

GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION
SPONSORED PROJECT INITIATION

Date: October 4, 1977

no action
adg
OHL

Project Title: Continuation of Management and Technical Assistance by Georgia
Institute of Technology, Industrial Extension Expansion Service Program

Project No: A-2018

12/31/83

5/31/83
3/31/83

Project Director: Hardy Taylor

1/31/82

12/31/81

12/31/82
4/31/82

Sponsor: U.S. Dept. of Commerce/EDA

July 31, 1981

PERMAN

Agreement Period: From 7/1/77

Until 9/30/78*

2/28/82

*12 mo. work period -
3 mos. for reporting, etc.

3/31/81
reports

Type Agreement: Grant No. 04-06-01567

Amount: \$75,000 EDA
25,000 GIT Cost-Sharing
\$100,000

4/28/82 - performance
3/31/84

Reports Required: Work Schedule Plan; Progress & Financial Reports; Final Technical
and Financial Reports

Sponsor Contact Person (s):

Technical Matters

Contractual Matters

Director
S. E. Regional Office
U. S. Dept. of Commerce/EDA
1365 Peachtree St., N.E., Suite 700
Atlanta, Georgia 30309

(thru OCA)

Defense Priority Rating:

Assigned to: Technology & Development Laboratory

(School/Laboratory)

COPIES TO:

Project Director
Division Chief (EES)
School/Laboratory Director
Dean/Director-EES
Accounting Office
Procurement Office
Security Coordinator (OCA) ✓
Reports Coordinator (OCA)

Library, Technical Reports Section
Office of Computing Services
Director, Physical Plant
EES Information Office
Project File (OCA)
Project Code (GTRI)
Other EES RFP

SPONSORED PROJECT TERMINATION/CLOSEOUT SHEETDate 11/6/84Project No. A-2018~~Library~~ School/Lab EDL

Includes Subproject No.(s) _____

Project Director(s) Hardy TaylorGTRI / ~~EDL~~Sponsor U. S. Department of Commerce (EDA)Title A Program of Management and Technical Assistance in Designated EDA Counties in Ga.Effective Completion Date: 3/31/84 (Performance) 6/30/84 (Reports)

Grant/Contract Closeout Actions Remaining:

☐ None☒ Final Invoice or Final Fiscal Report☐ Closing Documents☐ Final Report of Inventions☐ ~~Govt. Property Inventory & Related Certificate~~☐ Classified Material Certificate☐ Other _____

Continues Project No. _____ Continued by Project No. _____

COPIES TO:

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Research Administrative Network
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Research Security Services
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Legal Services

Library
GTRI
Research Communications (2)
Project File
Other A. Jones; M. Heyser

Project No. A-2018
Grant No. 04-06-01567-4

A PROGRAM
OF MANAGEMENT AND TECHNICAL ASSISTANCE
IN DESIGNATED EDA COUNTIES IN GEORGIA

Quarterly Report

November, December, January 1980-81

by

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Senior Research Scientist

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This technical assistance program was accomplished by professional consultants under a grant from the Economic Development Administration. The statements, findings, conclusions, recommendations, and other data in this report are solely those of the grantee and do not necessarily reflect the views of the Economic Development Administration.

Economic Development Laboratory
Engineering Experiment Station
GEORGIA INSTITUTE OF TECHNOLOGY
February 1981

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I. Background Information

A. Economic Characteristics of Service Area

To be reported only in the first quarterly progress report and the final report.

B. Organization and Establishment of Center

To be reported only in the first quarterly progress report and the final report.

II. Program Administration

A. Program Objectives

To be reported only in the first quarterly progress report and the final report.

B. Technical Assistance Services

To be reported only in the first quarterly progress report and the final report.

C. Project Personnel

To be reported only in the first quarterly progress report and the final report.

D. Phasing of Work Program

This work program, which encompasses Chart 2, has been waived by paragraph five of the grant amendment offer dated the 27th day of June 1972.

E. Relationship to Other Development Efforts

In furthering the EDA objective in Georgia, the Economic Development Laboratory works closely with representatives of the following organizations:

- Georgia State Office of Planning and Budget
- Georgia Department of Industry and Trade
- Economic Development Districts
- Area Planning and Development Commissions
- Chambers of Commerce
- Local Industrial Development Groups
- Coastal Plains Regional Commission
- Appalachian Regional Commission
- Small Business Administration
- EDA Economic Development Representatives

Particular attention is directed to working with the EDD's and APDC's on individual projects. When an assistance project is opened, these organizations are notified that EDL will be working in their areas, and monthly progress reports of activity on projects within their areas

are furnished. Cooperation with the above-mentioned organizations is enhanced by the fact that EDL personnel are in almost constant contact with these groups in connection with other activities outside the EDA program.

III. Strategy for Subregions

To be reported only in the first quarterly progress report and the final report. Maps 1 and 2 show locations of organizations involved in the program.

IV. Technical Assistance Projects

A. Location

Map 3 identifies the counties in which work was performed under the program and indicates the number of projects conducted in each county.

B. Highlights of Project Activity

Chart 3 summarizes the highlights of project activity by major program categories. Chart 4 summarizes the project activity by type and subregion to indicate the distribution of effort throughout the state. Chart 5 summarizes the project activity by type and subregion to indicate job impact.

The following project was selected for special mention.

Project 934: A manufacturing firm in Schley County experienced problems in its material flow and equipment layout needed to improve the efficiency of the present system. Assistance was requested in the redesign of its production line layout. EES personnel met with company principals and discussed production problems. A flow process chart on each of the components and subcomponents has been completed and the layout presented to plant personnel. Layout revisions have been completed and furnished the company. Management reports an estimated 50% increase in productivity as a result of project work. The project is closed.

C. Nondiscrimination Policy and Related Project Activity

To assure nondiscrimination in the provision of services of the program under Title VI of the Civil Rights Act of 1964 and Title 15 CRF, Part 8.4, a substantial effort was made to identify needs of the minority and female community for technical assistance to small businesses. Of the projects conducted during the grant period, three were in support of minority interest and one was in support of female interest. The following projects describe the action undertaken to assist the minority and female community.

1. Minority Interest

Project 929: Assistance to a local government in DeKalb County shopping district revitalization

An area within the City of Decatur, Georgia, which has a relatively large minority population has suffered from blight and outmigration of businesses. The city and residents want to reverse this trend. The vehicle which is to be used to reverse the trend is the Community Development Center (CDC), which has selected a shopping center as its catalytic project. Assistance has been requested to study the problem and to outline approaches that can be taken to improve the business climate in and about the central area. EES personnel met with the principal, who is Director of Economic Development for the CDC, examined approaches that can be undertaken to solve the problem, and have identified several that will be initiated. Further assistance was not required. The project is closed.

Project 940: Assistance to a paper products company in Fulton County for diversification of its operations

A minority-owned paper products company has been selling paper products on a limited basis. This company has requested assistance in conducting a feasibility study and development of a business plan to go into institutionalized distribution of paper and related products. EES personnel have been in communication with the president of the firm, and plans have been furnished in developing capital requirements and in locating warehouse space. The company planned to be in operation in January 1980; however, the plant opening has been delayed. Further assistance is not required at this time. The project is closed.

Project 875: Assistance to an executive search firm in Fulton County (Atlanta)

A minority-owned executive search firm in Atlanta is applying for an SBA working loan and requires assistance in completing the application. This firm specializes in executive searches for the banking industry. An EES staff assistant met with the principal of the firm and is providing assistance in completing the SBA application. The project is continuing.

2. Female Interest

Project 930: Assistance to an individual in Dougherty County for toothpaste market information

An individual in Dougherty County who is interested in developing a new product line of toothpaste has requested information concerning the marketability of such a product line. EES staff personnel met with the individual to discuss the possibility of conducting marketing in connection with the product line. Further assistance is not required. The project is closed.

D. Project Summaries

The 24 individual projects which were active during the quarter under the program of management and technical assistance to businesses, industrial firms, and communities in designated Georgia counties are listed by Economic Development Districts. Descriptions include identification of each project by number, type, and location; a brief description of the work performed; and a statement of the results achieved. The 13 projects which were still active as of January 31, 1981, are listed under "Ongoing Projects" in each EDD.

ALTAMAHA GEORGIA SOUTHERN ECONOMIC DEVELOPMENT DISTRICT

General

The Altamaha Georgia Southern Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Appling, Bulloch, Candler, Evans, Jeff Davis, Tattnall, Toombs, and Wayne. The Economic Development Centers are Hazlehurst (Jeff Davis County), Statesboro (Bulloch County), and Vidalia (Toombs County).

Discontinued Projects

During the period, one project was discontinued in the area.

Project 949: Assistance to a dairy concern in Bulloch County which is experiencing transient electric voltage problems

Nature of Problem: The electrical shocking of dairy cows by transient voltages has resulted in severe losses in milk production for a dairy farm in Bulloch County. The problem has existed since about 1973, but has become critical during the last two years. Steps recommended by other organizations have not produced satisfactory results.

Work Performed: A staff member visited the dairy and obtained background information on the problem. Further information was obtained to determine the reason for the transient voltages and to seek alternative solutions to the problem. Data on area and state milk production were furnished the dairy together with production data from the shock areas. Electrical protection devices were discussed with the manager. The dairy's production rates were compared with data from two dairy associations. Some changes were made to protect the system against electrical transformers by the electric company. Although milk production levels have improved, some shocks are still being noted. The small voltages being experienced cannot be adequately measured by available equipment. No further assistance can be furnished at this time.

Results: The project is closed.

Ongoing Projects

One project is currently under way in this area.

Project 958: Assistance to a group in Evans County that is interested in establishing an aluminum foundry

Nature of Problem: A group in Evans County is interested in establishing an aluminum foundry in the Claxton-Statesboro area. Much of the production equipment is owned by the group. Market survey work is needed to determine the demand for products. Site location assistance also is required.

Work Performed: EES staff personnel met with company representatives and developed a work plan for the project. A market survey process was developed and survey forms were mailed to selected addresses. Responses were received, tabulated, analyzed, and furnished the company. A presentation was made to the company concerning the aluminum casting survey. It was determined that the project should be expanded to include a study of production capacity and cost of equipment available to the company. In addition, it was determined that financing alternatives should be investigated. The investigation is under way.

Results: The project is continuing.

CENTRAL SAVANNAH RIVER ECONOMIC DEVELOPMENT DISTRICT

General

The Central Savannah River Economic Development District consists of 13 counties, all of which are eligible Redevelopment Area counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Lincoln, McDuffie, Richmond, Screven, Taliaferro, Warren, and Wilkes. The Economic Development Centers are Augusta (Richmond County) and Swainsboro (Emanuel County).

Discontinued Projects

None

Ongoing Projects

One project is now under way in this area.

Project 954: Assistance to a metal manufacturing company in Jefferson County

Nature of Problem: A tool and die shop is seeking to broaden its manufacturing base as well as its marketing area. The company produces several metal products, including gas fish cookers, pickup truck tool boxes, and wire cricket cages. The company has general machining, welding, and fabrication capabilities. It is interested in using these capabilities to produce metal fabrications and components for other companies. The firm has requested help with its marketing effort.

Work Performed: Initial contacts have been made with company personnel and a work program has been developed.

Results: The project is continuing.

CHATTAHOOCHEE-FLINT ECONOMIC DEVELOPMENT DISTRICT

General

The Chattahoochee-Flint Economic Development District consists of five counties, all of which are eligible Redevelopment Area counties: Carroll, Coweta, Heard, Meriwether, and Troup. The Economic Development Centers are Carrollton (Carroll County) and LaGrange (Troup County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

COASTAL AREA ECONOMIC DEVELOPMENT DISTRICT

General

The Coastal Area Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long, and McIntosh. The Economic Development Centers are Brunswick (Glynn County) and Hinesville (Liberty County).

Discontinued Projects

None.

Ongoing Projects

One project is currently under way in this area.

Project 979: Management assistance to an engineering company in Chatham County

Nature of Problem: An existing engineering firm is planning to expand its operation into the manufacturing field. EDL staff assistance has been requested to furnish assistance in the analysis and testing of new industrial instruments and to conduct market analysis for the new product.

Work Performed: EDL staff personnel have contacted company management, and initial work commenced during the period.

Results: The project is continuing.

COOSA VALLEY ECONOMIC DEVELOPMENT DISTRICT

General

The Coosa Valley Economic Development District consists of ten counties, all of which are eligible Redevelopment Area counties: Bartow, Catoosa, Chattooga, Dade, Floyd, Gordon, Haralson, Paulding, Polk, and Walker. The Economic Development Centers are Bremen-Tallapoosa-Buchanan (Haralson County), Rome (Floyd County), Cartersville (Bartow County), Ft. Oglethorpe (Catoosa County), and Rossville-LaFayette (Walker County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

GEORGIA MOUNTAINS ECONOMIC DEVELOPMENT DISTRICT

General

The Georgia Mountains Economic Development District consists of 13 counties, all of which are eligible Redevelopment Area counties: Banks, Dawson, Forsyth, Franklin, Habersham, Hall, Hart, Lumpkin, Rabun, Stephens, Towns, Union, and White. The Economic Development Centers are Gainesville (Hall County) and Toccoa (Stephens County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

HEART OF GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Heart of Georgia Economic Development District consists of nine counties, eight of which are eligible Redevelopment Area counties: Dodge, Laurens, Montgomery, Pulaski, Telfair, Treutlen, Wheeler, and Wilcox. The Economic Development Center is Dublin-East Dublin (Laurens County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

LOWER CHATTAHOOCHEE ECONOMIC DEVELOPMENT DISTRICT

General

The Lower Chattahoochee Economic Development District consists of eight counties, seven of which are eligible Redevelopment Area counties: Chattahoochee, Clay, Muscogee, Quitman, Randolph, Stewart, and Talbot. The Economic Development Center is Columbus (Muscogee County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

McINTOSH TRAIL ECONOMIC DEVELOPMENT DISTRICT

General

The McIntosh Trail Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Butts, Fayette, Henry, Lamar, Newton, Pike, Spalding, and Upson. The Economic Development Centers are Covington (Newton County), Griffin (Spalding County), and Thomas-ton (Upson County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

MIDDLE FLINT ECONOMIC DEVELOPMENT DISTRICT

General

The Middle Flint Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Crisp, Dooly, Macon, Marion, Schley, Sumter, Taylor, and Webster. The Economic Development Center is Americus (Sumter County).

Discontinued

During the period, two projects were discontinued in the area.

Project 932: Assistance to an irrigation equipment manufacturing company in Crisp County

Nature of Problem: An irrigation equipment manufacturing company in Crisp County requested assistance in the redesign of certain items of equipment manufactured by the company.

Work Performed: EES personnel met with the owner of the company, made an initial analysis of the problem, and determined that assistance would be required in the area of mechanical and electromechanical engineering. Subsequently a management decision was made to discontinue project work. Thus, further assistance was not required.

Results: The project is closed.

Project 934: Assistance to a company in Schley County in the development of a new production layout

Nature of Problem: A manufacturing firm in Schley County is experiencing problems in its material flow and equipment layout needed to improve the efficiency of the present system. Assistance has been requested in the redesign of its production line layout.

Work Performed: EES personnel met with company principals and discussed production problems. Layout revisions were furnished the company. Technical discussions were conducted concerning the laminating of plastics. Management reported an estimated 50% increase in productivity as a result of present work.

Results: The project is closed.

Ongoing Projects

There are no projects under way in this area.

MIDDLE GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Middle Georgia Economic Development District consist of seven counties, six of which are Redevelopment Area counties: Bibb, Crawford, Houston, Jones, Monroe, and Twiggs. The Economic Development Center is Macon (Bibb County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

NORTH GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The North Georgia Economic Development District consist of six counties, all of which are eligible Redevelopment Area counties: Cherokee, Fannin, Gilmer, Murray, Pickens, and Whitfield. The Economic Development Center is Dalton (Whitfield County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

NORTHEAST GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Northeast Georgia Economic Development District consists of ten counties, all of which are eligible Redevelopment Area counties: Barrow, Clarke, Elbert, Greene, Jackson, Madison, Morgan, Oconee, Oglethorpe, and Walton. The Economic Development Center is Athens (Clarke County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

OCCONEE ECONOMIC DEVELOPMENT DISTRICT

General

The Occonee Economic Development District consists of seven counties, all of which are eligible Redevelopment Area counties: Baldwin, Hancock, Jasper, Johnson, Putnam, Washington, and Wilkinson. The Economic Development Center is Milledgeville (Baldwin County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

SOUTH GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The South Georgia Economic Development District consists of ten counties, all of which are eligible Redevelopment Area counties: Ben Hill, Berrien, Brooks, Cook, Echols, Irwin, Lanier, Lowndes, Tift, and Turner. The Economic Development Centers are Valdosta (Lowndes County) and Tifton (Tift County).

Discontinued Projects

None.

Ongoing Projects

There are now four projects under way in this area.

Project 947: Assistance to a recreational vehicle manufacturing firm in Ben Hill County

Nature of Problem: A firm in Ben Hill County is experiencing production difficulties due to plant layout and production processes.

Work Performed: No current drawings existed, so the first step involved creating drawings of the existing layout. For these drawings, modifications were made to eliminate two major bottlenecks in material handling. During the creation of the new layout, another plant was closed by this company, so that much longer recreational vehicles had to be manufactured in this plant. Due to this latest change, several of the options in the new layout were not implemented and a proposed addition to the building was not made. However, a number of internal changes were implemented which allowed this company to improve production and not have to lay off workers. Specific improvements such as an overhead crane were instrumental in enabling the company to manufacture the longer trailers. Several additional changes will be implemented at a later date.

Results: Several layoffs have been avoided or delayed by the flexibility allowed in the new plant layout. The project is continuing.

Project 948: Assistance to a manufacturer of irrigation equipment in Ben Hill County

Nature of Problem: A firm in Ben Hill County is manufacturing a new product which involves a new type of electronic control circuit. No one in the area manufactures such a circuit. The company is interested in establishing a manufacturing capability in the area so that the item will be available for use in the company's new product. Assistance has been requested in establishing such a capability in the area.

Work Performed: EES personnel have assisted the company to initiate a project setup, draw a schematic, and locate sources of supplies. Investigation of sources of controls was undertaken, including cost estimates.

Results: The project is continuing.

Project 951: Assistance to a farm tool manufacturer in Ben Hill County

Nature of Problem: A manufacturing firm in Ben Hill County has a need to increase the efficiency of an electrostatic powder painting system. A way must be found to improve paint adherence while keeping the system price competitive.

Work Performed: EES staff personnel met with company personnel and further identified the problem. Work is under way to determine an approach to solving the adhesion problem.

Results: The project is continuing.

Project 973: Assistance to an agricultural manufacturing business in Berrien County

Nature of Problem: A small manufacturer of agricultural equipment in Berrien County wishes to diversify its product line by manufacturing disk blades for agricultural equipment. The company has requested assistance in identifying the basic production processes required, specific manufacturing operations needed, new equipment that will be required to produce the disks, and in the development of a pricing structure.

Work Performed: EES staff engineers have met with management and developed a detailed program to be undertaken. The project is now under way.

Results: The project is continuing.

SOUTHEAST GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Southeast Georgia Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Atkinson, Bacon, Brantley, Charlton, Clinch, Coffee, Pierce, and Ware. The Economic Development Center is Waycross (Ware County).

Discontinued Projects

During the period, one project was discontinued in the area.

Project 913: Assistance to a rebuilder of railroad cars in Ware County

Nature of Problem: A company in Ware County was interested in expanding its market and establishing a second plant in Atkinson County. As part of its expansion plan, the company requested assistance in the development of a promotional brochure.

Work Performed: Initially, the company principal requested assistance in preparing a promotional brochure. Photographs were taken and work on the brochure was undertaken. Subsequently, assistance was requested and furnished in the matter of heating a paint room and a paint coating system for rail cars. Assistance also was furnished in locating sources of investment capital for development financing. Further assistance is not required at this time.

Results: The project is closed.

Ongoing Projects

One project currently is under way in this area.

Project 972: Assistance to a nonprofit corporation in Ware County involved in furnishing work to handicapped workers

Nature of Problem: A concern in Ware County is involved in using handicapped personnel in the production of unfinished furniture. This nonprofit company is experiencing difficulty in obtaining funds for continuing operations. Assistance was requested to determine whether the company was eligible for a government loan.

Work Performed: An EES staff assistant visited the firm and discussed its status with the principal. It appears that the company may be eligible for an EDA loan. This matter is being discussed with an EDA representative.

Results: The project is continuing.

SOUTHWEST GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Southwest Georgia Economic Development District consists of 13 counties, 12 of which are eligible Redevelopment Area counties: Baker, Calhoun, Colquitt, Dougherty, Grady, Lee, Miller, Mitchell, Seminole, Terrell, Thomas, and Worth. The Economic Development Centers are Albany (Dougherty County) and Bainbridge (Decatur County).

Discontinued Projects

During the period, five projects were discontinued in the area.

Project 826: Assistance to an automobile component manufacturer in Dougherty County

Nature of Problem: This newly established manufacturer of an automobile fuel economizing device requested EES assistance in locating sources of supply for component parts of the product.

Work Performed: The EES staff made follow-up contact with the firm. The manufacturer located a supplier for most of the needed component parts, but needed help in locating rubber hoses and associated parts. The firm appears to be having success in the sale of its products. It is anticipated that no further assistance will be required in plant and production facilities in the near future.

Results: The project is closed.

Project 880: Assistance to an agricultural equipment manufacturer in Thomas County

Nature of Problem: This firm acquired a 60,000-square-foot manufacturing building and requested EES assistance with several problem areas in the start-up of production of irrigation equipment.

Work Performed: The EES staff completed work on a system for metal preparation and coating for the company. Work was initiated on the development of a management information system for use with materials and labor scheduling and for effective cost control and analysis. The EES staff member made a return visit to the firm and determined that work on metal preparation and coating was progressing well. The firm was provided information on newer manufacturing equipment and the production of rigid hoses. These requirements were discussed with management. Further assistance is not required at this time.

Results: The project is closed.

Project 922: Assistance to a firm in Mitchell County that manufactures automotive equipment

Nature of Problem: A concern in Mitchell County initially requested assistance in obtaining information relating to company procedures in the event of a union election. Subsequently, company management requested information and assistance in the development and manufacturing of a new product.

Work Performed: EES personnel met with management and arranged for the company to receive necessary information relating to union matters. Technical information and advice also were furnished concerning the ventilation of welding stations, electrical distribution systems, and drainage of loading docks. Additional assistance was provided in the field of industrial engineering as it pertains to the modernization of the plant and the production line. Management reports an estimated 20% increase in productivity as a result of project work. Further assistance is not required at this time.

Results: The project is closed.

Project 923: Request by a manufacturer of farm machinery in Dougherty County for assistance in patents and trademarks procedures

Nature of Problem: A manufacturer of farm machinery requested assistance concerning the processing of their product and matters relating to patents and trademarks.

Work Performed: A meeting with the project engineer of the firm was arranged by an EES staff member. The U.S. Department of Commerce's Patent and Trademarks Division was requested to provide information concerning patent classifications and subclassifications and appropriate forms. The EES staff member conducted a literature search relative to peanut blanching patents at the Georgia Tech Library. The company also identified certain vibration problems it was having with some of its equipment. EES personnel visited the plant, made measurements, and offered a solution which would eliminate the vibration problem. Technical assistance was furnished in the area of industrial engineering. Further assistance is not required at this time.

Results: The project is closed.

Project 930: Assistance to an individual in Dougherty County for toothpaste market information

Nature of Problem: An individual in Dougherty County who was interested in developing a new product line of toothpaste has requested information concerning the marketability of such a product line.

Work Performed: EES staff personnel have met with the individual to discuss the possibility of conducting market research in connection with the new product line. It was determined that further assistance was not required at this time.

Results: The project is closed.

Ongoing Projects

One project is currently under way in this area.

Project 980: Technical assistance to a manufacturing company in Colquitt County

Nature of Problem: A recently established small industrial firm produces a waste-fired furnace designed for agricultural uses such as tobacco curing, lumber curing, heating chicken houses, and pecan drying. The company has requested technical assistance to improve heat exchanger efficiency, heat recovery from stack gases, unit efficiency, and manufacturing processes. The company now employs six workers. It is anticipated that if the annual sales are increased, the work force will be increased to about 40 workers.

Work Performed: EES personnel have met with company principals and devised a preliminary work plan. Work will be undertaken in the near future.

Results: The project is continuing.

PROJECTS OUTSIDE ECONOMIC DEVELOPMENT DISTRICTS

General

During the period, six projects were active in counties outside the Economic Development Districts.

Discontinued Projects

During the period, two projects were discontinued in this area.

Project 929: Assistance to a local government in revitalizing a DeKalb County shopping district

Nature of Problem: An area within the city of Decatur, Georgia, which has a relatively large minority population has suffered from blight and outmigration of business. The city government and residents want to reverse this trend. The vehicle which is to be used to reverse the trend is the Community Development Center (CDC), which has selected a shopping center as its catalytic project. Assistance has been requested to study the problem and to outline approaches that can be taken to improve the business climate in and about the center area.

Work Performed: EES personnel met with the principal, who is Director of Economic Development for the CDC, examined approaches that can be undertaken to solve the problem, and identified several that will be initiated. Further assistance is not required at this time.

Results: The project is closed.

Project 940: Assistance to a paper products company in Fulton County (Atlanta) for diversification of its operations

Nature of Problem: A minority-owned paper products company has been selling paper products on a limited basis. This company requested assistance in conducting a feasibility study and developing a business plan to go into institutionalized distribution of paper and related products.

Work Performed: EES personnel were in communication with the president of the firm. Assistance was furnished in developing capital requirements and in locating warehouse space. The company is now in full operation. Further assistance is not required at this time.

Results: The project is closed.

Ongoing Projects

Four projects now are under way in this area.

Project 975: Assistance to an executive search firm in Fulton County (Atlanta)

Nature of Problem: An executive search firm in Atlanta is applying for an SBA working capital loan and requires assistance in completing the SBA application. This firm specializes in executive searches for the banking industry.

Work Performed: An EES staff assistant met with the principal of the firm and scheduled an appointment to assist him in completing the application.

Results: The project is continuing.

Project 976: Assistance to a building firm in Cobb County

Nature of Problem: A building firm in Cobb County is involved in the sale of custom housing plans and components. The company has requested assistance in preparing an SBA loan application.

Work Performed: An EES staff assistant met with the company principal. Work is now under way on the loan application.

Results: The project is continuing.

Project 977: Technical assistance to a moving firm in Fulton County (Atlanta)

Nature of Problem: A moving company in Fulton County has requested technical assistance in business development for the firm.

Work Performed: An EES staff assistant has contacted the company principal, and plans have been made to undertake the project.

Results: The project is continuing.

Project 978: Assistance to a firm in Fulton County that provides services to the phonograph industry

Nature of Problem: A firm in Fulton County that provides services to the phonograph industry has requested assistance in conducting a market evaluation for its services and advice on a marketing approach.

Work Performed: EES staff personnel have contacted company management, and plans are under way to accomplish the proposed work.

Results: The project is continuing.

V. EVALUATION OF PROGRAM

In drawing conclusions about the program, it would not be difficult to overstate the impact of the work performed by EDL staff personnel on individual projects. Work performed during the quarter reported on can be characterized in terms of further reviewing existing projects and eliminating those that did not appear to justify further effort and searching out new opportunities to provide management and technical assistance to companies and individuals that could possibly lead to the establishment of new jobs or provide stabilization for existing companies. During the period, five new projects were initiated; however, it is too early to estimate the job impact of these projects. In addition, 11 projects were completed and closed out, leaving 13 active projects at the end of the quarter.

Conclusions regarding the overall impact of this program must be based upon a collective evaluation of the individual projects and their respective results. This evaluation should include not only a recognition of the fact that a deliberate attempt has been made to state the significance of EDL efforts in realistic terms, but also a consideration of the following special points concerning the results reported:

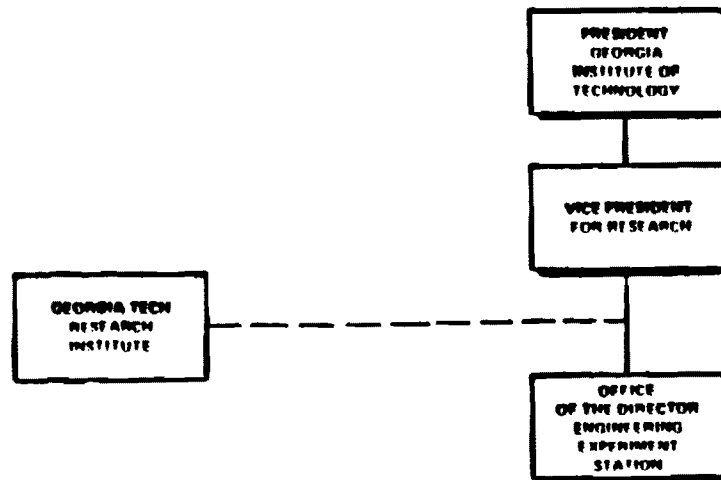
1. In many cases, the contributions of EDL staff personnel were major factors in management decisions to act or not to act on a specific plan of development. This was particularly true in those cases involving the development of new ventures.
2. In some situations, the end result would have been the same regardless of EDL participation. In such cases, EDL staff personnel helped to facilitate the achievement of an already determined goal.
3. In certain projects, EDL staff personnel filled a negative role by determining that a proposed course of action was not economically sound. The project staff felt that such actions, where they were taken, are in the best interests of all parties in the project. It is not enough to provide support for sound proposals; the unsound ones also must be identified.

Because of the preceding considerations, it is not practical to attempt to quantify results of this type program solely in terms of jobs created. Further, since it was the first program of its kind in a state-supported university, it is impossible to judge its merit on a comparative basis. It is necessary, therefore, to evaluate the program by empirical means. Several observations indicate that the management and technical assistance program to business and industry in Georgia has been beneficial:

1. After a modest start, the program has grown both in quantity of projects and in the comprehensiveness of the assistance offered. The program has been well received throughout Georgia and is being supported by the firms that have been assisted.

2. Consultants of all types have been kept apprised of Georgia Tech's management and technical assistance efforts and have worked in conjunction with EDL to further the program. All parties concerned seem to feel that the program is mutually beneficial.
3. Success of the original program has led to expansion of the project by the U.S. Department of Commerce's Economic Development Administration in Georgia and initiation of comparable programs by agencies in other states.
4. As a result of previous M & TA experience, EDL personnel provided counsel to the federal government in an effort to bridge the gap between the accumulated findings of governmental, educational, and private research and the information needs of business and industry. This counsel eventually resulted in the passing of the State Technical Services Act of 1965.

EXHIBITS



Organization
Engineering Experiment Station
Georgia Institute of Technology

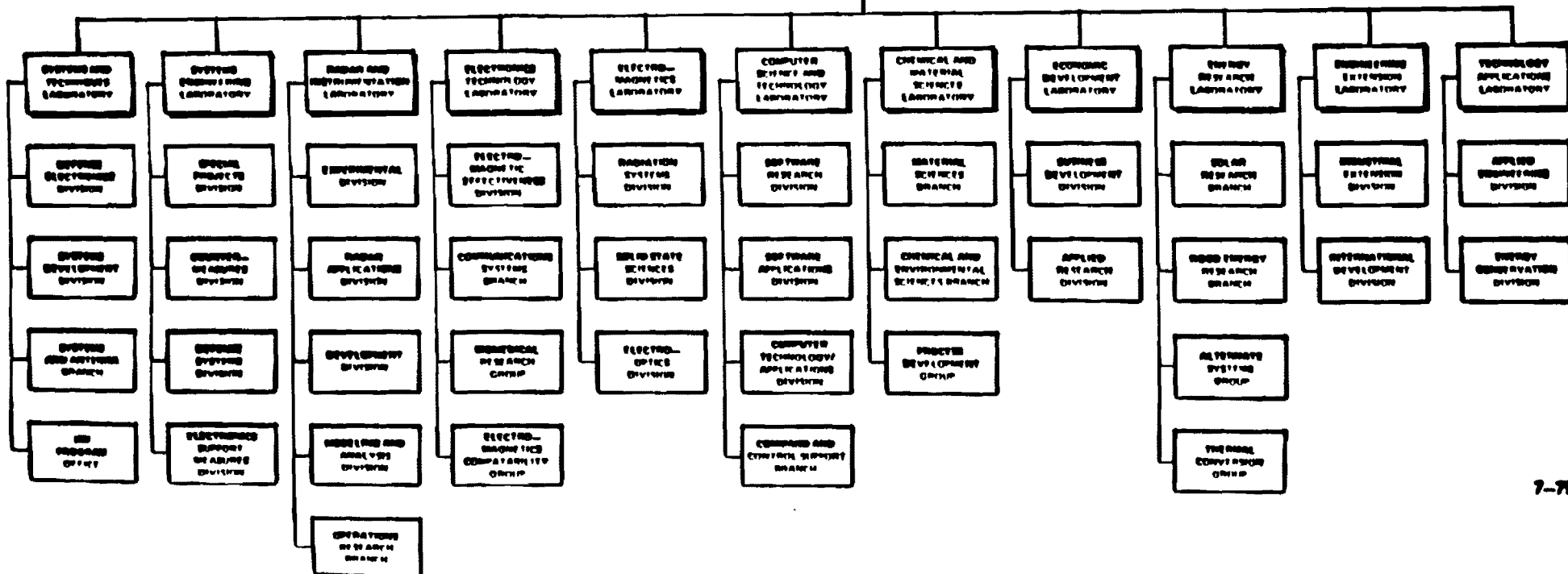
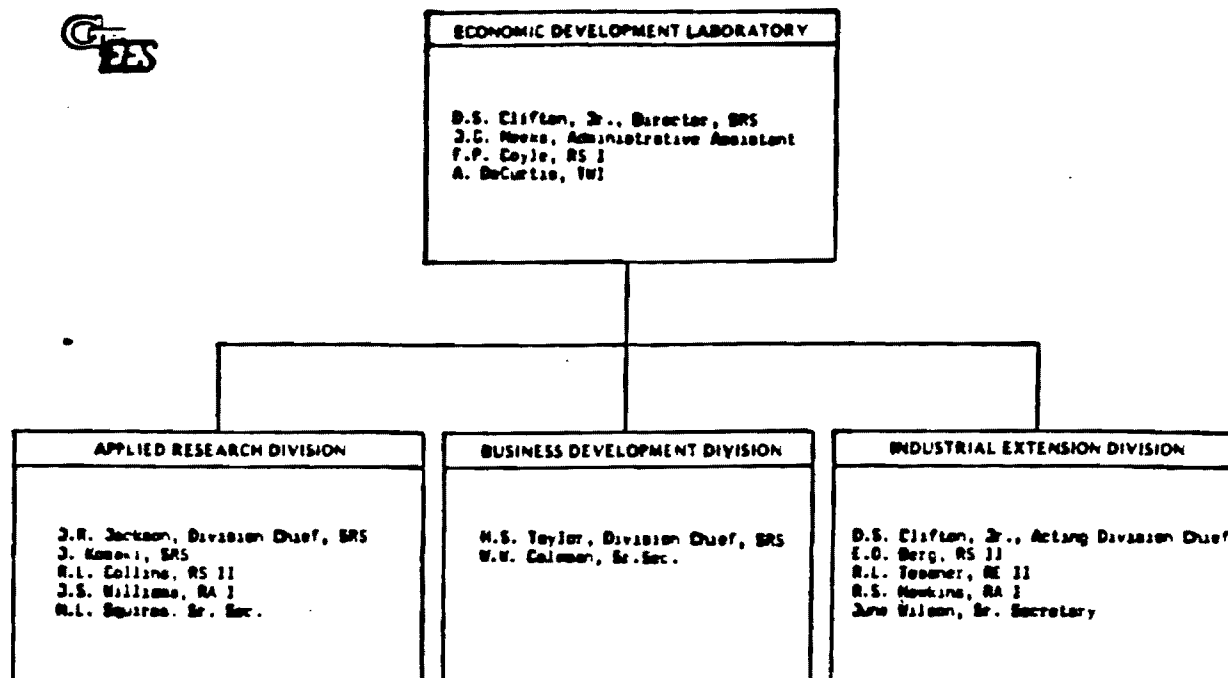


Exhibit 1

Exhibit 2



Basic Data Group

M.E. Anders, Leader, PRS
E.M. Whitehead, Secretary
T.C. Toler, Technical Assistant

Community Development and Training Group

R.B. Caswell, Leader, PRS
W.E. Collier, SRS
D.C. Sherrill, RS II
J.E. Dunson, Sr. Sec.

Economic Analysis Group

M.S. Gibson, Leader, RS II
T.J. Chiang, PRS
R.R. Ratajczak, SRS
R.B. Lonn, RS II
B.W. Riell, RS II
B.G. Keener, RS I
C.A. Gibson, Student Assistant

Transportation Systems Group

M.J. Moskaluk, Leader, SRS
J.R. Marks, RE
D.W. Robertson, Sr. Sec.
S.A. Bentavento, Student Assistant

EDA Management and Technical Assistance Program

R.E. Collier, Leader, SRS

Marketing Research Group

Group Leader, Open
M. Diamond, SRS
S.G. Daniels, RS II

Minority Business Development Group

E.A. Bethes, Leader, RS II
R.C. Eschaffery, RA II

Occupational Safety and Health Group

M.C. Howard, Leader, SRS
K.A. Smith, SRS
S.A. Warner, RE II
W.M. Spain, RT II
P.L. Williams, RS II
R.C. McCain, Staff Assistant
P.A. Office, Sr. Sec.
J. Strombos, Student Assistant

Trade Adjustment Assistance Branch

R.W. Springfield, Leader, RE II
E.T. Landrey, SRA
E.F. Rice, SRA
S.D. Walenchock, SRA
B.W. Calahan, RS II
C.M. Eyles, RE II
D.C. Cooper, RE II
R.D. Lumpkin, RS II
J.C. Muller, RE II
B.D. Lurier, RA II
J.M. Thomas, RA II
M.E. Storey, Staff Assistant
V.M. Hawkins, Sr. Sec.

Albany

E.L. Lewis, Director, RE II
E.M. Hordison, RE II
D.A. Gibson, Secretary

Augusta

R.B. Junk, Director, RE II
D.H. Pass, RE II
J.R. Howland, Sr. Secretary

Carrollton

M.W. Hodges, Director, RS II
T.A. Sanford, RT I
S.C. Brown, Secretary

Douglas

S.L. Dudley, RS II
M.T. Johnson, RT II
C.C. Davis, Secretary

Greenville

P.D. Loveless, Director, RS II
D. Fischer, Secretary

Marion

G.M. Lee, Director, RE II
M.I. Luster, RE II
P. Zabrackie, Secretary

Rome

M.C. Darley, Director, RE II
S.D. Marshall, Secretary

Savannah

L.R. Edens, Director, RE II
D.E. Primrose, RE II
K.E. Johnson, RA I
M.J. Hildebrandt, RS I
M.D. Blum, Sr. Secretary

Exhibit 3
BIOGRAPHICAL SKETCHES

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

BETHEA, EDWIN A.--Research Scientist II
Economic Development Laboratory

Education

M.S.W., Howard University	1962
B.S., Knoxville College	1953

Employment History

Georgia Institute of Technology Research Scientist II	1972-Present
Volunteers for International Technical Assistance Director-Washington, D.C., Director-East Central Regional Office	1970-1972
Youth Enterprises, Inc., Executive Director	1968-1970
United Planning Organization Community Organization Specialist (training officer), Economic Development Specialist	1966-1968
Far East Community Services, Inc., Community Organizer--Community Youth Organizer	1965-1966
District of Columbia, Department of Public Welfare Caseworker, Child Welfare Division	1962-1965

Experience Summary: Directed a regional office for technical assistance that provided services to minority and economically disadvantaged groups in mid-Atlantic region; responsible for establishing, structuring, and supervising new program offices in several states within the region. Program developer for minority economic ventures and community development project; responsibilities included establishing a working relationship with community groups, federal, state and local government agencies, and/or private agencies whose interests were similar. Organized and managed a minority firm for the purpose of establishing "spin-off" business ventures and the training of minority entrepreneurs. Managed and developed programs aimed toward helping groups initiate and implement economic and social changes in their community such as employment practices, bureaucratic procedures, etc. Assisted quasi-government and government department directors in community planning. Developed and directed programs relating to youth activities in the areas of training, proposal development, community improvement and change, and economic development. Has done private consulting work for several federal agencies and private corporations. Has completed seven continuing education short courses in the fields of small business development and management, new products development, and basic industrial development.

Current Fields of Interest

Minority business development; industrial and community development; manpower management and motivation; transportation; new economic systems.

Major Reports and Publications

1. "A Wood Energy Demonstration Center in Alabama, Phase I, Background Investigation," Minority Business Development Agency, March 1980, coauthor
2. "Technology Utilization and Commercialization Center," Quarterly Report--February, March, April 1980
3. "Technology Utilization and Commercialization Center," Quarterly Report--November, December, January 1979-80
4. "Technology Utilization and Commercialization Center," Annual Report, 1979
5. "Technology Commercialization Center--Expanding Black Enterprises," paper presented to the National Technical Association at their 57th National Convention, 1979
6. "Technology Utilization and Commercialization Center," Annual Report, 1979
7. "Technology Utilization and Commercialization Center," Quarterly Report--May, June, July 1979
8. "Technology Utilization and Commercialization Center," Quarterly Report--February, March, April 1979
9. "Technology Utilization and Commercialization Center," Quarterly Report--November, December, January 1978-79
10. "Technology Utilization and Commercialization Center," Quarterly Report--August, September, October 1978
11. "Technology Utilization and Commercialization Center," Annual Report, Office of Minority Business Enterprise, 1978
12. "Research and Demonstration Project," Regional Office of Minority Business Enterprise, Quarterly Reports, June 1977 and October 1977
13. "A Directory and Survey of Minority-Owned Business in the State of Georgia with Four Employees," Georgia Tech Report, 1977, coauthor
14. "Final Report on Technical Assistance to Selected Community Action Agencies in Georgia," Georgia Tech Report, 1976
15. "Market Study for Westgate Hardware Store," Georgia Tech Report, 1976
16. "A National Cultural Center at Tuskegee, Alabama," Georgia Tech Report, 1975
17. "Feasibility Study for Skating Rink in Columbus, Georgia," Georgia Tech Report, 1975, coauthor
18. "Market Study for Sea Island Handicraft Cooperative," Georgia Tech Report, 1973
19. "Survey of Georgia Minority Business," Georgia Tech Report, 1973, coauthor
20. "South Georgia Crafts--Study of Markets in Georgia, Product Quality and Management Structure," Georgia Tech Report, 1972

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

COLLIER, ROBERT E.--Senior Research Scientist
Economic Development Laboratory

Education

M.S., The George Washington University	1966
B.S., Texas Agricultural and Mechanical University	1939

Employment History

Georgia Institute of Technology	
Leader, EDA Management and Technical Assistance Program	1979-Present
Environmentalist (GS-12 Equiv.) IPA Assignment to U.S. Army Forces Command, Fort McPherson, Georgia (Part-time)	1979-Present
Senior Research Scientist	1972-Present
Head, Education and Training Branch	1974-1976
Head, Economic Development Training Section	1968-1970
Research Scientist II	1966-1968
Spindletop Research Center, Inc., Director, Training Services	1971-1972
U.S. Marine Corps, General Duty Officer	1940-1966
Sears, Roebuck & Company, El Paso, Management Training	1939

Experience Summary: As leader of the EDA Management and Technical Assistance Program at EES, assists in the management of the program and in reporting to EDA on program progress. As an Environmentalist on part-time IPA assignment to the Army, is responsible for development of environmental impact analyses to include data gathering, evaluation of data, and technical writing of environmental impact statements and assessments. As head of Education and Training Branch, was responsible for the development and conduct of training activities, including international programs. As Senior Research Scientist, Community Development Branch, IDD-EES, participated in training programs and conducted community development research projects. As Director, Training Services, National Area Development Institute, Spindletop Research, Inc., planned and conducted seminars and workshops for professionals and local leaders involved in area development activities. Courses were directed to the needs of individuals from economic development districts, community action agencies, governmental agencies, business organizations, farm organizations, utilities, cooperatives, public agencies and universities who were involved in area development programs. As head of the Economic Development Training Section, IDD-EES, developed handbooks, manuals, lesson plans, visual presentations and other materials for industrial and economic development training; also conducted training courses in the principles and techniques of industrial, economic and community development under sponsorship of the Economic Development Administration and Small Business Administration. As Research Scientist in the Industrial Services Branch, IDD-EES, furnished management guidance and technical

Experience Summary (continued): assistance to prospective and established business and industrial firms; also provided assistance in establishing sound new business ventures which utilize local resources and manpower. While on active duty with the Marine Corps, performed a variety of line and staff assignments involving administration, education, training, and logistics.

Current Fields of Interest

Economic development theory and practice; development education and training; public administration in the field of interorganizational/intergovernmental relations; environmental protection with specialization in the area of economic impact analysis.

Major Reports and Publications

1. "Final Report: A Program of Management and Technical Assistance to Designated EDA Counties in Georgia," prepared under EDA Contract No. 04-06-01567-2, December 1979, coauthor
2. "Interim Instructions for Implementing the Council on Environmental Quality (CEQ) Regulations," Department of the Army, Headquarters, United States Army Forces Command, Fort McPherson, Georgia, 19 September 1979, staff responsibility for preparation of instruction
3. "A Productivity Oversight Program for the Apparel Industry: A Regional Model," prepared under Department of Commerce Contract No. NP8D246, April 1979
4. "Final Report: A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," prepared under EDA Contract No. 04-06-01567-1, December 1978, coauthor
5. "Guidelines for the Establishment and Management of an Energy Assistance Program for Business and Industry," prepared under EDA Contract No. 99-6-9359-2, June 1978, coauthor
6. "Final Report: Planning for the Interorganizational Networking of a State Economic Development Council," prepared under contract with the Office of Economic Research, Economic Development Administration, under Grant No. OER-577-G-77-22, 1977
7. "Guidelines for an Energy Audit and an Energy Impact Statement," prepared under HUD Grant CPA-GA-04-06-1056, June 1976, coauthor
8. "Final Report: Substate Energy Management," prepared under contract with the Georgia State Energy Office, 15 February 1976, coauthor
9. "Analysis and Evaluation of Industrial Projects," a seminar with text prepared under AID Grant No. AID/CM/TA-G-73-18, 1975, coauthor
10. "Final Report: Leadership Training Programs in Selected Georgia Communities," Coastal Plains Regional Commission Contract No. 10040037, 1975, coauthor
11. "Guidelines for Industrial Extension Personnel," prepared under AID Grant No. AID/CM/TA/G-73-18, 1974, editor
12. "Economic Development Approaches for the Southeast," prepared for the Economic Development Administration under Grant No. 04-6-09029-6, 1973, coauthor
13. "Final Report: Leadership Training Programs in Selected Georgia Communities, May 31, 1972-September 30, 1973," Coastal Plains Regional Commission Contract No. 10240033, September 1973, coauthor

Major Reports and Publications (continued)

14. "Exploring the Dimensions of Area Development," National Area Development Institute Special Seminar sponsored under a Ford Foundation program, 1971
15. "Training Program for Staff Information Technicians," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970, coauthor
16. "Training Program for Planning and Development Technicians," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
17. "Basic Economic Development Training Program," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
18. "Industrial Development Training Program," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
19. "Executive Training Program," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
20. "Advanced Executive Training Program," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
21. "Final Report: Training Programs in Economic Development, 1 April 1969 - 31 March 1970," EDA Contract No. OER-208-G-69-2, May 1970
22. "Final Report: Development of a Community Development Training Program for the Small Business Administration, 19 June 1968 - 1 July 1969," Small Business Administration Contract No. 1474-FA-68, July 1969
23. "Final Report: Training Program in Economic Development, 1 April 1968 - 31 March 1969, EDA Contract No. OER-208-G-68-3, May 1969
24. "Internship Program in Regional Economic Development," a training program prepared for the Economic Development Administration under Contract C-239-62L Neg., 1967
25. "Site Relocation Guide for Georgia Retail Business," Industrial Series No. 2," Georgia Tech Report, April 1967

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

CLIFTON, DAVID S., Jr.--Director
Economic Development Laboratory

Education

Ph.D. in Economics, Georgia State University	1980
M.B.A. in Economics, Georgia State University	1970
B.I.E., Georgia Institute of Technology	1966

Employment History

Georgia Institute of Technology	
Director, Economic Development Laboratory, EES	1979-Present
Chief, Economic Development Division, TDL, EES	1977-1979
Manager, Economic Research, IDD, EDL, EES	1977-1978
Head, Industrial Economics Section, IDD, EDL, EES	1974-1977
Senior Research Scientist	1977-Present
Research Scientist II	1973-1977
Research Economist I	1970-1973
Lockheed-Georgia Company	
Associate Customer Facilities Engineer	1966-1969
Customer Facilities Engineer	1969-1970

Experience Summary: Georgia Tech assignment involves industry feasibility studies; regression analysis; product/market studies; transportation studies; economic impact studies; domestic/international training; and proposal development/project management; energy alternatives; and energy food plantation concepts. At Lockheed, gathered data, made preparatory investigations, analyzed and arrived at solutions for customer facilities problems. Provided technical assistance in planning and design of new construction or major alternations of customer facilities. Completed economic feasibility studies for prospective aircraft customers.

Current Fields of Interest

Market analysis; economic feasibility studies; international trade; energy research; technology assessment; research in economic and industrial development; research management.

Major Reports and Publications

1. "State Science, Engineering, and Technology Program," Georgia Tech Report, February 1980, coauthor
2. "Economic Development Analysis of Appalachian Georgia," Georgia Tech Report, January 1980, coauthor
3. "A Feasibility Study for Wood Energy Utilization in Georgia," Georgia Tech Report, August 1979, coauthor
4. "Market Potentials of Wood Fuel in the Southeast," Georgia Tech Report, June 1979, coauthor

Major Reports and Publications (continued)

5. "Regional Forums on Appropriate Technology," National Science Foundation, February 1979, coauthor
6. "Project Feasibility Analysis," presented at the Instituto de Administracion cientifica de las Empresas, Mexico City, 10-12 August 1978
7. "A Design for a Venture Opportunities Information System," Atlanta Regional Office of Minority Business Enterprise, August 1978, coauthor
8. "The Potential for Industrial Development in the Industrial City Region," Vol. 3, Georgia Tech Report, December 1977, coauthor
9. "The Industrial City: Concept and Design," Vol. 2, Georgia Tech Report, December 1977, coauthor
10. "The Industrial City: Executive Summary," Vol. 1, Georgia Tech Report, December 1977, coauthor
11. "Economic Analysis of Pretreatment Standards for the Textile Industry," Environmental Protection Agency, June 1977, coauthor
12. PROJECT FEASIBILITY ANALYSIS: A Guide to Profitable New Ventures, John Wiley & Sons, Inc., April 1977, coauthor
13. "Market Information System for Vada Builders, Inc.," Georgia Tech Report, November 1976, coauthor
14. "Baseline Energy Data System: Energy Indicators," Vol. 4, Georgia State Energy Office, June 1976
15. "Baseline Energy Data System: Energy Supply Network," Vol. 3, Georgia State Energy Office, June 1976, coauthor
16. "Baseline Energy Data System: Data Base 1973," Vol. 2, Georgia State Energy Office, June 1976, coauthor
17. "Baseline Energy Data System: Methodology," Vol. 1, Georgia State Energy Office, June 1976, coauthor
18. "Impact of the Engineering Experiment Station on the Economy of Georgia, Fiscal Years 1973 and 1974," Georgia Tech Report, February 1976, coauthor
19. "Energy in Georgia, Uses, Program Needs, Policy and Recommendations," prepared by State Energy Office and Georgia Tech, December 1975, coauthor
20. "A Program to Assist Business and Industry in Coping with the Energy Crisis," Georgia Tech Report, September 1975, coauthor
21. "Analysis and Evaluation of Industrial Projects," presented at the Institute for Small-Scale Industries, University of the Philippines, Manila, 1975, 23-27 June 1975
22. "A Training Program on the Analysis and Evaluation of Industrial Projects," Georgia Tech Report, June 1975, coauthor
23. "Economic Data Relative to the Central Georgia Steam Plant," Georgia Tech Report, February 1975, coauthor
24. "A Productivity Program for the Engineering Experiment Station," Georgia Tech Report, November 1974, coauthor
25. "An Analysis of Merchandising Methods for Eggs," Georgia Tech Report, June 1974
26. "Southeastern Trends of Selected Industries," Georgia Tech Report, April 1974, coauthor
27. "The Economic Impact of Georgia's Deepwater Ports," Georgia Tech Report, December 1973, coauthor
28. "Economic Development Approaches for the Southeast," Georgia Tech Report, November 1973, editor
29. "The Little-Mirrlees Cost-Benefit Method for Industrial Project Analysis in Developing Countries," unpublished report in Ph.D. program, Georgia State University, August 1973

Major Reports and Publications (continued)

30. "Georgia Employment and Population Projections with Special Reference to Water-Using Industries," Georgia Tech Report, July 1973, coauthor
31. "Training for Business and Industry in Florida, Kentucky, North Carolina, and South Carolina," Georgia Tech Report, May 1973, coauthor
32. "A Survey of Empirical Evidence of the Heckscher-Ohlin Theory of International Trade," unpublished report in Ph.D. program, Georgia State University, April 1973
33. "Training for Business and Industry in Alabama, Georgia, Mississippi, and Tennessee," Georgia Tech Report, March 1973, coauthor
34. "A Graduate-Employer Evaluation of Georgia's Vocational-Technical School Program," Georgia Tech Report, January 1973, coauthor
35. "An Unemployment Registration and Employment Generation Program for the Lower Chattahoochee Community Action Agency," Georgia Tech Report, September 1972, coauthor
36. Transportation Analysis in "Peanut Processing Opportunities," Southwest Georgia Area Planning and Development Commission, June 1972
37. "A Survey of Export Proceeds Instability Research with a Report on the Export Proceeds Instability of Colombia," unpublished report in Ph.D. program, Georgia State University, June 1972
38. "Georgia as a Center for Charcoal and Charcoal Briquette Production," Atlanta Economic Review, March 1972, coauthor
39. "A Registration of the Unemployed in the Heart of Georgia Community Action Council Area," Georgia Tech Report, January 1972, coauthor
40. "A Survey of Selected Users of Spun Sheet Metal in Alabama and Georgia," Economic Development Administration, July 1971
41. "Carbonized Bark for Briquetting Purposes," Georgia Tech Report, July 1971, coauthor
42. "Economic Factors Affecting the Feasibility of Locating a Vegetable Processing Plant in the Vicinity of Americus, Georgia," Georgia Tech Report, May 1971, coauthor
43. "The Market for Leaf Springs," Economic Development Administration, February 1971
44. "Industrial Air Pollution: Particulate Control Equipment Market," Economic Development Administration, December 1970
45. "The Potential Impact of Jumbo-Jet Air Cargo Transportation on Georgia," Georgia Tech Report, October 1970, coauthor
46. "Market Survey of Garden Center Buyers," Economic Development Administration, October 1970
47. "Georgia Retail Florist Store Sales," Economic Development Administration, September 1970
48. "The Southeastern Market for Plastic Bathroom Fixtures in Residential Construction," Economic Development Administration, July 1970
49. "The Calico Scallop Market," Economic Development Administration, June 1970
50. "The Southeastern Modular Housing Market," Economic Development Administration, May 1970
51. "The Market for Boxboard Containers for the Coastal Plain Region of Georgia," Economic Development Administration, May 1970
52. "Long Cycles in Residential Construction," unpublished report in M.B.A. program, Georgia State University, December 1969

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

DANIELL, SALLIE G.--Research Scientist II
Economic Development Laboratory

Education

B.S., University of Alabama	1966
M.Ln., Emory University	1973

Employment History

Georgia Institute of Technology	
Research Scientist II, EES	1977-Present
Research Scientist I	1973-1977
Research Scientist I (hourly)	1972-1973
Metrics, Inc., Research Analyst (Consulting)	1977-1979
Atlanta Public Library, Pre-Librarian	1971-1972
Kitchins Department Store, Sales Clerk and Artist	1970-1971
American National Red Cross, Recreation Aide, South Vietnam	1968-1969
Pizitz Department Store, Assistant Buyer	1967-1968
Texas Instruments, Engineering Clerk	1966-1967

Experience Summary: At Georgia Tech, work has involved market feasibility analysis; economic market analysis; plant location analysis; evaluation of area resources; preparation of methodologies; assimilation and dissemination of data for economic studies; literature searches; collecting, indexing, cataloging, and retrieval of data and materials; and considerable work with government documents and other pertinent secondary research data sources.

Current Fields of Interest

Business administration, including marketing, economics, and management; library science, including organization, retrieval, and dissemination of information.

Major Reports and Publications

1. "A Market Study for Poly-Quip, Inc.," Georgia Tech Report, March 1980, coauthor
2. "The Market Potential for Printed Circuit Boards," Georgia Tech Report, March 1980, coauthor
3. "Evaluation of Suntogs Marketing Prospects," Georgia Tech Report, August 1979, coauthor
4. "Analysis and Planning Market Study for Peachtree Jeans, Inc.," Georgia Tech Report, May 1979, coauthor
5. "Diagnostic Review/Feasibility Study for Pinellas Seafood Company," Georgia Tech Report, May 1979, coauthor
6. "A Preliminary Investigation of Profit Opportunities for Manufacturing Prefabricated Houses in Liberty County," Georgia Tech Report, May 1979

Major Reports and Publications (continued)

7. "A Demonstration Project to Establish a Technology Delivery System for Small and Medium-Sized Firms," Georgia Tech Report, February 1979, coauthor
8. "A Design for a Venture Opportunities Information System," Georgia Tech Report, August 1978, coauthor
9. "Directory of Public Service Resources and Interests for Local Governments Available from Georgia Institute of Technology," Inter-University Task Force Report, June 1978
10. "An Economic Definition of the Nuclear Industry," Metrics, Inc. Report, April 1978, coauthor
11. "The Potential for Industrial Development in the Industrial City Region," Georgia Tech Report, December 1977, coauthor
12. "The Industrial City: Concepts and Design," Georgia Tech Report, December 1977, coauthor
13. "The Industrial City: Executive Summary," Georgia Tech Report, December 1977, coauthor
14. "Economic Analysis of Pretreatment Standards for the Textile Industry," Environmental Protection Agency, June 1977, coauthor
15. "Baseline Energy Data System: Data Base 1973," Georgia Tech Report, June 1976, coauthor
16. "Baseline Energy Data System: Methodology," Georgia Tech Report, June 1976, coauthor
17. "Directory of Scientific Resources in Georgia, 1973-1974," Fourth Edition, Georgia Tech Report, March 1974, coauthor
18. "Marketing of the Public Library," unpublished report in M.Ln. program, Division of Librarianship, Emory University, July 1972

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

DIAMOND, HARVEY--Senior Research Engineer
Economic Development Laboratory

Education

St. Johns University	1941-1942
B.S. in Textile Engineering, North Carolina State College	1946

Employment History

Georgia Institute of Technology	
Senior Research Engineer, EES	1967-Present
Research Engineer II	1965-1967
Research Engineer I	1960-1965
Dux Mixture Hardware Company, Partner	1950-1960
American Woolen Company, Designer and Assistant Buyer	1947-1950
Cohn-Hall-Marx, Convertor and Assistant Designer	1946-1947

Experience Summary: Economic feasibility studies, plant location analyses, market research to identify manufacturing and nonmanufacturing business opportunities, raw materials and intermediate products availability studies, marketing strategies, purchasing and marketing development and procedures, evaluation of export markets, small-scale industry entrepreneurship, liaison with prospects on industrial location possibilities, evaluation and development of area resources, transportation studies, and management and technical assistance to prospective and established businesses. Coeditor of monthly metalworking bulleting. Purchasing and marketing of hardware, wholesale and retail; textile designing; textile converting.

Current Fields of Interest

Market analyses; plant location criteria; economic feasibility analyses; import-export potentials; small-scale industries.

Major Reports and Publications

1. "Export Promotion to Barbados," Georgia Tech Report, May 1980, coauthor
2. "Technical Assistance Program to the Jamaican National Export Corporation in Miami, Florida," Georgia Tech Report, February 1980, coauthor
3. "The Feasibility of Producing Metal Stampings in Southwest Georgia," Georgia Tech Report, January 1980, coauthor
4. "The Feasibility of Manufacturing Machine Shop Products in Southwest Georgia," Georgia Tech Report, January 1980, coauthor
5. "The Feasibility of Establishing a Convention Center in Savannah, Georgia," Georgia Tech Report, December 1979, coauthor
6. "The Feasibility of Obtaining Metalworking Support Facilities for Southwest Georgia Manufacturers," Georgia Tech Report, August 1979, coauthor

Major Reports and Publications (continued)

7. "Intermediate Technology Demonstration Project," Georgia Tech Report, January 1978, coauthor
8. "Truck Trailers," Georgia Tech Report, August 1977
9. "Export Potential of Selected Korean Small-Scale Industries," Georgia Tech Report, January 1976
10. "Musical Instruments: A Manufacturing Opportunity in Atlanta, Georgia," Georgia Tech Report, May 1975
11. "Directory of Metalworking Job Shop Capabilities in Georgia, 1975," Georgia Tech Report, February 1975
12. "Evaluation of Palm Beach and Dade County, Florida, Areas Concerning Long-Term Need for Agricultural Workers," Georgia Tech Report, December 1974, coauthor
13. "A Survey of Plastics Waste in Georgia," Georgia Tech Report, August 1974, coauthor
14. "Impact Study of the Offshore Power Systems," Georgia Tech Report, September 1973, coauthor
15. "Industrial Possibilities for Rural Georgia," Georgia Tech Report, July 1973
16. "Plastics Processors and Fabricators in Georgia and Surrounding Areas, 1972," Georgia Tech Report, June 1972, coauthor
17. "Metal Service Centers in the Southeast, 1972," Georgia Tech Report, April 1972
18. "Directory of Job Shop Capabilities in Georgia, 1971," Georgia Tech Report, December 1970
19. "Directory of Job Shop Capabilities in Georgia, 1966," Georgia Tech Report, September 1966, coauthor
20. "The Advantages of Manufacturing Asphalt and Vinyl Asbestos Floor Tile in Savannah," Georgia Tech Report, December 1965, coauthor
21. "Mobile Homes in Georgia: A Study of the Personal Property Taxes Levied on Mobile Homes in the Metropolitan Areas of Georgia and the Significance of the Mobile Home Industry to the State," Georgia Tech Report, February 1965, coauthor
22. "Investment Casting: A Manufacturing Possibility for Elberton, Georgia," Georgia Tech Report, January 1965
23. "Glass Wool Insulation: A Manufacturing Opportunity in Georgia," Georgia Tech Report, September 1964
24. "Pistons, Piston Rings, and Valves: A Manufacturing Opportunity in Georgia," Georgia Tech Report, June 1964
25. "Engine Electrical Equipment: A Manufacturing Opportunity in Georgia," Georgia Tech Report, May 1964
26. "Exhaust System Parts: A Manufacturing Opportunity in Georgia," Georgia Tech Report, April 1964
27. "Asphalt and Vinyl Asbestos Floor Tile: A Manufacturing Opportunity in Carroll County, Georgia," Georgia Tech Report, February 1964
28. "Flat Glass: A Manufacturing Opportunity in Georgia," Georgia Tech Report, June 1963
29. "Pipe Fittings and Valves: A Manufacturing Opportunity in Atlanta," Georgia Tech Report, September 1962
30. "Strengths and Weaknesses of Atlanta's Metalworking Industry," Georgia Tech Report, August 1962
31. "Plumbing Fixture Fittings: A Manufacturing Opportunity in Atlanta," Georgia Tech Report, June 1962
32. "Studies of Selected Industries in the Southeast River Basins: Textiles," Georgia Tech Report, March 1961, coauthor

Georgia Institute of Technology
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BIOGRAPHICAL SKETCH

EELMAN, BRUCE W.--Research Scientist II
Economic Development Laboratory

Education

M.B.A. in Finance, University of West Florida	1978
B.S. in Applied Mathematics, Georgia Institute of Technology	1971

Employment History

Georgia Institute of Technology	
Research Scientist II	1978-Present
Monsanto Textiles Company	
Senior Process Control Engineer	1977-1978
Process Control Engineer	1974-1977
Quality Control Engineer	1971-1974

Experience Summary: As a Research Scientist at Georgia Tech, handles consulting assignments with various companies, diagnosing their problems in the areas of management, marketing, finance, and manufacturing, and assisting in the development of plans of action aimed at addressing the firms' problems and strengthening their competitive position, including the preparation of loan applications. Initial work at Monsanto in quality control entailed responsibility for the establishment of statistical sampling procedures, development of quality monitoring methods and procedures, development of equipment reliability testing methods, correlation of customer feedback and internal indices for development of internal control criteria, and optimization of sampling procedures using cost vs. benefit approaches. Process control duties entailed routine process control of melt spun nylon yarns, including mass and quality yields, productivity increases, development of operating procedures and cost standards, process improvement and optimization experimental design and analysis and trouble shooting internal and customer quality problems.

Current Fields of Interest

Use of statistical techniques for analysis and business decision-making; financial management and analysis; management theory and practice; economic development and business improvement; feasibility studies.

Major Reports and Publications

1. "Trade Adjustment Initial Assistance Provided to Allen Knitting Mills," May 1980
2. "Diagnostic Review and Technical Assistance Adjustment Plan for Keane Monroe Corporation," May 1980
3. "Initial Overview for Wex-Tex Industries," April 1980
4. "Diagnostic Review for Forsyth Industries," March 1980
5. "Recovery Plan for Steridyne Corporation," March 1980

Major Reports and Publications (continued)

6. "Revised Recovery Plan for Dawson Industries," January 1980
7. "Southeastern TAAC Operations Manual," January 1980, editor
8. "Trade Adjustment Assistance Provided to Suntogs, Inc.," October 1979
9. "Cost Study for Suntogs, Inc.," September 1979
10. "Trade Adjustment Assistance Provided to Peachtree Jeans, Inc.," September 1979
11. "First Annual Report: Southeastern Trade Adjustment Assistance Center," September 1979, coauthor
12. "Quality Improvement of 70-34-L03," Monsanto Textiles Company, 1977
13. "Effects of Segregating Process Reject and Heel and Incomplete Production on Tire Yarn Quality," Monsanto Textile Company, 1974
14. "Elimination of Yarn Acceptance Sampling in Tire Yarn Beaming," Monsanto Textiles Company, 1973
15. "Evaluation of Automatic Yarn Inspectors for Tire Yarn Beaming," Monsanto Textiles Company, 1972
16. Authored approximately 50 operating instructions for processing nylon apparel yarn at Monsanto Textiles Company

Georgia Institute of Technology
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BIOGRAPHICAL SKETCH

ESCOFFERY, RONALD G.--Research Associate
Economic Development Laboratory

Education

M.B.A., Rutgers Graduate School of Business Administration	1973
B.A., Howard University	1972
Chase Manhattan Bank Credit Training	1974

Employment History

Georgia Institute of Technology	
Research Associate II	1979-Present
F. A. Johnson & Associates, Inc.	
Director of Finance & Marketing	1979
Escoffery, Bolton & Associates, President	1977-Present
Geore & Branday Ltd., Manager, Investment Department	1975-1977
Chase Manhattan Bank, Manager	
Credit & Marketing Financial Analyst	1974-1975
Rutgers MESBIC, Student Consultant	1972-1973
Johnson & Johnson, Graduating Financial Intern	1973

Experience Summary: As a financial analyst and consultant, is experienced in all phases of business, financial management and economic development, with emphasis on project and solution implementation, banking, budgeting, management and technical assistance to businessmen, loan packaging, financial counseling, feasibility studies, research for business development and expansion, and trouble shooting. Recently became involved in community revitalization projects, contributing to the development of financing vehicles for the catalyst projects which enabled the project implementation.

Current Fields of Interest

All phases of economic development with special interest in business and commercial development, identification and solution of business problems, and commercial revitalization.

Major Reports and Publications

1. "An Approach for an Economic Diversification Strategy for Bogalusa,"
1979

Georgia Institute of Technology
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BIOGRAPHICAL SKETCH

ESTES, CHARLES M., Jr.--Research Engineer II
Economic Development Laboratory

Education

M.B.A., University of South Carolina	1974
B.S., Industrial Engineering Auburn University	1971

Employment History

Georgia Institute of Technology	
Research Engineer II	1980-Present
Monsanto Textiles Company	
Industrial Engineering Supervisor	1978-1979
Senior Industrial Engineer	1975-1977
Industrial Engineer	1971-1975
Auburn University Computer Center	
Applications Programmer	1970-1971

Experience Summary: Industrial engineering responsibilities included designing and implementing automated materials-handling systems, developing improved management information systems, developing improved methods of operation, and determining manpower requirements. Specific accomplishments included development of computer program to optimize finished goods packaging, development of computerized operator scheduling system, chairmanship of committee to develop product inventory system, design of materials-handling system for new manufacturing process, development of manpower estimates for several long-range manufacturing processes, and implementation of several new procedures to increase labor productivity. As supervisor, managed group of five professionals. Also participated on start-up team of new manufacturing facility, coordinated \$1.5-million plant-wide cost reduction program, coordinated facilities planning and site development activities, and assisted in development of cost standards, budgets, and economic evaluations. At Auburn University Computer Center, provided programming assistance to students and assisted faculty/staff with computer applications for special projects.

Current Fields of Interest

Application of sound business and engineering principles to improve manufacturing businesses, including materials handling, economic evaluation, cost reduction, facilities planning, management information systems, and business planning.

Major Reports and Publications

1. "Site Development Manual," Monsanto Textiles Company, October 1978, coauthor
2. "Principles and Economics of Industrial Packaging," University of South Carolina Graduate Paper, May 1974
3. Published numerous analyses and recommendations for Monsanto Textiles Company

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BIOGRAPHICAL SKETCH

KEMPER, DANIEL C.--Research Engineer II
Economic Development Laboratory

Education

M.B.A. in Finance, Georgia State University	1980
B.I.E. (Co-op), Georgia Institute of Technology	1973

Employment History

Georgia Institute of Technology	
Research Engineer II	1979-Present
John H. Harland Co.,	
Senior Industrial Engineer	1975-1979
Industrial Engineer	1974-1975
AT&T Long Lines, Operations Supervisor	1973-1974
Schweizerische Isola-Werke, Industrial Engineer	1972
Bean and Whitney, Inc., Telephone Engineer	1970-1973

Experience Summary: At Georgia Tech, is a member of the Trade Adjustment Assistance Group, which provides technical and financial aid to firms adversely impacted by imports. Responsibilities include: in-depth analyses of each firm's strengths and weaknesses; development of full-scale business recovery plans involving marketing, financial and production strategies that address each firm's unique set of problems; assistance in preparing the necessary documents required for the firms to obtain Trade Adjustment loans; and recommendation of appropriate technical assistance to the participating firms. At Harland Company, had complete responsibility for the corporate industrial engineering program. Designed and implemented equipment layouts and material-handling systems in 21 plant locations to achieve standardized work flow. Developed plans and specifications and acted as liaison with architects and contractors on a multimillion-dollar construction program that included 16 new facilities and 5 renovations. Proposed and implemented cost reduction efforts such as capital equipment justifications, productivity improvement, and an energy conservation program for a total annual savings of over one-quarter million dollars. At AT&T, managed 13 relatively inexperienced craftsmen performing maintenance on over 1,600 private-line telephone circuits and installation of 500 new circuits per month. Was responsible for maintaining service and installation performance goals while seeing that all personnel received adequate training. As Industrial Engineer for Isola (Swiss Insulating Works, Ltd.), developed a computerized format for break-even analyses of proposed products. As Telephone Engineer, was responsible for numerous records verification projects under contract with New York Telephone and Southern Bell.

Current Fields of Interest

Productivity improvement as it relates to the optimal utilization of all available resources; manufacturing feasibility studies; financial analysis; operations and facilities design.

Major Reports and Publications

1. "Aly Handbags--Trade Adjustment Initial Assistance, Final Report," Georgia Institute of Technology, June 1980
2. "Miss Erica--Trade Adjustment Initial Assistance, Final Report," Georgia Institute of Technology, May 1980
3. "Taylor Radio--Trade Adjustment Initial Assistance, Final Report," Georgia Institute of Technology, May 1980
4. "Justification for the Purchase of a Wire Binding Machine," John H. Harland Co., March 1979
5. "A Proposal for an Automated Check Book Cover Machine," John H. Harland Co., June 1977
6. "A Proposal for Producing Self-Adhesive Address Labels," John H. Harland Co., May 1976
7. "A Proposal for Producing Check Transaction Registers," John H. Harland Co., January 1975
8. "A Trend Analysis System for Public Services in Fulton County," Georgia Institute of Technology, Department of Industrial and Systems Engineering, May 1973, coauthor
9. "Mindestbestellmenge," Schweizerische Isola-Werke, July 1972

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BIOGRAPHICAL SKETCH

LANIER, DIANNE D.--Research Associate II
Economic Development Laboratory

Education

M.B.A., Georgia State University	1979
B.A., University of Georgia	1974

Employment History

Georgia Institute of Technology	
Research Associate II	1979-Present
Marketing Information Service	
Project Manager	1979
Research Analyst	1978
Rich's, Research Analyst	1976-1978

Experience Summary: As a research associate at Georgia Tech, activities include outreach to acquaint prospective clients with the market research capabilities available within EES's Economic Development Laboratory. Duties also include consultation with clients seeking assistance from the Economic Development Administration or Trade Adjustment Assistance Program, with particular emphasis on marketing strategy and implementation of market research survey results. As a project manager at Marketing Information Service, directed all phases of the research process, with particular emphasis on client liaison and initial problem definition via a consulting orientation. Specific duties entailed interface with internal and external staff members and involvement in all areas of design and analysis, including methodology design and interpretive report writing and presentation. While a marketing research analyst, provided assistance in preparing research proposals, methodologies, data analysis, reports and statistical processing of data. Also was responsible for questionnaire design and creation of instructions for field personnel. As a research analyst with Rich's, was responsible for liaison with independent field services, questionnaire design, sample determination, supervision of coding process, SPSS programming, analysis and report writing in conjunction with survey research effort. Evaluated research reports and surveys prepared by other firms for Rich's management. Received training in trade area research from Hammer, Siler, George/Gould Retail Consultants and authored a major study of six potential southeastern markets for Rich's.

Current Fields of Interest

Industrial marketing and marketing research; marketing planning.

Major Reports and Publications

1. "The Modern Masculine Lifestyle," Advances in Consumer Research, Vol. IV, coauthor

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BIOGRAPHICAL SKETCH

LINDSEY, EDGAR T.--Senior Research Associate
Economic Development Laboratory

Education

M.B.A., University of Virginia	1972
B.S.I.M., Georgia Institute of Technology	1970

Employment History

Georgia Institute of Technology	
Senior Research Associate	1980-Present
Western Carolina University	
Associate Professor and Associate Director, Center for Improving Mountain Living	1976-1980
Harrison-Taylor Corporation	
Vice President & Treasurer	1975-1976
Southern Bank and Trust Company, Vice President	1973-1975
Citizens & Southern National Bank of South Carolina	
A National Accounts Officer	1972-1973
Summer Intern	1971
Citizens & Southern National Bank (Atlanta)	
Project Supervisor	1970

Experience Summary: Directed consulting projects for a federally sponsored technical assistance program designed to assist small businesses in a rural region; included establishing new techniques of assistance delivery, developing cooperative working arrangements with federal, state, and private organizations; and designing continuing educational programs for small businesses. Served as Vice President and Treasurer of a closely held corporation operating in several southeastern states. Served as Vice President of Loan Administration for a statewide bank establishing a new system of loan approval. Assisted in the establishment of a new bank division for the servicing and monitoring of national corporate accounts; upon the development of the division, serviced the bank's national corporate accounts which were headquartered in mid-Atlantic, Southeastern, Southwestern, and Western states. Served as a team member on a study team determining the feasibility of establishing an international banking department which was successfully established. Developed and performed a geographical market analysis of customers' attitudes towards banking services as a summer intern project.

Current Fields of Interest

Economic development, including business development and the development of assistance and support systems for the private sector in underdeveloped regions of the U.S.

Major Reports and Publications

1. "Imports - The Impact on North Carolina," North Carolina Commerce Report, July-August 1979, N.C. Department of Commerce
2. A significant number of consulting project reports written through grant support and for private industries--proprietary information

Georgia Institute of Technology

BIOGRAPHICAL SKETCH

LUMPKIN, RONALD O.--Research Scientist, Business Development Division,
Economic Development Laboratory, Engineering
Experiment Station

Education

B.B.A. Accounting and Finance, Georgia State University	1975
M.B.A. Finance, Georgia State University	1977

Employment History

Georgia Institute of Technology	
Research Scientist	1978-present
Complete Auto Transit (Subsidiary of Ryder)	
Regional Controller	1977-1978
Lockheed-Georgia Company	
Customer Supply Technical Group Supervisor	1972-1973
Supervisory Field Rep. (Logistic Support Manager Edwards AFB)	1971-1972
Customer Supply Technical Group Supervisor	1968-1971
Customer Supply Liaison Man	1966-1968
Development Test Material Man	1966-1966
Spares Support and Equipment Technician	1962-1966
Rich's Inc.	1959-1962

Experience Summary: At Georgia Tech, primarily involved in consulting with businesses by analyzing the firm's capabilities, isolating problems, and developing strategies or solutions. With Complete Auto Transit, was involved in eliminating accounting/financial problems through internal auditing, reviewing existing methods, and initiating proper procedures. Involved in design and installation of D.O.S. mini-computer system, analysis of capital expenditures, cash flow management, tax management and cost analysis for rate negotiations. Began with Lockheed in the identification and sale of spare parts, equipment, manuals and training with control over scheduling, planning and delivery of hardware and services. Responsible for the designing of a real time/random access procurement tracking and inventory control system for feasibility study phase through testing and implementation. Prepared procedures and instructions and conducted formal training for management and union personnel on mechanized systems and ancillary accounting functions. Had supervisory responsibility over organization that handled procurement/acquisition, inventory control, functional test and inspection, repairs, subcontracted rework, and accounting and control, including data entry for dynamic test inventory valued at over \$200 million. Additional responsibilities included planning, budgeting, forecasting, quoting, labor relations, procedures, schedule control, and contractual obligations. As the Logistic Support Manager at Edwards AFB, California, had all off-site support functions (acquisition, receiving inspection, warehousing, packaging and crating, shipping, accounting control, reporting, etc.) during the Air Force testing of the C-5 aircraft. Was involved in inventory control, receiving, distribution and retail merchandising with regional department store chain.

Current Fields of Interest

Analysis of business problems and the development and implementation of strategies or plans considering the major functional areas of a company--marketing, accounting/finance and production; data processing use; application of financial tools and other activities involved in sound management and business practices.

Major Reports and Publications

1. "Diagnostic Analysis and Adjustment Plan for Toll Gate, Inc.," Georgia Tech Report, 1981, coauthor
2. "Diagnostic Analysis and Summary of Initial Assistance for Donald MacMillan & Son, Inc.," Georgia Tech Report, 1981
3. "Maple Tree, Inc., Diagnostic Analysis and Recommendations," Georgia Tech Report, 1980, coauthor
4. "Adjustment Plan for Donald MacMillan & Son, Inc.," Georgia Tech Report, 1980
5. "A Market Study for MacMillan & Son, Inc.," Georgia Tech Report, 1980, project officer
6. "A Market Study for Poly-Quip, Inc.," Georgia Tech Report, 1980, project officer
7. "First Annual Report of the Southeastern Trade Adjustment Assistance-Center," prepared for Economic Development Administration, 1979, coauthor
8. "Diagnostic Review/Feasibility Study for Pinellas Seafood Company," Georgia Tech Report, 1979
9. "Development of a Set of Simplified Financial Management Procedures for Small Cities and Counties of Georgia," Georgia Tech Report, 1979
10. "A Demonstration Project to Establish a Technological Delivery System for Small and Medium-Sized Firms," Georgia Tech Report, 1979, coauthor
11. "An Initial Feasibility Study on the Manufacture of Liqueurs and Prepared Cocktails," Georgia Tech Report, 1978
12. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," prepared for Economic Development Administration, 1978
13. "User Guide to Complete Auto Transit's Data Point System," Complete Auto Transit, 1978
14. "Project 923--Real Time/Random Access System for C-5 Inventory Management," Lockheed-Georgia Company, 1967, coauthor
15. Author of approximately 130 procedures for Lockheed-Georgia Company

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

MULLER, JAMES C.--Research Engineer II
Economic Development Laboratory

Education

M.B.A. in Management, Georgia State University	1972
B.M.E., Georgia Institute of Technology	1967

Employment History

Georgia Institute of Technology	
Research Engineer II	1977-Present
Corning Glass Works	
Equipment Development Engineer	1975-1977
Senior Equipment Engineer	1974-1975
Southwire Company,	
Assistant Manager, Design Engineer	1972-1974
U.S. Army, Ordnance Officer	1968-1970
International Harvester, Design Engineer	1968

Experience Summary: At Georgia Tech, functions as project director and/or principal investigator on sponsored research projects concerning energy conservation and economic feasibility; also provides management and technical consultation to manufacturing firms in the southeastern United States. As senior equipment engineer in charge of equipment development at Corning in the Electronic Products Division, developed six new and different pieces of production equipment, taking them through all stages of development: conceptualizing, funding, designing, prototyping, debugging, fabricating, training operators, training maintenance personnel, commissioning, and documenting. As assistant manager of design engineering, provided engineering drawings to support all Southwire Continuous Rod projects; functioned as a design engineer, designing a complete continuous copper casting machine and bar preparation machine; did feasibility studies on an insulated scrap reclamation plant, designed the eventual system, and participated in the design of a system for recycling the plastic insulation material. As test officer, U.S. Army Armor and Engineering Board, conducted field test of experimental wheel and track vehicles. As platoon leader, commanded 98 men performing direct support maintenance on vehicles and armament of two battalion-size combat units. Assigned to General Staff, Support Command DaNang, monitored the readiness of engineer construction and material-handling equipment for all U.S. Army forces from Chu Lai to the DMZ. As design engineer, designed the valve train for a family of six-cylinder engines in medium-duty trucks.

Current Fields of Interest

Manufacturing engineering and manufacturing management, in particular: feasibility studies on new ventures, analysis of current problems, equipment selection and development, cost reduction programs, automation, computer-aided manufacturing.

Patents

1. "Automatic Metering System," U.S. Patent Pending, coinventor
2. "Pour Pot Manipulator," U.S. Patent No. 3,877,509

Registrations

Licensed Professional Engineer, Georgia, Reg. No. 11429
Licensed Professional Engineer, North Carolina, Reg. No. 7943
Certified Manufacturing Engineering, Cert. No. 970285, Exp. Date, Dec.
31, 1982

Major Reports and Publications

1. "Industrial Supply Company, Brunswick, Georgia: An Economic Analysis," Georgia Tech Report, May 1980
2. "The Feasibility of Manufacturing Machine Shop Products in Southwest Georgia," January 1980, with Harvey Diamond
3. "Feasibility of Manufacturing Metal Stampings in Southwest Georgia," Georgia Tech Report, January 1980, with Harvey Diamond
4. "The Feasibility of Obtaining Metalworking Support Facilities for Southwest Georgia Manufacturers," Georgia Tech Report, August 1979, with Harvey Diamond
5. "Diagnosis of Butler Furniture Industries," Georgia Tech Report, August 1979
6. "Feasibility of Reopening the Southern Electric Steel Mill, Birmingham, Alabama," Georgia Tech Report, May 1979
7. "Precision Metals Inc., An Economic Analysis," Georgia Tech Report, January 1979
8. "Trade Adjustment Assistance Provided to the Atlanta Umbrella Company," Georgia Tech Report, December 1978
9. "A Craftsman's Guide to Energy Conservation," textbook to be used in vocational/technical schools in Georgia, November 1978, with Esther Burks, Tom McGowan, and William Studstill
10. "Production and Profitability Analysis of Miami Laces Corporation," Georgia Tech Report, November 1978
11. "Energy Conservation and Management in Vocation/Technical Schools," Georgia Tech Report, September 1978, with James Clark
12. "Technical Assistance to Mulvey Supply Company, Hollywood, Florida," Georgia Tech Final Report, April 1978

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BIOGRAPHICAL SKETCH

RICE, GREGORY F.--Senior Research Associate
Economic Development Laboratory

Education

J.D., De Paul University	1961
B.A., De Paul University	1954
12 Semester Hours of Accounting, USAFI	1956

Employment History

Georgia Institute of Technology	
Senior Research Associate	1979-Present
Atlanta Protection Systems, Inc., President	1978-1979
Southern Silk Mills, Vice President Marketing/Sales	1977-1978
The Lovable Company, Vice President of Operations	1971-1976
Sears Roebuck & Company, Buyer/Merchandiser	1966-1970
Jewel Companies, Attorney, Buyer	1958-1965

Experience Summary: Georgia Tech activities include outreach to acquaint prospective clients with TAAC Program, consultation with clients to identify specific problem areas and develop strategies for recovery, and interaction with both the client and EDA to facilitate implementation of technical and/or financial assistance. President of Atlanta Protection Systems, in-home sales of residential burglar and fire alarm systems. As Vice President Marketing/Sales, directed national 16-man representative sales force. Formulated marketing and sales plans and budgets for sales in excess of \$20 million, priced all products, determined overall P&L plan, and administered the Marketing Department. As Vice President of Operations was responsible for all manufacturing and staff support areas except finance. Acted as marketing coordinator for company, and was responsible for unifying sales and manufacturing functions. Buyer/merchandiser duties at Sears included determining composition of line and pricing of products for retail and catalog sales, and preparing sales and P&L budgets. Negotiated long-term buying arrangements and costs with vendors, and prepared sales and production planning schedules for vendors. As a buyer for Jewel, determined selection, pricing and sales presentation of toys for retail food, discount and drug stores and for catalog operations. Also prepared sales plans and P&L budget. As an Attorney for Jewel, worked in law division in contract, regulation and labor areas.

Current Fields of Interest

- Analysis and solution of management/manufacturing problems with emphasis on the interrelation of marketing, production, and financial operations.

Registrations

Licensed to practice law in the state of Illinois and the United States
District Court, Northern District of Illinois, 1961

Georgia Institute of Technology
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BIOGRAPHICAL SKETCH

TAYLOR, HARDY A.--Chief, Business Development Division
Economic Development Laboratory

Education

B.S. in Business Administration and Pre-Law, University of Alabama	1943
Defense Department Comptrollership School, Washington, DC	1955
Graduate School of Business Organization, University of Nebraska	1951
Harvard Graduate School of Business Administration	1944

Employment History

Georgia Institute of Technology	
Chief, Business Development Division	1979-Present
Head, Industrial Services Group	1977-1979
Associate Chief, Industrial Development Division	1976-1977
Assistant Head, Industrial Services Branch	1970-1976
Assistant Head, Industrial Services Branch,	1970-1976
Head, EDA Services Section	1970
Head, Management and Technical Assistance Section	1968
Senior Research Scientist	1968
Research Scientist, II	1968
U.S. Navy, Supply and Fiscal Officer/Comptroller	1943-1968
Gladwin Industries, Inc., Atlanta, Georgia, Treasurer/ Controller	1964-1966
Turco Products, Inc., Atlanta, Georgia, Representative and Field Engineer	1943
National Southern Products, Inc., Tuscaloosa, Alabama, Research Assistant	1943

Experience Summary: As the Head of the Industrial Services Group is responsible for directing the overall EDL program of management and technical assistance and EDA services to Georgia industry. Served as treasurer of a locally based national corporation, primarily a manufacturer for the telephone industry, and was responsible for accounting and financial management, office administration and sales maintenance services, purchasing, customer relations and local sales, personnel administration, print shop operations and sales catalog maintenance. Served as a member of the board of directors of several corporations with national and international sales distribution. In 1964 completed 20 years in U.S. Navy as top departmental executive with experience in all phases of business and financial management. Special emphasis was on controllership, which consisted of budgeting and internal auditing; supply and fiscal operations, consisting of accounting and payroll, office administration and personnel management and training, procurement and contract negotiation and administration, inventory management, warehousing, traffic operations, quality control, industrial safety, and property disposal. Assisted in development of, and was in charge of implementation of, a new inventory management concept at the Naval Aviation Supply Office, which is the worldwide

inventory control point for all Naval Aviation spare parts and material. This concept, based on the maximum utilization of the latest electronic data processing equipment, resulted in the greatest advancement in the management of aviation material during the past several years. Served as Supply and Fiscal Officer/Comptroller at several Naval Air Stations and directed a working staff of 75 to 300 civilian personnel. As the first U.S. Naval representative in Sicily, negotiated at the highest governmental levels in Sicily and in Rome in arriving at agreements and procedural methods for operation of a U.S. Naval Air Station. Additionally, recruited, interviewed selected and hired the initial group of 100 civilian personnel. Also negotiated and approved contract for procurement of equipment, supplies and services from European sources to provide complete support for a station population of 1,800 people. Developed the idea and published a catalog in connection with a Simplified Issue Procedure for General Stores Material. This idea has been further developed and is widely used through the Naval Supply System.

Current Fields of Interest

All Phases of area development activity, including industrial and community development, financial and inventory management, and management development.

Major Reports and Publications

1. "Technical Assistance to Motels and Restaurant Owners Located on U.S. Highway 301", Georgia Tech Report, January 1978, coauthor.
2. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, December 1977, co-author
3. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, January 1977, coauthor
4. "Feasibility of Restructuring the Long-Term Financing of Delta Diversified, Inc.," Georgia Tech Report, July 1976, coauthor
5. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, December 1975
6. "A Program of Technical Assistance to the Farmers Home Administration Business and Industry Loan Program," Georgia Tech Report, March 1975
7. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, December 1974 coauthor
8. "Management and Technical Assistance to Georgia Business and Industry," Georgia Tech Report, August 1973, coauthor
9. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia", Georgia Tech Report, June 1973, coauthor
10. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia", Georgia Tech Report, September, 1972, coauthor
11. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Final Report September 1971, coauthor

12. "Ways of Organizing a Business in Georgia," Georgia Tech Management and Technical Assistance Counseling Note, August 1971, coauthor
13. "An Evaluation Report on McGuire Tire and Recapping Company, Atlanta, Georgia," Special Report for the Small Business Administration, July 1971, coauthor
14. "A Feasibility Report on the Proposed Expansion of Bertie Industries, Inc., Windsor, North Carolina," Special Report for the Small Business Administration, June 1971, coauthor
15. "A Program of Management and Technical Assistance in Designated EDA Counties," Georgia Tech Final Report, August 1970, coauthor
16. "Management and Technical Assistance to Georgia Business and Industry," Georgia Tech Annual Report, August 1968, coauthor
17. "Economic Impact of a Proposed Industrial District to be Located in Richmond County, Georgia," EDA Special Report, May 1968, coauthor
18. "Economic Impact of Proposed Water and Sewerage Systems Improvements on Gibson, Georgia," EDA Special Report, April 1968, coauthor
19. "Economic Impact of Proposed Water and Sewerage System Improvements on Madison, Georgia," EDA Special Report, April 1968
20. "Economic Impact of Proposed Sewerage System Improvements on Camilla, Georgia," EDA Special Report, March 1968, coauthor
21. "Economic Impact of Proposed Water and Sewerage Systems Improvements on the City of Sylvester and Worth County, Georgia," EDA Special Report
22. "Economic Impact of a Proposed Industrial Park to be Located in Milledgeville, Georgia," EDA Special Report, February 1968
23. "Economic Impact of the Proposed Establishment of Keller Industries, Inc. in Swainsboro, Georgia," EDA Special Report, February 1968, coauthor
24. "Economic Impact of a Proposed Industrial Park to be located in Swainsboro, Georgia," EDA Special Report, January 1968, coauthor
25. "Economic Impact of the Proposed I-20 Regional Industrial Park at Comak, Georgia," EDA Special Report, January 1968
26. "Economic Impact of Proposed Water and Sewerage System Improvements on Warrenton, Georgia," EDA Special Report, September or December 1967
27. "A Simplified Inventory and Cost Control System for a Small Manufacturer," EDA Special Report, June 1967
28. "Economic Impact of Proposed Water and Sewerage System on Cleveland, Georgia," EDA Special Report, May 1967, coauthor
29. "Economic Impact of a Proposed Water Storage Tank on Tennille, Georgia," EDA Special Report, April 1967
30. "Impact of Proposed Water and Sewerage System on Blakely, Georgia," EDA Special Report, February 1967, coauthor
31. Author of numerous published company studies; procedural systems manuals; and operational plans
32. Published catalog in connection with a Simplified Issue Procedure for General Stores Material

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BIOGRAPHICAL SKETCH

THOMAS, JAMES M.--Research Associate II
Economic Development Laboratory

Education

M.S., Management, Purdue University	1977
B.S.I.M., Georgia Institute of Technology	1972

Employment History

Georgia Institute of Technology	
Research Associate II	1980-Present
Touche Ross and Company, Management Consultant	1977-1980
Purdue University, Instructor of Financial Accounting	1975-1977
Federal Reserve Bank-Miami	
Systems Department Manager	1974-1975
Branch Systems Analysts	1973-1974
Check Collection Analyst and Check Processing Supervisor	1972-1973

Experience Summary: With Touche Ross and Company, performed a broad range of general management consulting engagements, including a review of operations and fiscal controls for a county maintenance department, development of a water quality management program for a state-designated water pollution control district, design and implementation of inventory evaluation procedures for a general hardware manufacturer, management of a Chapter XI bankruptcy for the court and creditors of a food processing company, implementation of a fully integrated accounting system for a state welfare agency, analyses of engineering operations and manpower utilization for an affiliated company of the Bell System, development of employee performance appraisal and incentive system for two county governments, development of a staff performance appraisal system for the Atlanta Management Services Department of Touche Ross and Company, analyses of road and drainage system maintenance operations and manpower utilization for a county government, development of an organization and operations plan for a new lease company venture, and market profile analyses of potential management consulting markets in the southeastern United States. Work experience with Purdue University included course instruction in financial accounting. As Systems Department Manager, with the Federal Reserve Bank, developed and implemented the department's organizational structure, procedures and policies; planned and managed the efforts of the programming and operations analyst staff; and managed the systems and user department's conversion from second to third generation computers. As Check Processing Supervisor, supervised three operational units with over fifty employees. Branch System Analyst work experience included supervision of the Data Processing Department programming staff, and planning and coordination of the department conversion from second to third generation computers. As a Check Collection Analyst, performed analyses of short- and long-term computer hardware requirements, performed analyses of alternative damaged check processing equipment, and coordinated implementation of computer hardware recommendations. Work experience with the Georgia Power Company included drafting and layout design of electrical sub-stations.

Current Fields of Interest

Utilization of quantitative management tools in finance, operations and marketing in the development of strategic business and operating plans.

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

SPRINGFIELD, ROBERT W.--Research Engineer II
Economic Development Laboratory

Education

B.I.E., Georgia Institute of Technology 1969

Employment History

Georgia Institute of Technology	
Research Engineer II	1979-Present
Summerour and Associates, Inc., Management Consultants	
Associate	1977-1979
Senior Consultant	1975-1977
Staff Consultant	1973-1975
Colonial Stores, Inc., Retail Food Chain	
Industrial Engineer, Corporate Warehousing and Transportation Department	1969-1973

Experience Summary: As a research engineer at Georgia Tech, duties include program management responsibility for a business consulting unit which provides management, financial, production, and marketing services primarily to small and medium manufacturing firms. As a management consultant with Summerour and Associates, worked with both large and small companies in solving the problems of facility design, employee productivity, personnel recruiting, training, cost and method analysis, inventory control and production planning. As a senior consultant, specialized in on-site implementation of problem solutions and engineering programs with complete documentation. As an associate consultant, responsibilities included marketing consulting services, preparing proposals and surveys and supervising staff engineers performing on-site implementation work. As an industrial engineer with Colonial Stores, did extensive project work in product delivery to stores, warehouse material handling methods, inventory control, store material handling methods, equipment justification, and facility layout and design.

Current Fields of Interest

Utilization of sound marketing, financial and management techniques that apply to manufacturing businesses; operations management with respect to diagnosing and solving problems.

Major Reports and Publications

1. "A Diagnostic Review and Business Recovery Plan," prepared for Mapletree, Inc., July 1980, coauthor
2. "A Diagnostic Review of Company Operations," prepared for Forsyth Industries, February 1980, coauthor
3. "A Business Recovery Plan," prepared for the Curlee Clothing Company, March 1979

Major Reports and Publications (continued)

4. "Economic Feasibility Study for the Proposed Relocation of Sewing, Finishing, and Distribution Activities," prepared for the Tobias Kotzin Company, January 1979
5. "Layout Concept for Central Cutting and Piece Goods Facility," prepared for Noel Industries, Inc., February 1977
6. "Facilities Utilization Study," prepared for Skyline Manufacturing Company, Inc., November 1977
7. "Industrial Engineering and Standard Data Manual," prepared for Atlantic Products Corporation, August 1977
8. "Survey Analysis of the Chicago Distribution Operations," prepared for Humphrey's Leather Goods, January 1977
9. "Results of an Assessment of Order Fulfillment Costs," prepared for McGregor-Donniger, Inc., October 1975, coauthor
10. "Survey of the Distribution Facility," prepared for Jonbil, Inc., November 1975
11. "Industrial Engineering and Incentive Wage Manual for the Camden Finished Goods Warehouse," prepared for Skyline Manufacturing Company, Inc., September 1974
12. "Cutting Engineering Manual-Summersville," prepared for Angelica, Inc., August 1973, coauthor
13. "Proposed Design for the Hazlehurst Service Center," prepared for the Edward Hyman Company, April 1973

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

WILENCHEK, STEPHEN B.--Senior Research Associate
Economic Development Laboratory

Education

M.B.A., Harvard Business School	1964
B.S.I.M., Georgia Institute of Technology	1960

Employment History

Georgia Institute of Technology	
Senior Research Associate	1979-Present
Wilenchek & Associates, Consultant	1979-Present
Citizens and Southern National Bank	
Vice President-Senior Credit Officer	1976-1979
Vice President-Branch Manager	1975-1976
Vice President-Equipment Leasing	1972-1975
Vice President-Corporate Financial Planning	1971-1972
Commercial Lending Officer	1966-1971
Trainee	1964-1966

Experience Summary: As senior research associate at EES, activities include outreach to acquaint prospective clients with Trade Adjustment Assistance Program, consultation with clients to identify specific problem areas and develop strategies for recovery, and interaction with both clients and Economic Development Administration to facilitate application to EDA for financial assistance. As senior credit officer, administered diversified portfolio of problem commercial loans which initially totalled \$12 million. Developed specific strategies for each situation and reduced loans by \$4 million through sales of collateral, demands made upon guarantors, and refinancing of loans elsewhere. Identified losses and charged off uncollectible amounts. Acted as liaison with attorneys in numerous lawsuits concerning defaulted loans, and regarding litigation against the bank arising from loan transactions. Assumed management of commercial/retail bank branch having high percentage of problem loans. Systematically reduced problem loan balances by 25%, while increasing deposits by 40% and cutting expenses by 10%. Despite poor business conditions, generated new consumer and commercial loan business, including the first SBA-guaranteed loan made by this bank to a contractor. Organized and operated equipment leasing department. Within two years, outstandings reached \$12 million. Served on troubled customer's finance committee and board of directors. During this time customer's operating losses were substantially eliminated and administrative procedures were greatly improved. Sold commercial banking services to and negotiated lines of credit with major national companies as well as local businesses. Managed \$19-million loan portfolio. Consulted with customers on financial strategy, mergers and acquisitions, and arranged private placements of debt.

Current Fields of Interest

Financial management, marketing management, market analysis, and the interaction of these factors in making strategic business decisions.

CHARTS

Chart 3

REGIONAL ECONOMIC DEVELOPMENT CENTER
GEORGIA INSTITUTE OF TECHNOLOGY
ACTIVITY REPORT
November 1, 1980 - January 31, 1981

	<u>Stabilization</u>		<u>Business Expansion</u>		<u>New Venture</u>		<u>Community Development</u>		<u>TOTAL</u>	
	<u>Previous</u>	<u>Current</u>	<u>Previous</u>	<u>Current</u>	<u>Previous</u>	<u>Current</u>	<u>Previous</u>	<u>Current</u>	<u>Previous</u>	<u>Current</u>
ONGOING (BEGINNING)	6	8	6	8	7	2	1	1	20	19
NEW	5	0	3	1	1	4	0	0	9	5
DISCONTINUED	3	5	1	4	6	1	0	1	20	11
ONGOING (ENDING)	8	3	8	5	2	5	1	0	19	13
TOTAL ACTIVE DURING QUARTER	11	8	9	9	8	6	1	1	29	24
<u>Percentage of Effort as Measured by Cost*</u>							<u>This Period</u>		<u>Previous Period</u>	
Business Stabilization							33		38	
Business Expansion							38		31	
New Venture							25		28	
Community Development							4		3	

*Cost is interpreted to mean Budget Cost for Period of Reporting.

Chart 4

SUMMARY OF PROJECT ACTIVITY BY TYPE AND SUBREGION

<u>Subregion</u>	<u>New Venture</u>	<u>Business Expansion</u>	<u>Business Stabilization</u>	<u>Community Development</u>	<u>Current Costs % of Total</u>
ALTAMAHA GEORGIA SOUTHERN EDD	1		1		8
CENTRAL SAVANNAH RIVER EDD		1			4
CHATTAHOOCHEE-FLINT EDD					
COASTAL AREA EDD		1			4
COOSA VALLEY EDD					
GEORGIA MOUNTAINS EDD					
HEART OF GEORGIA EDD					
LOWER CHATTAHOOCHEE EDD					
McINTOSH TRAIL EDD					
MIDDLE FLINT EDD			2		8
MIDDLE GEORGIA EDD					
NORTH GEORGIA EDD					
NORTHEAST GEORGIA EDD					
OCONEE EDD					
SOUTH GEORGIA EDD		3	1		18
SOUTHEAST GEORGIA EDD		1	1		8
SOUTHWEST GEORGIA EDD	2	2	2		25
NON-EDD	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>25</u>
TOTAL	6	9	8	1	100

Chart 5

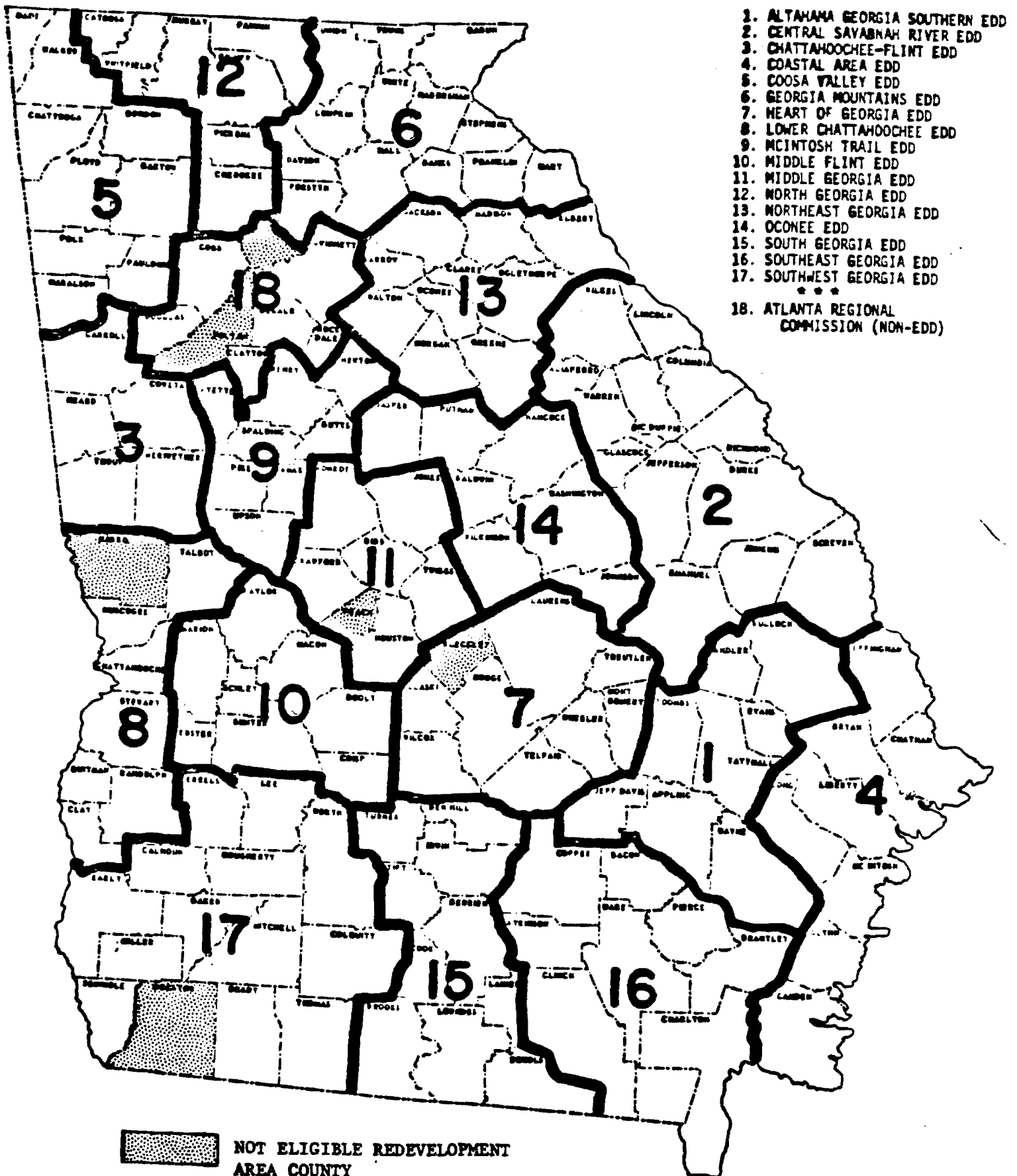
JOB IMPACT SUMMARY

<u>Subregion</u>	<u>Business Stabilization</u>		<u>Business Expansion</u>		<u>New Venture</u>		<u>Community Economic Development</u>		<u>Other</u>	
	<u>Goal</u>	<u>Actual</u>	<u>Goal</u>	<u>Actual</u>	<u>Goal</u>	<u>Actual</u>	<u>Goal</u>	<u>Actual</u>	<u>Goal</u>	<u>Actual</u>
Altamaha Ga. Southern EDD	Not Estab.	0	Not Estab.	0	Not Estab.	0	Not Estab.	0	Not Estab.	0
Central Savannah River EDD	"	0	"	0	"	0	"	0	"	0
Chattahoochee Flint EDD	"	0	"	0	"	0	"	0	"	0
Coastal Area EDD	"	0	"	0	"	0	"	0	"	0
Coosa Valley EDD	"	0	"	0	"	0	"	0	"	0
Georgia Mountains EDD	"	0	"	0	"	0	"	0	"	0
Heart of Georgia EDD	"	0	"	0	"	0	"	0	"	0
Lower Chattahoochee EDD	"	0	"	0	"	0	"	0	"	0
McIntosh Trail EDD	"	0	"	0	"	0	"	0	"	0
Middle Flint EDD	"	0	"	0	"	0	"	0	"	0
Middle Georgia EDD	"	0	"	0	"	0	"	0	"	0
North Georgia EDD	"	0	"	0	"	0	"	0	"	0
Northeast Georgia EDD	"	0	"	0	"	0	"	0	"	0
Oconee EDD	"	0	"	0	"	0	"	0	"	0
South Georgia EDD	"		"	0	"	0	"	0	"	0
Southeast Georgia EDD	"	3	"	0	"	0	"	0	"	0
Southwest Georgia EDD	"	0	"	0	"	0	"	0	"	0
Non-EDD	"	0	"	5	"	0	"	0	"	0
TOTAL	"	3	"	5	"	0	"	0	"	0

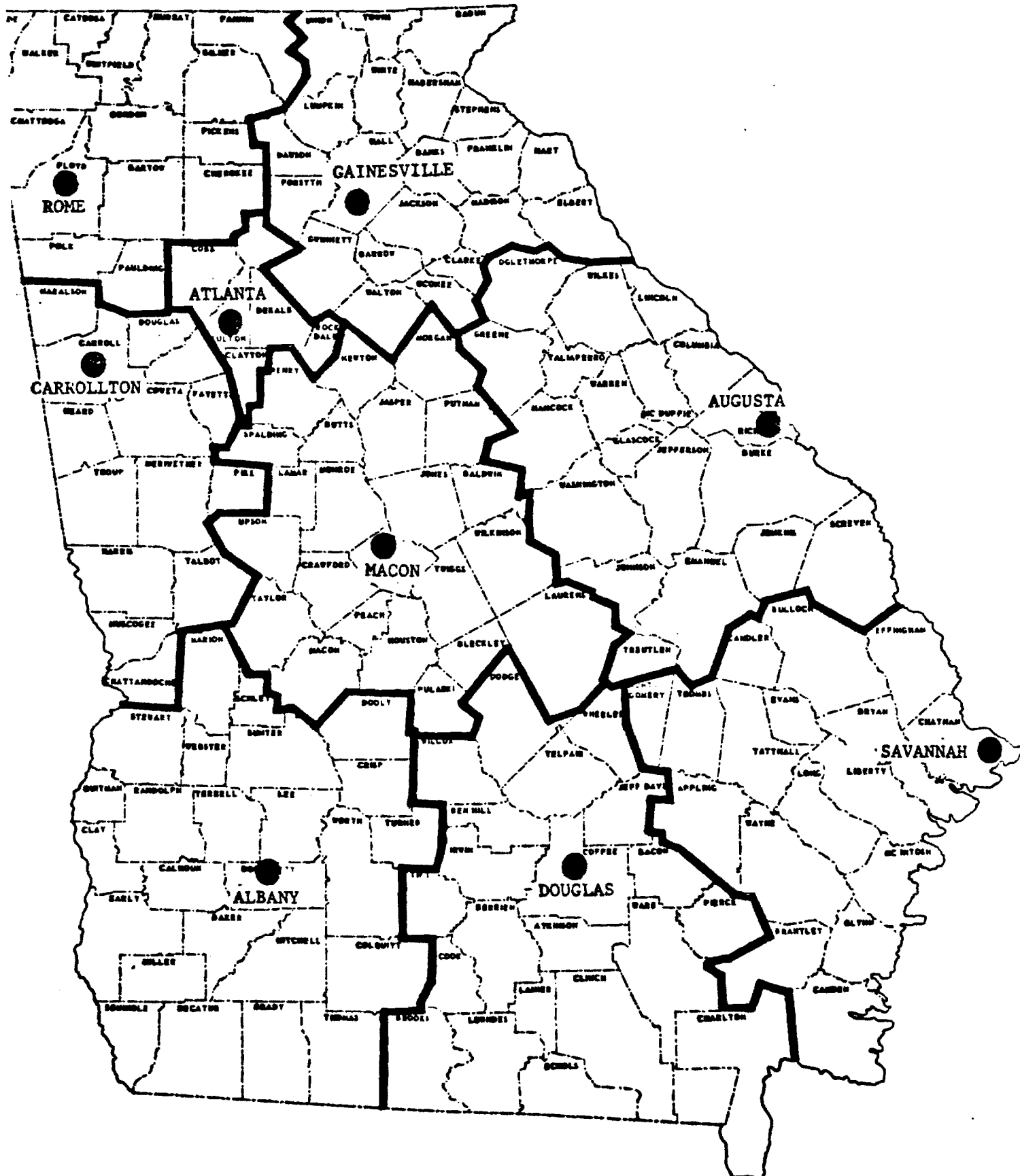
MAPS

Map 1

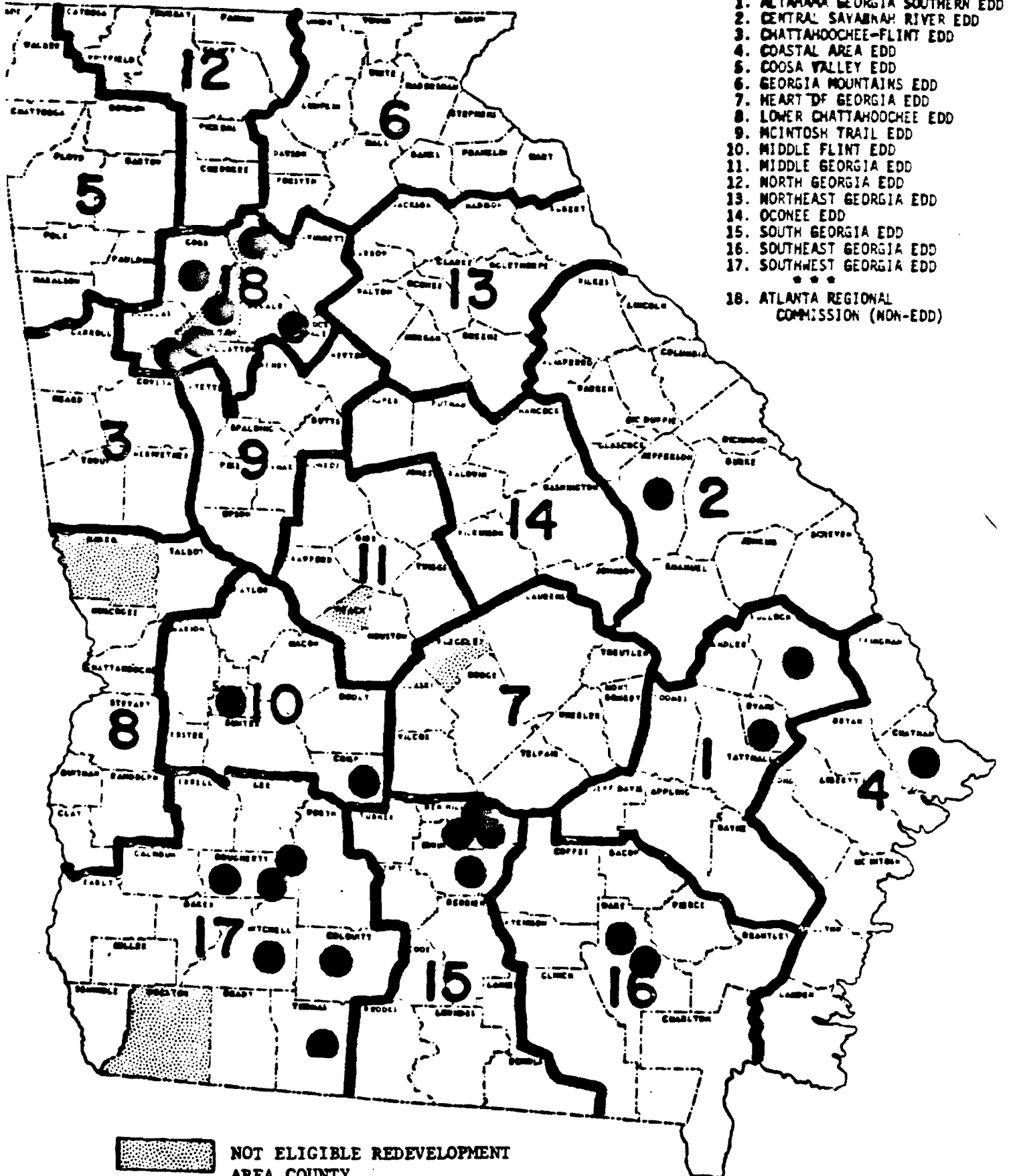
ECONOMIC DEVELOPMENT DISTRICTS
AREA PLANNING AND DEVELOPMENT COMMISSION BOUNDARIES



Map 2
 AREA OFFICES OF
 GEORGIA INSTITUTE OF TECHNOLOGY



Map 3
PROJECT LOCATION BY COUNTIES



Project No. A-2018
Grant No. 04-06-01567-5

A PROGRAM
OF MANAGEMENT AND TECHNICAL ASSISTANCE
IN DESIGNATED EDA COUNTIES IN GEORGIA

Quarterly Report

February, March, April 1981

by

Hardy S. Taylor
Senior Research Scientist

Robert E. Collier
Senior Research Scientist

This technical assistance program was accomplished by professional consultants under a grant from the Economic Development Administration. The statements, findings, conclusions, recommendations, and other data in this report are solely those of the grantee and do not necessarily reflect the views of the Economic Development Administration.

Economic Development Laboratory
Engineering Experiment Station
GEORGIA INSTITUTE OF TECHNOLOGY
May 1981

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I. Background Information

A. Economic Characteristics of Service Area

To be reported only in the first quarterly progress report and the final report.

B. Organization and Establishment of Center

To be reported only in the first quarterly progress report and the final report.

II. Program Administration

A. Program Objectives

To be reported only in the first quarterly progress report and the final report.

B. Technical Assistance Services

To be reported only in the first quarterly progress report and the final report.

C. Project Personnel

To be reported only in the first quarterly progress report and the final report.

D. Phasing of Work Program

This work program, which encompasses Chart 2, has been waived by paragraph five of the grant amendment offer dated the 27th day of June 1972.

E. Relationship to Other Development Efforts

In furthering the EDA objective in Georgia, the Economic Development Laboratory works closely with representatives of the following organizations:

- Georgia State Office of Planning and Budget
- Georgia Department of Industry and Trade
- Economic Development Districts
- Area Planning and Development Commissions
- Chambers of Commerce
- Local Industrial Development Groups
- Coastal Plains Regional Commission
- Appalachian Regional Commission
- Small Business Administration
- EDA Economic Development Representatives

Particular attention is directed to working with the EDD's and APDC's on individual projects. When an assistance project is opened, these organizations are notified that EDL will be working in their areas, and monthly progress reports of activity on projects within their areas

are furnished. Cooperation with the above-mentioned organizations is enhanced by the fact that EDL personnel are in almost constant contact with these groups in connection with other activities outside the EDA program.

III. Strategy for Subregions

To be reported only in the first quarterly progress report and the final report. Maps 1 and 2 show locations of organizations involved in the program.

IV. Technical Assistance Projects

A. Location

Map 3 identifies the counties in which work was performed under the program and indicates the number of projects conducted in each county.

B. Highlights of Project Activity

Chart 3 summarizes the highlights of project activity by major program categories. Chart 4 summarizes the project activity by type and subregion to indicate the distribution of effort throughout the state. Chart 5 summarizes the project activity by type and subregion to indicate job impact.

C. Nondiscrimination Policy and Related Project Activity

To assure nondiscrimination in the provision of services of the program under Title VI of the Civil Rights Act of 1964 and Title 15 CRF, Part 8.4, a substantial effort was made to identify needs of the minority and female community for technical assistance to small businesses. Of the projects conducted during the grant period, one was in support of minority interest and none were in support of female interest. The following projects describe the action undertaken to assist the minority and female community.

1. Minority Interest

Project 975: Assistance to an executive search firm in Fulton County (Atlanta)

A minority-owned executive search firm in Atlanta is applying for an SBA working capital loan and requires assistance in completing the application. This firm specializes in executive searches for the banking industry. An EES staff assistant met with the principal of the firm and is providing assistance in completing the SBA application. The project is continuing.

2. Female Interest

None.

D. Project Summaries

The 13 individual projects which were active during the quarter under the program of management and technical assistance to businesses, industrial firms, and communities in designated Georgia counties are listed by Economic Development Districts. Descriptions include identification of each project by number, type, and location; a brief description of the work performed; and a statement of the results achieved. The eight projects which were still active as of April 30, 1981, are listed under "Ongoing Projects" in each EDD.

ALTAMAHA GEORGIA SOUTHERN ECONOMIC DEVELOPMENT DISTRICT

General

The Altamaha Georgia Southern Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Appling, Bulloch, Candler, Evans, Jeff Davis, Tattnall, Toombs, and Wayne. The Economic Development Centers are Hazlehurst (Jeff Davis County), Statesboro (Bulloch County), and Vidalia (Toombs County).

Discontinued Projects

During the period, one project was discontinued in the area.

Project 958: Assistance to a group in Evans County that is interested in establishing an aluminum foundry

Nature of Problem: A group in Evans County is interested in establishing an aluminum foundry in the Claxton-Statesboro area. Much of the production equipment is owned by the group. Market survey work was needed to determine the demand for products. Site location assistance also was required.

Work Performed: EES staff personnel met with company representatives and developed a work plan for the project. A market survey process was developed and survey forms were mailed to selected addresses. Responses were received, tabulated, analyzed, and furnished the company. A presentation was made to the company concerning the aluminum casting survey. It was determined that the project should be expanded to include a study of production capacity and cost of equipment available to the company. In addition, it was determined that financing alternatives should be investigated. Due to current economic conditions, management has decided not to expand operation at this time. Further assistance is not required.

Results: The project is closed.

Ongoing Projects

There are no projects under way in this area.

CENTRAL SAVANNAH RIVER ECONOMIC DEVELOPMENT DISTRICT

General

The Central Savannah River Economic Development District consists of 13 counties, all of which are eligible Redevelopment Area counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Lincoln, McDuffie, Richmond, Screven, Taliaferro, Warren, and Wilkes. The Economic Development Centers are Augusta (Richmond County) and Swainsboro (Emanuel County).

Discontinued Projects

None.

Ongoing Projects

One project is now under way in this area.

Project 954: Assistance to a metal manufacturing company in Jefferson County

Nature of Problem: A tool and die shop is seeking to broaden its manufacturing base as well as its marketing area. The company produces several metal products, including gas fish cookers, pickup truck tool boxes, and wire cricket cages. The company has general machining, welding, and fabrication capabilities. It is interested in using these capabilities to produce metal fabrications and components for other companies. The firm has requested help with its marketing effort, including supply guidelines for promotion of the most profitable work.

Work Performed: Initial contacts have been made with company personnel and a work program has been developed.

Results: The project is continuing.

CHATTAHOOCHEE-FLINT ECONOMIC DEVELOPMENT DISTRICT

General

The Chattahoochee-Flint Economic Development District consists of five counties, all of which are eligible Redevelopment Area counties: Carroll, Coweta, Heard, Meriwether, and Troup. The Economic Development Centers are Carrollton (Carroll County) and LaGrange (Troup County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

COASTAL AREA ECONOMIC DEVELOPMENT DISTRICT

General

The Coastal Area Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long, and McIntosh. The Economic Development Centers are Brunswick (Glynn County) and Hinesville (Liberty County).

Discontinued Projects

During the period, one project was discontinued in the area.

Project 979: Management assistance to an engineering company in Chatham County

Nature of Problem: An existing engineering firm was planning to expand its operation into the manufacturing field. EDL staff assistance was requested in analyzing and testing new industrial instruments and to in conducting market analysis for the new product.

Work Performed: EDL staff personnel contacted company management; however, it was determined that EDL assistance was not required.

Results: The project is closed.

Ongoing Projects

There are no projects under way in this area.

COOSA VALLEY ECONOMIC DEVELOPMENT DISTRICT

General

The Coosa Valley Economic Development District consists of ten counties, all of which are eligible Redevelopment Area counties: Bartow, Catoosa, Chattooga, Dade, Floyd, Gordon, Haralson, Paulding, Polk, and Walker. The Economic Development Centers are Bremen-Tallapoosa-Buchanan (Haralson County), Rome (Floyd County), Cartersville (Bartow County), Ft. Oglethorpe (Catoosa County), and Rossville-LaFayette (Walker County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

GEORGIA MOUNTAINS ECONOMIC DEVELOPMENT DISTRICT

General

The Georgia Mountains Economic Development District consists of 13 counties, all of which are eligible Redevelopment Area counties: Banks, Dawson, Forsyth, Franklin, Habersham, Hall, Hart, Lumpkin, Rabun, Stephens, Towns, Union, and White. The Economic Development Centers are Gainesville (Hall County) and Toccoa (Stephens County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

HEART OF GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Heart of Georgia Economic Development District consists of nine counties, eight of which are eligible Redevelopment Area counties: Dodge, Laurens, Montgomery, Pulaski, Telfair, Treutlen, Wheeler, and Wilcox. The Economic Development Center is Dublin-East Dublin (Laurens County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

LOWER CHATTAHOOCHEE ECONOMIC DEVELOPMENT DISTRICT

General

The Lower Chattahoochee Economic Development District consists of eight counties, seven of which are eligible Redevelopment Area counties: Chattahoochee, Clay, Muscogee, Quitman, Randolph, Stewart, and Talbot. The Economic Development Center is Columbus (Muscogee County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

McINTOSH TRAIL ECONOMIC DEVELOPMENT DISTRICT

General

The McIntosh Trail Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Butts, Fayette, Henry, Lamar, Newton, Pike, Spalding, and Upson. The Economic Development Centers are Covington (Newton County), Griffin (Spalding County), and Thomas-ton (Upson County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

MIDDLE GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Middle Georgia Economic Development District consists of seven counties, six of which are Redevelopment Area counties: Bibb, Crawford, Houston, Jones, Monroe, and Twiggs. The Economic Development Center is Macon (Bibb County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

NORTH GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The North Georgia Economic Development District consists of six counties, all of which are eligible Redevelopment Area counties: Cherokee, Fannin, Gilmer, Murray, Pickens, and Whitfield. The Economic Development Center is Dalton (Whitfield County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

NORTHEAST GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Northeast Georgia Economic Development District consists of ten counties, all of which are eligible Redevelopment Area counties: Barrow, Clarke, Elbert, Greene, Jackson, Madison, Morgan, Oconee, Oglethorpe, and Walton. The Economic Development Center is Athens (Clarke County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

OCONEE ECONOMIC DEVELOPMENT DISTRICT

General

The Oconee Economic Development District consists of seven counties, all of which are eligible Redevelopment Area counties: Baldwin, Hancock, Jasper, Johnson, Putnam, Washington, and Wilkinson. The Economic Development Center is Milledgeville (Baldwin County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

SOUTH GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The South Georgia Economic Development District consists of ten counties, all of which are eligible Redevelopment Area counties: Ben Hill, Berrien, Brooks, Cook, Echols, Irwin, Lanier, Lowndes, Tift, and Turner. The Economic Development Centers are Valdosta (Lowndes County) and Tifton (Tift County).

Discontinued Projects

During the period, two projects were discontinued in the area.

Project 947: Assistance to a recreational vehicle manufacturing firm in Ben Hill County

Nature of Problem: A firm in Ben Hill County was experiencing production difficulties due to plant layout and production processes.

Work Performed: No current drawings existed, so the first step involved creating drawings of the existing layout. For these drawings, modifications were made to eliminate two major bottlenecks in material handling. During the creation of the new layout, another plant was closed by this company, so that much longer recreational vehicles had to be manufactured in this plant. Due to this latest change, several of the options in the new layout were not implemented and a proposed addition to the building was not made. However, a number of internal changes were implemented which allowed this company to improve production and not have to lay off workers. Specific improvements such as an overhead crane were instrumental in enabling the company to manufacture the longer trailers. Several additional changes will be implemented at a later date.

Results: Several layoffs have been avoided or delayed by the flexibility allowed in the new plant layout. However, due to economic conditions, the company is not going to fully implement recommended changes at this time. Further assistance is not required at this time. The project is closed.

Project 951: Assistance to a farm tool manufacturer in Ben Hill County

Nature of Problem: A manufacturing firm in Ben Hill County needed to increase the efficiency of an electrostatic powder painting system. The company was seeking a way to improve paint adherence while keeping the system price competitive.

Work Performed: EES staff personnel met with company personnel and further identified the problem. Work was undertaken to determine an approach to solving the adhesion problem. However, the company has decided not to purchase new equipment at this time. Further assistance is not needed.

Results: The project is closed.

Ongoing Projects

Two projects are currently under way in this area.

Project 948: Assistance to a manufacturer of irrigation equipment in Ben Hill County

Nature of Problem: A firm in Ben Hill County is manufacturing a new product which involves a new type of electronic control circuit. No one in the area manufactures such a circuit. The company is interested in establishing a manufacturing capability in the area so that the item will be available for use in the company's new product. Assistance has been requested in establishing such a capability in the area.

Work Performed: EES personnel have assisted the company to initiate a project setup, draw a schematic, and locate sources of supplies.. Investigation of sources of controls was undertaken, including cost estimates. Initial design work has been completed on the control circuit.

Results: The project is continuing.

Project 973: Assistance to an agricultural manufacturing business in Berrien County

Nature of Problem: A small manufacturer of agricultural equipment in Berrien County wishes to diversify its product line by manufacturing disk blades for agricultural equipment. The company has requested assistance in identifying the basic production processes required, specific manufacturing operations needed, new equipment that will be required to produce the disks, and in the development of a pricing structure.

Work Performed: EES staff engineers have met with management and developed a detailed program to be undertaken. The project is now under way.

Results: The project is continuing.

SOUTHEAST GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Southeast Georgia Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties. Atkinson, Bacon, Brantley, Charleston, Clinch, Coffee, Pierce, and Ware. The Economic Development Center is Waycross (Ware County).

Discontinued Projects

During the period, one project was discontinued in the area.

Project 972: Assistance to a nonprofit corporation in Ware County involved in furnishing work to handicapped workers

Nature of Problem: A concern in Ware County is involved in using handicapped personnel in the production of unfinished furniture. This nonprofit company is experiencing difficulty in obtaining funds for continuing operations. Assistance was requested to determine whether the company was eligible for a government loan.

Work Performed: An EES staff assistance visited the firm and discussed its status with the principal. It appears that the company may be eligible for an EDA loan. This matter was discussed with an EDA representative. Further EDA assistance is not required at this time.

Results: The project was discontinued.

Ongoing Projects

There are no projects under way in this area.

SOUTHWEST GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Southwest Georgia Economic Development District consists of 13 counties, 12 of which are eligible Redevelopment Area counties: Baker, Calhoun, Colquitt, Dougherty, Grady, Lee, Miller, Mitchell, Seminole, Terrell, Thomas, and Worth. The Economic Development Centers are Albany (Dougherty County) and Bainbridge (Decatur County).

Discontinued Projects

None.

Ongoing Projects

One project is currently under way in this area.

Project 980: Technical assistance to a manufacturing company in Colquitt County

Nature of Problem: A recently established small industrial firm produces a waste-fired furnace designed for agricultural uses such as tobacco curing, lumber curing, heating chicken houses, and pecan drying. The company has requested technical assistance to improve heat exchanger efficiency, heat recovery from stack gases, unit efficiency, and manufacturing processes. The company now employs six workers. It is anticipated that if the annual sales are increased, the work force will be increased to about 40 workers.

Work Performed: EES personnel have met with company principals and devised a preliminary work plan. Data collection and calculations of parameters to determine heat exchanger design is under way.

Results: The project is continuing.

PROJECTS OUTSIDE ECONOMIC DEVELOPMENT DISTRICTS

General

During the period, four projects were active in counties outside the Economic Development Districts.

Discontinued Projects

None.

Ongoing Projects

Four projects are now under way in this area.

Project 975: Assistance to an executive search firm in Fulton County (Atlanta)

Nature of Problem: An executive search firm in Atlanta is applying for an SBA working capital loan and requires assistance in completing the SBA application. This firm specializes in executive searches for the banking industry.

Work Performed: An EES staff assistant met with the principal of the firm and scheduled an appointment to assist him in completing the application.

Results: The project is continuing.

Project 976: Assistance to a building firm in Cobb County

Nature of Problem: A building firm in Cobb County is involved in the sale of custom housing plans and components. The company has requested assistance in preparing an SBA loan application.

Work Performed: An EES staff assistant met with the company principal. Work is now under way on the loan application.

Results: The project is continuing.

Project 977: Technical assistance to a moving firm in Fulton County (Atlanta)

Nature of Problem: A moving company in Fulton County has requested technical assistance in business development for the firm.

Work Performed: An EES staff assistant has contacted the company principal, and plans have been made to undertake the project.

Results: The project is continuing.

Project 978: Assistance to a firm in Fulton County that provides services to the phonograph industry

Nature of Problem: A firm in Fulton County that provides services to the phonograph industry has requested assistance in conducting a market evaluation for its services and advice on a marketing approach.

Work Performed: EES staff personnel have contacted company management, and plans are under way to accomplish the proposed work.

Results: The project is continuing.

V. EVALUATION OF PROGRAM

In drawing conclusions about the program, it would not be difficult to overstate the impact of the work performed by EDL staff personnel on individual projects. Work performed during the quarter reported on can be characterized in terms of further reviewing existing projects and eliminating those that did not appear to justify further effort, along with searching out new opportunities to provide management and technical assistance to companies and individuals that could possibly lead to the establishment of new jobs or provide stabilization for existing companies. During the period, no new projects were initiated. Five projects were completed and closed out, leaving eight active projects at the end of the quarter.

Conclusions regarding the overall impact of this program must be based upon a collective evaluation of the individual projects and their respective results. This evaluation should include not only a recognition of the fact that a deliberate attempt has been made to state the significance of EDL efforts in realistic terms, but also a consideration of the following special points concerning the results reported:

1. In many cases, the contributions of EDL staff personnel were major factors in management decisions to act or not to act on a specific plan of development. This was particularly true in those cases involving the development of new ventures.
2. In some situations, the end result would have been the same regardless of EDL participation. In such cases, EDL staff personnel helped to facilitate the achievement of an already determined goal.
3. In certain projects, EDL staff personnel filled a negative role by determining that a proposed course of action was not economically sound. The project staff felt that such actions, where they were taken, are in the best interests of all parties in the project. It is not enough to provide support for sound proposals; the unsound ones also must be identified.

Because of the preceding considerations, it is not practical to attempt to quantify results of this type program solely in terms of jobs created. Further, since it was the first program of its kind in a state-supported university, it is impossible to judge its merit on a comparative basis. It is necessary, therefore, to evaluate the program by empirical means. Several observations indicate that the management and technical assistance program to business and industry in Georgia has been beneficial:

1. After a modest start, the program has grown both in quantity of projects and in the comprehensiveness of the assistance offered. The program has been well received throughout Georgia and is being supported by the firms that have been assisted.

2. Consultants of all types have been kept apprised of Georgia Tech's management and technical assistance efforts and have worked in conjunction with EDL to further the program. All parties concerned seem to feel that the program is mutually beneficial.
3. Success of the original program has led to expansion of the project by the U.S. Department of Commerce's Economic Development Administration in Georgia and initiation of comparable programs by agencies in other states.
4. As a result of previous M & TA experience, EDL personnel provided counsel to the federal government in an effort to bridge the gap between the accumulated findings of governmental, educational, and private research and the information needs of business and industry. This counsel eventually resulted in the passing of the State Technical Services Act of 1965.

EXHIBITS

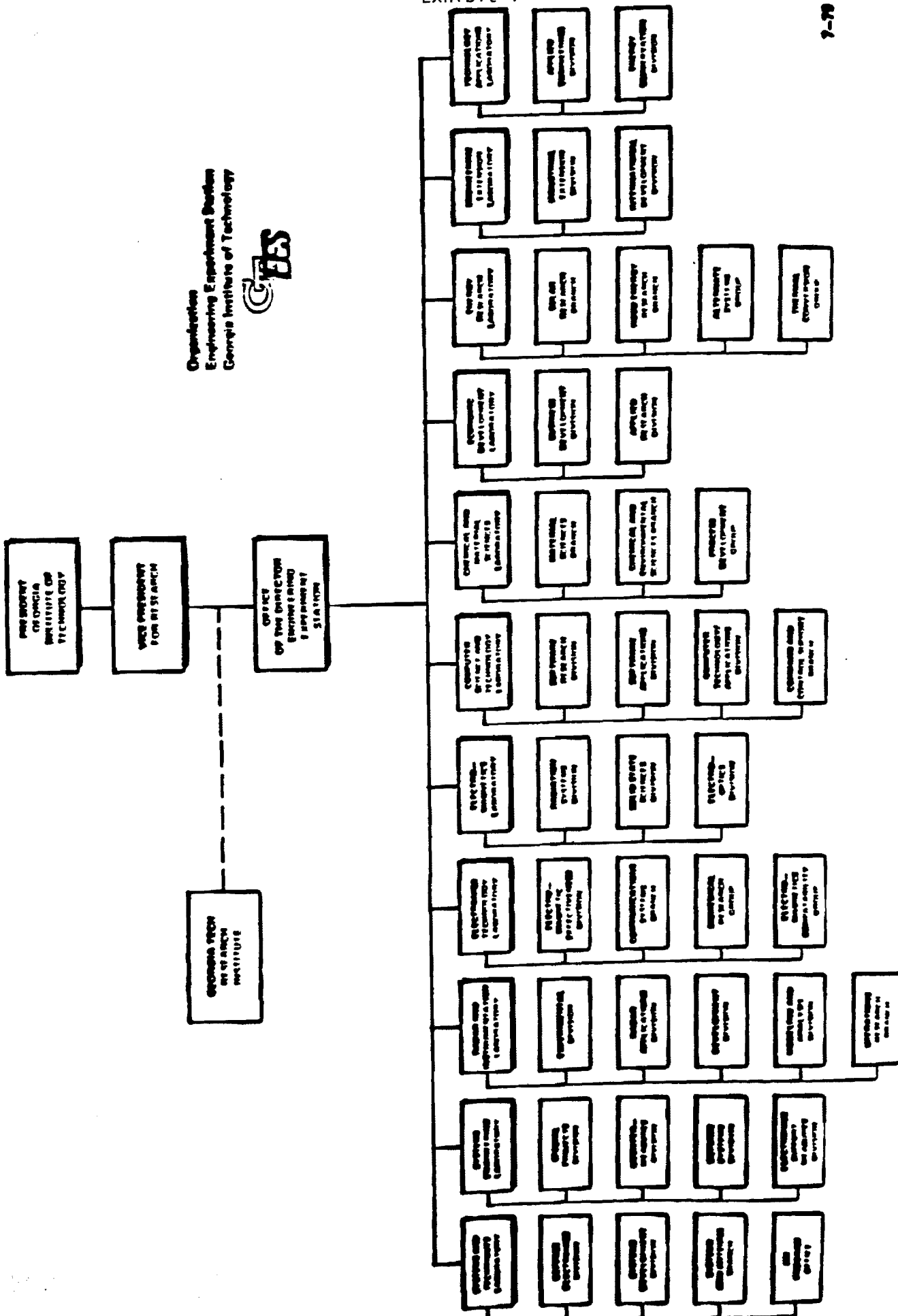


Exhibit 2

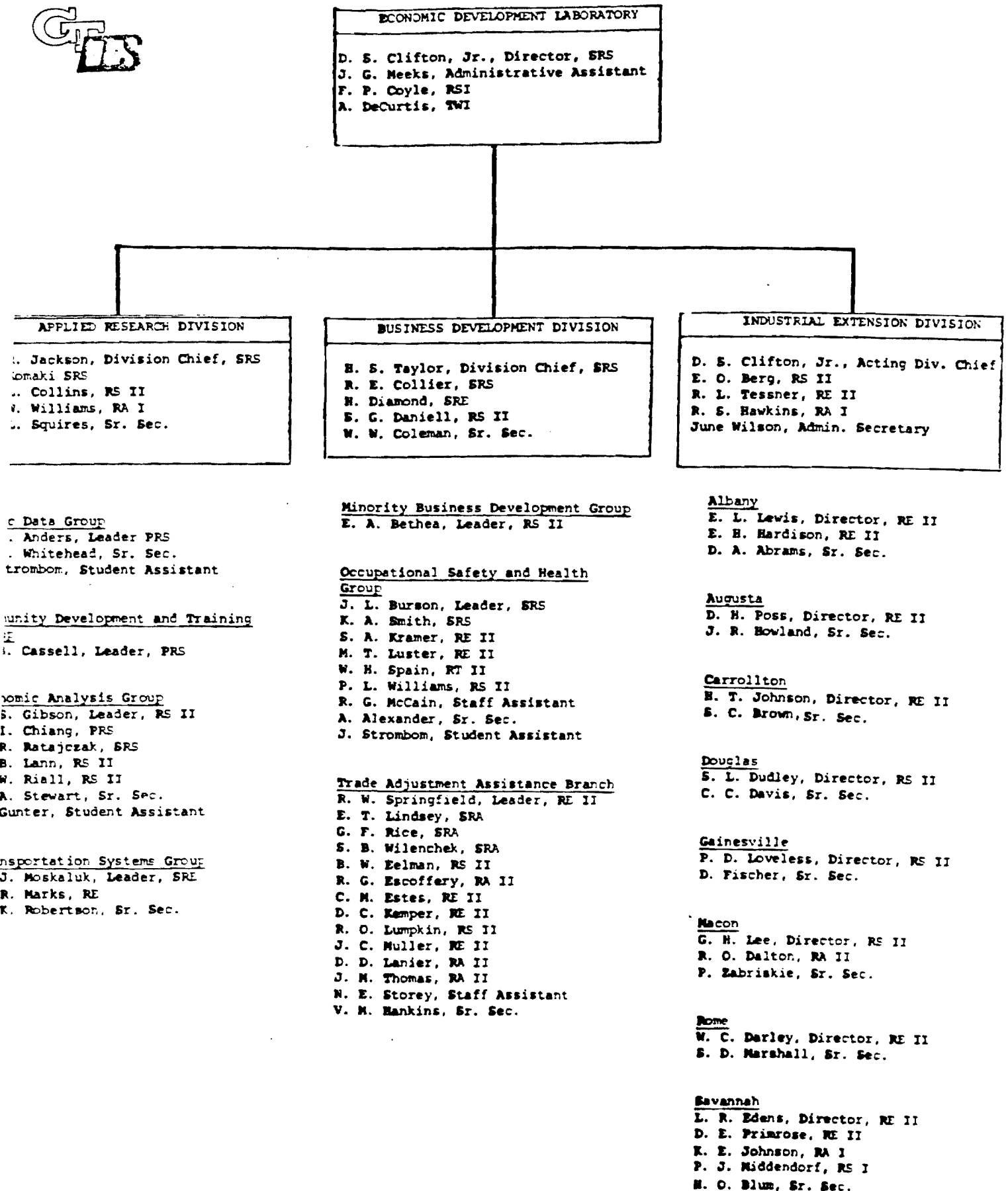


Exhibit 3
BIOGRAPHICAL SKETCHES

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

BETHEA, EDWIN A.--Research Scientist II
Economic Development Laboratory

Education

M.S.W., Howard University	1962
B.S., Knoxville College	1953

Employment History

Georgia Institute of Technology	
Research Scientist II	1972-Present
Volunteers for International Technical Assistance	
Director-Washington, D.C.,	
Director-East Central Regional Office	1970-1972
Youth Enterprises, Inc., Executive Director	1968-1970
United Planning Organization	
Community Organization Specialist (training officer), Economic Development Specialist	1966-1968
Far East Community Services, Inc., Community Organizer--Community Youth Organizer	1965-1966
District of Columbia, Department of Public Welfare	
Caseworker, Child Welfare Division	1962-1965

Experience Summary: Directed a regional office for technical assistance that provided services to minority and economically disadvantaged groups in mid-Atlantic region; responsible for establishing, structuring, and supervising new program offices in several states within the region. Program developer for minority economic ventures and community development project; responsibilities included establishing a working relationship with community groups, federal, state and local government agencies, and/or private agencies whose interests were similar. Organized and managed a minority firm for the purpose of establishing "spin-off" business ventures and the training of minority entrepreneurs. Managed and developed programs aimed toward helping groups initiate and implement economic and social changes in their community such as employment practices, bureaucratic procedures, etc. Assisted quasi-government and government department directors in community planning. Developed and directed programs relating to youth activities in the areas of training, proposal development, community improvement and change, and economic development. Has done private consulting work for several federal agencies and private corporations. Has completed seven continuing education short courses in the fields of small business development and management, new products development, and basic industrial development.

Current Fields of Interest

Minority business development; industrial and community development; manpower management and motivation; transportation; new economic systems.

Major Reports and Publications

1. "A Wood Energy Demonstration Center in Alabama, Phase I, Background Investigation," Minority Business Development Agency, March 1980, coauthor
2. "Technology Utilization and Commercialization Center," Quarterly Report--February, March, April 1980
3. "Technology Utilization and Commercialization Center," Quarterly Report--November, December, January 1979-80
4. "Technology Utilization and Commercialization Center," Annual Report, 1979
5. "Technology Commercialization Center--Expanding Black Enterprises," paper presented to the National Technical Association at their 57th National Convention, 1979
6. "Technology Utilization and Commercialization Center," Annual Report, 1979
7. "Technology Utilization and Commercialization Center," Quarterly Report--May, June, July 1979
8. "Technology Utilization and Commercialization Center," Quarterly Report--February, March, April 1979
9. "Technology Utilization and Commercialization Center," Quarterly Report--November, December, January 1978-79
10. "Technology Utilization and Commercialization Center," Quarterly Report--August, September, October 1978
11. "Technology Utilization and Commercialization Center," Annual Report, Office of Minority Business Enterprise, 1978
12. "Research and Demonstration Project," Regional Office of Minority Business Enterprise, Quarterly Reports, June 1977 and October 1977
13. "A Directory and Survey of Minority-Owned Business in the State of Georgia with Four Employees," Georgia Tech Report, 1977, coauthor
14. "Final Report on Technical Assistance to Selected Community Action Agencies in Georgia," Georgia Tech Report, 1976
15. "Market Study for Westgate Hardware Store," Georgia Tech Report, 1976
16. "A National Cultural Center at Tuskegee, Alabama," Georgia Tech Report, 1975
17. "Feasibility Study for Skating Rink in Columbus, Georgia," Georgia Tech Report, 1975, coauthor
18. "Market Study for Sea Island Handicraft Cooperative," Georgia Tech Report, 1973
19. "Survey of Georgia Minority Business," Georgia Tech Report, 1973, coauthor
20. "South Georgia Crafts--Study of Markets in Georgia, Product Quality and Management Structure," Georgia Tech Report, 1972

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

COLLIER, ROBERT E.--Senior Research Scientist
Economic Development Laboratory

Education

M.S., The George Washington University	1966
B.S., Texas Agricultural and Mechanical University	1939

Employment History

Georgia Institute of Technology	
Leader, EDA Management and Technical Assistance Program	1979-Present
Environmentalism (GS-12 Equiv.) IPA Assignment to U.S. Army Forces Command, Fort McPherson, Georgia (Part-time)	1979-Present
Senior Research Scientist	1972-Present
Head, Education and Training Branch	1974-1976
Head, Economic Development Training Section	1968-1970
Research Scientist II	1966-1968
Spindletop Research Center, Inc., Director, Training Services	1971-1972
U.S. Marine Corps, General Duty Officer	1940-1966
Sears, Roebuck & Company, El Paso, Management Training	1939

Experience Summary: As leader of the EDA Management and Technical Assistance Program at EES, assists in the management of the program and in reporting to EDA on program progress. As an Environmentalist on part-time IPA assignment to the Army, is responsible for development of environmental impact analyses to include data gathering, evaluation of data, and technical writing of environmental impact statements and assessments. As head of Education and Training Branch, was responsible for the development and conduct of training activities, including international programs. As Senior Research Scientist, Community Development Branch, IDD-EES, participated in training programs and conducted community development research projects. As Director, Training Services, National Area Development Institute, Spindletop Research, Inc., planned and conducted seminars and workshops for professionals and local leaders involved in area development activities. Courses were directed to the needs of individuals from economic development districts, community action agencies, governmental agencies, business organizations, farm organizations, utilities, cooperatives, public agencies and universities who were involved in area development programs. As head of the Economic Development Training Section, IDD-EES, developed handbooks, manuals, lesson plans, visual presentations and other materials for industrial and economic development training; also conducted training courses in the principles and techniques of industrial, economic and community development under sponsorship of the Economic Development Administration and Small Business Administration. As Research Scientist in the Industrial Services Branch, IDD-EES, furnished management guidance and technical

Experience Summary (continued): assistance to prospective and established business and industrial firms; also provided assistance in establishing sound new business ventures which utilize local resources and manpower. While on active duty with the Marine Corps, performed a variety of line and staff assignments involving administration, education, training, and logistics.

Current Fields of Interest

Economic development theory and practice; development education and training; public administration in the field of interorganizational/intergovernmental relations; environmental protection with specialization in the area of economic impact analysis.

Major Reports and Publications

1. "Final Report: A Program of Management and Technical Assistance to Designated EDA Counties in Georgia," prepared under EDA Contract No. 04-06-01567-2, December 1979, coauthor
2. "Interim Instructions for Implementing the Council on Environmental Quality (CEQ) Regulations," Department of the Army, Headquarters, United States Army Forces Command, Fort McPherson, Georgia, 19 September 1979, staff responsibility for preparation of instruction
3. "A Productivity Oversight Program for the Apparel Industry: A Regional Model," prepared under Department of Commerce Contract No. NP8D246, April 1979
4. "Final Report: A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," prepared under EDA Contract No. 04-06-01567-1, December 1978, coauthor
5. "Guidelines for the Establishment and Management of an Energy Assistance Program for Business and Industry," prepared under EDA Contract No. 99-6-9359-2, June 1978, coauthor
6. "Final Report: Planning for the Interorganizational Networking of a State Economic Development Council," prepared under contract with the Office of Economic Research, Economic Development Administration, under Grant No. OER-577-G-77-22, 1977
7. "Guidelines for an Energy Audit and an Energy Impact Statement," prepared under HUD Grant CPA-GA-04-06-1056, June 1976, coauthor
8. "Final Report: Substate Energy Management," prepared under contract with the Georgia State Energy Office, 15 February 1976, coauthor
9. "Analysis and Evaluation of Industrial Projects," a seminar with text prepared under AID Grant No. AID/CM/TA-G-73-18, 1975, coauthor
10. "Final Report: Leadership Training Programs in Selected Georgia Communities," Coastal Plains Regional Commission Contract No. 10040037, 1975, coauthor
11. "Guidelines for Industrial Extension Personnel," prepared under AID Grant No. AID/CM/TA/G-73-18, 1974, editor
12. "Economic Development Approaches for the Southeast," prepared for the Economic Development Administration under Grant No. 04-6-09029-6, 1973, coauthor
13. "Final Report: Leadership Training Programs in Selected Georgia Communities, May 31, 1972-September 30, 1973," Coastal Plains Regional Commission Contract No. 10240033, September 1973, coauthor

Major Reports and Publications (continued)

14. "Exploring the Dimensions of Area Development," National Area Development Institute Special Seminar sponsored under a Ford Foundation program, 1971
15. "Training Program for Staff Information Technicians," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970, coauthor
16. "Training Program for Planning and Development Technicians," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
17. "Basic Economic Development Training Program," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
18. "Industrial Development Training Program," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
19. "Executive Training Program," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
20. "Advanced Executive Training Program," a seminar prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
21. "Final Report: Training Programs in Economic Development, 1 April 1969 - 31 March 1970," EDA Contract No. OER-208-G-69-2, May 1970
22. "Final Report: Development of a Community Development Training Program for the Small Business Administration, 19 June 1968 - 1 July 1969," Small Business Administration Contract No. 1474-FA-68, July 1969
23. "Final Report: Training Program in Economic Development, 1 April 1968 - 31 March 1969, EDA Contract No. OER-208-G-68-3, May 1969
24. "Internship Program in Regional Economic Development," a training program prepared for the Economic Development Administration under Contract C-239-62L Neg., 1967
25. "Site Relocation Guide for Georgia Retail Business," Industrial Series No. 2," Georgia Tech Report, April 1967

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

DANIELL, SALLIE G.--Research Scientist II
Economic Development Laboratory

Education

B.S., University of Alabama	1966
M.Ln., Emory University	1973

Employment History

Georgia Institute of Technology	
Research Scientist II, EES	1977-Present
Research Scientist I	1973-1977
Research Scientist I (hourly)	1972-1973
Metrics, Inc., Research Analyst (Consulting)	1977-1979
Atlanta Public Library, Pre-Librarian	1971-1972
Kitchens Department Store, Sales Clerk and Artist	1970-1971
American National Red Cross, Recreation Aide, South Vietnam	1968-1969
Pizitz Department Store, Assistant Buyer	1967-1968
Texas Instruments, Engineering Clerk	1966-1967

Experience Summary: At Georgia Tech, work has involved market feasibility analysis; economic market analysis; plant location analysis; evaluation of area resources; preparation of methodologies; assimilation and dissemination of data for economic studies; literature searches; collecting, indexing, cataloging, and retrieval of data and materials; and considerable work with government documents and other pertinent secondary research data sources.

Current Fields of Interest

Business administration, including marketing, economics, and management; library science, including organization, retrieval, and dissemination of information.

Major Reports and Publications

1. "A Market Study for Poly-Quip, Inc.," Georgia Tech Report, March 1980, coauthor
2. "The Market Potential for Printed Circuit Boards," Georgia Tech Report, March 1980, coauthor
3. "Evaluation of Suntogs Marketing Prospects," Georgia Tech Report, August 1979, coauthor
4. "Analysis and Planning Market Study for Peachtree Jeans, Inc.," Georgia Tech Report, May 1979, coauthor
5. "Diagnostic Review/Feasibility Study for Pinellas Seafood Company," Georgia Tech Report, May 1979, coauthor
6. "A Preliminary Investigation of Profit Opportunities for Manufacturing Prefabricated Houses in Liberty County," Georgia Tech Report, May 1979

Major Reports and Publications (continued)

7. "A Demonstration Project to Establish a Technology Delivery System for Small and Medium-Sized Firms," Georgia Tech Report, February 1979, coauthor
8. "A Design for a Venture Opportunities Information System," Georgia Tech Report, August 1978, coauthor
9. "Directory of Public Service Resources and Interests for Local Governments Available from Georgia Institute of Technology," Inter-University Task Force Report, June 1978
10. "An Economic Definition of the Nuclear Industry," Metrics, Inc. Report, April 1978, coauthor
11. "The Potential for Industrial Development in the Industrial City Region," Georgia Tech Report, December 1977, coauthor
12. "The Industrial City: Concepts and Design," Georgia Tech Report, December 1977, coauthor
13. "The Industrial City: Executive Summary," Georgia Tech Report, December 1977, coauthor
14. "Economic Analysis of Pretreatment Standards for the Textile Industry," Environmental Protection Agency, June 1977, coauthor
15. "Baseline Energy Data System: Data Base 1973," Georgia Tech Report, June 1976, coauthor
16. "Baseline Energy Data System: Methodology," Georgia Tech Report, June 1976, coauthor
17. "Directory of Scientific Resources in Georgia, 1973-1974," Fourth Edition, Georgia Tech Report, March 1974, coauthor
18. "Marketing of the Public Library," unpublished report in M.Ln. program, Division of Librarianship, Emory University, July 1972

Georgia Institute of Technology
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BIOGRAPHICAL SKETCH

DIAMOND, HARVEY--Senior Research Engineer
Economic Development Laboratory

Education

St. Johns University	1941-1942
B.S. in Textile Engineering, North Carolina State College	1946

Employment History

Georgia Institute of Technology	
Senior Research Engineer, EES	1967-Present
Research Engineer II	1965-1967
Research Engineer I	1960-1965
Dux Mixture Hardware Company, Partner	1950-1960
American Woolen Company, Designer and Assistant Buyer	1947-1950
Cohn-Hall-Marx, Convertor and Assistant Designer	1946-1947

Experience Summary: Economic feasibility studies, plant location analyses, market research to identify manufacturing and nonmanufacturing business opportunities, raw materials and intermediate products availability studies, marketing strategies, purchasing and marketing development and procedures, evaluation of export markets, small-scale industry entrepreneurship, liaison with prospects on industrial location possibilities, evaluation and development of area resources, transportation studies, and management and technical assistance to prospective and established businesses. Coeditor of monthly metalworking bulleting. Purchasing and marketing of hardware, wholesale and retail; textile designing; textile converting.

Current Fields of Interest

Market analyses; plant location criteria; economic feasibility analyses; import-export potentials; small-scale industries.

Major Reports and Publications

1. "Export Promotion to Barbados," Georgia Tech Report, May 1980, coauthor
2. "Technical Assistance Program to the Jamaican National Export Corporation in Miami, Florida," Georgia Tech Report, February 1980, coauthor
3. "The Feasibility of Producing Metal Stampings in Southwest Georgia," Georgia Tech Report, January 1980, coauthor
4. "The Feasibility of Manufacturing Machine Shop Products in Southwest Georgia," Georgia Tech Report, January 1980, coauthor
5. "The Feasibility of Establishing a Convention Center in Savannah, Georgia," Georgia Tech Report, December 1979, coauthor
6. "The Feasibility of Obtaining Metalworking Support Facilities for Southwest Georgia Manufacturers," Georgia Tech Report, August 1979, coauthor

Major Reports and Publications (continued)

7. "Intermediate Technology Demonstration Project," Georgia Tech Report, January 1978, coauthor
8. "Truck Trailers," Georgia Tech Report, August 1977
9. "Export Potential of Selected Korean Small-Scale Industries," Georgia Tech Report, January 1976
10. "Musical Instruments: A Manufacturing Opportunity in Atlanta, Georgia," Georgia Tech Report, May 1975
11. "Directory of Metalworking Job Shop Capabilities in Georgia, 1975," Georgia Tech Report, February 1975
12. "Evaluation of Palm Beach and Dade County, Florida, Areas Concerning Long-Term Need for Agricultural Workers," Georgia Tech Report, December 1974, coauthor
13. "A Survey of Plastics Waste in Georgia," Georgia Tech Report, August 1974, coauthor
14. "Impact Study of the Offshore Power Systems," Georgia Tech Report, September 1973, coauthor
15. "Industrial Possibilities for Rural Georgia," Georgia Tech Report, July 1973
16. "Plastics Processors and Fabricators in Georgia and Surrounding Areas, 1972," Georgia Tech Report, June 1972, coauthor
17. "Metal Service Centers in the Southeast, 1972," Georgia Tech Report, April 1972
18. "Directory of Job Shop Capabilities in Georgia, 1971," Georgia Tech Report, December 1970
19. "Directory of Job Shop Capabilities in Georgia, 1966," Georgia Tech Report, September 1966, coauthor
20. "The Advantages of Manufacturing Asphalt and Vinyl Asbestos Floor Tile in Savannah," Georgia Tech Report, December 1965, coauthor
21. "Mobile Homes in Georgia: A Study of the Personal Property Taxes Levied on Mobile Homes in the Metropolitan Areas of Georgia and the Significance of the Mobile Home Industry to the State," Georgia Tech Report, February 1965, coauthor
22. "Investment Casting: A Manufacturing Possibility for Elberton, Georgia," Georgia Tech Report, January 1965
23. "Glass Wool Insulation: A Manufacturing Opportunity in Georgia," Georgia Tech Report, September 1964
24. "Pistons, Piston Rings, and Valves: A Manufacturing Opportunity in Georgia," Georgia Tech Report, June 1964
25. "Engine Electrical Equipment: A Manufacturing Opportunity in Georgia," Georgia Tech Report, May 1964
26. "Exhaust System Parts: A Manufacturing Opportunity in Georgia," Georgia Tech Report, April 1964
27. "Asphalt and Vinyl Asbestos Floor Tile: A Manufacturing Opportunity in Carroll County, Georgia," Georgia Tech Report, February 1964
28. "Flat Glass: A Manufacturing Opportunity in Georgia," Georgia Tech Report, June 1963
29. "Pipe Fittings and Valves: A Manufacturing Opportunity in Atlanta," Georgia Tech Report, September 1962
30. "Strengths and Weaknesses of Atlanta's Metalworking Industry," Georgia Tech Report, August 1962
31. "Plumbing Fixture Fittings: A Manufacturing Opportunity in Atlanta," Georgia Tech Report, June 1962
32. "Studies of Selected Industries in the Southeast River Basins: Textiles," Georgia Tech Report, March 1961, coauthor

Georgia Institute of Technology
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BIOGRAPHICAL SKETCH

CLIFTON, DAVID S., Jr.--Director
Economic Development Laboratory

Education

Ph.D. in Economics, Georgia State University	1980
M.B.A. in Economics, Georgia State University	1970
B.I.E., Georgia Institute of Technology	1966

Employment History

Georgia Institute of Technology	
Director, Economic Development Laboratory, EES	1979-Present
Chief, Economic Development Division, TDL, EES	1977-1979
Manager, Economic Research, IDD, EDL, EES	1977-1978
Head, Industrial Economics Section, IDD, EDL, EES	1974-1977
Senior Research Scientist	1977-Present
Research Scientist II	1973-1977
Research Economist I	1970-1973
Lockheed-Georgia Company	
Associate Customer Facilities Engineer	1966-1969
Customer Facilities Engineer	1969-1970

Experience Summary: Georgia Tech assignment involves industry feasibility studies; regression analysis; product/market studies; transportation studies; economic impact studies; domestic/international training; and proposal development/project management; energy alternatives; and energy food plantation concepts. At Lockheed, gathered data, made preparatory investigations, analyzed and arrived at solutions for customer facilities problems. Provided technical assistance in planning and design of new construction or major alternations of customer facilities. Completed economic feasibility studies for prospective aircraft customers.

Current Fields of Interest

Market analysis; economic feasibility studies; international trade; energy research; technology assessment; research in economic and industrial development; research management.

Major Reports and Publications

1. "State Science, Engineering, and Technology Program," Georgia Tech Report, February 1980, coauthor
2. "Economic Development Analysis of Appalachian Georgia," Georgia Tech Report, January 1980, coauthor
3. "A Feasibility Study for Wood Energy Utilization in Georgia," Georgia Tech Report, August 1979, coauthor
4. "Market Potentials of Wood Fuel in the Southeast," Georgia Tech Report, June 1979, coauthor

Major Reports and Publications (continued)

5. "Regional Forums on Appropriate Technology," National Science Foundation, February 1979, coauthor
6. "Project Feasibility Analysis," presented at the Instituto de Administracion cientifica de las Empresas, Mexico City, 10-12 August 1978
7. "A Design for a Venture Opportunities Information System," Atlanta Regional Office of Minority Business Enterprise, August 1978, coauthor
8. "The Potential for Industrial Development in the Industrial City Region," Vol. 3, Georgia Tech Report, December 1977, coauthor
9. "The Industrial City: Concept and Design," Vol. 2, Georgia Tech Report, December 1977, coauthor
10. "The Industrial City: Executive Summary," Vol. 1, Georgia Tech Report, December 1977, coauthor
11. "Economic Analysis of Pretreatment Standards for the Textile Industry," Environmental Protection Agency, June 1977, coauthor
12. PROJECT FEASIBILITY ANALYSIS: A Guide to Profitable New Ventures, John Wiley & Sons, Inc., April 1977, coauthor
13. "Market Information System for Vada Builders, Inc.," Georgia Tech Report, November 1976, coauthor
14. "Baseline Energy Data System: Energy Indicators," Vol. 4, Georgia State Energy Office, June 1976
15. "Baseline Energy Data System: Energy Supply Network," Vol. 3, Georgia State Energy Office, June 1976, coauthor
16. "Baseline Energy Data System: Data Base 1973," Vol. 2, Georgia State Energy Office, June 1976, coauthor
17. "Baseline Energy Data System: Methodology," Vol. 1, Georgia State Energy Office, June 1976, coauthor
18. "Impact of the Engineering Experiment Station on the Economy of Georgia, Fiscal Years 1973 and 1974," Georgia Tech Report, February 1976, coauthor
19. "Energy in Georgia, Uses, Program Needs, Policy and Recommendations," prepared by State Energy Office and Georgia Tech, December 1975, coauthor
20. "A Program to Assist Business and Industry in Coping with the Energy Crisis," Georgia Tech Report, September 1975, coauthor
21. "Analysis and Evaluation of Industrial Projects," presented at the Institute for Small-Scale Industries, University of the Philippines, Manila, 1975, 23-27 June 1975
22. "A Training Program on the Analysis and Evaluation of Industrial Projects," Georgia Tech Report, June 1975, coauthor
23. "Economic Data Relative to the Central Georgia Steam Plant," Georgia Tech Report, February 1975, coauthor
24. "A Productivity Program for the Engineering Experiment Station," Georgia Tech Report, November 1974, coauthor
25. "An Analysis of Merchandising Methods for Eggs," Georgia Tech Report, June 1974
26. "Southeastern Trends of Selected Industries," Georgia Tech Report, April 1974, coauthor
27. "The Economic Impact of Georgia's Deepwater Ports," Georgia Tech Report, December 1973, coauthor
28. "Economic Development Approaches for the Southeast," Georgia Tech Report, November 1973, editor
29. "The Little-Mirrlees Cost-Benefit Method for Industrial Project Analysis in Developing Countries," unpublished report in Ph.D. program, Georgia State University, August 1973

Major Reports and Publications (continued)

30. "Georgia Employment and Population Projections with Special Reference to Water-Using Industries," Georgia Tech Report, July 1973, coauthor
31. "Training for Business and Industry in Florida, Kentucky, North Carolina, and South Carolina," Georgia Tech Report, May 1973, coauthor
32. "A Survey of Empirical Evidence of the Heckscher-Ohlin Theory of International Trade," unpublished report in Ph.D. program, Georgia State University, April 1973
33. "Training for Business and Industry in Alabama, Georgia, Mississippi, and Tennessee," Georgia Tech Report, March 1973, coauthor
34. "A Graduate-Employer Evaluation of Georgia's Vocational-Technical School Program," Georgia Tech Report, January 1973, coauthor
35. "An Unemployment Registration and Employment Generation Program for the Lower Chattahoochee Community Action Agency," Georgia Tech Report, September 1972, coauthor
36. Transportation Analysis in "Peanut Processing Opportunities," Southwest Georgia Area Planning and Development Commission, June 1972
37. "A Survey of Export Proceeds Instability Research with a Report on the Export Proceeds Instability of Colombia," unpublished report in Ph.D. program, Georgia State University, June 1972
38. "Georgia as a Center for Charcoal and Charcoal Briquette Production," Atlanta Economic Review, March 1972, coauthor
39. "A Registration of the Unemployed in the Heart of Georgia Community Action Council Area," Georgia Tech Report, January 1972, coauthor
40. "A Survey of Selected Users of Spun Sheet Metal in Alabama and Georgia," Economic Development Administration, July 1971
41. "Carbonized Bark for Briquetting Purposes," Georgia Tech Report, July 1971, coauthor
42. "Economic Factors Affecting the Feasibility of Locating a Vegetable Processing Plant in the Vicinity of Americus, Georgia," Georgia Tech Report, May 1971, coauthor
43. "The Market for Leaf Springs," Economic Development Administration, February 1971
44. "Industrial Air Pollution: Particulate Control Equipment Market," Economic Development Administration, December 1970
45. "The Potential Impact of Jumbo-Jet Air Cargo Transportation on Georgia," Georgia Tech Report, October 1970, coauthor
46. "Market Survey of Garden Center Buyers," Economic Development Administration, October 1970
47. "Georgia Retail Florist Store Sales," Economic Development Administration, September 1970
48. "The Southeastern Market for Plastic Bathroom Fixtures in Residential Construction," Economic Development Administration, July 1970
49. "The Calico Scallop Market," Economic Development Administration, June 1970
50. "The Southeastern Modular Housing Market," Economic Development Administration, May 1970
51. "The Market for Boxboard Containers for the Coastal Plain Region of Georgia," Economic Development Administration, May 1970
52. "Long Cycles in Residential Construction," unpublished report in M.B.A. program, Georgia State University, December 1969

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

ESTES, CHARLES M., Jr.--Research Engineer II
Economic Development Laboratory

Education

M.B.A., University of South Carolina	1974
B.S., Industrial Engineering Auburn University	1971

Employment History

Georgia Institute of Technology	
Research Engineer II	1980-Present
Monsanto Textiles Company	
Industrial Engineering Supervisor	1978-1979
Senior Industrial Engineer	1975-1977
Industrial Engineer	1971-1975
Auburn University Computer Center	
Applications Programmer	1970-1971

Experience Summary: Industrial engineering responsibilities included designing and implementing automated materials-handling systems, developing improved management information systems, developing improved methods of operation, and determining manpower requirements. Specific accomplishments included development of computer program to optimize finished goods packaging, development of computerized operator scheduling system, chairmanship of committee to develop product inventory system, design of materials-handling system for new manufacturing process, development of manpower estimates for several long-range manufacturing processes, and implementation of several new procedures to increase labor productivity. As supervisor, managed group of five professionals. Also participated on start-up team of new manufacturing facility, coordinated \$1.5-million plant-wide cost reduction program, coordinated facilities planning and site development activities, and assisted in development of cost standards, budgets, and economic evaluations. At Auburn University Computer Center, provided programming assistance to students and assisted faculty/staff with computer applications for special projects.

Current Fields of Interest

Application of sound business and engineering principles to improve manufacturing businesses, including materials handling, economic evaluation, cost reduction, facilities planning, management information systems, and business planning.

Major Reports and Publications

1. "Site Development Manual," Monsanto Textiles Company, October 1978, coauthor
2. "Principles and Economics of Industrial Packaging," University of South Carolina Graduate Paper, May 1974
3. Published numerous analyses and recommendations for Monsanto Textiles Company

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BIOGRAPHICAL SKETCH

ESCOFFERY, RONALD G.--Research Associate
Economic Development Laboratory

Education

M.B.A., Rutgers Graduate School of Business Administration	1973
B.A., Howard University	1972
Chase Manhattan Bank Credit Training	1974

Employment History

Georgia Institute of Technology	
Research Associate II	1979-Present
F. A. Johnson & Associates, Inc.	
Director of Finance & Marketing	1979
Escoffery, Bolton & Associates, President	1977-Present
Geore & Branday Ltd., Manager, Investment Department	1975-1977
Chase Manhattan Bank, Manager	
Credit & Marketing Financial Analyst	1974-1975
Rutgers MESBIC, Student Consultant	1972-1973
Johnson & Johnson, Graduating Financial Intern	1973

Experience Summary: As a financial analyst and consultant, is experienced in all phases of business, financial management and economic development, with emphasis on project and solution implementation, banking, budgeting, management and technical assistance to businessmen, loan packaging, financial counseling, feasibility studies, research for business development and expansion, and trouble shooting. Recently became involved in community revitalization projects, contributing to the development of financing vehicles for the catalyst projects which enabled the project implementation.

Current Fields of Interest

All phases of economic development with special interest in business and commercial development, identification and solution of business problems, and commercial revitalization.

Major Reports and Publications

1. "An Approach for an Economic Diversification Strategy for Bogalusa,"
1979

Georgia Institute of Technology
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BIOGRAPHICAL SKETCH

KEMPER, DANIEL C.--Research Engineer II
Economic Development Laboratory

Education

M.B.A. in Finance, Georgia State University	1980
B.I.E. (Co-op), Georgia Institute of Technology	1973

Employment History

Georgia Institute of Technology	
Research Engineer II	1979-Present
John H. Harland Co.,	
Senior Industrial Engineer	1975-1979
Industrial Engineer	1974-1975
AT&T Long Lines, Operations Supervisor	1973-1974
Schweizerische Isola-Werke, Industrial Engineer	1972
Bean and Whitney, Inc., Telephone Engineer	1970-1973

Experience Summary: At Georgia Tech, is a member of the Trade Adjustment Assistance Group, which provides technical and financial aid to firms adversely impacted by imports. Responsibilities include: in-depth analyses of each firm's strengths and weaknesses; development of full-scale business recovery plans involving marketing, financial and production strategies that address each firm's unique set of problems; assistance in preparing the necessary documents required for the firms to obtain Trade Adjustment loans; and recommendation of appropriate technical assistance to the participating firms. At Harland Company, had complete responsibility for the corporate industrial engineering program. Designed and implemented equipment layouts and material-handling systems in 21 plant locations to achieve standardized work flow. Developed plans and specifications and acted as liaison with architects and contractors on a multimillion-dollar construction program that included 16 new facilities and 5 renovations. Proposed and implemented cost reduction efforts such as capital equipment justifications, productivity improvement, and an energy conservation program for a total annual savings of over one-quarter million dollars. At AT&T, managed 13 relatively inexperienced craftsmen performing maintenance on over 1,600 private-line telephone circuits and installation of 500 new circuits per month. Was responsible for maintaining service and installation performance goals while seeing that all personnel received adequate training. As Industrial Engineer for Isola (Swiss Insulating Works, Ltd.), developed a computerized format for break-even analyses of proposed products. As Telephone Engineer, was responsible for numerous records verification projects under contract with New York Telephone and Southern Bell.

Current Fields of Interest

Productivity improvement as it relates to the optimal utilization of all available resources; manufacturing feasibility studies; financial analysis; operations and facilities design.

Major Reports and Publications

1. "Aly Handbags--Trade Adjustment Initial Assistance, Final Report," Georgia Institute of Technology, June 1980
2. "Miss Erica--Trade Adjustment Initial Assistance, Final Report," Georgia Institute of Technology, May 1980
3. "Taylor Radio--Trade Adjustment Initial Assistance, Final Report," Georgia Institute of Technology, May 1980
4. "Justification for the Purchase of a Wire Binding Machine," John H. Harland Co., March 1979
5. "A Proposal for an Automated Check Book Cover Machine," John H. Harland Co., June 1977
6. "A Proposal for Producing Self-Adhesive Address Labels," John H. Harland Co., May 1976
7. "A Proposal for Producing Check Transaction Registers," John H. Harland Co., January 1975
8. "A Trend Analysis System for Public Services in Fulton County," Georgia Institute of Technology, Department of Industrial and Systems Engineering, May 1973, coauthor
9. "Mindestbestellmenge," Schweizerische Isola-Werke, July 1972

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BIOGRAPHICAL SKETCH

LANIER, DIANNE D.--Research Associate II
Economic Development Laboratory

Education

M.B.A., Georgia State University	1979
B.A., University of Georgia	1974

Employment History

Georgia Institute of Technology	
Research Associate II	1979-Present
Marketing Information Service	
Project Manager	1979
Research Analyst	1978
Rich's, Research Analyst	1976-1978

Experience Summary: As a research associate at Georgia Tech, activities include outreach to acquaint prospective clients with the market research capabilities available within EES's Economic Development Laboratory. Duties also include consultation with clients seeking assistance from the Economic Development Administration or Trade Adjustment Assistance Program, with particular emphasis on marketing strategy and implementation of market research survey results. As a project manager at Marketing Information Service, directed all phases of the research process, with particular emphasis on client liaison and initial problem definition via a consulting orientation. Specific duties entailed interface with internal and external staff members and involvement in all areas of design and analysis, including methodology design and interpretive report writing and presentation. While a marketing research analyst, provided assistance in preparing research proposals, methodologies, data analysis, reports and statistical processing of data. Also was responsible for questionnaire design and creation of instructions for field personnel. As a research analyst with Rich's, was responsible for liaison with independent field services, questionnaire design, sample determination, supervision of coding process, SPSS programming, analysis and report writing in conjunction with survey research effort. Evaluated research reports and surveys prepared by other firms for Rich's management. Received training in trade area research from Hammer, Siler, George/Gould Retail Consultants and authored a major study of six potential southeastern markets for Rich's.

Current Fields of Interest

Industrial marketing and marketing research; marketing planning.

Major Reports and Publications

1. "The Modern Masculine Lifestyle," Advances in Consumer Research, Vol. IV, coauthor

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BIOGRAPHICAL SKETCH

LINDSEY, EDGAR T.--Senior Research Associate
Economic Development Laboratory

Education

M.B.A., University of Virginia	1972
B.S.I.M., Georgia Institute of Technology	1970

Employment History

Georgia Institute of Technology Senior Research Associate	1980-Present
Western Carolina University Associate Professor and Associate Director, Center for Improving Mountain Living	1976-1980
Harrison-Taylor Corporation Vice President & Treasurer	1975-1976
Southern Bank and Trust Company, Vice President	1973-1975
Citizens & Southern National Bank of South Carolina A National Accounts Officer	1972-1973
Summer Intern	1971
Citizens & Southern National Bank (Atlanta) Project Supervisor	1970

Experience Summary: Directed consulting projects for a federally sponsored technical assistance program designed to assist small businesses in a rural region; included establishing new techniques of assistance delivery, developing cooperative working arrangements with federal, state, and private organizations; and designing continuing educational programs for small businesses. Served as Vice President and Treasurer of a closely held corporation operating in several southeastern states. Served as Vice President of Loan Administration for a statewide bank establishing a new system of loan approval. Assisted in the establishment of a new bank division for the servicing and monitoring of national corporate accounts; upon the development of the division, serviced the bank's national corporate accounts which were headquartered in mid-Atlantic, Southeastern, Southwestern, and Western states. Served as a team member on a study team determining the feasibility of establishing an international banking department which was successfully established. Developed and performed a geographical market analysis of customers' attitudes towards banking services as a summer intern project.

Current Fields of Interest

Economic development, including business development and the development of assistance and support systems for the private sector in underdeveloped regions of the U.S.

Major Reports and Publications

1. "Imports - The Impact on North Carolina," North Carolina Commerce Report, July-August 1979, N.C. Department of Commerce
2. A significant number of consulting project reports written through grant support and for private industries--proprietary information

Georgia Institute of Technology

BIOGRAPHICAL SKETCH

LUMPKIN, RONALD D.--Research Scientist, Business Development Division,
Economic Development Laboratory, Engineering
Experiment Station

Education

B.B.A. Accounting and Finance, Georgia State University	1975
M.B.A. Finance, Georgia State University	1977

Employment History

Georgia Institute of Technology	
Research Scientist	1978-present
Complete Auto Transit (Subsidiary of Ryder)	
Regional Controller	1977-1978
Lockheed-Georgia Company	
Customer Supply Technical Group Supervisor	1972-1973
Supervisory Field Rep. (Logistic Support Manager Edwards AFB)	1971-1972
Customer Supply Technical Group Supervisor	1968-1971
Customer Supply Liaison Man	1966-1968
Development Test Material Man	1966-1966
Spares Support and Equipment Technician	1962-1966
Rich's Inc.	1959-1962

Experience Summary: At Georgia Tech, primarily involved in consulting with businesses by analyzing the firm's capabilities, isolating problems, and developing strategies or solutions. With Complete Auto Transit, was involved in eliminating accounting/financial problems through internal auditing, reviewing existing methods, and initiating proper procedures. Involved in design and installation of D.O.S. mini-computer system, analysis of capital expenditures, cash flow management, tax management and cost analysis for rate negotiations. Began with Lockheed in the identification and sale of spare parts, equipment, manuals and training with control over scheduling, planning and delivery of hardware and services. Responsible for the designing of a real time/random access procurement tracking and inventory control system for feasibility study phase through testing and implementation. Prepared procedures and instructions and conducted formal training for management and union personnel on mechanized systems and ancillary accounting functions. Had supervisory responsibility over organization that handled procurement/acquisition, inventory control, functional test and inspection, repairs, subcontracted rework, and accounting and control, including data entry for dynamic test inventory valued at over \$200 million. Additional responsibilities included planning, budgeting, forecasting, quoting, labor relations, procedures, schedule control, and contractual obligations. As the Logistic Support Manager at Edwards AFB, California, had all off-site support functions (acquisition, receiving inspection, warehousing, packaging and crating, shipping, accounting control, reporting, etc.) during the Air Force testing of the C-5 aircraft. Was involved in inventory control, receiving, distribution and retail merchandising with regional department store chain.

Current Fields of Interest

Analysis of business problems and the development and implementation of strategies or plans considering the major functional areas of a company--marketing, accounting/finance and production; data processing use; application of financial tools and other activities involved in sound management and business practices.

Major Reports and Publications

1. "Diagnostic Analysis and Adjustment Plan for Toll Gate, Inc.," Georgia Tech Report, 1981, coauthor
2. "Diagnostic Analysis and Summary of Initial Assistance for Donald MacMillan & Son, Inc.," Georgia Tech Report, 1981
3. "Maple Tree, Inc., Diagnostic Analysis and Recommendations," Georgia Tech Report, 1980, coauthor
4. "Adjustment Plan for Donald MacMillan & Son, Inc.," Georgia Tech Report, 1980
5. "A Market Study for MacMillan & Son, Inc.," Georgia Tech Report, 1980, project officer
6. "A Market Study for Poly-Quip, Inc.," Georgia Tech Report, 1980, project officer
7. "First Annual Report of the Southeastern Trade Adjustment Assistance-Center," prepared for Economic Development Administration, 1979, coauthor
8. "Diagnostic Review/Feasibility Study for Pinellas Seafood Company," Georgia Tech Report, 1979
9. "Development of a Set of Simplified Financial Management Procedures for Small Cities and Counties of Georgia," Georgia Tech Report, 1979
10. "A Demonstration Project to Establish a Technological Delivery System for Small and Medium-Sized Firms," Georgia Tech Report, 1979, coauthor
11. "An Initial Feasibility Study on the Manufacture of Liqueurs and Prepared Cocktails," Georgia Tech Report, 1978
12. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," prepared for Economic Development Administration, 1978
13. "User Guide to Complete Auto Transit's Data Point System," Complete Auto Transit, 1978
14. "Project 923--Real Time/Random Access System for C-5 Inventory Management," Lockheed-Georgia Company, 1967, coauthor
15. Author of approximately 130 procedures for Lockheed-Georgia Company

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BIOGRAPHICAL SKETCH

MULLER, JAMES C.--Research Engineer II
Economic Development Laboratory

Education

M.B.A. in Management, Georgia State University	1972
B.M.E., Georgia Institute of Technology	1967

Employment History

Georgia Institute of Technology	
Research Engineer II	1977-Present
Corning Glass Works	
Equipment Development Engineer	1975-1977
Senior Equipment Engineer	1974-1975
Southwire Company,	
Assistant Manager, Design Engineer	1972-1974
U.S. Army, Ordnance Officer	1968-1970
International Harvester, Design Engineer	1968

Experience Summary: At Georgia Tech, functions as project director and/or principal investigator on sponsored research projects concerning energy conservation and economic feasibility; also provides management and technical consultation to manufacturing firms in the southeastern United States. As senior equipment engineer in charge of equipment development at Corning in the Electronic Products Division, developed six new and different pieces of production equipment, taking them through all stages of development: conceptualizing, funding, designing, prototyping, debugging, fabricating, training operators, training maintenance personnel, commissioning, and documenting. As assistant manager of design engineering, provided engineering drawings to support all Southwire Continuous Rod projects; functioned as a design engineer, designing a complete continuous copper casting machine and bar preparation machine; did feasibility studies on an insulated scrap reclamation plant, designed the eventual system, and participated in the design of a system for recycling the plastic insulation material. As test officer, U.S. Army Armor and Engineering Board, conducted field test of experimental wheel and track vehicles. As platoon leader, commanded 98 men performing direct support maintenance on vehicles and armament of two battalion-size combat units. Assigned to General Staff, Support Command DaNang, monitored the readiness of engineer construction and material-handling equipment for all U.S. Army forces from Chu Lai to the DMZ. As design engineer, designed the valve train for a family of six-cylinder engines in medium-duty trucks.

Current Fields of Interest

Manufacturing engineering and manufacturing management, in particular: feasibility studies on new ventures, analysis of current problems, equipment selection and development, cost reduction programs, automation, computer-aided manufacturing.

Patents

1. "Automatic Metering System," U.S. Patent Pending, coinventor
2. "Pour Pot Manipulator," U.S. Patent No. 3,877,509

Registrations

Licensed Professional Engineer, Georgia, Reg. No. 11429
Licensed Professional Engineer, North Carolina, Reg. No. 7943
Certified Manufacturing Engineering, Cert. No. 970285, Exp. Date, Dec.
31, 1982

Major Reports and Publications

1. "Industrial Supply Company, Brunswick, Georgia: An Economic Analysis," Georgia Tech Report, May 1980
2. "The Feasibility of Manufacturing Machine Shop Products in Southwest Georgia," January 1980, with Harvey Diamond
3. "Feasibility of Manufacturing Metal Stampings in Southwest Georgia," Georgia Tech Report, January 1980, with Harvey Diamond
4. "The Feasibility of Obtaining Metalworking Support Facilities for Southwest Georgia Manufacturers," Georgia Tech Report, August 1979, with Harvey Diamond
5. "Diagnosis of Butler Furniture Industries," Georgia Tech Report, August 1979
6. "Feasibility of Reopening the Southern Electric Steel Mill, Birmingham, Alabama," Georgia Tech Report, May 1979
7. "Precision Metals Inc., An Economic Analysis," Georgia Tech Report, January 1979
8. "Trade Adjustment Assistance Provided to the Atlanta Umbrella Company," Georgia Tech Report, December 1978
9. "A Craftsman's Guide to Energy Conservation," textbook to be used in vocational/technical schools in Georgia, November 1978, with Esther Burks, Tom McGowan, and William Studstill
10. "Production and Profitability Analysis of Miami Laces Corporation," Georgia Tech Report, November 1978
11. "Energy Conservation and Management in Vocation/Technical Schools," Georgia Tech Report, September 1978, with James Clark
12. "Technical Assistance to Mulvey Supply Company, Hollywood, Florida," Georgia Tech Final Report, April 1978

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BIOGRAPHICAL SKETCH

RICE, GREGORY F.--Senior Research Associate
Economic Development Laboratory

Education

J.D., De Paul University	1961
B.A., De Paul University	1954
12 Semester Hours of Accounting, USAFI	1956

Employment History

Georgia Institute of Technology	
Senior Research Associate	1979-Present
Atlanta Protection Systems, Inc., President	1978-1979
Southern Silk Mills, Vice President Marketing/Sales	1977-1978
The Lovable Company, Vice President of Operations	1971-1976
Sears Roebuck & Company, Buyer/Merchandiser	1966-1970
Jewel Companies, Attorney, Buyer	1958-1965

Experience Summary: Georgia Tech activities include outreach to acquaint prospective clients with TAAC Program, consultation with clients to identify specific problem areas and develop strategies for recovery, and interaction with both the client and EDA to facilitate implementation of technical and/or financial assistance. President of Atlanta Protection Systems, in-home sales of residential burglar and fire alarm systems. As Vice President Marketing/Sales, directed national 16-man representative sales force. Formulated marketing and sales plans and budgets for sales in excess of \$20 million, priced all products, determined overall P&L plan, and administered the Marketing Department. As Vice President of Operations was responsible for all manufacturing and staff support areas except finance. Acted as marketing coordinator for company, and was responsible for unifying sales and manufacturing functions. Buyer/merchandiser duties at Sears included determining composition of line and pricing of products for retail and catalog sales, and preparing sales and P&L budgets. Negotiated long-term buying arrangements and costs with vendors, and prepared sales and production planning schedules for vendors. As a buyer for Jewel, determined selection, pricing and sales presentation of toys for retail food, discount and drug stores and for catalog operations. Also prepared sales plans and P&L budget. As an Attorney for Jewel, worked in law division in contract, regulation and labor areas.

Current Fields of Interest

Analysis and solution of management/manufacturing problems with emphasis on the interrelation of marketing, production, and financial operations.

Registrations

Licensed to practice law in the state of Illinois and the United States District Court, Northern District of Illinois, 1961

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BIOGRAPHICAL SKETCH

TAYLOR, HARDY A.--Chief, Business Development Division
Economic Development Laboratory

Education

B.S. in Business Administration and Pre-Law,	
University of Alabama	1943
Defense Department Comptrollership School, Washington, DC	1955
Graduate School of Business Organization, University	
of Nebraska	1951
Harvard Graduate School of Business Administration	1944

Employment History

Georgia Institute of Technology	
Chief, Business Development Division	1979-Present
Head, Industrial Services Group	1977-1979
Associate Chief, Industrial Development Division	1976-1977
Assistant Head, Industrial Services Branch	1970-1976
Assistant Head, Industrial Services Branch,	1970-1976
Head, EDA Services Section	1970
Head, Management and Technical Assistance Section	1968
Senior Research Scientist	1968
Research Scientist, II	1968
U.S. Navy, Supply and Fiscal Officer/Comptroller	1943-1968
Gladwin Industries, Inc., Atlanta, Georgia, Treasurer/ Controller	1964-1966
Turco Products, Inc., Atlanta, Georgia, Representative and Field Engineer	1943
National Southern Products, Inc., Tuscaloosa, Alabama, Research Assistant	1943

Experience Summary: As the Head of the Industrial Services Group is responsible for directing the overall EDL program of management and technical assistance and EDA services to Georgia industry. Served as treasurer of a locally based national corporation, primarily a manufacturer for the telephone industry, and was responsible for accounting and financial management, office administration and sales maintenance services, purchasing, customer relations and local sales, personnel administration, print shop operations and sales catalog maintenance. Served as a member of the board of directors of several corporations with national and international sales distribution. In 1964 completed 20 years in U.S. Navy as top departmental executive with experience in all phases of business and financial management. Special emphasis was on controllership, which consisted of budgeting and internal auditing; supply and fiscal operations, consisting of accounting and payroll, office administration and personnel management and training, procurement and contract negotiation and administration, inventory management, warehousing, traffic operations, quality control, industrial safety, and property disposal. Assisted in development of, and was in charge of implementation of, a new inventory management concept at the Naval Aviation Supply Office, which is the worldwide

inventory control point for all Naval Aviation spare parts and material. This concept, based on the maximum utilization of the latest electronic data processing equipment, resulted in the greatest advancement in the management of aviation material during the past several years. Served as Supply and Fiscal Officer/Comptroller at several Naval Air Stations and directed a working staff of 75 to 300 civilian personnel. As the first U.S. Naval representative in Sicily, negotiated at the highest governmental levels in Sicily and in Rome in arriving at agreements and procedural methods for operation of a U.S. Naval Air Station. Additionally, recruited, interviewed selected and hired the initial group of 100 civilian personnel. Also negotiated and approved contract for procurement of equipment, supplies and services from European sources to provide complete support for a station population of 1,800 people. Developed the idea and published a catalog in connection with a Simplified Issue Procedure for General Stores Material. This idea has been further developed and is widely used through the Naval Supply System.

Current Fields of Interest

All Phases of area development activity, including industrial and community development, financial and inventory management, and management development.

Major Reports and Publications

1. "Technical Assistance to Motels and Restaurant Owners Located on U.S. Highway 301", Georgia Tech Report, January 1978, coauthor.
2. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, December 1977, coauthor
3. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, January 1977, coauthor
4. "Feasibility of Restructuring the Long-Term Financing of Delta Diversified, Inc.," Georgia Tech Report, July 1976, coauthor
5. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, December 1975
6. "A Program of Technical Assistance to the Farmers Home Administration Business and Industry Loan Program," Georgia Tech Report, March 1975
7. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, December 1974 coauthor
8. "Management and Technical Assistance to Georgia Business and Industry," Georgia Tech Report, August 1973, coauthor
9. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia", Georgia Tech Report, June 1973, coauthor
10. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia", Georgia Tech Report, September, 1972, coauthor
11. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Final Report September 1971, coauthor

12. "Ways of Organizing a Business in Georgia," Georgia Tech Management and Technical Assistance Counseling Note, August 1971, coauthor
13. "An Evaluation Report on McGuire Tire and Recapping Company, Atlanta, Georgia," Special Report for the Small Business Administration, July 1971, coauthor
14. "A Feasibility Report on the Proposed Expansion of Bertie Industries, Inc., Windsor, North Carolina," Special Report for the Small Business Administration, June 1971, coauthor
15. "A Program of Management and Technical Assistance in Designated EDA Counties," Georgia Tech Final Report, August 1970, coauthor
16. "Management and Technical Assistance to Georgia Business and Industry," Georgia Tech Annual Report, August 1968, coauthor
17. "Economic Impact of a Proposed Industrial District to be Located in Richmond County, Georgia," EDA Special Report, May 1968, coauthor
18. "Economic Impact of Proposed Water and Sewerage Systems Improvements on Gibson, Georgia," EDA Special Report, April 1968, coauthor
19. "Economic Impact of Proposed Water and Sewerage System Improvements on Madison, Georgia," EDA Special Report, April 1968
20. "Economic Impact of Proposed Sewerage System Improvements on Camilla, Georgia," EDA Special Report, March 1968, coauthor
21. "Economic Impact of Proposed Water and Sewerage Systems Improvements on the City of Sylvester and Worth County, Georgia," EDA Special Report
22. "Economic Impact of a Proposed Industrial Park to be Located in Milledgeville, Georgia," EDA Special Report, February 1968
23. "Economic Impact of the Proposed Establishment of Keller Industries, Inc. in Swainsboro, Georgia," EDA Special Report, February 1968, coauthor
24. "Economic Impact of a Proposed Industrial Park to be located in Swainsboro, Georgia," EDA Special Report, January 1968, coauthor
25. "Economic Impact of the Proposed I-20 Regional Industrial Park at Comak, Georgia," EDA Special Report, January 1968
26. "Economic Impact of Proposed Water and Sewerage System Improvements on Warrenton, Georgia," EDA Special Report, September or December 1967
27. "A Simplified Inventory and Cost Control System for a Small Manufacturer," EDA Special Report, June 1967
28. "Economic Impact of Proposed Water and Sewerage System on Cleveland, Georgia," EDA Special Report, May 1967, coauthor
29. "Economic Impact of a Proposed Water Storage Tank on Tennille, Georgia," EDA Special Report, April 1967
30. "Impact of Proposed Water and Sewerage System on Blakely, Georgia," EDA Special Report, February 1967, coauthor
31. Author of numerous published company studies; procedural systems manuals; and operational plans
32. Published catalog in connection with a Simplified Issue Procedure for General Stores Material

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BIOGRAPHICAL SKETCH

THOMAS, JAMES M.--Research Associate II
Economic Development Laboratory

Education

M.S., Management, Purdue University	1977
B.S.I.M., Georgia Institute of Technology	1972

Employment History

Georgia Institute of Technology	
Research Associate II	1980-Present
Touche Ross and Company, Management Consultant	1977-1980
Purdue University, Instructor of Financial Accounting	1975-1977
Federal Reserve Bank-Miami	
Systems Department Manager	1974-1975
Branch Systems Analysts	1973-1974
Check Collection Analyst and Check Processing Supervisor	1972-1973

Experience Summary: With Touche Ross and Company, performed a broad range of general management consulting engagements, including a review of operations and fiscal controls for a county maintenance department, development of a water quality management program for a state-designated water pollution control district, design and implementation of inventory evaluation procedures for a general hardware manufacturer, management of a Chapter XI bankruptcy for the court and creditors of a food processing company, implementation of a fully integrated accounting system for a state welfare agency, analyses of engineering operations and manpower utilization for an affiliated company of the Bell System, development of employee performance appraisal and incentive system for two county governments, development of a staff performance appraisal system for the Atlanta Management Services Department of Touche Ross and Company, analyses of road and drainage system maintenance operations and manpower utilization for a county government, development of an organization and operations plan for a new lease company venture, and market profile analyses of potential management consulting markets in the southeastern United States. Work experience with Purdue University included course instruction in financial accounting. As Systems Department Manager, with the Federal Reserve Bank, developed and implemented the department's organizational structure, procedures and policies; planned and managed the efforts of the programming and operations analyst staff; and managed the systems and user department's conversion from second to third generation computers. As Check Processing Supervisor, supervised three operational units with over fifty employees. Branch System Analyst work experience included supervision of the Data Processing Department programming staff, and planning and coordination of the department conversion from second to third generation computers. As a Check Collection Analyst, performed analyses of short- and long-term computer hardware requirements, performed analyses of alternative damaged check processing equipment, and coordinated implementation of computer hardware recommendations. Work experience with the Georgia Power Company included drafting and layout design of electrical sub-stations.

Current Fields of Interest

Utilization of quantitative management tools in finance, operations and marketing in the development of strategic business and operating plans.

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BIOGRAPHICAL SKETCH

SPRINGFIELD, ROBERT W.--Research Engineer II
Economic Development Laboratory

Education

B.I.E., Georgia Institute of Technology 1969

Employment History

Georgia Institute of Technology	
Research Engineer II	1979-Present
Summerour and Associates, Inc., Management Consultants	
Associate	1977-1979
Senior Consultant	1975-1977
Staff Consultant	1973-1975
Colonial Stores, Inc., Retail Food Chain	
Industrial Engineer, Corporate Warehousing and Transportation Department	1969-1973

Experience Summary: As a research engineer at Georgia Tech, duties include program management responsibility for a business consulting unit which provides management, financial, production, and marketing services primarily to small and medium manufacturing firms. As a management consultant with Summerour and Associates, worked with both large and small companies in solving the problems of facility design, employee productivity, personnel recruiting, training, cost and method analysis, inventory control and production planning. As a senior consultant, specialized in on-site implementation of problem solutions and engineering programs with complete documentation. As an associate consultant, responsibilities included marketing consulting services, preparing proposals and surveys and supervising staff engineers performing on-site implementation work. As an industrial engineer with Colonial Stores, did extensive project work in product delivery to stores, warehouse material handling methods, inventory control, store material handling methods, equipment justification, and facility layout and design.

Current Fields of Interest

Utilization of sound marketing, financial and management techniques that apply to manufacturing businesses; operations management with respect to diagnosing and solving problems.

Major Reports and Publications

1. "A Diagnostic Review and Business Recovery Plan," prepared for Mapletree, Inc., July 1980, coauthor
2. "A Diagnostic Review of Company Operations," prepared for Forsyth Industries, February 1980, coauthor
3. "A Business Recovery Plan," prepared for the Curlee Clothing Company, March 1979

Major Reports and Publications (continued)

4. "Economic Feasibility Study for the Proposed Relocation of Sewing, Finishing, and Distribution Activities," prepared for the Tobias Kotzin Company, January 1979
5. "Layout Concept for Central Cutting and Piece Goods Facility," prepared for Noel Industries, Inc., February 1977
6. "Facilities Utilization Study," prepared for Skyline Manufacturing Company, Inc., November 1977
7. "Industrial Engineering and Standard Data Manual," prepared for Atlantic Products Corporation, August 1977
8. "Survey Analysis of the Chicago Distribution Operations," prepared for Humphrey's Leather Goods, January 1977
9. "Results of an Assessment of Order Fulfillment Costs," prepared for McGregor-Donniger, Inc., October 1975, coauthor
10. "Survey of the Distribution Facility," prepared for Jonbil, Inc., November 1975
11. "Industrial Engineering and Incentive Wage Manual for the Camden Finished Goods Warehouse," prepared for Skyline Manufacturing Company, Inc., September 1974
12. "Cutting Engineering Manual-Summersville," prepared for Angelica, Inc., August 1973, coauthor
13. "Proposed Design for the Hazlehurst Service Center," prepared for the Edward Hyman Company, April 1973

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BIOGRAPHICAL SKETCH

WILENCHEK, STEPHEN B.--Senior Research Associate
Economic Development Laboratory

Education

M.B.A., Harvard Business School	1964
B.S.I.M., Georgia Institute of Technology	1960

Employment History

Georgia Institute of Technology	
Senior Research Associate	1979-Present
Wilenchek & Associates, Consultant	1979-Present
Citizens and Southern National Bank	
Vice President-Senior Credit Officer	1976-1979
Vice President-Branch Manager	1975-1976
Vice President-Equipment Leasing	1972-1975
Vice President-Corporate Financial Planning	1971-1972
Commercial Lending Officer	1966-1971
Trainee	1964-1966

Experience Summary: As senior research associate at EES, activities include outreach to acquaint prospective clients with Trade Adjustment Assistance Program, consultation with clients to identify specific problem areas and develop strategies for recovery, and interaction with both clients and Economic Development Administration to facilitate application to EDA for financial assistance. As senior credit officer, administered diversified portfolio of problem commercial loans which initially totalled \$12 million. Developed specific strategies for each situation and reduced loans by \$4 million through sales of collateral, demands made upon guarantors, and refinancing of loans elsewhere. Identified losses and charged off uncollectible amounts. Acted as liaison with attorneys in numerous lawsuits concerning defaulted loans, and regarding litigation against the bank arising from loan transactions. Assumed management of commercial/retail bank branch having high percentage of problem loans. Systematically reduced problem loan balances by 25%, while increasing deposits by 40% and cutting expenses by 10%. Despite poor business conditions, generated new consumer and commercial loan business, including the first SBA-guaranteed loan made by this bank to a contractor. Organized and operated equipment leasing department. Within two years, outstandings reached \$12 million. Served on troubled customer's finance committee and board of directors. During this time customer's operating losses were substantially eliminated and administrative procedures were greatly improved. Sold commercial banking services to and negotiated lines of credit with major national companies as well as local businesses. Managed \$19-million loan portfolio. Consulted with customers on financial strategy, mergers and acquisitions, and arranged private placements of debt.

Current Fields of Interest

Financial management, marketing management, market analysis, and the interaction of these factors in making strategic business decisions.

CHARTS

Chart 3

REGIONAL ECONOMIC DEVELOPMENT CENTER
GEORGIA INSTITUTE OF TECHNOLOGY
ACTIVITY REPORT
February 1, 1981 - April 30, 1981

	<u>Stabilization</u>		<u>Business Expansion</u>		<u>New Venture</u>		<u>Community Development</u>		<u>TOTAL</u>	
	Previous	Current	Previous	Current	Previous	Current	Previous	Current	Previous	Current
ONGOING (BEGINNING)	8	3	8	5	2	5	1	0	19	13
NEW	0	0	1	0	4	0	0	0	5	0
DISCONTINUED	5	2	4	2	1	1	1	0	11	5
ONGOING (ENDING)	3	1	5	3	5	4	0	0	13	8
TOTAL ACTIVE DURING QUARTER	8	3	9	5	6	5	1	0	24	13
<u>Percentage of Efforts as Measured by Cost*</u>							<u>This Period</u>		<u>Previous Period</u>	
Business Stabilization							24		33	
Business Expansion							38		38	
New Venture							38		25	
Community Development							0		4	

*Cost is interpreted to mean Budget Cost for Period of Reporting

Chart 4

SUMMARY OF PROJECT ACTIVITY BY TYPE AND SUBREGION

<u>Subregion</u>	<u>New Venture</u>	<u>Business Expansion</u>	<u>Business Stabilization</u>	<u>Community Development</u>	<u>Current Costs % of Total</u>
ATLANTA GEORGIA SOUTHERN EDD	1				8
CENTRAL SAVANNAH RIVER EDD		1			8
HATTASOOCHEE-FLINT EDD					
EASTAL AREA EDD		1			8
COOSA VALLEY EDD					
GEORGIA MOUNTAINS EDD					
EAST OF GEORGIA EDD					
SOUTHER CHATTASOOCHEE EDD					
CLINTON TRAIL EDD					
MIDDLE FLINT EDD					
MIDDLE GEORGIA EDD					
NORTH GEORGIA EDD					
NORTHEAST GEORGIA EDD					
CONEE EDD					
SOUTH GEORGIA EDD		3	1		30
SOUTHEAST GEORGIA EDD			1		8
SOUTHWEST GEORGIA EDD	1				8
NON-EDD	<u>3</u>	—	<u>1</u>		<u>30</u>
TOTAL	5	5	3		100

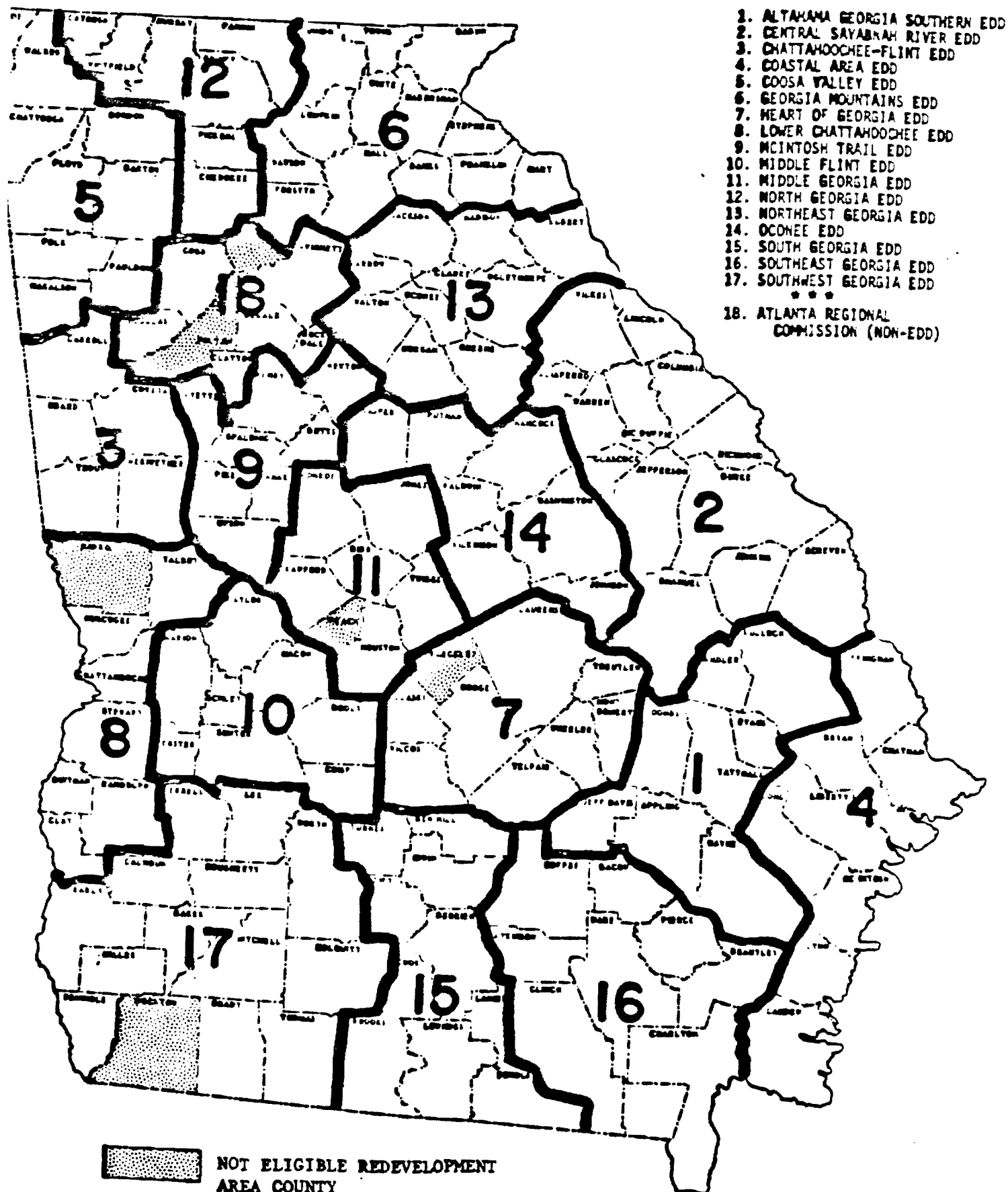
Chart 5

JOB IMPACT SUMMARY

<u>Subregion</u>	<u>Business Stabilization</u>		<u>Business Expansion</u>		<u>New Venture</u>		<u>Community Economic Development</u>		<u>Other</u>	
	<u>Goal</u>	<u>Actual</u>	<u>Goal</u>	<u>Actual</u>	<u>Goal</u>	<u>Actual</u>	<u>Goal</u>	<u>Actual</u>	<u>Goal</u>	<u>Actual</u>
Altamaha Ga. Southern EDD	Not Estab.	0	Not Estab.	0	Not Estab.	0	Not Estab.	0	Not Estab.	0
Central Savannah River EDD	"	0	"	0	"	0	"	0	"	0
Chattahoochee Flint EDD	"	0	"	0	"	0	"	0	"	0
Coastal Area EDD	"	0	"	0	"	0	"	0	"	0
Coosa Valley EDD	"	0	"	0	"	0	"	0	"	0
Georgia Mountains EDD	"	0	"	0	"	0	"	0	"	0
Heart of Georgia EDD	"	0	"	0	"	0	"	0	"	0
Lower Chattahoochee EDD	"	0	"	0	"	0	"	0	"	0
McIntosh Trail EDD	"	0	"	0	"	0	"	0	"	0
Middle Flint EDD	"	0	"	0	"	0	"	0	"	0
Middle Georgia EDD	"	0	"	0	"	0	"	0	"	0
North Georgia EDD	"	0	"	0	"	0	"	0	"	0
Northeast Georgia EDD	"	0	"	0	"	0	"	0	"	0
Oconee EDD	"	0	"	0	"	0	"	0	"	0
South Georgia EDD	"		"	0	"	0	"	0	"	0
Southeast Georgia EDD	"	3	"	0	"	0	"	0	"	0
Southwest Georgia EDD	"	0	"	0	"	0	"	0	"	0
Non-EDD	"	0	"	0	"	0	"	0	"	0
TOTAL	"	3	"	0	"	0	"	0	"	0

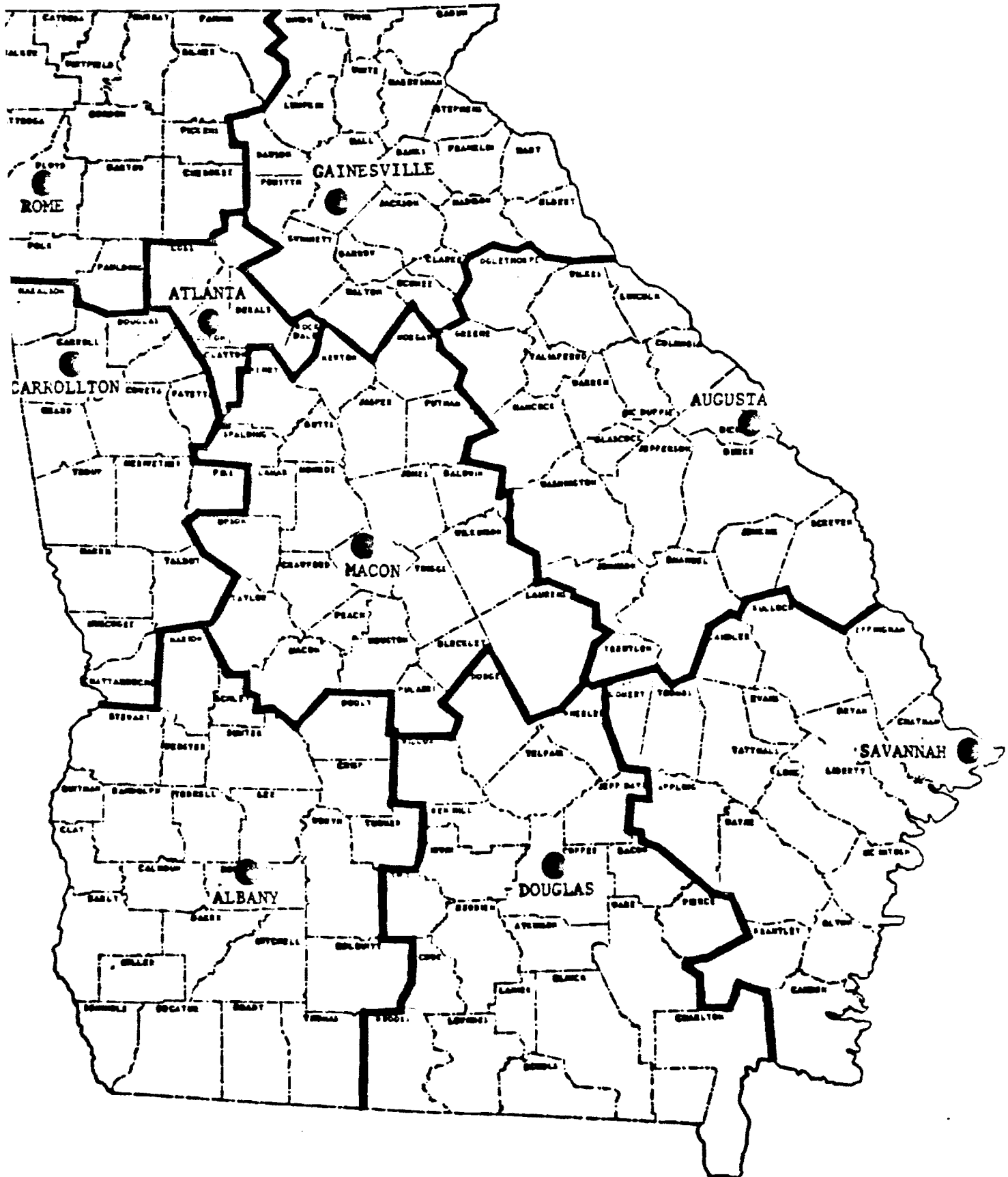
MAPS

Map 1
ECONOMIC DEVELOPMENT DISTRICTS
AREA PLANNING AND DEVELOPMENT COMMISSION BOUNDARIES

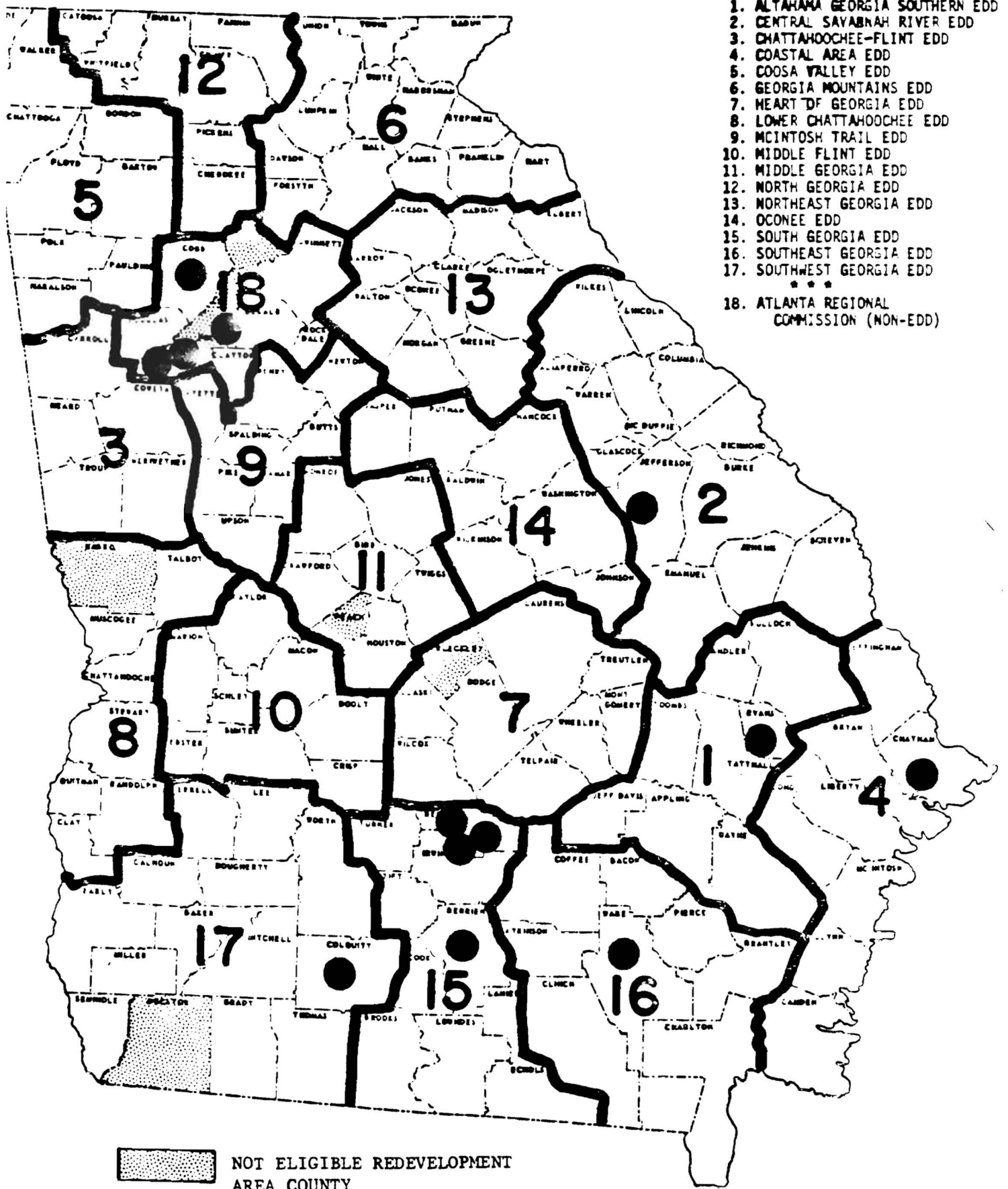


Map 2

AREA OFFICES OF
GEORGIA INSTITUTE OF TECHNOLOGY



Map 3
PROJECT LOCATION BY COUNTIES



Project No. A-2018
Grant No. 04-06-01567-5

A PROGRAM
OF MANAGEMENT AND TECHNICAL ASSISTANCE
IN DESIGNATED EDA COUNTIES IN GEORGIA

Quarterly Report

May, June, July 1981

by

Hardy S. Taylor
Senior Research Scientist

Robert E. Collier
Senior Research Scientist

This technical assistance program was accomplished by professional consultants under a grant from the Economic Development Administration. The statements, findings, conclusions, recommendations, and other data in this report are solely those of the grantee and do not necessarily reflect the views of the Economic Development Administration.

Economic Development Laboratory
Engineering Experiment Station
GEORGIA INSTITUTE OF TECHNOLOGY
September 1981

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I. Background Information

A. Economic Characteristics of Service Area

To be reported only in the first quarterly progress report and the final report.

B. Organization and Establishment of Center

To be reported only in the first quarterly progress report and the final report.

II. Program Administration

A. Program Objectives

To be reported only in the first quarterly progress report and the final report.

B. Technical Assistance Services

To be reported only in the first quarterly progress report and the final report.

C. Project Personnel

To be reported only in the first quarterly progress report and the final report.

D. Phasing of Work Program

This work program, which encompasses Chart 2, has been waived by paragraph five of the grant amendment offer dated the 27th day of June 1972.

E. Relationship to Other Development Efforts

In furthering the EDA objective in Georgia, the Economic Development Laboratory works closely with representatives of the following organizations:

- Georgia State Office of Planning and Budget
- Georgia Department of Industry and Trade
- Economic Development Districts
- Area Planning and Development Commissions
- Chambers of Commerce
- Local Industrial Development Groups
- Coastal Plains Regional Commission
- Appalachian Regional Commission
- Small Business Administration
- EDA Economic Development Representatives

Particular attention is directed to working with the EDD's and APDC's on individual projects. When an assistance project is opened, these organizations are notified that EDL will be working in their areas, and monthly progress reports of activity on projects within their areas

are furnished. Cooperation with the above-mentioned organizations is enhanced by the fact that EDL personnel are in almost constant contact with these groups in connection with other activities outside the EDA program.

III. Strategy for Subregions

To be reported only in the first quarterly progress report and the final report. Maps 1 and 2 show locations of organizations involved in the program.

IV. Technical Assistance Projects

A. Location

Map 3 identifies the counties in which work was performed under the program and indicates the number of projects conducted in each county.

B. Highlights of Project Activity

Chart 3 summarizes the highlights of project activity by major program categories. Chart 4 summarizes the project activity by type and subregion to indicate the distribution of effort throughout the state. Chart 5 summarizes the project activity by type and subregion to indicate job impact.

C. Nondiscrimination Policy and Related Project Activity

To assure nondiscrimination in the provision of services of the program under Title VI of the Civil Rights Act of 1964 and Title 15 CRF, Part 8.4, a substantial effort was made to identify needs of the minority and female community for technical assistance to small businesses. Of the projects conducted during the grant period, one was in support of minority interest and none were in support of female interest. The following projects describe the action undertaken to assist the minority and female community.

1. Minority Interest

Project 975: Assistance to an executive search firm in Fulton County (Atlanta)

A minority-owned executive search firm in Atlanta is applying for an SBA working capital loan and requires assistance in completing the application. This firm specializes in executive searches for the banking industry. An EES staff assistant met with the principal of the firm and is providing assistance in completing the SBA application. The project is continuing.

2. Female Interest

None.

D. Project Summaries

The eight individual projects which were active during the quarter under the program of management and technical assistance to businesses, industrial firms, and communities in designated Georgia counties are listed by Economic Development Districts. Descriptions include identification of each project by number, type, and location; a brief description of the work performed; and a statement of the results achieved. The eight projects which were still active as of July 31, 1981, are listed under "Ongoing Projects" in each EDD.

ALTAMAHA GEORGIA SOUTHERN ECONOMIC DEVELOPMENT DISTRICT

General

The Altamaha Georgia Southern Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Appling, Bulloch, Candler, Evans, Jeff Davis, Tattnall, Toombs, and Wayne. The Economic Development Centers are Hazlehurst (Jeff Davis County), Statesboro (Bulloch County), and Vidalia (Toombs County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

CENTRAL SAVANNAH RIVER ECONOMIC DEVELOPMENT DISTRICT

General

The Central Savannah River Economic Development District consists of 13 counties, all of which are eligible Redevelopment Area counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Lincoln, McDuffie, Richmond, Screven, Taliaferro, Warren, and Wilkes. The Economic Development Centers are Augusta (Richmond County) and Swainsboro (Emanuel County).

Discontinued Projects

None.

Ongoing Projects

One project is now under way in this area.

Project 974: Assistance to a metal manufacturing company in Jefferson County

Nature of Problem: A tool and die shop is seeking to broaden its manufacturing base as well as its marketing area. The company produces several metal products, including gas fish cookers, pickup truck tool boxes, and wire cricket cages. The company has general machining, welding, and fabrication capabilities. It is interested in using these capabilities to produce metal fabrications and components for other companies. The firm has requested help with its marketing effort, including supply guidelines for promotion of the most profitable work.

Work Performed: Initial contacts have been made with company personnel and a work program has been developed.

Results: The project is continuing.

CHATTAHOOCHEE-FLINT ECONOMIC DEVELOPMENT DISTRICT

General

The Chattahoochee-Flint Economic Development District consists of five counties, all of which are eligible Redevelopment Area counties: Carroll, Coweta, Heard, Meriwether, and Troup. The Economic Development Centers are Carrollton (Carroll County) and LaGrange (Troup County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

COASTAL AREA ECONOMIC DEVELOPMENT DISTRICT

General

The Coastal Area Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long, and McIntosh. The Economic Development Centers are Brunswick (Glynn County) and Hinesville (Liberty County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

COOSA VALLEY ECONOMIC DEVELOPMENT DISTRICT

General

The Coosa Valley Economic Development District consists of ten counties, all of which are eligible Redevelopment Area counties: Bartow, Catoosa, Chattooga, Dade, Floyd, Gordon, Haralson, Paulding, Polk, and Walker. The Economic Development Centers are Bremen-Tallapoosa-Buchanan (Haralson County), Rome (Floyd County), Cartersville (Bartow County), Ft. Oglethorpe (Catoosa County), and Rossville-LaFayette (Walker County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

GEORGIA MOUNTAINS ECONOMIC DEVELOPMENT DISTRICT

General

The Georgia Mountains Economic Development District consists of 13 counties, all of which are eligible Redevelopment Area counties: Banks, Dawson, Forsyth, Franklin, Habersham, Hall, Hart, Lumpkin, Rabun, Stephens, Towns, Union, and White. The Economic Development Centers are Gainesville (Hall County) and Toccoa (Stephens County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

HEART OF GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Heart of Georgia Economic Development District consists of nine counties, eight of which are eligible Redevelopment Area counties: Dodge, Laurens, Montgomery, Pulaski, Telfair, Treutlen, Wheeler, and Wilcox. The Economic Development Center is Dublin-East Dublin (Laurens County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

LOWER CHATTAHOOCHEE ECONOMIC DEVELOPMENT DISTRICT

General

The Lower Chattahoochee Economic Development District consists of eight counties, seven of which are eligible Redevelopment Area counties: Chattahoochee, Clay, Muscogee, Quitman, Randolph, Stewart, and Talbot. The Economic Development Center is Columbus (Muscogee County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

McINTOSH TRAIL ECONOMIC DEVELOPMENT DISTRICT

General

The McIntosh Trail Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Butts, Fayette, Henry, Lamar, Newton, Pike, Spalding, and Upson. The Economic Development Centers are Covington (Newton County), Griffin (Spalding County), and Thomas-ton (Upson County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

MIDDLE FLINT ECONOMIC DEVELOPMENT DISTRICT

General

The Middle Flint Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Crisp, Dooly, Macon, Marion, Schley, Sumter, Taylor, and Webster. The Economic Development Center is Americus (Sumter County).

Discontinued

None.

Ongoing Projects

There are no projects under way in this area.

MIDDLE GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Middle Georgia Economic Development District consists of seven counties, six of which are Redevelopment Area counties: Bibb, Crawford, Houston, Jones, Monroe, and Twiggs. The Economic Development Center is Macon (Bibb County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

NORTH GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The North Georgia Economic Development District consists of six counties, all of which are eligible Redevelopment Area counties: Cherokee, Fannin, Gilmer, Murray, Pickens, and Whitfield. The Economic Development Center is Dalton (Whitfield County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

NORTHEAST GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Northeast Georgia Economic Development District consists of ten counties, all of which are eligible Redevelopment Area counties: Barrow, Clarke, Elbert, Greene, Jackson, Madison, Morgan, Oconee, Oglethorpe, and Walton. The Economic Development Center is Athens (Clarke County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

OCONEE ECONOMIC DEVELOPMENT DISTRICT

General

The Oconee Economic Development District consists of seven counties, all of which are eligible Redevelopment Area counties: Baldwin, Hancock, Jasper, Johnson, Putnam, Washington, and Wilkinson. The Economic Development Center is Milledgeville (Baldwin County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

SOUTH GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The South Georgia Economic Development District consists of ten counties, all of which are eligible Redevelopment Area counties: Ben Hill, Berrien, Brooks, Cook, Echols, Irwin, Lanier, Lowndes, Tift, and Turner. The Economic Development Centers are Valdosta (Lowndes County) and Tifton (Tift County).

Discontinued Projects

None.

Ongoing Projects

Two projects are currently under way in this area.

Project 948: Assistance to a manufacturer of irrigation equipment in Ben Hill County

Nature of Problem: A firm in Ben Hill County is manufacturing a new product which involves a new type of electronic control circuit. No one in the area manufactures such a circuit. The company is interested in establishing a manufacturing capability in the area so that the item will be available for use in the company's new product. Assistance has been requested in establishing such a capability in the area.

Work Performed: EES personnel have assisted the company to initiate a project setup, draw a schematic, and locate sources of supplies. Investigation of sources of controls was undertaken, including cost estimates. Initial design work has been completed on the control circuit.

Results: The project is continuing.

Project 973: Assistance to an agricultural manufacturing business in Berrien County

Nature of Problem: A small manufacturer of agricultural equipment in Berrien County wishes to diversify its product line by manufacturing disk blades for agricultural equipment. The company has requested assistance in identifying the basic production processes required, specific manufacturing operations needed, new equipment that will be required to produce the disks, and in the development of a pricing structure.

Work Performed: EES staff engineers have met with management and developed a detailed program to be undertaken. The project is now under way.

Results: The project is continuing.

SOUTHEAST GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Southeast Georgia Economic Development District consists of eight counties, all of which are eligible Redevelopment Area counties: Atkinson, Bacon, Brantley, Charlton, Clinch, Coffee, Pierce, and Ware. The Economic Development Center is Waycross (Ware County).

Discontinued Projects

None.

Ongoing Projects

There are no projects under way in this area.

SOUTHWEST GEORGIA ECONOMIC DEVELOPMENT DISTRICT

General

The Southwest Georgia Economic Development District consists of 13 counties, 12 of which are eligible Redevelopment Area counties: Baker, Calhoun, Colquitt, Dougherty, Grady, Lee, Miller, Mitchell, Seminole, Terrell, Thomas, and Worth. The Economic Development Centers are Albany (Dougherty County) and Bainbridge (Decatur County).

Discontinued Projects

None.

Ongoing Projects

One project is currently under way in this area.

Project 980: Technical assistance to a manufacturing company in Colquitt County

Nature of Problem: A recently established small industrial firm produces a waste-fired furnace designed for agricultural uses such as tobacco curing, lumber curing, heating chicken houses, and pecan drying. The company has requested technical assistance to improve heat exchanger efficiency, heat recovery from stack gases, unit efficiency, and manufacturing processes. The company now employs six workers. It is anticipated that if the annual sales are increased, the work force will be increased to about 40 workers.

Work Performed: EES personnel have met with company principals and devised a preliminary work plan. Data collection and calculations of parameters to determine heat exchanger design is under way.

Results: The project is continuing.

PROJECTS OUTSIDE ECONOMIC DEVELOPMENT DISTRICTS

General

During the period, four projects were active in counties outside the Economic Development Districts.

Discontinued Projects

None.

Ongoing Projects

Four projects are now under way in this area.

Project 975: Assistance to an executive search firm in Fulton County (Atlanta)

Nature of Problem: An executive search firm in Atlanta is applying for an SBA working capital loan and requires assistance in completing the SBA application. This firm specializes in executive searches for the banking industry.

Work Performed: An EES staff assistant met with the principal of the firm and scheduled an appointment to assist him in completing the application.

Results: The project is continuing.

Project 976: Assistance to a building firm in Cobb County

Nature of Problem: A building firm in Cobb County is involved in the sale of custom housing plans and components. The company has requested assistance in preparing an SBA loan application.

Work Performed: An EES staff assistant met with the company principal. Work is now under way on the loan application.

Results: The project is continuing.

Project 977: Technical assistance to a moving firm in Fulton County (Atlanta)

Nature of Problem: A moving company in Fulton County has requested technical assistance in business development for the firm.

Work Performed: An EES staff assistant has contacted the company principal, and plans have been made to undertake the project.

Results: The project is continuing.

Project 978: Assistance to a firm in Fulton County that provides services to the phonograph industry

Nature of Problem: A firm in Fulton County that provides services to the phonograph industry has requested assistance in conducting a market evaluation for its services and advice on a marketing approach.

Work Performed: EES staff personnel have contacted company management, and plans are under way to accomplish the proposed work.

Results: The project is continuing.

V. EVALUATION OF PROGRAM

In drawing conclusions about the program, it would not be difficult to overstate the impact of the work performed by EDL staff personnel on individual projects. Work performed during the quarter reported on can be characterized in terms of further reviewing existing projects and eliminating those that did not appear to justify further effort, along with searching out new opportunities to provide management and technical assistance to companies and individuals that could possibly lead to the establishment of new jobs or provide stabilization for existing companies. During the period, no new projects were initiated. Five projects were completed and closed out, leaving eight active projects at the end of the quarter.

Conclusions regarding the overall impact of this program must be based upon a collective evaluation of the individual projects and their respective results. This evaluation should include not only a recognition of the fact that a deliberate attempt has been made to state the significance of EDL efforts in realistic terms, but also a consideration of the following special points concerning the results reported.

1. In many cases, the contributions of EDL staff personnel were major factors in management decisions to act or not to act on a specific plan of development. This was particularly true in those cases involving the development of new ventures.
2. In some situations, the end result would have been the same regardless of EDL participation. In such cases, EDL staff personnel helped to facilitate the achievement of an already determined goal.
3. In certain projects, EDL staff personnel filled a negative role by determining that a proposed course of action was not economically sound. The project staff felt that such actions, where they were taken, are in the best interest of all parties in the project. It is not enough to provide support for sound proposals; the unsound ones also must be identified.

Because of the preceding considerations, it is not practical to attempt to quantify results of this type program solely in terms of jobs created. Further, since it was the first program of its kind in a state-supported university, it is impossible to judge its merit on a comparative basis. It is necessary, therefore, to evaluate the program by empirical means. Several observations indicate that the management and technical assistance program to business and industry in Georgia has been beneficial:

1. After a modest start, the program has grown both in quantity of projects and in the comprehensiveness of the assistance offered. The program has been well received throughout Georgia and is being supported by the firms that have been assisted.

2. Consultants of all types have been kept apprised of Georgia Tech's management and technical assistance efforts and have worked in conjunction with EDL to further the program. All parties concerned seem to feel that the program is mutually beneficial.
3. Success of the original program has led to expansion of the project by the U.S. Department of Commerce's Economic Development Administration in Georgia and initiation of comparable programs by agencies in other states.
4. As a result of previous M & TA experience, EDL personnel provided counsel to the federal government in an effort to bridge the gap between the accumulated findings of governmental, educational, and private research and the information needs of business and industry. This counsel eventually resulted in the passing of the State Technical Services Act of 1965.

EXHIBITS

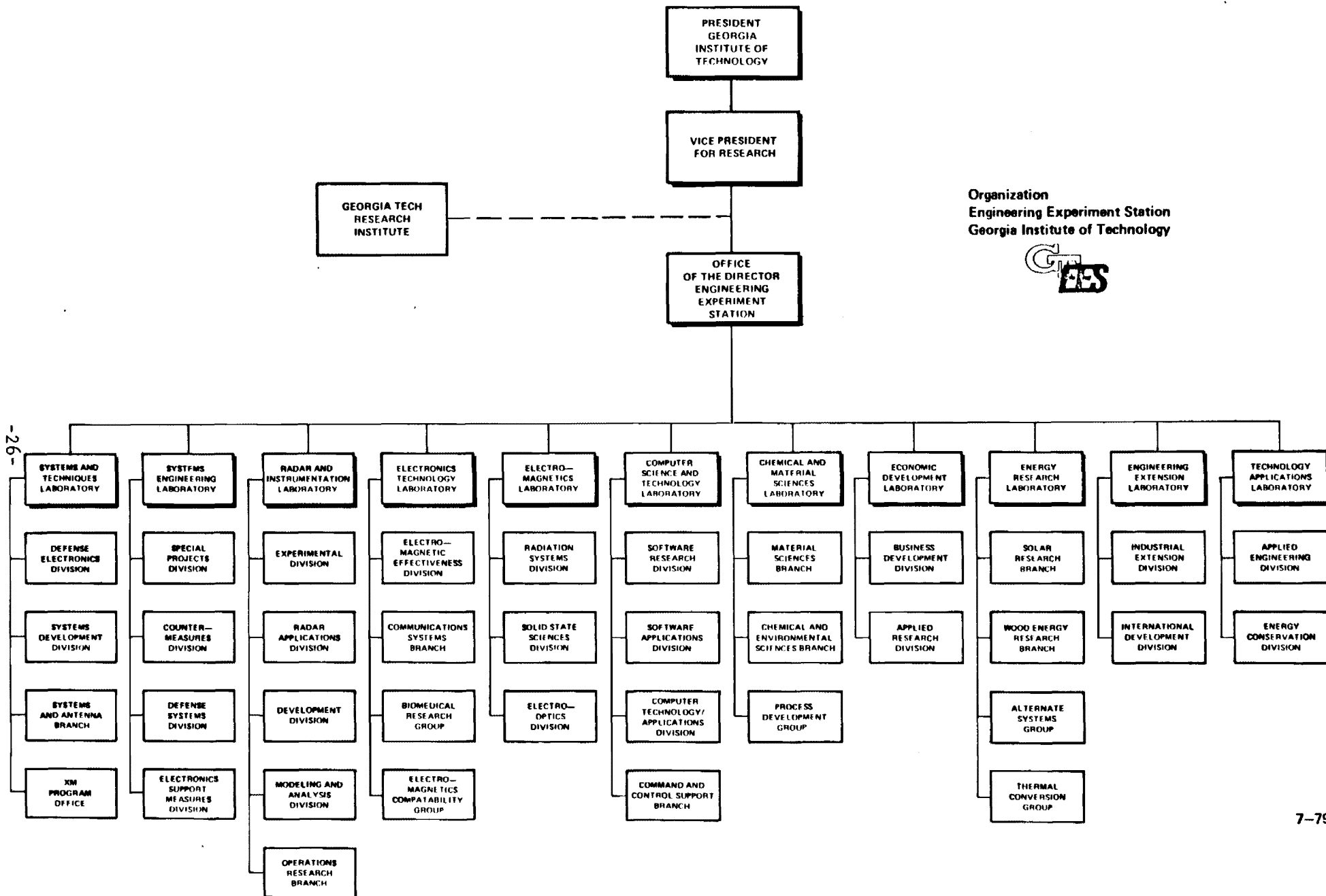
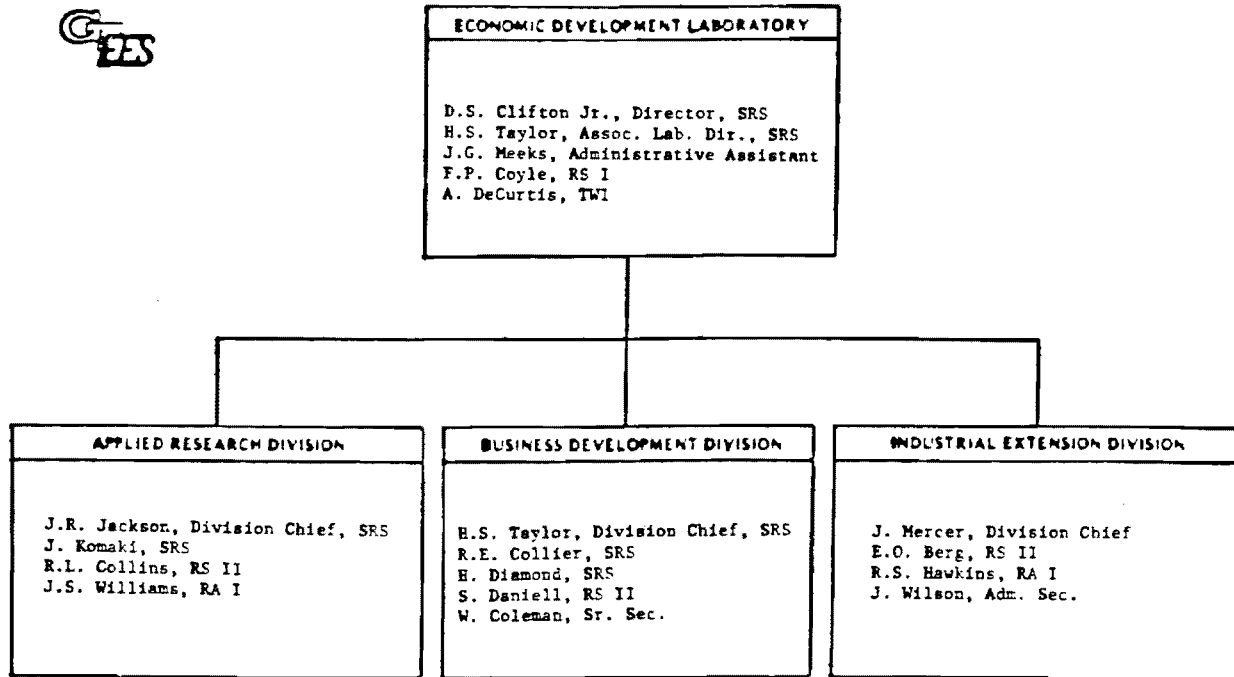


Exhibit 2



Basic Data Group

M.E. Anders, Leader, PRS

Economic Analysis Group

N.S. Gibson, Leader, RS II
 T.I. Chiang, PRS
 R.R. Ratajczak, SRS
 R.B. Lann, RS II
 B.W. Riall, RS II
 D.G. Keener, RS I
 D. Stewart, Sr. Sec.

Transportation System Group

M.J. Moskaluk, Leader, SRE
 J.R. Marks, RE
 D.K. Robertson, Sr. Sec.
 T.A. Bentivengo, Student Asst.

Management and Technical Assistance Programs

R.W. Springfield, Leader, RE II
 E.T. Lindsey, SRA
 G.F. Rice, SRA
 S.B. Wilenchek, SRA
 C.M. Estes, RE II
 R.O. Lumpkin, RS II
 J.C. Muller, SRE
 D.D. Lanier, RA II
 J.M. Thomas, RA II
 V.M. Hankins, Staff Assistant

Minority Business Development Group

E.A. Betha
 R.G. Escoffery, RA II

Occupational Safety and Health Group

J. Burson, Leader, SRS
 K.A. Smith, SRS
 S.A. Kramer, RE II
 W.H. Spain, RT II
 P.L. Williams, RS II
 R.C. McCain, Staff Assistant

Albany

E.L. Lewis, Director, RE II
 E.H. Hardison, RE II
 D.A. Gibson, Sec.

Augusta

D.H. Poss, Director, RE II

Carrollton

R.T. Johnson, Director, RS II
 T.A. Samford, RT I
 S.C. Brown, Sec.

Douglas

S. Dudley, RS II
 C.C. Davis, Sec.

Gainesville

P.D. Loveless, Director, RS II
 D. Fischer, Sec.

Macon

G.B. Lee, Director, RE II
 M.T. Luster, RE II
 P. Zabriskie, Sec.

Rome

W.C. Darley, Director, RE II
 S.D. Marshall, Sec.

Savannah

L.R. Edens, Director, RE II
 D.E. Primrose, RE II
 K.E. Johnson, RA I
 H.J. Middendorf, RS I
 H.O. Blum, Sr. Sec.

Exhibit 3
BIOGRAPHICAL SKETCHES

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

BETHEA, EDWIN A. -- Research Scientist, Economic Development Division,
Technology and Development Laboratory, Engineering
Experiment Station

Education

B. S., Knoxville College	1953
M. S. W., Howard University	1962
Certificate of Completion, Howard University's Small Business Guidance Center	1969
Certificate of Completion, CPM and PERT for Project Managers, Continuing Education Department, Georgia Institute of Technology	1974
Georgia Institute of Technology Basic Industrial Development Continuing Education Course, Certificate of Completion	1976
Emory University How to Start and Manage a Successful Business -- Continuing Education Course, Certificate of Completion	1977

Employment History

District of Columbia, Department of Public Welfare, Caseworker, Child Welfare Division	1962 - 1965
Far East Community Services, Inc., Community Organizer - Youth Community Organizer	1965 - 1966
United Planning Organization, Community Organization Specialist (training officer), Economic Development Specialist	1966 - 1968
Youth Enterprises, Inc., Executive Director	1968 - 1970

Consultant Employers

Office of Economic Opportunity; Manpower Assistance Project, Inc.; University Research Corp.; Xerox Corporation; Commerce Department, Economic Development Administration	1969 - 1970
Volunteers for International Technical Assistance, Director - Washington D.C.; Director - East Central Regional Office	1970 - 1972
Georgia Institute of Technology Research Scientist	1972 - Present

Experience Summary

Directed a regional office for technical assistance that provided services to minority and economically disadvantaged groups in mid Atlantic region; this entailed establishing, structuring, and supervising new program offices in several states within the region. Program developer for minority economic ventures and community development project; the responsibilities included establishing a working relationship with community groups, federal, state and local government agencies, and/or private agencies whose interests were similar. Organized and managed a minority firm for the purpose of establishing "spin-off" business ventures and the training of minority entrepreneurs. Managed and developed programs aimed toward helping groups initiate and implement economic and social changes in their community planning. Developed and directed programs relating to youth activities in the areas of training, proposal development, community improvement and change and economic developments.

Current Fields of Interest

Minority business development, industrial and community development, manpower management and motivation, transportation and new economic systems.

Major Reports and Publications

1. "South Georgia Crafts - Study of Markets in Georgia, Product Quality and Management Structure," Georgia Tech Report, 1972
2. "Survey of Georgia Minority Business," Georgia Tech Report, 1973, coauthor
3. "Market Study for Sea Island Handicraft Cooperative," Georgia Tech Report, 1973

4. "Feasibility Study for Skating Rink in Columbus, Georgia," Georgia Tech Report, coauthor, 1975
5. "A National Cultural Center at Tuskegee, Alabama. (A feasibility study)," Georgia Tech Report, 1975
6. "Market Study for Westgate Hardware Store," Georgia Tech Report, 1976
7. "Final Report on Technical Assistance to Selected Community Action Agencies in Georgia," Georgia Tech Report, 1976
8. A Directory and Survey of Minority-Owned Business in the State of Georgia with Pond Employees, Georgia Tech Report, 1977, coauthor
9. "Research and Demonstration Project" - Regional Office of Minority Business Enterprise = Quarterly Reports. June 1977 and October 1977. Georgia Tech Report, 1977

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

CLIFTON, DAVID. S., JR. --Director
Economic Development Laboratory

Education

Ph.D. in Economics, Georgia State University	1980
M.B.A. in Economics, Georgia State University	1970
B.I.E., Georgia Institute of Technology	1966

Employment History

Georgia Institute of Technology	
Director, Economic Development Laboratory, EES	1979 - Present
Chief, Economic Development Division, TDL, EES	1977 - 1979
Manager, Economic Research, IDD, EDL, EES	1977 - 1978
Head, Industrial Economics Section, IDD, EDL, EES	1974 - 1977
Senior Research Scientist	1977 - Present
Research Scientist II	1973 - 1977
Research Economist I	1970 - 1973
Lockheed - Georgia Company	
Associate Customer Facilities Engineer	1966 - 1969
Customer Facilities Engineer	1969 - 1970

Experience Summary

Georgia Tech assignment involves industry feasibility studies; regression analysis; product/market studies; transportation studies; economic impact studies; domestic/international training; and proposal development/project management; energy alternatives; and energy fuel plantation concepts. At Lockheed, gathered data, made preparatory investigations, analyzed and arrived at solutions for customer facilities problems. Provided technical assistance in planning and design of new construction or major alternations of customer facilities. Completed economic feasibility studies for prospective aircraft customers.

Current Fields of Interest

Market analysis; economic feasibility studies; international trade; energy research; technology assessment; research in economic and industrial development; research management.

Major Reports and Publications

1. "State Science, Engineering, and Technology Program," Georgia Tech Report, February 1980, coauthor
2. "Economic Development Analysis of Appalachian Georgia," Georgia Tech Report, January 1980, coauthor
3. "A Feasibility Study for Wood Energy Utilization in Georgia," Georgia Tech Report, August 1979, coauthor
4. "Market Potentials of Wood Fuel in the Southeast," Georgia Tech Report, June 1979, coauthor
5. "Regional Forums on Appropriate Technology," National Science Foundation, February 1979, coauthor
6. "Project Feasibility Analysis," presented at the Instituto de Administracion cientifica de las Empresas, Mexico City, 10 - 12 August 1978
7. "A Design for a Ventur Opportunities Information System," Atlanta Regional Office of Minority Business Enterprise, August 1978, coauthor
8. "The Potential for Industrial Development in the Industrial City Region," Vol. 3, Georgia Tech Report, December 1977, coauthor
9. "The Industrial City: Concept and Design," Vol. 2, Georgia Tech Report, December 1977, coauthor
10. "The Industrial City: Executive Summary," Vol. 1, Georgia Tech Report, December 1977, coauthor
11. "Economic Analysis of Pretreatment Standards for the Textile Industry," Environmental Protection Agency, June 1977, coauthor
12. PROJECT FEASIBILITY ANALYSIS: A Guide to Profitable New Ventures, John Wiley & Sons, Inc., April 1977, coauthor
13. "Market Information System for Vada Builders, Inc." Georgia Tech Report, November 1976, coauthor
14. "Baseline Energy Data System: Energy Indicators," Vol. 4, Georgia State Energy Office, June 1976

15. "Baseline Energy Data System: Energy Supply Network," Vol. 3, Georgia State Energy Office, June 1976, coauthor
16. "Baseline Energy Data System: Data Base 1973," Vol. 2, Georgia State Energy Office, June 1976, coauthor
17. "Baseline Energy Data System: Methodology," Vol. 1, Georgia State Energy Office, June 1976, coauthor
18. "Impact of the Engineering Experiment Station on the Economy of Georgia, Fiscal Years 1973 and 1974," Georgia Tech Report, February 1976, coauthor
19. "Energy in Georgia, Uses, Program Needs, Policy and Recommendations," prepared by State Energy Office and Georgia Tech, December 1975, coauthor
20. "A Program to Assist Business and Industry in Coping with the Energy Crisis," Georgia Tech Report, September 1975, coauthor
21. "Analysis and Evaluation of Industrial Projects," presented at the Institute for Small-Scale Industries, University of the Philippines, Manila, 1975, 23-27 June 1975
22. "A Training Program on the Analysis and Evaluation of Industrial Projects," Georgia Tech Report, June 1975
23. "Economic Data Relative to the Central Georgia Steam Plant," Georgia Tech Report, February 1975, coauthor
24. "A Productivity Program for the Engineering Experiment Station," Georgia Tech Report, November 1974, coauthor
25. "An Analysis of Merchandising Methods for Eggs," Georgia Tech Report, June 1974
26. "Southeastern Trends of Selected Industries," Georgia Tech Report, April 1974, coauthor
27. "The Economic Impact of Georgia's Deepwater Ports," Georgia Tech Report, December 1973, editor
29. "The Little-Mirrlees Cost-Benefit Method for Industrial Project Analysis in Developing Countries," unpublished report in Ph.D. program, Georgia State University, August 1973.
30. "Georgia Employment and Population Projections with Special Reference to Water-Using Industries," Georgia Tech Report, July 1973, coauthor
31. "Training for Business and Industry in Florida, Kentucky, North Carolina, and South Carolina," Georgia Tech Report, May 1973, coauthor

32. "A Survey of Empirical Evidence of the Heckscher-Ohlin Theory of International Trade," unpublished report in Ph.D. program, Georgia State University, April 1973
33. "Training for Business and Industry in Alabama, Georgia, Mississippi, and Tennessee," Georgia Tech Report, March 1973, coauthor
34. "A Graduate-Employer Evaluation of Georgia's Vocational-Technical School Program," Georgia Tech Report, January 1973, coauthor
35. "An Unemployment Registration and Employment Generation Program for the Lower Chattahoochee Community Action Agency," Georgia Tech Report, September 1972, coauthor
36. Transportation Analysis in "Peanut Processing Opportunities," Southwest Georgia Area Planning and Development Commission, June 1972
37. "A Survey of Export Proceeds Instability Research with a Report on the Export Proceeds Instability of Colombia," unpublished report in Ph.D. program, Georgia State University, June 1972
38. "Georgia as a Center for Charcoal and Charcoal Briquette Production," Atlanta Economic Review, March 1972, coauthor
39. "A Registration of the Unemployed in the Heart of Georgia Community Action Council Area," Georgia Tech Report, January 1972, coauthor
40. "A Survey of Selected Users of Spun Sheet Metal in Alabama and Georgia," Economic Development Administration, July 1971
41. "Carbonized Bark for Briquetting Purposes," Georgia Tech Report, July 1971, coauthor
42. "Economic Factors Affecting the Feasibility of Locating a Vegetable Processing Plant in the Vicinity of Americus, Georgia," Georgia Tech Report, May 1971, coauthor
43. "The Market for Leaf Springs," Economic Development Administration, February 1971
44. "Industrial Air Pollution: Particulate Control Equipment Market," Economic Development Administration, December 1970
45. "The Potential Impact of Jumbo-Jet Air Cargo Transportation on Georgia," Georgia Tech Report, October 1970, coauthor
46. "Market Survey of Garden Center Buyers," Economic Development Administration, October 1970
47. "Georgia Retail Florist Store Sales," Economic Development Administration, September 1970

48. "The Southeastern Market for Plastic Bathroom Fixtures in Residential Construction, Economic Development Administration, July 1970
49. "The Calico Scallop Market," Economic Development Administration, June 1970
50. "The Southeastern Modular Housing Market," Economic Development Administration, May 1970
51. "The Market for Boxboard Containers for the Coastal Plain Region of Georgia," Economic Development Administration, May 1970
52. "Long Cycles in Residential Construction," unpublished report in M.B.A. program, Georgia State University, December 1969

Georgia Institute of Technology

BIOGRAPHICAL SKETCH

**COLLIER, ROBERT E. -- Senior Research Scientist, Economic Development
Division, Technology and Development Laboratory
Engineering Experiment Station**

Education

B. S., Texas Agricultural and Mechanical University	1939
M. S., The George Washington University	1966

Employment History

Sears Robuck & Company, El Paso, Management Training	1939
U. S. Marine Corps, General Duty Officer	1940 - 1966
Spindletop Research Center, Inc., Director, Training Services	1971 - 1972
Georgia Institute of Technology	
Research Scientist	1966 - 1970
Head, Economic Development Training Section, IDD - EES	1968 - 1970
Senior Research Scientist	1972 - Present

Experience Summary

While on active duty with the Marine Corps, performed a variety of line and staff assignments involving administration, education, training, and logistics. As Research Scientist in the Management and Technical Assistance Section, IDD - EES, furnished management guidance and technical assistance to prospective and established business and industrial firms; also provided assistance in establishing sound new business ventures which utilize local resources and manpower. As head of the Economic Development Training Section, IDD - EES, developed handbooks, manuals, lesson plans, visual presentations and other materials for industrial and economic development training; also conducted training courses in the principles and techniques of industrial, economic, and community development under sponsorship of the Economic Development Administration and the Small Business Administration. As Director, Training Services, National Area Development Institute, Spindletop Research, Inc.,

planned and conducted seminars and workshops for professionals and local leaders involved in area development activities. Courses were directed to the needs of individuals from economic development districts, community action agencies, governmental agencies, business organizations, farm organizations, utilities, cooperatives, public agencies and universities who were involved in area development programs. As Senior Research Scientist, Community Development Branch, IDD - EES, participated in training programs and conducted community development research projects. As head of Education and Training Branch, is responsible for the development and conduct of laboratory training activities.

Current Fields of Interest

Management theory and practice, public administration, management information systems, economic development training, public technology, and inter-governmental operations.

Major Reports and Publications

1. "Site Relocation Guide for Georgia Retail Business, Industrial Series No. 2," Georgia Tech Report, April 1967
2. "Internship Program in Regional Economic Development," A Training Program Prepared for the Economic Development Administration under Contract C-239-62L Neg., 1967
3. "Final Report: Training Program in Economic Development, April 1, 1968 - March 31, 1969," Economic Development Administration Contract No. OER-208-G-68-3, May 1969
4. "Final Report: Development of a Community Development Training Program for the Small Business Administration, June 19, 1968 - July 1969." Small Business Administration Contract No. 1474-FA-68, July 1969
5. "Final Report: Training Programs in Economic Development, April 1, 1969 - March 31, 1970," Economic Development Administration Contract No. OER-208-G-69-2, May 1970
6. "Advanced Executive Training Program," A Seminar Prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
7. "Executive Training Program," A Seminar Prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970

8. "Industrial Development Training Program," A Seminar Prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
9. "Basic Economic Development Training Program," A Seminar Prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
10. "Training Program for Planning and Development Technicians," A Seminar Prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970
11. "Training Program for Staff Information Technicians," A Seminar Prepared for the Economic Development Administration under EDA Grant No. 99-6-09165, 1970, coauthor
12. "Exploring the Dimensions of Area Development," The National Area Development Institute Special Seminar Sponsored under a Ford Foundation Program, 1971
13. "Final Report: Leadership Training Programs in Selected Georgia Communities, May 31, 1972 - September 30, 1973," Coastal Plains Regional Commission Contract No. 10240033, September 1973, coauthor
14. "Economic Development Approaches for the Southeast," A Study Prepared for the Economic Development Administration under Grant No. 04-6-09029-6, 1973, coauthor
15. "Final Report: Leadership Training Programs in Selected Georgia Communities," Coastal Planning Regional Commission Contract No. 10040037, 1975, coauthor
16. "Guidelines for Industrial Extension Personnel," Prepared under AID Grant No. AID/CM/TA/G-73-18, 1974, editor
17. "Analysis and Evaluation of Industrial Projects," A Seminar with Text Prepared under AID Grant No. AID/CM/TA/G-73-18, 1975, coauthor
18. "Guidelines for an Energy Audit and an Energy Impact Statement," prepared under HUD Grant CPA-GA-04-06-1056, June 1976, coauthor
19. "Final Report: Substate Energy Management," prepared under contract with the Georgia State Energy Office, February 15, 1976, coauthor
20. "Final Report: Planning for the Interorganizational Networking of a State Economic Development Council," Prepared under contract with the Office of Economic Research, Economic Development Administration under Grant No. OER-577-G-77-22, 1977

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

DIAMOND, HARVEY — Senior Research Engineer, Economic Development Division,
Technology and Development Laboratory, Engineering
Experiment Station

Education

St. Johns University	1941 - 1942
B. S. in Textile Engineering, North Carolina State College	1942 - 1946

Employment History

Cohn-Hall-Marx, Converter and Assistant Designer	1946 - 1947
American Woolen Company, Designer and Assistant Buyer	1947 - 1950
Dux Mixture Hardware Company, Partner	1950 - 1960
Georgia Institute of Technology	
Assistant Research Engineer	1960 - 1965
Research Engineer	1965 - 1967
Senior Research Engineer	1967 - Present

Experience Summary

Economic feasibility studies; plant location analyses; market research to identify manufacturing and nonmanufacturing business opportunities; raw materials and intermediate products availability studies; marketing strategies; purchasing and marketing development and procedures; evaluation of export markets; small-scale industry entrepreneurship; liaison with prospects on industrial location possibilities; evaluation and development of area resources; transportation studies; management and technical assistance to prospective and established business; product diversification studies; manpower resources; industrial economic analyses; purchasing and marketing of hardware, wholesale and retail; textile designing; textile converting. Coeditor of monthly metalworking bulletin.

Current Fields of Interest

Market analyses; plant location criteria; economic feasibility analyses; import-export potentials; small-scale industries.

Major Reports and Publications

1. "Studies of Selected Industries in the Southeast River Basins: Textiles," Georgia Tech Report, March 1961, coauthor
2. "Plumbing Fixture Fittings: A Manufacturing Opportunity in Atlanta," Georgia Tech Report, June 1962
3. "Strengths and Weaknesses of Atlanta's Metalworking Industry," Georgia Tech Report, August 1962
4. "Pipe Fittings and Valves: A Manufacturing Opportunity in Atlanta," Georgia Tech Report, September 1962
5. "Flat Glass: A Manufacturing Opportunity in Georgia," Georgia Tech Report, June 1963
6. "Glass Wool Insulation: A Manufacturing Opportunity in Georgia," Georgia Tech Report, September 1964

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

ESCOFFERY, RONALD G. -- Research Associate
Economic Development Laboratory

Education

M. B. A., Rutgers Graduate School of Business Administration	1973
B. A., Howard University	1972
Chase Manhattan Bank Credit Training	1974

Employment History

Georgia Institute of Technology	
Research Associate II	1979 - Present
F. A. Johnson & Associates, Inc.	
Director of Finance and Marketing	1979
Escoffery, Bolten & Associates, President	1977 - Present
Geore & Branday Ltd., Manager, Investment Department	1975 - 1977
Chase Manhattan Bank, Manager	
Credit & Marketing Financial Analyst	1974 - 1975
Rutgers MESBIC, Student Consultant	1972 - 1973
Johnson & Johnson, Graduating Financial Intern	1973

Experience Summary

As a financial analyst and consultant, is experienced in all phases of business, financial management and economic development, with emphasis on project and solution implementation, banking, budgeting, management and technical assistance to businessmen, loan packaging, financial counseling, feasibility studies, research for business development and expansion, and trouble shooting. Recently became involved in community revitalization projects, contributing to the development of financing vehicles for the catalyst projects which enabled the project implementation.

Current Field of Interest

All phases of economic development with special interest in business and commercial development, identification and solution of business problems, and commercial revitalization.

Major Reports and Publications

1. "An Approach for an Economic Diversification Strategy for Bogalusa", 1979.

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

ESTES, CHARLES M., JR. -- Research Engineer II
Economic Development Laboratory

Education

M.B.A., University of South Carolina	1974
B.S., Industrial Engineering, Auburn University	1971

Employment History

Georgia Institute of Technology	
Research Engineer II	1980 - Present
Monsanto Textiles Company	
Industrial Engineering Supervisor	1978 - 1979
Senior Industrial Engineer	1975 - 1977
Industrial Engineer	1971 - 1975
Auburn University Computer Center	
Applications Programmer	1970 - 1971

Experience Summary

Industrial engineering responsibilities included designing and implementing automated materials-handling systems, developing improved management information systems, developing improved methods of operation, and determining manpower requirements. Specific accomplishments including development of computer program to optimize finished goods packaging, development of computerized operator scheduling system, chairmanship of committee to develop product inventory system, design of materials-handling system for new manufacturing process, development of manpower estimates for several long-range manufacturing processes, and implementation of several new procedures to increase labor productivity. As supervisor, managed group of five professionals. Also participated in start-up team of new manufacturing facility, coordinated \$1.5 million plant-wide cost reduction program, coordinated facilities planning and site development activities, and assisted in development of cost standards, budgets, and economic evaluations. At Auburn

University Computer Center, provided programming assistance to students and assisted faculty/staff with computer applications for special projects.

Current Fields of Interest

Application of sound business and engineering principles to improve manufacturing businesses, including materials handling, economic evaluation, cost reduction, facilities planning, management information systems, and business planning.

Major Reports and Publications

1. "Site Development Manual," Monsanto Textiles Company, October 1978, coauthor
2. "Principles and Economics of Industrial Packaging," University of South Carolina Graduate Paper, May 1974
3. Published numerous analyses and recommendations for Monsanto Textiles Company

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

LANIER, DIANNE D. -- Research Associate II
Economic Development Laboratory

Education

M.B.A., Georgia State University	1979
B.A., University of Georgia	1974

Employment History

Georgia Institute of Technology	
Research Associate II	1979 - Present
Marketing Information Service	
Project Manager	1979
Research Analyst	1978
Rich's, Research Analyst	1976 - 1978

Experience Summary

As a research associate at Georgia Tech, activities include outreach to acquaint prospective clients with the market research capabilities available within EES's Economic Development Laboratory. Duties also include consultation with clients seeking assistance from the Economic Development Administration or Trade Adjustment Assistance Program, with particular emphasis on marketing strategy and implementation of market research survey results. As a project manager at Marketing Information Service, directed all phases of the research process, with particular emphasis on client liaison and initial problem definition via a consulting orientation. Specific duties entailed interface with internal and external staff members and involvement in all areas of design and analysis, including methodology design and interpretive report writing and presentation. While a marketing research analyst, provided assistance in preparing research proposals, methodologies, data analysis, reports and statistical processing of data. Also was responsible for questionnaire design and creation of instructions for field personnel. As a research analyst with

Rich's, was responsible for liaison with independent field services, questionnaire design, sample determination, supervision of coding process, SPSS programming, analysis and report writing in conjunction with survey research effort. Evaluated research reports and surveys prepared by other firms for Rich's management. Received training in trade area research from Hammer, Siler, George/Gould Retail Consultants and authored a major study of six potential southeastern markets for Rich's.

Current Fields of Interest

Industrial marketing and marketing research; marketing planning.

Major Reports and Publications

1. "The Modern Masculine Lifestyle," Advances in Consumer Research, Vol. IV, coauthor

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

LINDSEY, EDGAR T. -- Senior Research Associate
Economic Development Laboratory

Education

M.B.A., University of Virginia	1972
B.S.I.M., Georgia Institute of Technology	1970

Employment History

Georgia Institute of Technology	
Senior Research Associate	1980 - Present
Western Carolina University	
Associate Professor and Associate Director, Center for Improving Mountain Living	1976 - 1980
Harrison - Taylor Corporation	
Vice-President & Treasurer	1975 - 1976
Southern Bank and Trust Company, Vice President	1973 - 1975
Citizens & Southern National Bank of South Carolina	
A National Accounts Officer	1972 - 1973
Summer Intern	1971
Citizens & Southern National Bank (Atlanta)	
Project Supervisor	1970

Experience Summary

Directed consulting projects for a federally sponsored technical assistance program designed to assist small businesses in a rural region; included establishing new techniques of assistance delivery, developing cooperative working arrangements with federal, state, and private organizations; and designing continuing educational programs for small businesses. Served as Vice President and Treasurer of a closely held corporation operating in several southeastern states. Served as Vice President of Loan Administration for a statewide bank establishing a new system of loan approval.

Assisted in the establishment of a new bank division for the servicing and monitoring of national corporate accounts; upon the development of the division, serviced the bank's national corporate accounts which were headquartered in mid-Atlantic, Southeastern, Southwestern, and Western states. Served as a team member on a study team determining the feasibility of establishing an international banking department which was successfully established. Developed and performed a geographical market analysis of customers' attitudes towards banking services as a summer intern project.

Current Fields of Interest

Economic development, including business development and the development of assistance and support systems for the private sector in underdeveloped regions of the U.S.

Major Reports and Publications

1. "Imports - The Impact on North Carolina," North Carolina Commerce Report, July - August 1979, N.C. Department of Commerce
2. A significant number of consulting project reports written through grant support and for private industries -- proprietary information

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

LUMPKIN, RONALD O. -- Research Scientist, Business Development Division,
Economic Development Laboratory, Engineering
Experiment Station

Education

B. B. A. Accounting and Finance, Georgia State University	1975
M. B. A. Finance, Georgia State University	1977

Employment History

Georgia Institute of Technology	
Research Scientist	1978 - Present
Complete Auto Transit (Subsidiary of Ryder)	
Regional Controller	1977 - 1978
Lockheed - Georgia Company	
Customer Supply Technical Group Supervisor	1972 - 1973
Supervisory Field Rep. (Logistic Support Manager Edwards AFB)	1971 - 1972
Customer Supply Technical Group Supervisor	1968 - 1971
Customer Supply Liaison Man	1966 - 1968
Development Test Material Man	1966 - 1966
Spares Support and Equipment Technician	1962 - 1966
Rich's Inc.	1959 - 1962

Experience Summary

At Georgia Tech, primarily involved in consulting with businesses by analyzing the firm's capabilities, isolating problems, and developing strategies or solutions. With Complete Auto Transit, was involved in eliminating accounting/financial problems through internal auditing, reviewing existing methods, and initiating proper procedures. Involved in design and installation of D.O.S. mini-computer system, analysis for rate negotiations. Began with Lockheed in the identification and sale of spare parts,

equipment, manuals and training with control over scheduling, planning and delivery of hardware and services. Responsible for the designing of a real time/random access procurement tracking and inventory control system for feasibility study phase through testing and implementation. Prepared procedures and instructions and conducted formal training for management and union personnel on mechanized systems and ancillary accounting functions. Had supervisory responsibility over organization that handled procurement/acquisition, inventory control, functional test and inspection, repairs, subcontracted rework, and accounting and control, including data entry for dynamic test inventory valued at over \$200 million. Additional responsibilities included planning, budgeting, forecasting, quoting, labor relations, procedures, schedule control, and contractual obligations. As the Logistic Support Manager at Edwards AFB, California, and all off-site support functions (acquisition, receiving, inspection, warehousing, packaging and crating, shipping, accounting control, reporting, etc.) during the Air Force testing of the C-5 aircraft. Was involved in inventory control, receiving, distribution and retail merchandising with regional department store chain.

Current Fields of Interest

Analysis of business problems and the development and implementation of strategies or plans considering the major functional areas of a company -- marketing, accounting/finance and production; data processing use; application of financial tools and other activities involved in sound management and business practices.

Major Reports and Publications

1. "Diagnostic Analysis and Adjustment Plan for Toll Gate, Inc.," Georgia Tech Report, 1981, coauthor
2. "Diagnostic Analysis and Summary of Initial Assistance for Donald MacMillan & Son, Inc.," Georgia Tech Report, 1981
3. "Maple Tree, Inc., Diagnostic Analysis and Recommendations," Georgia Tech Report, 1980, coauthor
4. "Adjustment Plan for Donald MacMillan & Son, Inc.," Georgia Tech Report, 1980
5. "A Market Study for MacMillan & Son, Inc.," Georgia Tech Report, 1980, project officer
6. "A Market Study for Poly-Quip, Inc.," Georgia Tech Report, 1980, project officer

7. "First Annual Report of the Southeastern Trade Adjustment Assistance Center," prepared for Economic Development Administration, 1979, coauthor
8. "Diagnostic Review/Feasibility Study for Pinellas Seafood Company," Georgia Tech Report, 1979
9. "Development of a Set of Simplified Financial Management Procedures for Small Cities and Counties of Georgia," Georgia Tech Report, 1979
10. "A Demonstration Project to Establish a Technological Delivery System for Small and Medium-Sized Firms," Georgia Tech Report, 1979, coauthor
11. "An Initial Feasibility Study on the Manufacture of Liqueurs and Prepared Cocktails," Georgia Tech Report, 1978
12. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," prepared for Economic Development Administration, 1978
13. "User Guide to Complete Auto Transit's Data Point System," Complete Auto Transit, 1978
14. "Project 923 -- Real Time/Random Access System for C-5 Inventory Management," Lockheed - Georgia Company, 1967, coauthor
15. Author of approximately 130 procedures for Lockheed - Georgia Company

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

MULLER, JAMES C. -- Research Engineer II
Economic Development Laboratory

Education

M.B.A. in Management, Georgia State University	1972
B.M.E., Georgia Institute of Technology	1967

Employment History

Georgia Institute of Technology	
Research Engineer II	1977 - Present
Corning Glass Works	
Equipment Development Engineer	1975 - 1977
Senior Equipment Engineer	1974 - 1975
Southwire Company	
Assistant Manager, Design Engineer	1972 - 1974
U.S. Army, Ordnance Officer	1968 - 1970
International Harvester, Design Engineer	1968

Experience Summary

At Georgia Tech, functions as project director and/or principal investigator on sponsored research projects concerning energy conservation and economic feasibility; also provides management and technical consultation to manufacturing firms in the southeastern United States. As senior equipment engineer in charge of equipment development at Corning in the Electronic Products Division, developed six new and different pieces of production equipment, taking them through all stages of development; conceptualizing, funding, designing, prototyping, debugging, fabricating, training operators, training maintenance personnel, commissioning, and documenting. As assistant manager of design engineering, provided engineering drawings to support all Southwire Continuous Road projects; functioned as a design engineer, designing a complete continuous copper casting machine and bar preparation machine; did

feasibility studies on an insulated scrap reclamation plant, designed the eventual system, and participated in the design of a system for recycling the plastic insulation material. As test officer, U.S. Army Armor and Engineering Board, conducted field test of experimental wheel and track vehicles. As platoon leader, commanded 98 men performing direct support maintenance on vehicles and armament of two battalion-size combat units. Assigned to General Staff, Support Command DaNang, monitored the readiness of engineer construction and material-handling equipment for all U.S. Army forces from Chu Lai to the DMZ. As design engineer, designed the valve train for a family of six-cylinder engines in medium-duty trucks.

Current Fields of Interest

Manufacturing engineering and manufacturing management, in particular: feasibility studies on new ventures, analysis of current problems, equipment selection and development, cost reduction programs, automation, computer-aided manufacturing.

Patents

1. "Automatic Metering System," U.S. Patent Pending, coinventor
2. "Pour Pot Manipulator," U.S. Patent No. 3,877,509

Registrations

Licensed Professional Engineer, Georgia, Reg. No. 11429

Licensed Professional Engineer, North Carolina, Reg. No. 7943

Certified Manufacturing Engineering, Cert. No. 970285, Exp. Date, Dec. 31, 1982

Major Reports and Publications

1. "Industrial Supply Company, Brunswick, Georgia: An Economic Analysis," Georgia Tech Report, May 1980
2. "The Feasibility of Manufacturing Machine Shop Products in Southwest Georgia," January 1980, with Harvey Diamond
3. "Feasibility of Manufacturing Metal Stampings in Southwest Georgia," Georgia Tech Report, January 1980, with Harvey Diamond
4. "The Feasibility of Obtaining Metalworking Support Facilities for Southwest Georgia Manufacturers," Georgia Tech Report, August 1979, with Harvey Diamond

5. "Diagnosis of Butler Furniture Industries," Georgia Tech Report, August 1979
6. "Feasibility of Reopening the Southern Electric Steel Mill, Birmingham, Alabama," Georgia Tech Report, May 1979
7. "Precision metals Inc., An Economic Analysis," Georgia Tech Report, January 1979
8. "Trade Adjustment Assistance Provided to the Atlanta Umbrella Company," Georgia Tech Report, December 1978
9. "A Craftsman's Guide to Energy Conservation," textbook to be used in vocational/technical schools in Georgia, November 1978, with Esther Burks, Tom McGowan, and William Studstill
10. "Production and Profitability Analysis of Miami Laces Corporation," Georgia Tech Report, November 1978
11. "Energy Conservation and Management in Vocation/Technical Schools," Georgia Tech Report, September 1978, with James Clark
12. "Technical Assistance to Mulvey Supply Company, Hollywood, Florida," Georgia Tech Final Report, April 1978

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

RICE, GREGORY F. -- Senior Research Associate
Economic Development Laboratory

Education

J.D., De Paul University	1961
B.A., De Paul University	1954
12 Semester Hours of Accounting, USAFI	1956

Employment History

Georgia Institute of Technology	
Senior Research Associate	1979 - Present
Atlanta Protection Systems, Inc., President	1978 - 1979
Southern Silk Mills, Vice President Marketing/Sales	1977 - 1978
The Lovable Company, Vice President of Operations	1971 - 1976
Sears Roebuck & Company, Buyer/Merchandiser	1966 - 1970
Jewel Companies, Attorney, Buyer	1958 - 1965

Experience Summary

Georgia Tech activities include outreach to acquaint prospective clients with TAAC Program, consultation with clients to identify specific problem areas and develop strategies for recovery, and interaction with both the client and EDA to facilitate implementation of technical and/or financial assistance. President of Atlanta Protection Systems, in-home sales of residential burglar and fire alarm systems. As Vice-President of Marketing/Sales, directed national 16-man representative sales force. Formulated marketing and sales plans and budgets for sales in excess of \$20 million, priced all products, determined overall P&L plan, and administered the Marketing Department. As Vice President of Operations was responsible for all manufacturing and staff support areas except finance. Acted as marketing coordinator for company, and was responsible for unifying sales and manufacturing functions. Buyer/merchandiser duties at Sears included determining

composition of line and pricing of products for retail and catalog sales, and preparing sales and P&L budgets. Negotiated long-term buying arrangements and costs with vendors, and prepared sales and production planning schedules for vendors. As a buyer for Jewel, determined selection, pricing and sales presentation of toys for retail food, discount and drug stores and for catalog operations. Also prepared sales plans and P&L budget. As an Attorney for Jewel, worked in law division in contract, regulation and labor areas.

Current Fields of Interest

Analysis and solution of management/manufacturing problems with emphasis on the interrelation of marketing, production, and financial operations.

Registrations

Licensed to practice law in the state of Illinois and the United States District Court, Northern District of Illinois, 1961

Georgia Institute of Technology
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BIOGRAPHICAL SKETCH

SPRINGFIELD, ROBERT W. — Research Engineer II
Economic Development Laboratory

Education

B.I.E., Georgia Institute of Technology 1969

Employment History

Georgia Institute of Technology	
Research Engineer II	1979 - Present
Summerour and Associates, Inc., Management Consultants	
Associate	1977 - 1979
Senior Consultant	1975 - 1977
Staff Consultant	1973 - 1975
Colonial Stores, Inc., Retail Food Chain	
Industrial Engineer, Corporate Warehousing and Transportation Department	1969 - 1973

Experience Summary

As a research engineer at Georgia Tech, duties include program management responsibility for a business consulting unit which provides management, financial, production, and marketing services primarily to small and medium manufacturing firms. As a management consultant with Summerour and Associates, worked with both large and small companies in solving the problems of facility design, employee productivity, personnel recruiting, training, cost and method analysis, inventory control and production planning. As a senior consultant, specialized in on-site implementation of problem solutions and engineering programs with complete documentation. As an associate consultant, responsibilities included marketing consulting services, preparing proposals and surveys and supervising staff engineers performing on-site implementation work. As an industrial engineer with Colonial Stores, did extensive project work in product delivery to stores, warehouse material

handling methods, inventory control, store material handling methods, equipment justification, and facility layout and design.

Current Fields of Interest

Utilization of sound marketing, financial and management techniques that apply to manufacturing businesses; operations management with respect to diagnosing and solving problems.

Major Reports and Publications

1. "A Diagnostic Review and Business Recovery Plan," prepared by Mapletree, Inc., July 1980, coauthor
2. "A Diagnostic Review of Company Operations," prepared for Forsyth Industries, February 1980, coauthor
3. "A Business Recovery Plan," prepared for the Curlee Clothing Company, March 1979
4. "Economic Feasibility Study for the Proposed Relocation of Sewing, Finishing, and Distribution Activities," prepared for the Tobias Kotzin Company, January 1979
5. "Layout Concept for Central Cutting and Piece Goods Facility," prepared for Noel Industries, Inc., February 1977
6. "Facilities Utilization Study," prepared for Skyline Manufacturing Company, Inc., November 1977
7. "Industrial Engineering and Standard Data Manual," prepared for Atlantic Products Corporation, August 1977
8. "Survey Analysis of the Chicago Distributon Operations," prepared for Humphrey's Leather Goods, January 1977
9. "Results of an Assessment of Order Fulfillment Costs," prepared for McGregor-Donniger, Inc., October 1975, coauthor
10. "Survey of the Distribution Facility," prepared for Jonbil, Inc., November 1975
11. "Industrial Engineering and Incentive Wage Manual for the Camden Finished Goods Warehouse," prepared for Skyline Manufacturing Company, Inc., September 1974
12. "Cutting Engineering Manual-Summersville," prepared by Angelica, Inc., August 1973, coauthor
13. "Proposed Design for the Hazlehurst Service Center," prepared for the Edward Hyman Company, April 1973

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BIOGRAPHICAL SKETCH

TAYLOR, HARDY A.--Chief, Business Development Division
Economic Development Laboratory

Education

B.S. in Business Administration and Pre-Law, University of Alabama	1943
Defense Department Comptrollership School, Washington, DC	1955
Graduate School of Business Organization, University of Nebraska	1951
Harvard Graduate School of Business Administration	1944

Employment History

Georgia Institute of Technology	
Chief, Business Development Division	1979-Present
Head, Industrial Services Group	1977-1979
Associate Chief, Industrial Development Division	1976-1977
Assistant Head, Industrial Services Branch	1970-1976
Assistant Head, Industrial Services Branch,	1970-1976
Head, EDA Services Section	1970
Head, Management and Technical Assistance Section	1968
Senior Research Scientist	1968
Research Scientist, II	1968
U.S. Navy, Supply and Fiscal Officer/Comptroller	1943-1968
Gladwin Industries, Inc., Atlanta, Georgia, Treasurer/ Controller	1964-1966
Turco Products, Inc., Atlanta, Georgia, Representative and Field Engineer	1943
National Southern Products, Inc., Tuscaloosa, Alabama, Research Assistant	1943

Experience Summary: As the Head of the Industrial Services Group is responsible for directing the overall EDL program of management and technical assistance and EDA services to Georgia industry. Served as treasurer of a locally based national corporation, primarily a manufacturer for the telephone industry, and was responsible for accounting and financial management, office administration and sales maintenance services, purchasing, customer relations and local sales, personnel administration, print shop operations and sales catalog maintenance. Served as a member of the board of directors of several corporations with national and international sales distribution. In 1964 completed 20 years in U.S. Navy as top departmental executive with experience in all phases of business and financial management. Special emphasis was on controllership, which consisted of budgeting and internal auditing; supply and fiscal operations, consisting of accounting and payroll, office administration and personnel management and training, procurement and contract negotiation and administration, inventory management, warehousing, traffic operations, quality control, industrial safety, and property disposal. Assisted in development of, and was in charge of implementation of, a new inventory management concept at the Naval Aviation Supply Office, which is the worldwide

inventory control point for all Naval Aviation spare parts and material. This concept, based on the maximum utilization of the latest electronic data processing equipment, resulted in the greatest advancement in the management of aviation material during the past several years. Served as Supply and Fiscal Officer/Comptroller at several Naval Air Stations and directed a working staff of 75 to 300 civilian personnel. As the first U.S. Naval representative in Sicily, negotiated at the highest governmental levels in Sicily and in Rome in arriving at agreements and procedural methods for operation of a U.S. Naval Air Station. Additionally, recruited, interviewed selected and hired the initial group of 100 civilian personnel. Also negotiated and approved contract for procurement of equipment, supplies and services from European sources to provide complete support for a station population of 1,800 people. Developed the idea and published a catalog in connection with a Simplified Issue Procedure for General Stores Material. This idea has been further developed and is widely used through the Naval Supply System.

Current Fields of Interest

All Phases of area development activity, including industrial and community development, financial and inventory management, and management development.

Major Reports and Publications

1. "Technical Assistance to Motels and Restaurant Owners Located on U.S. Highway 301", Georgia Tech Report, January 1978, coauthor.
2. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, December 1977, co-author
3. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, January 1977, coauthor
4. "Feasibility of Restructuring the Long-Term Financing of Delta Diversified, Inc.," Georgia Tech Report, July 1976, coauthor
5. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, December 1975
6. "A Program of Technical Assistance to the Farmers Home Administration Business and Industry Loan Program," Georgia Tech Report, March 1975
7. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Report, December 1974 coauthor
8. "Management and Technical Assistance to Georgia Business and Industry," Georgia Tech Report, August 1973, coauthor
9. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia", Georgia Tech Report, June 1973, coauthor
10. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia", Georgia Tech Report, September, 1972, coauthor
11. "A Program of Management and Technical Assistance in Designated EDA Counties in Georgia," Georgia Tech Final Report September 1971, coauthor

12. "Ways of Organizing a Business in Georgia," Georgia Tech Management and Technical Assistance Counseling Note, August 1971, coauthor
13. "An Evaluation Report on McGuire Tire and Recapping Company, Atlanta, Georgia," Special Report for the Small Business Administration, July 1971, coauthor
14. "A Feasibility Report on the Proposed Expansion of Bertie Industries, Inc., Windsor, North Carolina," Special Report for the Small Business Administration, June 1971, coauthor
15. "A Program of Management and Technical Assistance in Designated EDA Counties," Georgia Tech Final Report, August 1970, coauthor
16. "Management and Technical Assistance to Georgia Business and Industry," Georgia Tech Annual Report, August 1968, coauthor
17. "Economic Impact of a Proposed Industrial District to be Located in Richmond County, Georgia," EDA Special Report, May 1968, coauthor
18. "Economic Impact of Proposed Water and Sewerage Systems Improvements on Gibson, Georgia," EDA Special Report, April 1968, coauthor
19. "Economic Impact of Proposed Water and Sewerage System Improvements on Madison, Georgia," EDA Special Report, April 1968
20. "Economic Impact of Proposed Sewerage System Improvements on Camilla, Georgia," EDA Special Report, March 1968, coauthor
21. "Economic Impact of Proposed Water and Sewerage Systems Improvements on the City of Sylvester and Worth County, Georgia," EDA Special Report
22. "Economic Impact of a Proposed Industrial Park to be Located in Milledgeville, Georgia," EDA Special Report, February 1968
23. "Economic Impact of the Proposed Establishment of Keller Industries, Inc. in Swainsboro, Georgia," EDA Special Report, February 1968, coauthor
24. "Economic Impact of a Proposed Industrial Park to be located in Swainsboro, Georgia," EDA Special Report, January 1968, coauthor
25. "Economic Impact of the Proposed I-20 Regional Industrial Park at Comak, Georgia," EDA Special Report, January 1968
26. "Economic Impact of Proposed Water and Sewerage System Improvements on Warrenton, Georgia," EDA Special Report, September or December 1967
27. "A Simplified Inventory and Cost Control System for a Small Manufacturer," EDA Special Report, June 1967
28. "Economic Impact of Proposed Water and Sewerage System on Cleveland, Georgia," EDA Special Report, May 1967, coauthor
29. "Economic Impact of a Proposed Water Storage Tank on Tennille, Georgia," EDA Special Report, April 1967
30. "Impact of Proposed Water and Sewerage System on Blakely, Georgia," EDA Special Report, February 1967, coauthor
31. Author of numerous published company studies; procedural systems manuals; and operational plans
32. Published catalog in connection with a Simplified Issue Procedure for General Stores Material

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

THOMAS, JAMES M. -- Research Associate II
Economic Development Laboratory

Education

M.S., Management, Purdue University	1977
B.S.I.M., Georgia Institute of Technology	1972

Employment History

Georgia Institute of Technology	
Research Associate II	1980 - Present
Touche Ross and Company, Management Consultant	1977 - 1980
Purdue University, Instructor of Financial Accounting	1975 - 1977
Federal Reserve Bank - Miami	
Systems Department Manager	1974 - 1975
Branch Systems Analysts	1973 - 1974
Check Collection Analyst and Check Processing Supervisor	1972 - 1973

Experience Summary

With Touche Ross and Company, performed a broad range of general management consulting engagements, including a review of operations and fiscal controls for a county maintenance department, development of a water quality management program for a state-designated water pollution control district, design and implementation of inventory evaluation procedures for a general hardware manufacturer, management of a Chapter XI bankruptcy for the court and creditors of a food processing company, implementation of a fully integrated accounting system for a state welfare agency, analyses of engineering operations and manpower utilization for an affiliated company of the Bell System, development of employee performance appraisal and incentive system for two county governments, development of a staff performance appraisal system for the Atlanta Management Services Department of Touche Ross and Company, analyses of road and drainage system maintenance operations and manpower

utilization for a county government, development of an organization and operations plan for a new lease company venture, and market profile analyses of potential management consulting markets in the southeastern United States. Work experience with Purdue University included course instruction in financial accounting. As Systems Department Manager, with the Federal Reserve Bank, developed and implemented the department's organizational structure, procedures and policies; planned and managed the efforts of the programming and operations analyst staff; and managed the systems and user department's conversion from second to third generation computers. As Check Processing Supervisor, supervised three operational units with over fifty employees. Branch System Analyst work experience included supervision of the Data Processing Department programming staff, and planning and coordination of the department conversion from second to third generation computers. As a Check Collection Analyst, performed analyses of short-and long-term computer hardware requirements, performed analyses of alternative damaged check processing equipment, and coordinated implementation of computer hardware recommendations. Work experience with the Georgia Power Company included drafting and layout design of electrical sub-stations.

Current Fields of Interest

Utilization of quantitative management tools in finance, operations and marketing in the development of strategic business and operating plans.

Georgia Institute of Technology
Engineering Experiment Station

BIOGRAPHICAL SKETCH

WILENCHECK, STEPHEN B. -- Senior Research Associate
Economic Development Laboratory

Education

M.B.A., Harvard Business School	1964
B.S.I.M., Georgia Institute of Technology	1960

Employment History

Georgia Institute of Technology	
Senior Research Associate	1979 - Present
Wilenchek & Associates, Consultant	1979 - Present
Citizens and Southern National Bank	
Vice President - Senior Credit Officer	1976 - 1979
Vice President - Branch Manager	1975 - 1976
Vice President - Equipment Leasing	1972 - 1975
Vice President - Corporate Financial Planning	1971 - 1972
Commercial Lending Officer	1966 - 1971
Trainee	1964 - 1966

Experience Summary

As senior research associate at EES, activities include outreach to acquaint prospective clients with Trade Adjustment Assistance Program, consultation with clients to identify specific problem areas and develop strategies for recovery, and interaction with both clients and Economic Development Administration to facilitate application to EDA for financial assistance. As senior credit officer, administered diversified portfolio of problem commercial loans which initially totalled \$12 million. Developed specific strategies for each situation and reduced loans by \$4 million through sales of collateral, demands made upon guarantors, and refinancing of loans elsewhere. Identified losses and charged off uncollectible amounts. Acted as liaison with attorneys in numerous lawsuits concerning defaulted loans, and regarding

litigation against the bank arising from loan transactions. Assumed management of commercial/retail bank branch having high percentage of problem loans. Systematically reduced problem loan balances by 25%, while increasing deposits by 40% and cutting expenses by 10%. Despite poor business conditions, generated new consumer and commercial loan business, including the first SBA - guaranteed loan made by this bank to a contractor. Organized and operated equipment leasing department. Within two years, outstandings reached \$12 million. Served on troubled customer's finance committee and board of directors. During this time customer's operating losses were substantially eliminated and administrative procedures were greatly improved. Sold commercial banking services to and negotiated lines of credit with major national companies as well as local businesses. Managed \$19 million loan portfolio. Consulted with customers on financial strategy, mergers and acquisitions, and arranged private placements of debt.

Current Fields of Interest

Financial management, marketing management, market analysis, and the interaction of these factors in making strategic business decisions.

CHARTS

Chart 3

REGIONAL ECONOMIC DEVELOPMENT CENTER
GEORGIA INSTITUTE OF TECHNOLOGY
ACTIVITY REPORT

May 1, 1981 - July 31, 1981

	<u>Stabilization</u>		<u>Business Expansion</u>		<u>New Venture</u>		<u>Community Development</u>		<u>TOTAL</u>	
	Previous	Current	Previous	Current	Previous	Current	Previous	Current	Previous	Current
ONGOING (BEGINNING)	3	2	5	2	5	4	0	0	13	8
NEW	0	0	0	0	0	0	0	0	0	0
DISCONTINUED	2	0	2	0	1	0	0	0	5	0
ONGOING (ENDING)	1	2	3	2	4	4	0	0	8	8
TOTAL ACTIVE DURING QUARTER	3	2	5	2	5	4	0	0	13	8

Percentage of Effort as Measured by Cost*

	<u>This Period</u>	<u>Previous Period</u>
Business Stabilization	25	24
Business Expansion	25	38
New Venture	50	38
Community Development	0	0

*Cost is interpreted to mean Budget Cost for Period of Reporting.

Chart 4

SUMMARY OF PROJECT ACTIVITY BY TYPE AND SUBREGION

<u>Subregion</u>	<u>New Venture</u>	<u>Business Expansion</u>	<u>Business Stabilization</u>	<u>Community Development</u>	<u>Current Costs % of Total</u>
ALTAMAHA GEORGIA SOUTHERN EDD					
CENTRAL SAVANNAH RIVER EDD		1			13
CHATTAHOOCHEE-FLINT EDD					
COASTAL AREA EDD					
COOSA VALLEY EDD					
GEORGIA MOUNTAINS EDD					
HEART OF GEORGIA EDD					
LOWER CHATTAHOOCHEE EDD					
McINTOSH TRAIL EDD					
MIDDLE FLINT EDD					
MIDDLE GEORGIA EDD					
NORTH GEORGIA EDD					
NORTHEAST GEORGIA EDD					
OCONEE EDD					
SOUTH GEORGIA EDD		1	1		24
SOUTHEAST GEORGIA EDD					
SOUTHWEST GEORGIA EDD	1				13
NON-EDD	<u>3</u>	<u>—</u>	<u>1</u>		<u>50</u>
TOTAL	4	2	2		100

Chart 5

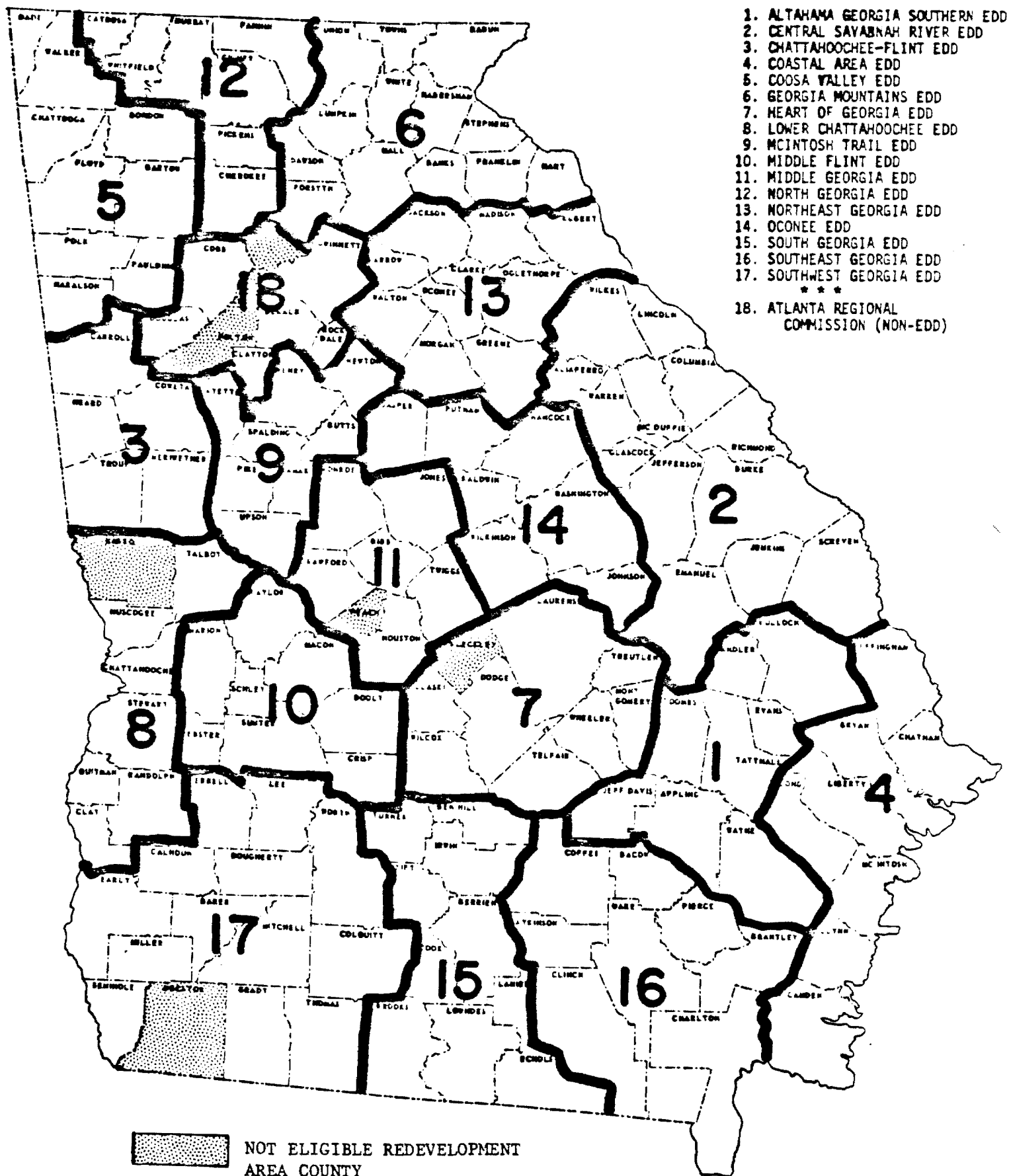
JOB IMPACT SUMMARY

Subregion	Business Stabilization		Business Expansion		New Venture		Community Economic Development		Other	
	Goal	Actual	Goal	Actual	Goal	Actual	Goal	Actual	Goal	Actual
Altamaha Ga. Southern EDD	Not Estab.	0	Not Estab.	0	Not Estab.	0	Not Estab.	0	Not Estab.	0
Central Savannah River EDD	"	0	"	0	"	0	"	0	"	0
Chattahoochee Flint EDD	"	0	"	0	"	0	"	0	"	0
Coastal Area EDD	"	0	"	0	"	0	"	0	"	0
Coosa Valley EDD	"	0	"	0	"	0	"	0	"	0
Georgia Mountains EDD	"	0	"	0	"	0	"	0	"	0
Heart of Georgia EDD	"	0	"	0	"	0	"	0	"	0
Lower Chattahoochee EDD	"	0	"	0	"	0	"	0	"	0
McIntosh Trail EDD	"	0	"	0	"	0	"	0	"	0
Middle Flint EDD	"	0	"	0	"	0	"	0	"	0
Middle Georgia EDD	"	0	"	0	"	0	"	0	"	0
North Georgia EDD	"	0	"	0	"	0	"	0	"	0
Northeast Georgia EDD	"	0	"	0	"	0	"	0	"	0
Oconee EDD	"	0	"	0	"	0	"	0	"	0
South Georgia EDD	"	0	"	0	"	0	"	0	"	0
Southeast Georgia EDD	"	3	"	0	"	0	"	0	"	0
Southwest Georgia EDD	"	0	"	0	"	0	"	0	"	0
Non-EDD	"	0	"	5	"	0	"	0	"	0
TOTAL	"	3	"	5	"	0	"	0	"	0

MAPS

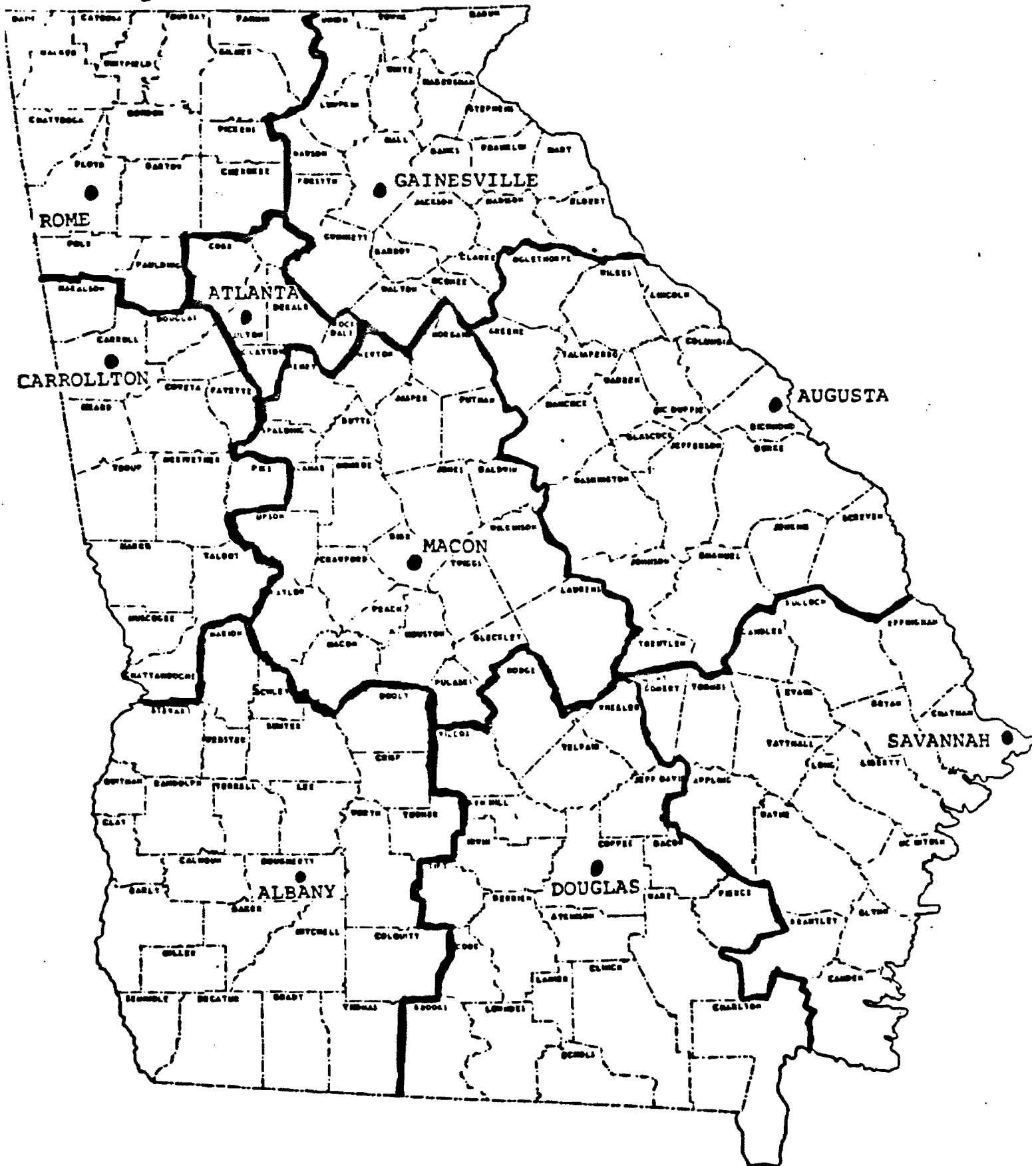
Map 1

ECONOMIC DEVELOPMENT DISTRICTS
AREA PLANNING AND DEVELOPMENT COMMISSION BOUNDARIES



Map 2

AREA OFFICES OF
GEORGIA INSTITUTE OF TECHNOLOGY



Map 3
PROJECT LOCATION BY COUNTIES

