<td>4</td>
</tr>
<tr>
<td>Theme</td>
<td>6</td>
</tr>
<tr>
<td>Staff</td>
<td>7</td>
</tr>
<tr>
<td>Board Members</td>
<td>8</td>
</tr>
<tr>
<td>Financial Report</td>
<td>10</td>
</tr>
<tr>
<td>Sponsored Research</td>
<td>12</td>
</tr>
<tr>
<td>Cooperative Projects</td>
<td>14</td>
</tr>
<tr>
<td>Presentations/Papers/Chapters</td>
<td>16</td>
</tr>
<tr>
<td>Visiting Scholars &amp; Senior Fellows</td>
<td>18</td>
</tr>
<tr>
<td>Collaborative Efforts</td>
<td>20</td>
</tr>
<tr>
<td>New Initiatives</td>
<td>21</td>
</tr>
<tr>
<td>Education Programs</td>
<td>22</td>
</tr>
<tr>
<td>Tech Transfers &amp; Communications</td>
<td>23</td>
</tr>
</tbody>
</table>

...A catalyst for the next generation of urban infrastructure investment...
Although I have been a member of the CIUS board since its inception, my first year as its chair has allowed me to see close up the extraordinary work of the Institute’s director and assistant director. In a relatively short time, CIUS has assembled board members, fellows, students, friends, and supporters into a network that has produced significant accomplishments.

In following its charge to chart the City’s changing systems, the Institute has focused on transportation, the urban environment, building design, and smart growth. In each of these efforts, CIUS works from the understanding of the increasing complexity of urban systems as they continue to integrate advanced technologies into their design, construction, and operation.

In the next year, CIUS will finalize the creation of two new initiatives. The first, a Regional Economics Center, will offer to City decision makers an ongoing resource of economic assessment relating to the intersection of various technological developments and the City’s infrastructure. The other effort works on a different scale and accomplishes a different aspect of the Institute’s mission. Working with the CUNY Baccalaureate Program, CIUS has sponsored and will begin recruiting students into a CUNY baccalaureate program in Community Development and Technology. These two long-range efforts, as well as the earlier mentioned medium-range projects, promise to keep CIUS busy for the foreseeable future.

Richard Hanley, Ph.D.

English Professor
New York City College of Technology
While the Year 2000 was symbolic of change – one millennium to the next, it was truly a watershed year. The incredibly rapid introduction of Information Technology, modern communications and the ubiquitous utilization of computers of all scales have changed our culture, our approach to work and our concepts of quality of life. Learning to cope with everyday needs in the 21st Century becomes a driving force for academic and personal inquiry. CIUS was founded recognizing that this transformation was taking place. CIUS recognizes that during such a profound transformation Academic Institutions will be both leaders and followers. The true leaders of the wireless generation will be both teachers and practitioners. CIUS work addresses what is needed to respond to and be responsive to technological change of this magnitude; our work looks at Institutions and Institutional Change, paying for these changes, and what technology creates. We have concluded our first study of Smart Growth; this addresses quality of life and institutional change. We are completing a study of Bus Rapid Transit – not as a typical transportation study, but as a new urban mode requiring new institutional thinking. We are examining the New York Estuary with the same intent. We are planning a Green Building Conference; this is not another Conference on how to be responsive to environmental needs (although that is always one of our messages). This will be an innovative conference to test how academics who must teach practitioners and practitioners who must lead academics can mesh into the same persons. And, we are planning a Regional Economics Center to address the impacts of competing regional investments. Underlying integration of new technology and institutional responsiveness is our collective ability to pay for new infrastructure investments. Our newsletters will keep you up to date with our work, or, visit our website http://www.ccny.cuny.edu/cius/. It is a time of exciting change and CIUS is delighted to have a small role in helping to understand that change.

Robert E. Paaswell, PhD, PE
Director and Distinguished Professor of Civil Engineering
City College of New York
Providing guidance for the next generation of infrastructure investment

The CUNY Institute for Urban Systems (CIUS) was established to shape the next generation of infrastructure investment and its impacts, while simultaneously providing leadership through policy advisement and practice.

Transportation, water, energy, and communication – these infrastructure systems have supported New York City’s position as a world capital in business, media, and the arts. Now these systems are showing signs of strain, threatening our ability to meet the demands for further growth, change, and even maintenance of our present economy. The near future will not only require repair of existing urban systems but necessitate significant further infrastructure investment at a much higher technological level with strong implications for related institutions and financing.

Three major forces will shape the next generation of infrastructure investment:

TECHNOLOGY: The emerging wide scale applications of computers and communications technologies will create more centralized control and more real-time information to be used by infrastructure managers and users.

INSTITUTIONS: Institutions developed in the 20th century to build infrastructure now must transform to operate, control and finance the next generation of infrastructure.

FINANCE: Modernization and capital expansion demanded by new technologies and institutional change will call for new methods of financing, which itself will impact infrastructure institutions.

CUNY is a natural home for the Institute. The Institute’s Board of Directors is composed of distinguished faculty from a number of CUNY campuses. With strong schools of engineering and architecture, and noted programs in economics, urban planning, law and management. CIUS is linking academia and business to provide solutions to the problems of aging infrastructure.
Dr. Robert E. Paaswell
CIUS Director; Distinguished Professor of Civil Engineering, City College of New York

Laurence Frommer
CIUS Assistant Director; Urban Planner

Yaskira E. Paulino
CIUS Assistant/Intern Engineering/Business Administration

Soanya Ahmad
CIUS Assistant/Intern Architecture/Fine Arts
CIUS BOARD MEMBERS

Ethan Cohen
Director, City College Architectural Center (CCAC)

Dr. Cameron Gordon
Assistant Professor, Finance, College of Staten Island

Dr. Richard Hanley
English Professor, New York City College of Technology

Dr. Martin D. Hanlon
Director, Social Science Master's Degree Program, Queens College

Dr. Lily Hoffman
Director of the Rosenburg/Humphrey Program in Public Policy

Dr. Susan T. Meiklejohn
Associate Professor, Graduate Urban Affairs/Urban Planning Department, Hunter College

Dr. Stanley Moses
Chair, Graduate Urban Affairs/Urban Planning Department, Hunter College
CIUS BOARD MEMBERS

Dr. Neville Parker
Director of the CUNY Institute for Transportation Systems (ITS)

Dr. Jonathan Peters
Assistant Professor of Finance, College of Staten Island

Michael Sorkin
Director, Urban Design Program, School of Architecture, Urban Design and Landscape Architecture (SAUDLA)

Also on the Board:

Dr. James Cohen
Associate Professor, Economics and Public Management, John Jay College

Dr. John Seley
Professor, Environmental Psychology, The Graduate Center

Dr. Edward Weil
Provost and Vice-President for Academic Affairs

Dr. Ross Weiner
Associate Professor, Economics Department, City College

Henry Wollman
Director, Steven L. Newman Real Estate Institute, Baruch College
The Following charts summarize the CIUS revenues and allocations through fiscal year 2003.

The CUNY Institute for Urban Systems allocated 76 percent of its revenue to research projects. To carry out the administrative task, 11 percent of the funds were used. Eight percent were used to support student interns for temporary services. The Research Fellows programs and the development of an educational program were each allocated 2 percent of the total revenue.

Revenues from sponsors of the Center research projects totaled more than $300,000.
2020 Vision: Smart Growth For The New York Metropolitan Region At The Start Of The 21st Century

**Sponsor: Revson Foundation**

CIUS, the Citizens Union, and planning consultant Harry Schwartz completed a major study to publish a report in May 2003 on applying smart growth principles to Metro NY and urban areas. Added value – CIUS established a comprehensive database and library of related materials and organizations. These first steps will result in a planning handbook outlining smart growth applications for the region.

New York Harbor Estuary Watershed Study

**Sponsor: New York City Department of Environmental Protection**

CIUS is conducting a feasibility study of developing a watershed strategy for the Hudson Raritan estuary, and examining whether replacing the current categorical approaches to Clean Water investment with such a strategy could provide greater environmental improvement at less cost and with increased economic and social benefits.

Liberate the Streets

**Sponsor: Kaplan Fund**

With the support of the JM Kaplan Fund, CIUS has developed a comprehensive strategy for introducing Bus Rapid Transit into New York, including recommendations for immediately implementing two BRT corridors, along First and Second Avenue in Manhattan and along Northern Blvd. in Queens. As part of this grant, CIUS is also developing a blueprint of practical steps for the region’s transportation agencies to move the region to full scale value pricing of bridge and road facilities. In a second year of the project, CIUS will concentrate on working with the MTA and the New York City Department of Transportation to turn BRT into a functioning program in New York City as soon as possible.
CUNY Aviation Institute at York College
*Sponsor: Port Authority of New York and New Jersey*
CIUS provided technical support for the creation of the CUNY Aviation Institute at York College, and continues to lend expertise to this venture. The Aviation Institute will provide academic skills, specialized training, and work-study opportunities for students to enter into aviation industry careers, and it will offer advanced study coursework and continuing education to support career development in that workforce in south east Queens and throughout New York City.

Regional Transportation Capital Investments: A Study of Benefits, Cost and Project Priorities
*Sponsor: New York City Partnership*
CIUS, with CUNY’s University Transportation Research Center (UTRC), is creating a transparent methodology of comparing costs and benefits over the lifetimes of select high-capital transportation projects currently being considered. The methodology, using accepted methods of practice, will develop quantitative and qualitative approaches to prioritization of projects.
The Civic Alliance to Rebuild Downtown New York (CIUS is a founding member), a coalition of more than 75 business, community and environmental groups representing a cross-section of New York and the region providing a broad "umbrella" for civic planning and advocacy affords in support of the rebuilding of Downtown New York. CIUS was involved in the following:

- Gave input on rebuilding the infrastructure of Lower Manhattan and city wide.
- Participated in *Listening to the City, Listening to the City II*, and ongoing meetings and further alliance events.
- Co-hosted with the City College Architectural Center, an April 2002 Municipal Art Society's *Imagine New York* workshop for the Northern Manhattan community on the CCNY campus.
- Participated and attended events of Rebuild Downtown Our Town (RDOT).

Created Guidelines for Rebuilding Lower Manhattan, Post 9/11
Post-9/11 Newsletter for Planning Community and Greater Public
An edition of the CIUS newsletter, summarizing all public and private organizations responding to the 9/11 situation, was distributed to the planning community and public at large and remains on the CIUS website.

Course on Lower Manhattan Transit Hub
CIUS created a course, with the School of Architecture, Urban Design and Landscape Architecture (SAUDLA), at City College/CUNY about a proposed lower Manhattan transit hub. During the summer of 2002 CIUS conducted an internship program with CUNY Honors College students related to the proposed Hub. This served as preliminary research for a studio class offered in Fall, 2002, under the auspices of SAUDLA on the same subject. The course was taught jointly by Professors Carmi Bee, FAIA and Lance Brown FAIA, AIA/NY of the School of Architecture and Professor R. Paaswell of CIUS and Civil Engineering, at CCNY.
Richard Hanley, CIUS Board Chair, wrote “A Concept Paper Proposing a New CUNY Baccalaureate Degree in Community Development Technology,” and ultimately won approval for this proposal.

Joseph Berechman (CIUS and UTRC) presented a paper at the STELLA Conference in Santa Barbara, California On Methods to assess Transit Investments. May 2003

CIUS Director Robert E. Paaswell and Board members Michael Sorkin and Neville Parker presented papers at the National Science Foundation meeting on “Extreme Events” in November 2001.

CIUS Board Member James Cohen wrote, "The Political Economy of Credit and Its Effects on Funding & Implementation of Large-Scale Public Infrastructure Projects"


Former Board Chair Victor Goldsmith organized and chaired the 2002 & 2003 Mitigation Session of THE URBAN HAZARDS FORUM: Natural and Man-Made Disasters, sponsored by FEMA, at John Jay College, CUNY.
VISITING SCHOLARS

Anthony Perl, Ph. D, Associate Professor of Political Science at the University of Calgary, Visiting Scholar at CIUS FY 2001-2002, and former Director of the CUNY Aviation Institute. Completed important transportation related research particularly related to the condition of America’s national rail systems. Released the book *New Departures: Rethinking Rail Passenger Policy in the 21st Century* (University Press of Kentucky, 2002. On May 23, 2002 Dr. Perl was a featured speaker at a conference jointly sponsored by CIUS and the Stephen L. Newman institute entitled The New Penn Station and Amtrak: Their Economic Impacts on New York; followed by an invited presentation to the Commissioner of NYS Dept. of Transportation.

SENIOR FELLOWS

Al Appleton is working on several projects that address the challenge of restructuring regional policies and institutions in the areas of water, energy, transportation and environmental management to modernize the New York City region’s infrastructure systems to meet the challenges of sustainability and to fund and manage the infrastructure and environmental services New York City needs to remain competitive in the global economy and enhance its quality of life.
Hillary Brown, AIA, LEED A.P., Principal, New Civic Works is studying how municipalities might broaden the definition of sustainable design and construction – from buildings to other components of urban infrastructure.

Tony Hiss is currently conducting research on Transportation Quality Indicators (TQI). The TQI will be a certified, easy-to-understand metrics system that will provide quality-rating information and indicators that will both help travelers choose between trip options, and will point travel providers toward popular new services to develop and manage in the generation ahead.

Harry Schwartz, AICP, has played a central role in the development of 2020 Vision: Smart Growth For The New York Metropolitan Region At The Start Of The 21st Century. Mr. Schwartz brought to the project a wealth of knowledge regarding transportation, urban and community development, open space preservation, regional planning, as well as previous best practices and model legislation, incentives and budget-priority setting models.
The CUNY Urban Consortium

The Steven L. Newman Real Estate Institute of Baruch College has played a key role in the development of the CUNY Consortium. CIUS is one of the founding members and a contributor to the Consortium programs. Under the umbrella of the City University, the Consortium provides a focus for CUNY faculty research and planning addressing New York State and New York City issues. For example the Consortium, at a February 2002 regional conference, examined NYC post 9.11 and CIUS developed a Paper on Transportation needs for that conference. At a December 2003 conference on the Future of New York in the global economy, CIUS offered a presentation on infrastructure and investment for a competitive New York.

CIUS is providing technical support to the City College Architectural Center (CCAC)/School of Architectural, Urban Design, and Landscape Architectural (SAUDLA)

On the following projects:

Concept Design plan for East 138th Street in the South Bronx. Project conducted for the Bronx 138th Merchants Assoc. and the South Bronx Overall Development Organization (SOBRO) The project was supported by the New York City Department of Business Services and the New York Empowerment Zone.

New York State Quality Communities Initiative

CIUS is assisting the CCAC on the metropolitan New York portion of this endeavor: Focusing on the two New York “inner ring” suburbs of Mt. Vermont and Hempstead and the Inner city neighborhood of East New York, Brooklyn.
**Center for Regional Economic Analysis**
CIUS plans to initiate a Center for Regional Economic Analysis. The center will provide important economic insights to the regional economy, considering the impacts of economic stimuli (e.g., infrastructure investments). It will use well grounded models of economic accounts (I-O), and will provide analytic complement to the research themes of CIUS.

**Conference on The Future of a Sustainable Construction Industry in the NYC Region**
On May 14, 2004, the CUNY Institute for Urban Systems – in cooperation with Continuing Education & Public Programs, The Graduate Center, CUNY– will hold an all-day conference on sustainable construction in the New York Metropolitan Region. The conference is co-sponsored by the CUNY Urban Consortium, the Steven L. Newman Real Estate Institute of Baruch College, the New York Building Congress, and the NYC Department of Environmental Protection.

**Conference on Energy**
CIUS is planning to hold a conference on the future of energy-considering technical and institutional issues-in late 2004. A CUNY initiative, the conference will address emerging demand-supply patterns, energy institutions, and new technologies that can be applied to manage our electrical (and substitute) energy supply and demand.

**Conference on Information Technology**
CIUS is planning to hold a conference on the future of Information Technology as an integral arm of urban infrastructure in late 2004 or early 2005.
4 year Baccalaureate Degree program in “Community Development Technology”
A Concept Paper: Proposing a New Baccalaureate Degree in Community Development Technology By:
Richard Hanley, New York City Technical College of the City University of New York.

School of Architecture Urban Design and Landscape Architecture (SAUDLA)
For the past two years CIUS has been sponsoring The Green City Lecture Series organized by CIUS Board Member Michael Sorkin. The Green City Lectures bring a range voices to City College to address questions of the nature, design, and implementation of sustainable practices in city making. The series is informed be the notion of the urban “ecological footprint”, the idea that a city must be measured not simply in terms of conventional political or density boundaries but by its impact on the larger global environment that it requires for its impact on the larger global environment that it requires for its food, oxygen, and water supplies and for the take-up of its carbon dioxide and wastes.

Steven L. Newman Real Estate Institute of Baruch College
In conjunction with The Baruch College’s Steven L. Newman Real Estate Institute, CIUS is conducting a series of public events and applied planning and research on the relationships between real estate industry concerns, government land use policy and planning, and a broad array of infrastructure issues. The events are normally held at the William & Anita Newman Conference Center, 151 East 25th Street, 7th floor. For all details please call The Steven L. Newman Real Estate Institute at 212.802.5940.
The CIUS Newsletter

Edition 1: General Introduction to CIUS

Edition 2: Review of activities and projects of CIUS Board members.


Edition 4: Comprehensive summary of post-9/11 efforts in NYC.

Edition 5: Updates on post-9/11 efforts in NYC.


Edition 8: Comprehensive review of new CIUS Senior Fellows program and projects of CIUS Board members.

Edition 9: Smart growth—Education and research

Edition 10: Smart growth—Adaptive reuse


Tech Transfer and Communications

Greetings CIUS Board Members and friends! This is our 8th edition of the CIUS E-newsletter. CIUS recently held a board meeting which characterized the complex disciplinary mix that must be in place as we implement infrastructure investments in the coming decades.

Our Kaplan Grant will address institutional change and finance, made possible by new information-rich technologies. While that grant focuses on new modes of transportation, and new ways to finance transportation, lessons on how institutions cope and change will result. Focusing the issue in 2002 are the national, state and local budget cuts. Can public institutions designed to build infrastructure capacity change how they infrastructure operates? Can public institutions that are organized to issue debt also recognize to raise capital through TIFs, real estate arbitrage or true private investments?

The technology that makes electronic toll collection possible, and posts that money to specific accounts, by its nature makes it attractive to a number of cash-strapped agencies. Institutions must begin this modernization exercise by crafting well thought-out objectives for their investments: public business plans of a type, and win the “shareholders” of this business, i.e. the public, to support these initiatives. Intricately, the people are modern technology in all aspects of its private life. In fact, their quality of life now depends upon these technologies. Will they push public institutions to modernize in a similar fashion? CIUS will continue to work on projects to help answer these complex problems.

We wish you all the best for the holiday season!!

Robert E. Pasniewski, Director, CUNY Institute for Urban Systems

They Key: 4

1. Arjun Appadurai, currently a Senior Fellow at the Regional Plan Association (RPA) in New York City. His work concentrates on the development of more effective public policies that integrate infrastructure and environmental investment, and regional needs with local concerns. Mr. Appadurai also serves as RPA’s expert on public finance and is currently directing its project on allocating funding for the multi-billion (investment) in New Jersey’s Trans-Hudson Region.

2. Tony Puglia is an independent author, lecturer, and consultant on recycling New York’s cities, communities and landscapes. Mr. Puglia became a staff writer at The New Yorker Magazine in 1964, and since 1964 has been a Visiting Scholar at New York University, first at the Taub Urban Research Center, and now at the Robert F. Wagner Graduate School of Public Service. He is the author of twelve books, most recently "The Tsi Russian Region 2002" (with Christopher Hedges) and "The Iran Iran Ali-amer's Memoir" (The New York Times Notable Book).

3. Harri Schwartz is an independent urban planning consultant on economic development, housing, social and health services, and neighborhood planning.

4. In addition to his current work with CIUS, new sources funding his current and recent projects are a study of social and health services that enable people to remain in their homes and communities as they age (organizing a planning and development coalition in the Northeast neighborhood of Kansas City, MO) and preparing a housing strategy for the Bethel Town neighborhood of St. Louis.

Prior to his present practice, Mr. Schwartz founded and is Managing Director of Urban Development Strategies, LLC, a planning and economic development consulting firm involved in a broad range of projects and studies on affordable housing, land use regulations, community planning, and economic development.