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DEVELOPMENT OF A COMMUNITY SERVICE MISSION AT NJIT

## INTRODUCTION

Among the factors favoring a community service component within the NJIT mission are the following:

1. A moral commitment appropriate to an urban technological university.
2. The research and problem solving opportunities in the urban environment which are complementary to many of the academic programs offered by the Institute.
3. Stabilization and improvement of the areas surrounding the Institute are in its best interests in terms of recruiting students, faculty and staff, and serve as a stimulus to further area revitalization.
4. A community service mission component can have the effect of attracting inner city youngsters to the technological professions.

NJIT has a long and still evolving history of community involvement. Individual and organizational projects will be outlined in this report as will a recommended program of action.

## HISTORY

The Community service Mission may be traced to the Institute's very first charge, "opening its doors to students on February 9, 1885, --- to provide what was then advanced technical training through evening courses for the artisans and mechanics of Newark's industrial employers."<sup>1</sup> Although the Institute began to offer traditional baccalaureate degrees in three engineering disciplines in 1918, the original community service mission of the Institute has been continued to this day. Through the Division of Technology, NJIT continues to provide "advanced technical training....for artisans and mechanics" of the region.

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<sup>1</sup>Phase I, Master Plan, Chapter II, page 2-1, Section 1. Curricular and Research Programs - The Early Years (1885-1940).

Until the decade of the '60's, the Institute concentrated on its original service mission through education and career preparation and on serving, through its faculty members, the various engineering and educational professional societies. In the sixties, the deterioration of urban centers in the Northeast emerged as a major social problem. Faced with increasing unemployment, deteriorating capital stock and a diminishing tax base, many cities and states found themselves in a situation containing little hope for meeting the present and future needs of their citizens with available resources.

In a national environment in which life had become increasingly complex, urban centers found themselves less able to provide the services for which they had assumed responsibility. Transportation systems, refuse collection and disposal, crime control, education, water supply, maintenance of the city and state facilities became more unreliable, manifesting the effects of neglect. These problems were certainly not all related to technology, but each had an important technological component.

It was during the decade of the 1960's that NJIT's contemporary community commitment began to emerge. The civil disorders in Newark created a need for this institution to re-examine its community role. One group of concerned faculty and administrators worked to create NJIT's Engineering Opportunity Program (EOP), a program dedicated to attracting and responding to the special needs of New Jersey's educationally and economically disadvantaged citizens. Although the EOP program was the first NJIT program to so respond, state and urban problems stimulated increasing numbers of faculty to offer their professional services in the name of the Institute.

In the 1970's, however, both the Institute and its community underwent profound changes. It became necessary to articulate a more extended and deliberate contemporary rationale for its community service mission. In the '70's, NJIT emerged as the State's technological university located in the State's most populated and industrialized urban center. As an urban university it eagerly accepted the strong moral obligation to serve its community consistent with its human and financial resources. It developed new programs of instruction and research, many of which complement a redefined community service mission. It is in the Institute's own best interest to be perceived as part of a community which is improving itself, to act as a stabilizing force in that community, and to be a catalyst for redevelopment of its area. Finally, fundamental to the Institute's educational mission is the responsibility for educating adequate numbers of technological professionals. With the well-known demographic trends of the 1980's, one of the most effective ways for an urban university to assist in dealing with potential shortages of technical professionals is to reach more aggressively into the urban population for those capable students who have been educationally and economically disadvantaged and to provide opportunities for them to overcome their deficiencies. In actively seeking such students for NJIT, the Institute is satisfying a moral obligation to which it has long been committed. At the same time, it is serving the greater community by continuing to educate acceptable numbers of technological professionals.

#### INSTITUTE MISSION

The Institute's Phase II Master Plan includes a firm commitment to a public service mission with community service a principal component: "As a technological university the overall mission of NJIT includes

public service as a major goal. For years the Institute has carried on an extensive and varied program of public service activities as outlined in the Institute's Master Plan Phase I. With increasing pressures on society generally and government in particular, and with a pronounced technical orientation of these pressures in the 1980's, there is a need to place even more emphasis on these efforts and assign them a higher priority....There is an urgent need to establish greater recognition of these activities and the importance of their benefits to the public, and to obtain financial support from the State for their continuance and expansion..."

Summaries of community oriented activities appear in the following policy documents of the Institute:

1. Institutional Programmatic Overview, May 1979, Section V, Public Service. This document was developed to demonstrate the need for basic reconsideration of the budgetary formulas used by the State in funding NJIT.
2. Center for Pre-College Programs, 1979-1980 Annual Report  
While some of the Institute's pre-college activities are described in other reference documents, this annual report provides a comprehensive listing of this important area of institutional outreach. (The Annual Report for 1980-81 updates much of this information.)
3. Phase II Master Plan, March 1981, Chapter VII, Public Service.  
Heightened public expectations of institutional involvement, as well as the NJIT response to that expectation, make this an appropriate time to undertake a current review and to reassess both opportunities and problems.

The aforementioned documents present a compendium of activities and programs which may be further summarized in major categories as follows:

## INSTRUCTIONAL PROGRAMS

Continuing Professional Education

Pre-College Programs

## SERVICE TO COMMUNITY GROUPS

Architectural and Planning Studies

Technical Assistance

## SERVICE TO LOCAL, STATE, AND NATIONAL GOVERNMENTS

Energy Conservation Audits

Air Monitoring

Hazardous Waste Disposal Studies

Water Resource and Distribution Studies

Environmental Impact Studies

Newark Board of Education Building Maintenance Program and Other Technical and Management Assistance

Law and Technology Center

Appendix E contains a compendium of community service activities in which members of the faculty and staff are engaged.

## COMMUNITY SERVICE DEFINED

The primary mission of the Institute is to provide high quality technologically oriented postsecondary education to the citizens of New Jersey. While this is a service function to the community, it is not the focus of this report which concerns itself with more direct interactions between various communities and the Institute's faculty and staff. For example, Newark's Board of Education recently encountered problems with its management system for maintaining the over one hundred buildings under its supervision. NJIT's faculty includes experts in the

design and operation of such management systems. The Board of Education was offered assistance in designing, organizing, and operating a new maintenance management system for its buildings and has been provided such direct assistance for some time.

A more specific definition of Community Service includes the following objectives:

1. To be an involved participant in the life of Newark and other nearby urban areas.
2. To create and provide pre-college programs with a particular emphasis upon preparation for the technological professions targeted at the young people of this community.
3. To serve as a technical resource for local and state governments and for community groups.
4. To develop research and educational programs related to urban and regional needs.
5. To cooperate actively with other institutions of higher education in Newark in implementing the community service mission.
6. To encourage faculty members to undertake leadership roles in professional organizations which address urban needs.
7. To work with industry to establish an attractive climate for economic development of the area.
8. To work with national service organizations created to help local communities in dealing with their specific technical and social problems.

#### ORGANIZATION OF THE COMMUNITY SERVICE EFFORT

Most community service activities are carried out as part of the mission of various organized centers and committees. In addition, of

course, many individual faculty members, feeling a strong sense of responsibility to the community, pursue their own service activities. In this section the centers are described, the extent to which they conduct a community service function, and how they are coordinated so as to avoid conflicting activities.

#### Office of Urban Affairs

The Institute established an Office of Urban Affairs in 1980 with a Director assigned to the staff of the President. The Director also served as Chairman of the Institute Committee on Urban Affairs. The Director's responsibility with the involvement of the Committee has been to coordinate all community service activities, to engage in a critical review of all related activity of any interest to the Institute, to act as the person to whom all questions both from within and without the Institute are directed, and to stimulate discussion and ideas concerning new community activities consistent with the expressed mission of the Institute and to advise the President on matters concerning the Community. All centers, and all individual faculty and staff members, engaged in activity within the community have a responsibility to keep the Director of Urban Affairs fully informed as to their activities in the Community.

#### The Center for Pre-College Programs

Pre-College Programs are housed in the Center for Pre-College Programs within the Office of Academic Affairs. The Center operates with an Advisory Committee which includes substantial representation from the corporate sector. The Director of Pre-College Programs is a faculty member who, in his role as Director, is responsible to the Associate Vice President for Research and Graduate Studies. Coordination between community functions has been maintained on both informal and formal levels (e.g., the Director of Urban Affairs serves

on the Advisory Committee of The Center for Pre-College Programs and several members of the Advisory Committee serve on the Urban Affairs Committee with the Associate Vice President serving on both groups.)

#### Community Advisory Council

In a university in which students, faculty and staff are largely commuters, natural linkages with neighborhood groups have not prospered, a situation which warrants serious attention. The NJIT Board of Trustees, within the past year, approved the creation of a Community Advisory Council (see Appendix F). The Director of Urban Affairs and the President, in consultation with the Mayor, sketched out the constituencies from which representation would be sought. To date, candidates from roughly half the constituencies have indicated willingness to serve, and an organizing meeting should have taken place by the time of submission of this report. A draft set of by-laws has been developed for submission to the Council and the President.

#### Urban Technical Resources Center

In order to coordinate existing activities and to encourage new ones, a draft proposal for an Urban Technical Resources Center has been written. It has been recommended by a standing committee of the Institute to the administration. Because of the increasing number of faculty activities involving community service, it has become necessary to coordinate these activities to provide a single forum from which information flows on faculty service and to avoid an inadvertent commitment to programs and projects which the Institute cannot or should not support.

The Resource Center is also intended to serve as a focal point for financial support to the various urban activities of the faculty. It

would represent the collective resources of the Institute in fulfilling its community service mission. Finally, the Resource Center would function as a referral center in which those external to NJIT in need of expertise to deal with problems would be put in contact with appropriate NJIT faculty members.

#### The Institute for Hazardous and Toxic Waste Management (IHTWM)

The Institute has recently created an Institute for Hazardous and Toxic Waste Management (IHTWM) which will be responsible for programs of instruction, research and public service in the area of Waste Management. To date, \$700,000 in external funding has been secured in support of the IHTWM. It will play a major role in developing short courses for the generators and regulators of toxic waste, in running conferences concerned with presenting state-of-the-art treatment and analysis procedures. It is expected to be a major resource to the corporate sector and government.

In addition, the staff of the IHTWM has already carried out a number of studies which can be characterized as community service. For example, they have worked with the City of Newark to establish safe routing for hazardous materials transported through the city; they have studied the feasibility of creating a hazardous waste port in Newark for waste incineration at sea; they have worked with the Newark Fire Department to identify equipment to be placed on fire trucks that would provide guidance to fire fighters concerning when it is safe to enter chemical fire zones.

## The Center for Technology Assessment

A Center for Technology Assessment was created in 1973. It has been involved in a number of activities which could be characterized as community service. For example, as a service to the State, staff have performed a number of studies concerned with water resources and distribution; staff members have designed, organized, and managed the State's energy audit program and they have performed training as energy auditors for retired citizens to enable them to supplement their retirement income while performing useful and significant work. Finally, they have created an energy extension service to provide information to the community concerning energy conservation.

### RESOURCES

Not all of the problems of implementing a community service mission are related to fiscal and personnel resources, but the adequacy of such resources remains a central issue. The current involvement of Institute personnel in activities representing institutional community service is on the order of several hundreds of thousands of dollars. Involvement has bred success and recognition. The result is that these services are sought at an accelerating rate and resources, therefore, have become strained.

The Institute, in order to secure additional external support of community service activities, has for some time actively sought major federal involvement in support of university-centered urban programs. It played a leadership role in the legislative effort which resulted in the inclusion of Title XI (Urban Grant Universities) in the Higher Education Amendments of 1980. It has worked closely with Rutgers-Newark in supporting this legislation and in developing preliminary proposals

for joint designation as an Urban Grant University. Unfortunately, Title XI has not been funded nor is it likely to be funded in the foreseeable future.

The New Jersey Board of Higher Education has proposed specific budgetary recommendations to the State administration for partial funding of NJIT public service efforts. To date, these recommendations have not been supported.

The problem of funding is one that must be addressed in new ways. The Urban Technical Resources Center, in addition to playing an appropriate coordination and referral role, would serve as a vehicle for fund-raising from private foundation and industrial sources as well as from governmental agencies.

The availability of resources will impact significantly the scope of future community service involvement of the Institute. The pre-college programs have had a support structure in place for some years. The federal government's portion of that support will not be available in the near future. Private sector funding will have to be increased substantially if these very successful programs are to continue at even their current level.

#### CONCERNS TO BE ADDRESSED

The Director of Urban Affairs left the Institute recently and has not yet been replaced. The Administration is in the process of reviewing the appropriate organization of community affairs activities at the Institute. A strong coordinating activity will likely be established which may include the following elements to the extent that they have a community affairs focus: The Center for Pre-College Programs, the Urban Resource Center being considered, the Center for Technology Assessment,

the Institute for Hazardous and Toxic Waste Management, the Community Advisory Council, and the Urban Affairs Committee.

#### TASK FORCE RECOMMENDATIONS

1. The creation of the Community Advisory Council has been approved by the President and the Board of Trustees. It should be implemented so that it can provide community input into the wide variety of service activities in which the Institute is engaged and so that community needs and interests can be assessed as new and continuing activities are considered.
2. The Urban Affairs Committee should be replaced by a Public Service Council including: the Director of the Center for Technology Assessment, the Director of the Public Affairs Division of the Institute for Hazardous and Toxic Waste Management, the Director of the Center for Pre-College Programs, the Director of the Urban Resource Center, the Chairperson of the Community Advisory Council, the Director of Continuing Education, the Associate Vice President for Research and Graduate Studies, and other faculty members with a demonstrated interest in community affairs. The Public Service Council should: (1) Advise the President concerning the organization of the community affairs mission at the Institute, (2) Recommend appropriate funding for a planned program of community service activities, (3) Consider new involvements, (4) Draft a community service guide to assist faculty and others in understanding the NJIT community service role, opportunities and limitations.
3. All of the academic institutions in Newark represent a unique resource for the community and all are serving that community

to some extent. However, the service role needs to be less passive and more highly coordinated. The task force recommends that the creation of an academic council of representatives involving NJIT, The University of Medicine and Dentistry of New Jersey, Rutgers - The State University in Newark, Seton Hall University School of Law, and Essex County College. The Council would work with community groups, city government, industry and business groups to improve the quality of life in the City.

4. A Liaison Committee between NJIT and the Newark Board of Education has functioned effectively for the past several years. This Committee has served as the vehicle for identifying areas in which NJIT might serve Newark's pre-college public education system. With the appointment of a new Executive Superintendent of Schools this past summer this Liaison Committee needs to be re-established. The task force recommends that the new Executive Superintendent and the President formally re-establish the Liaison Committee. (A preliminary meeting between the two has already taken place.)
5. NJIT should continue to serve the community within the limits of its resources; financial, human, and physical.

## TASK FORCE MEMBERSHIPS

### I. Institute Accountability

Gary Thomas, Vice President for Academic Affairs - Chairman  
John O'Connor, Associate Professor of History  
John Droughton, Associate Professor of Mechanical Engineering  
Edward Miller, Associate Dean of Engineering; Professor of  
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Franklin Salek, Associate Professor of Civil and Environmental  
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Arnold Allentuch, Associate Vice President for Research and Graduate  
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### II. The Role of Extension Programs at NJIT

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Harold Deutschman, Assistant Vice President for Extension Programs  
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Anita LaSalle, Associate Professor Computer and Information Science

### III. Human Resources: Faculty Recruiting, Retention and Development

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Aaron Pulhamus, Executive Director of Employee Relations  
Vernon Nelson, Director, Educational Opportunity Program  
Roy Helfgott, Chairman, Department of Organizational and Social  
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Constance Murray, Dean of Student Services  
Lawrence Schmerzler, Associate Professor of Mechanical Engineering  
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Peter Sklannik, President, Student Senate

### IV. Development of the Community Service Mission at NJIT

Arnold Allentuch, Associate Vice President for Research and Graduate  
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Eugene Golub, Chairman, Department of Civil and Environmental Engineering,  
Professor of Civil and Environmental Engineering  
Barry Jackson, Associate Professor New Jersey School of Architecture  
Howard Kimmel, Professor of Chemistry and Co-Director of the Center  
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Manuel Perez, Associate Professor of Mathematics  
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