

GEORGIA INSTITUTE OF TECHNOLOGY  
OFFICE OF CONTRACT ADMINISTRATION  
SPONSORED PROJECT INITIATION

Date: November 1, 1979

Project Title: "Design & Implement Curriculum For Instruction of Economic Development Practitioner in Selected Universities"

Project No: A-2497

*Green card U.S.*

Project Director: R.B. Cassell

Sponsor: Mississippi Research & Development Center

*Nov. 30/80*

Agreement Period: From 9/15/79 Until 9/15/80

Type Agreement: MRDC Agreement No. 80-17E\*

Amount: \$31,000

Reports Required: Quarterly Progress & Financial Reports, Final Technical Report, Final Financial Report

Sponsor Contact Person (s):

Technical Matters

Dr. Kenneth C. Wagner  
Center Director  
Mississippi Research & Development Center  
P.O. Drawer 2470  
Jackson, Mississippi 39205

Contractual Matters

(thru OCA)

\*Sub-contract under an EDA prime (Grant No. 04-06-01884)

Defense Priority Rating:

Assigned to: ED/AR (~~SCRS~~/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  
EES Information Office  
EES Reports & Procedures  
Project File (OCA)  
Project Code (GTRI)  
Other \_\_\_\_\_

0-11  
B-11  
N-11

GEORGIA INSTITUTE OF TECHNOLOGY  
OFFICE OF CONTRACT ADMINISTRATION  
SPONSORED PROJECT TERMINATION

Date: 12/11/80

Project Title: Design and Implement Curriculum for Instruction of Economic  
Development Practitioner in Selected Universities  
Project No: A-2497  
Project Director: R.B. Cassell  
Sponsor: Mississippi Research and Development Center

Effective Termination Date: 11/30/80

Clearance of Accounting Charges: 11/30/80

Grant/Contract Closeout Actions Remaining:

~~Final Invoice and Final Document~~

☒ Final Invoice and ~~Final Document~~

☒ Final Fiscal Report

☐ Final Report of Inventions

☐ Govt. Property Inventory & Related Certificate

☐ Classified Material Certificate

☐ Other \_\_\_\_\_

Assigned to: EDL/ARD (~~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

EES Information Office

Project File (OCA)

Project Code (GTRI)

Other Project Code (OCA)



# Georgia Institute of Technology

ENGINEERING EXPERIMENT STATION

ATLANTA, GEORGIA 30332

Economic Development Laboratory

Applied Research Division

December 14, 1979

Dr. Kenneth C. Wagner, Director  
Mississippi Research & Development Center  
P. O. Drawer 2470  
Jackson MS 39205

Subject: MDRC Agreement No.80-17E

Dear Ken:

## Work Accomplished

In accordance with the schedule set out in the above referenced agreement, we submit herewith copies of Progress and Financial Report for the quarter ending December 15, 1979.

As you are aware, we have been unable to perform any activity under this sub-contract agreement. A portion of the delay results from the fact that the contractual arrangement was not executed by our Georgia Tech Research Institute until October 10 (in effect deleting one month from this quarter).

Since that date, we have been awaiting some indication that the National Advisory Council, as provided in item 3 of the scope of work, would be established. We held back our efforts in formulating program descriptions, program plans, contents, and locations for presentation, in order that we would have the benefit of thinking and response from that Council.

We did nominate on November 9 a total of 13 persons representing six different organizations as possible candidates for that Council. These organizations appear to us to represent interests in the development field and to have the potential for substantive input into the proposed programs. We have not received any reaction to those suggestions, however.

## Work Ahead

We expect to proceed in making contacts with a series of experts for instructor segments to develop subject areas for the first series of seminars on "Targeting Appropriate Economic Activities." In the absence of a sounding

Dr. Kenneth C. Wagner

December 14, 1979

Page 2


board, however, we have been reluctant to press the development of that topic, as well as selecting locations for presentations, dates, and timing of the program segments.

Nonetheless, in order to carry out our contractual commitments, it appears necessary for us now to push ahead on this matter without any external advice or response from either the other members of the academic consortium, i.e. the Mississippi Research and Development Center and the University of Arkansas Industrial Research and Extension Center, or the proposed National Advisory Committee.

#### Financial

As is obvious from the above comments, no expenditures of funds were involved in this project between October 10 and the present date.

Sincerely yours, 

  
Robert B. Cassell

Project Director





# Georgia Institute of Technology

ENGINEERING EXPERIMENT STATION

ATLANTA, GEORGIA 30332

Economic Development Laboratory

Applied Research Division

March 14, 1980

Dr. Kenneth C. Wagner, Director  
Mississippi Research & Development Center  
P. O. Drawer 2470  
Jackson MS 39205

Subject: MDRC Agreement No. 80-17E

Dear Ken:

In accordance with the schedule set out in the above referenced agreement, we submit herewith copies of Progress and Financial Report for the quarter ending March 15, 1980.

## Work Accomplished

We have developed a plan of action for presenting our first seminar/training program on "Sophisticated Prospecting Techniques" which will be offered on the Georgia Tech campus in June. We have discussed in great detail the theme, process of presentation, staffing, course content, and syllabus with Mr. George McFarland of your staff. This was done in January at Jackson.

George has reviewed these segments of our game plan. Subsequently, a meeting was held in New Orleans, which you attended, with Mr. Dan Harrington of the Washington staff of the Economic Development Administration in order to clarify several problem areas. These appear to have been resolved satisfactorily, and we are proceeding accordingly.

## Work Ahead

We are now in the process of lining up the staff participants and meeting place for the "Targeting" seminar. We will be making contact with a select group for the audience of the first program, over and above those individuals who have been asked to serve on the Advisory Council. We are also giving consideration to the manner in which the second segment should be presented.

Dr. Kenneth C. Wagner/2  
March 17, 1980

We are beginning to sort out probable subject areas for the second seminar/training program which will deal with public investment choices in the development of local industrial parks. We do not anticipate the presentation of this program until early fall.

Financial (through February 29)

	<u>Expended</u>	<u>Budgeted</u>	<u>Balance</u>
Personal Services	\$1,012	\$14,406	\$13,394
Staff Benefits	106	1,514	1,408
Indirect Costs	769	10,949	10,180
Materials & Supplies	1	3,000	2,999
Travel	<u>242</u>	<u>1,131</u>	<u>889</u>
Total	\$2,130	\$31,000	\$28,870

Sincerely yours,

Robert B. Cassell  
Project Director



# Georgia Institute of Technology

ENGINEERING EXPERIMENT STATION

ATLANTA, GEORGIA 30332

Economic Development Laboratory  
Applied Research Division  
June 30, 1980

Dr. Kenneth C. Wagner, Director  
Mississippi Research & Development Center  
P.O. Drawer 2470  
Jackson, MS 39205

Subject: MDRC Agreement No. 80-17E

Dear Ken:

In accordance with the schedule set out in the above referenced agreement, we submit herewith copies of Progress and Financial Report for the quarter ending June 15, 1980.

## Work Accomplished

Late in May (on the 28th) we presented the first version of our seminar/training session on the subject of "Latest Prospecting Techniques". This session was attended by representatives from 15 multi-county planning and development districts from four states-- Georgia, Alabama, Mississippi, and Tennessee. Also in attendance were one staff member from the Georgia Department of Industry & Trade, and one staff member of a local Chamber of Commerce organization. All of these attendees were invited by personal letter.

George McFarland of the Mississippi Research & Development Center and Marion Faulkner of the University of Arkansas Industrial Research & Extension Center also attended as observers.

## Seminar on Latest Prospecting Techniques

The presentations for this six-hour seminar consisted of three elements: Growth Industries and Analytical Tools, Matrix Analyses, and Local Development Strategies and Application of the Analytical Tools. These segments were presented by Dr. Robert L. Koepke of the University of Southern Illinois, Dr. David C. Sweet of Cleveland State University, and Michael G. Jones of Hensley-Schmidt consulting engineers.

The program elements dealt with the identification of industry groups having high to medium/high growth potentials, and included service and other non-manufacturing categories. Limitations such as environmental constraints, energy restrictions, transportation requirements, resource shortages, and the impact of the national recession were all considered as external influences.

Analytical techniques included economic base analyses and area

DESIGN AND IMPLEMENT CURRICULUM  
FOR INSTRUCTION OF ECONOMIC DEVELOPMENT PRACTITIONERS  
IN SELECTED UNIVERSITIES

(October, 1979 - November, 1980)

Final Report on Project A-2497

To

Mississippi Research and Development Center

Jackson, Mississippi

Economic Development Laboratory  
Engineering Experiment Station  
GEORGIA INSTITUTE OF TECHNOLOGY  
Atlanta, Georgia  
November, 1980

# FINAL REPORT

## DESIGN AND IMPLEMENT CURRICULUM FOR INSTRUCTION OF ECONOMIC DEVELOPMENT PRACTITIONERS IN SELECTED UNIVERSITIES

(October, 1979 - November, 1980)

### Purpose

Under the contractual agreement (MRDC Agreement No. 80-17E) signed in September 1979, it became our mission to create two seminars on subject areas of interest and concern to economic development practitioners. Each of these seminars was designed for presentation on a trial basis in an academic environment on a college campus and to a select list of invited attendees. Each seminar was then revised for a second presentation to a wider, brochure-circulated audience at Memphis State University late in October.

One of the subject areas selected by Georgia Tech was to demonstrate a sound and rational procedure for creating a strategy for the attraction of new and significant investment activities and a review of the procedures for implementing those efforts. The premise was that there do exist sound and advanced procedures which can be used to identify potential industries as well as other significant types of economic activities. Further, these procedures can be employed for marketing community assets and working with potential investors in a businesslike and profitable fashion.

The other subject area selected was to examine the procedure for developing industrial parks by the public sector. Some of the aspects to be considered include the merits and disadvantages of industrial park ventures, the specific costs involved all the way from raw land acquisition through installation of utilities, as well as street and highway access, and marketing costs. The engineering approach to planning and development phases was underscored, and a case history was presented which capsuled many of the principles enunciated in the lecture segments.

### Rationale

Economic development efforts embrace a broad spectrum of public and private actions. These include the preparatory work of making a community attractive and receptive to investment that will produce additional employment and increase

## Design and Implement Curriculum For Instruction of Economic Development Practitioners in Selected Universities/2

income opportunities, as well as the skillful task of marketing a single community or even a larger area with economic potential. In the course of undertaking such tasks, the individuals who represent the specific geographic entity must adopt the viewpoint of the entrepreneur or the investor who is searching for the most suitable location for the proposed enterprise.

In these economic expansion efforts, several separate groups of developers are engaged. Foremost are the professional developers who are employed by agencies or with institutions and charged with the responsibility for upgrading the economic base. They, however, must have a broad range of volunteer support and participation, almost universally from the private sector and from local public officials. Thus at all levels -- state, area, community -- a number of actors are involved.

In order to upgrade the efforts of this diverse audience, and to sharpen the talents and techniques of as many different individuals and organizations as exist, the construction of suitable training programs and especially the selection of initial subject areas is quite difficult. Many professionals learn their business as a result of "on-the-job" training, without an adequate philosophical and theoretical base. Many volunteers too readily absorb the poor work practices of amateurs in the development field, and help to perpetuate a set of false assumptions.

It was determined that the Georgia Tech program should center on two subject areas that appeal to both the volunteer segments and the local professional development cadre. One subject element from the "getting the community ready" list of items was selected, and one from the point of view of achieving better or improved marketing techniques.

As a result of these deliberate choices, the latest information and organized procedures for developing an industrial park, which is a very popular approach at the local level, was selected. From the other side of the development picture, how to create an industry targeting program seemed suitable to illustrate basic techniques in economic analysis, and to reinforce the necessity of compiling and keeping current full data about the community's resources and potentials.

### First Sessions

The seminar on "Modern Prospecting Techniques" was presented May 28th on



## Design and Implement Curriculum For Instruction of Economic Development Practitioners in Selected Universities/3

the Georgia Tech campus. In attendance were 17 persons, including representatives from 15 multi-county planning and development districts from 4 states (Georgia, Alabama, Mississippi, and Tennessee) and a staff member from a state development organization and a local chamber of commerce. This program consisted of 6 hours of lecture and class discussion, with concentration on economic base analysis and identification of growth industries, computer matching and matrix matching with emphasis on desirability and feasibility factors, and a case history of marketing local resources with intelligent application of the techniques described.

The seminar on "Developing Industrial Parks" was offered September 16 also on the Georgia Tech campus. In attendance were 23 persons, including representatives of 18 multi-county planning and development districts from 4 states (Georgia, Alabama, North Carolina, and Tennessee) and state development department staff members and a city planner. This program consisted of 6 hours of lectures and class discussion with emphasis on how to identify suitable land areas, in consonance with existing land use patterns; preplanning and actual development of the park, once the selection process is completed; environmental constraints that must be factored in, and a case history of park development with attention to various financial sources for assistance.

### Second Sessions

On the basis of a review of each program by the project director, in addition to input gleaned from an analysis of the student critiques, both programs were revised and compressed into three-hour presentations. For the Prospecting Techniques segment, a new roster of instructors was employed. Details on the instructors and their outlines are contained in Appendix I. Some informational material which was dissiminated is included in this summation of the course content.

Similarly, the Industrial Park presentation was reduced to a three-hour presentation, and two of the previous instructors were brought to Memphis. Details on instructors and outlines along with typical handout materials are included in Appendix II.

The Prospecting Technique seminar was presented twice at Memphis to a total of 64 participants. The Industrial Park seminar was offered one time and was attended by 40 participants. Lists of those attending are attached as Appendix III.

Design and Implement Curriculum for Instruction of Economic Development  
Practitioners in Selected Universities/4

Recommendations

In both cases, the presentations were well received and most of the comments on the student critiques were laudatory. It was demonstrated that enough common subject matter and detailed outlines could be furnished so that any informed and professionally adept developer could handle a segment of either program. We are moving to a stage where a syllabus could be prepared.

However, from the observer's point of view, one more revision might be in order before the courses are firmed up for general presentation. Some of the handout materials probably should be revised slightly to give a more universal application, although many of the handout materials are widely applicable throughout the southeast.

This leads to some specific suggestions that a roster of experts be developed so that a team could easily be put together to deliver one or more of these programs. Standardization of illustrative materials, probable expansion of several case histories to make them suitable for small group discussion, and a bibliography of materials for outside reading might be suggested in any type of follow-on program.



## APPENDIX I

### MODERN PROSPECTING TECHNIQUES

Course Outlines, Handouts, Graphics

## LESSON CONCEPTS

### I. GROWTH INDUSTRIES

- Locational Constraints -- Regional Variations
- Spatial Considerations
- Import Substitute Industries
- "Non-Product" Activities

#### TECHNIQUES OF ANALYSES

- Economic Base
- Location Quotient
- Shift Share
- Matrix Matching

### II. IDENTIFICATION OF TARGET INDUSTRIES

- Location Selection Process
- Feasibility Factors
- Desirability Factors

#### INDUSTRY ANALYSIS

- Growth Features
- Markets
- Special Utility Needs

#### APPLICATIONS TO NON-MANUFACTURING

### III. LOCAL MARKETING

- Emphasis on Community Assets
- Selection of Assets to be Highlighted
- Identification Process
- Contact Procedures

## BIOGRAPHICAL SKETCH

HOSEY H. HEARN

Dr. Hearn received his BA degree from the College of William and Mary in Virginia, MURP from the University of Oklahoma, and a Doctorate in Environmental Design from Texas A. & M. University.

For several years he has taught graduate planning and economic development courses at several universities. He is currently a Planning and Development Counselor with the Regional Economic Development Center and an Associate Professor in the Graduate Department of Planning at Memphis State University. Before beginning a teaching career, he was a Research Planner with the Texas Transportation Institute, Executive Director of the Charleston County Planning Commission, Director of Community Development Division of the Oklahoma State Department of Commerce and Industry, and Director of the Metropolitan Area Planning Commission, Enid and Garfield County, Oklahoma. Dr. Hearn has been an active participant in the identification of potential industrial development clients and in the presentation and locational aspects of industrial development.

He is an active member of national and local urban development organizations, including the American Society of Planning Officials, the American Institute of Certified Planners, the National Examining Board for Professional Development of the AIP, and has served as president and in other official capacities in various state and local developmental organizations.

# GROWTH INDUSTRIES AND ANALYTICAL TECHNIQUES

HOSEY H. HEARN

- I. INTRODUCTION
- II. GROWTH INDUSTRIES
  - A. Definition
  - B. Points of View
  - C. Local Requirements
- III. PROSPECTING
  - A. Local
  - B. External
- IV. EVALUATION OF LOCAL ECONOMY
  - A. Needs
  - B. Goals and Objectives
- V. TECHNIQUES OF ANALYSIS
  - A. Measuring the Economy
  - B. Data Sources
  - C. Economic Base Theory
    - 1. Location Quotient
    - 2. Minimum Requirements
    - 3. Survey
  - D. Shift - Share Analysis
  - E. Input - Output Analysis
- VI. ECONOMIC STRUCTURE
  - A. Diversification Index
  - B. Coefficient of Linkage and Similarity
  - C. Concentration Index
- VII. SUMMARY

## BIOGRAPHICAL SKETCH

ROBERT B. CASSELL

Mr. Cassell was educated at the University of Chattanooga (B.A.) and Vanderbilt University (M.A.) with additional work at Princeton University. He has had over thirty years' experience in industrial development. He has been with Georgia Tech's Economic Development Laboratory (and its predecessors) since 1960, and previously was with the Tennessee Industrial and Agricultural Commission.

Mr. Cassell is Principal Research Scientist in Tech's Economic Development Laboratory. He is the author of numerous economic analyses and for fifteen years edited the Georgia Development News. Among his latest studies are Economic Development Analysis of Appalachian Georgia, Industrial Plant Financing, Handbook on Community Development for SBA Personnel, Industrial Districts in Georgia: A Directory and the Chapter on Research in Guide to Industrial Development. He conducts numerous seminars and workshops in community and industrial development and evaluation procedures, and has been director of the Georgia Tech's Basic Economic Development Course since its inception.

He is a past president of the American Economic Development Council (formerly AIDC), a former director on its Board and a Fellow Member of AEDC. He is also a Certified Industrial Developer. He recently was honored by the award of Honorary Life Membership in the Council.

Mr. Cassell is also a past president of the Southern Industrial Development Council and presently serves as its Executive Director. In 1978 he was one of nine members elected as SIDC's first Honorary Life Members.

He is a member of the AEDC Regents for Education, and a faculty lecturer at AEDC Economic Development Institute at the University of Oklahoma. In 1975, he received the Board of Regents Special Recognition for Dedicated Service to Education in Industrial Development.

# IDENTIFICATION OF TARGET INDUSTRIES

ROBERT B. CASSELL

- I. INTRODUCTION
  - A. Action Program
  - B. Role of Prospecting
  - C. Systematic Approach
  - D. Economic Development Responsibility Matrix
- II. TARGETING TECHNIQUES
  - A. Check Lists/Forecasts
  - B. Location Quotient
  - C. Linkage Analysis -- Input/Output
  - D. Screening Matrix
  - E. Comparative Cost Studies
- III. OTHER TARGETING
  - A. Geographic Areas
  - B. Population Groups
- IV. IMPLEMENTATION
  - A. Local
  - B. At Other Levels
- V. NON-MANUFACTURING APPLICATIONS

Criteria  Industry 4-Digit SIC	High Growth			Wages		Linkages			Labor		Port Orientations		Materials		Markets	
	High Growth	Very High	High	Labor Intensive	Most in Region	Partially in Region	Most Links Elsewhere	Professional	Skilled	Semi-skilled	Port Orientations	Generally in Region	Partially Found in Region	Regional	National	TOTAL
Weight:	10	10	5	5	8	5	2	2	4	6	2	6	3	3	5	
2611 Pulp mills	x		x		x				x		x	x		x		38
2732 Book printing	x		x	x		x				x		x			x	42
2911 Petroleum refining	x	x				x		x	x		x			x		36
3541 Machine tools	x		x	x			x	x	x						x	33
3673 Electron tubes	x		x	x			x		x						x	31
3831 Optical lenses	x		x				x	x	x						x	28

#### APPLICATION OF THE SCREENING MATRIX

(Prepared by: David C. Sweet, College of Urban Affairs,  
Cleveland State University, Cleveland, Ohio)

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Table 12

FEASIBILITY MATRIX SCREENING CRITERIA WEIGHTS

<u>Criterion</u>	<u>Weight</u>
Labor Skill Requirements	10
Forward and Backward Linkages	5
Water Requirements	5
Product Shipment to Local/Regional Markets	10
Labor Force Requirements	5
Rural/Urban Preference	10
Natural Gas Requirements	5

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Table 14

DESIRABILITY MATRIX SCREENING CRITERIA WEIGHTS

<u>Criterion</u>	<u>Weight</u>
Historical Growth Rates	10
Projected Growth Rates	10
Level of Labor Intensity	5
Wage Levels	5
Diversification of Industrial Base	10

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Table 17

## FEASIBILITY-DESIRABILITY RANKING OF FOUR-DIGIT INDUSTRIES

Highest Potential (ranked in order)	Modest Potential (ranked in order)
3622 - Industrial Controls	3662 - Radio and Television Equipment and Apparatus
2512 - Wood Household Furniture, Upholstered	2321 - Men's, Youths' and Boys' Shirts and Nightwear
3623 - Welding Apparatus, Electric	2322 - Men's, Youths' and Boys' Underwear
2519 - Household Furniture, NEC	2323 - Men's, Youths', and Boys' Neckwear
2514 - Metal Household Furniture	2329 - Men's, Youths' and Boys' Clothing, NEC
3423 - Hand and Edge Tools	2311 - Men's, Youths' and Boys' Suits and Coats
2399 - Fabricated Textile Products, NEC	3634 - Electric Housewares and Fans
3425 - Hand Saws and Saw Blades	2331 - Women's, Misses' and Juniors' Blouses, Waists, and Shirts
2391 - Curtains and Draperies	2335 - Women's, Misses', and Juniors' Dresses
3021 - Rubber and Plastics Footwear	2397 - Schiffli Machine Embroideries
3421 - Cutlery	2515 - Mattresses and Bedsprings
3429 - Hardware, NEC	2652 - Setup Paperboard Boxes
2394 - Canvas and Related Products	3635 - Household Vacuum Cleaners
3629 - Electrical Industrial Apparatus	2521 - Wood Office Furniture
3612 - Power, Distribution, and Specialty Transformers	3915 - Jewelers' Findings and Materials
2395 - Pleating, Decorative and Novelty Stitching	3944 - Games, Toys and Children's Vehicles
3613 - Switchgear and Switchboard Apparatus	3631 - Household Cooking Equipment
3432 - Plumbing Fixture Fittings and Trim	3873 - Watches, Clocks, Clockwork Operated Devices
2339 - Women's and Misses' Outerwear	2328 - Men's, Youths' and Boys' Work Clothing
2392 - House Furnishings	3914 - Silverware, Plated Wire, and Stainless Steel
2396 - Automotive and Apparel Trimmings	3911 - Jewelry, Precious Metal
3621 - Motors and Generators	2341 - Women's, Misses' and Children's Underwear
3949 - Sporting and Athletic Goods	2361 - Girls', Children's and Infants' Dresses and Blouses
2386 - Leather and Sheeplined Clothes	2381 - Dress and Work Gloves
2511 - Wood Household Furniture	2387 - Apparel Belts
	2389 - Apparel and Accessories, NEC

Table 19  
SUMMARY OF HIGH PROBABILITIES FOR  
EXPANDED ACTIVITY

BARROW COUNTY

53	General Merchandise Stores
63	Insurance Carriers
73	Business Services
83	Health Services

CARROLL COUNTY

42	Trucking and Warehousing
50	Wholesale Trade -- Durable Goods
57	Furniture and Home Furnishing Stores
63	Insurance Carriers
65	Real Estate
89	Miscellaneous Services

FLOYD COUNTY

65	Real Estate
70	Hotels and Other Lodging Places
73	Business Services

GORDON COUNTY

48	Communication
50	Wholesale Trade -- Durable Goods
51	Wholesale Trade -- Non-Durable Goods
53	General Merchandise Stores
60	Banking
80	Health Services

GWINNETT COUNTY

42	Trucking and Warehousing
49	Electric, Gas and Sanitary Services

# SERVICE SECTOR - LINKAGE ANALYSIS

TRANSPORTATION SERVICES SIC 47 (exl. 474, pt. 4789) I/O 65.0700

## Output

\$ (million)

317.7	-	65.0500	Air Transportation	45
206.1	-	65.0100	Railroads	40, 474, pt. 4789
94.2	-	65.0300	Motor Freight Transportation and Warehousing	42, pt. 4789
93.2	-	65.0400	Water Transportation	44
39.1	-	69.0100	Wholesale Trade	50, 51
12.2	-	72.0100	Hotels & Lodging Places	70 (exl. dining)
10.8	-	71.0200	Real Estate	65, 66, pt. 1531

$\frac{195.6 \text{ Personal Consumption Expenditures}}{1212.4 \text{ Total Commodity Output}} = 16.1\%$

## Input

90.4	-	71.0200	Real Estate	65, 66 pt. 1531
47.9	-	70.0400	Insurance Carriers	63
41.0	-	70.0100	Banking	60
40.4	-	73.0100	Miscellaneous Business Services	732-9 (exl. 7396) 7692, 7694, pt. 7689
40.3	-	74.0000	Eating & Drinking Places	58, pt. 70

# SERVICE SECTOR - LINKAGE ANALYSIS

INSURANCE CARRIERS

SIC 63

I/O 70.0400

## Output

\$ (million)

1,222.0 - 71.0100	Banking	60
815.9 - 71.0200	Credit Agencies	61 (exl. 613), 67
581.2 - 69.0200	Retail Trade	52-7, 59, 7396, 8042
531.5 - 69.0100	Wholesale Trade	50, 51
465.3 - 65.0300	Motor Freight Transportation and Warehousing	42, Ot. 4789

19,081.5	Personal Consumption Expenditures	= 68.6%
27,828.5	Total Commodity Output	

## Input

10,304.1 - 70.0500	Insurance Agents & Brokers	64
502.5 - 70.0100	Banking	60
405.0 - 73.0100	Miscellaneous Business Services	732-9 (exl. 7396) 7692, 7694, pt. 7689
440.1 - 74.0000	Eating & Drinking Places	58, pt. 70
354.3 - 71.0200	Real Estate	65, 66 pt. 1531

# **The Detailed Input-Output Structure of the U.S. Economy: 1972**

**VOLUME I**

**THE USE AND MAKE OF  
COMMODITIES BY INDUSTRIES**



**U.S. DEPARTMENT OF COMMERCE**

**BUREAU OF ECONOMIC ANALYSIS**

# **input/output databases**

**uses in business and government**

**jay m. gould**

**with a foreword by wassily leontief**



**garland stpm press/new york & london**  
**an augustus m. kelley book**

## BIOGRAPHICAL SKETCH

### WILLIAM B. BARRETT

William B. Barrett, who is recognized nationally as an authority on Regional Development, has been Executive Director of the North Mississippi Industrial Development Association since 1961. In this capacity he directs the area development activities of over 100 communities in 29 counties.

In 1957, after two years as Manager of the Marion County Chamber of Commerce in Columbia, Mississippi, Barrett moved into the area of Industrial Development when he became Industrial Representative for the Mississippi Agricultural & Industrial Board. Three years later he was named Manager of the Industrial Department of the Board. A year later he was named to his present position with headquarters in West Point, Mississippi.

He is a native of Water Valley, Mississippi, and attended Delta State University and the University of Mississippi. He is a graduate of the U. S. Maritime Service Officers School in New London, Connecticut, and served in the U. S. Maritime Service four years. Upon separation from the service he joined Radio Station WELO in Tupelo, Mississippi, and later was associated four years with WCJU in Columbia, Mississippi.

His professional affiliations include: American Economic Development Council, MEC - State Chamber of Commerce, Mississippi Forestry Association, Mississippi Industrial Development Council, Mississippi Manufacturers Association, Mississippi Rivers & Harbors Association, Mississippi Rural Areas Development Committee, Mississippi Safety Council, Newcomen Society in North America, Southeastern Community Development Association and Southern Industrial Development Council.

Barrett completed the Institute for Organization Management sponsored by the Chamber of Commerce of the United States at the University of Georgia and also the Economic Development Institute sponsored by the American Economic Development Council at the University of Oklahoma.

## LOCAL AND STATE MARKETING PROGRAMS

WILLIAM B. BARRETT  
West Point, Mississippi

### I. OPENING

- A. Comments
- B. Transition/Participation

### II. WHY, WHO, WHEN, WHAT, WHERE, HOW -

- A. Local-State Marketing Programs -- Semantics
- B. Why a Marketing Program
- C. Who Is Responsible?
- D. When Are You Ready to Initiate a Marketing Program?
  - 1. Five Essentials
  - 2. Seven Desirables
  - 3. Need Help? You Can Get It--
- E. What Do You Have to Market
  - 1. Inventory Advantages
  - 2. Work on Disadvantages
- F. Where Do You Find the Prospect -- the Customer?
- G. How Do You Contact, Create Interest, and Sell?

### III. SUMMARY

- A. Review and Discussion
- B. Never/Never, Never/Never, Never, Never Give Up!



## APPENDIX II

### DEVELOPING INDUSTRIAL PARKS

Course Outlines, Handouts, Graphics

# INDUSTRIAL PARK SEMINAR

## PROGRAM DESIGN

### Background

The development of attractive industrial parks by public sector agencies involves several major considerations. If public money is to be committed to such projects, a strategy should be formulated for accomplishing the objectives in undertaking this activity. Should the goals of this particular program be well and clearly stated, the methods by which they can be reached will be generally understood, especially on the part of those public agencies directly involved or in supportive roles.

Public investment decisions which are made at the local level, as well as those made on multi-county and regional levels, appear to be receiving considerable attention and consideration these days. We are seeking to minimize in one area the making of decisions to expend public funds, often done on the spur of the moment without any of the alternatives and cost-benefits being rationally evaluated.

Moreover, the increasing public concern over taxes and the resultant expenditures for industrial park development, necessitate a more formalized approach on the community level to the evaluation of investments. Such decisions ought to encourage participation by local elected officials, business organizations, neighborhood leaders, and other citizens.

Over the last two decades, substantial efforts have been made by the public sector to attract additional investment which would serve to expand the economic base and the generation of additional employment. It has become almost axiomatic, as a consequence of these efforts, that the most successful results have been obtained when private sector investment makes its own commitments for new and expanded business activity.

### Some Considerations

In the case of industrial parks or industrial districts, manufacturing companies often express extreme reluctance to acquire land or to construct buildings without the essential utility services. In many cases, the installation of such services comes about only when funds are provided to cover the cost of utility extensions. Once this is done, with the proper marketing effort, the development of the industrial park has a much greater chance of success.

This process actually calls for long-range and flexible planning, the setting of priorities, and the making of public investment decisions on the basis of some agreed-upon objectives. In defining a community's economic development goals, quite logically, a strategy must be created which can incorporate specific policies and programs to respond to the needs and potentials of the geographic area.

Many Federal agencies are indicating that local economic development strategies should be considered as frameworks for local and Federal investment, with better allocation of resources and utilization of local investments so as to attract additional private investment.

One of the items we should be considering here is the relative merit and disadvantage of industrial parks developed by public agencies. Since some authorities in the development field predict that in the future most new industrial facilities will be clustered in industrial parks or subdivisions, this does appear to be a timely subject. Moreover, the thrust of some agencies most concerned with the country's economic health has been to support through loans or outright grants the expansion of utility systems to serve proposed industrial parks.

### Specific Elements

Once the community leadership has taken a positive position that an industrial park has a high priority and ought to be developed in order to support

or to expand the local economic base, then we become concerned with several major considerations. How does one go about selecting an area for development? What are the major guidelines? What are some of the principal pitfalls?

After these items are answered, or at least temporized with, and an area identified, the acquisition of the land can be initiated. Now, other current and long-range costs must be considered. Such aspects as raw land purchase, extension of major utility lines, installations of interior service facilities, required transportation improvements and extensions all become important.

We will draw upon the experiences of a major engineering company which has actually undertaken, as a contractor, to develop such parks. We hope to develop some "ballpark" figures in identifying various developmental costs.

Similarly, the investment strategies which could lead to a decision to build a speculative building with support from public funds might be incorporated, either as a major generator of traffic or as a "loss leader" to initiate occupancy.

The strategy has these elements:

- (1) The land identification process (map study, zoning and land use plans, thoroughfares and traffic patterns, housing, subdivision and commercial complex developments) followed by the selection of a particular area.
- (2) Then the land must be acquired (often in the public realm that land which is available or not needed by other agencies automatically becomes the top choice).
- (3) Proper planning and staging of development is essential to good industrial park development -- this will provide for the installation of utility services achieved at lowest combined costs, and in most efficient and phased programming steps.

## New Aspects

A new aspect may well be the rapidly churning transportation field, leavened by effects of deregulation. These can make yesterday's consideration of transportation advantages passe. The tendency of major rail complexes to abandon branch lines and to consolidate service by short lines can be meaningful, as well as the pending increase of competition among motor carriers.

Environmental considerations should touch upon the state and federal agencies most involved, when and how to prepare environmental impact assessments or statements, and the rules and regulations covering land development, grading, selection of delicate or sensitive areas, etc.

Marketing techniques will be covered in the segment presented by the developer who will recite a case history. He will cover how to phase this in with demand conditions, and how to measure current supplies of suitable industrial property. This narrative should include some accounting of the sources of external funding support. Specific techniques need to be described which can be employed to call attention to the park development through printed brochures, word of mouth, tours, and "dog and pony shows." This can fit under the heading of "Implementation and Promotion."

What alternatives are there to public-sponsored developments? These considerations also need to be enumerated and evaluated.

# SELECTION AND PLANNING OF INDUSTRIAL DISTRICTS

ROBERT B. CASSELL

- I. WHY A PLANNED INDUSTRIAL DISTRICT?
  - A. Advantages to Industry
  - B. Advantages to Community
  - C. Cost Effective/Lower Expenditures
- II. ELEMENTS IN SUITABLE INDUSTRIAL AREAS
  - A. Reasonable Terrain
  - B. Transportation Facilities
  - C. Necessary Utilities
  - D. Zoning/Other Protection
  - E. Encumbrance Free
  - F. Sizeable Parcels
  - G. Reasonable Price
  - H. Good Address
- III. LAND IDENTIFICATION PROCESS
  - A. Study Existing Maps
  - B. On-Site Visits
  - C. Preliminary Site Analysis
  - D. Determine Availability
- IV. LAND ACQUISITION
  - A. Purchase
  - B. Long-Term Option
  - C. Stockpile of Sites
- V. PLANNING THE INDUSTRIAL DISTRICT
  - A. Basic Criteria
  - B. Physical Features
  - C. Protective Features
  - D. Service Facilities
  - E. Promotion and Marketing

## THRUST FOR INDUSTRIAL PARKS

I. Blurring of distinction between Parks and Districts

II. Advantages to Industry

All details taken care of: utilities, site preparation, services

Neighborhoods of like operations

Growing dependence on truck transportation

One floor layouts

Easier to employ labor

Esthetic advantages

Advertising and public relations values

III. Advantages to Community

Savings in utility and other infrastructure

Major similar economic functions clustered

Attractive for new industrial prospects

Better control for safety and fire protection services

Demonstrates community commitment

S U I T A B L E I N D U S T R I A L

A R E A S M U S T H A V E

R E A S O N A B L E T E R R A I N

T R A N S P O R T A T I O N F A C I L I T I E S

N E C E S S A R Y U T I L I T I E S

Z O N I N G P R O T E C T I O N

E N C U M B R A N C E F R E E

S I Z E A B L E P A R C E L S

R E A S O N A B L E P R I C E

G O O D A D D R E S S



PHYSICAL FEATURES IN  
THE PLANNED PARK

ROADS

RAIL

WATER MAINS

SEWER LINES

NATURAL GAS

ELECTRIC SERVICE

DRAINAGE

PARCEL SIZE

P R O T E C T I V E   C O V E N A N T S   S H O U L D   C O N T A I N

P R O V I S I O N S   O N

L A N D   U S E

N U I S A N C E   C O N T R O L

C O N S T R U C T I O N   A N D   D E S I G N

S E T - B A C K S

A P P E A R A N C E

L O A D I N G   D O C K S ,   P A R K I N G ,  
S T O R A G E

I M P L E M E N T A T I O N

## LAND USE

compatible uses

specific exclusions

## NUISANCE CONTROL

what is objectionable such as

smoke

dust

odor

noise

noxious fumes

## C O N S T R U C T I O N      A N D      D E S I G N

t y p e s      o f      c o n s t r u c t i o n

b u i l d i n g - t o - l a n d      r a t i o

h e i g h t s

t y p e s      o f      m a t e r i a l s

a c c e p t a b l e      e x t e r i o r      w a l l s

## S E T - B A C K S

d i s t a n c e s      f r o m      s t r e e t s

r i g h t s - o f - w a y

o t h e r      b u i l d i n g s

## A P P E A R A N C E

l a n d s c a p i n g      a n d      h o u s e k e e p i n g

f o r

a t t r a c t i v e n e s s

a n d

c l e a n / s a f e

c o n d i t i o n s

t y p e s

r e s t r i c t i o n s

o n

s i g n s ,

n e o n ,

f l a s h i n g

## LOADING DOCKS, PARKING, STORAGE

location of truckloading

docks and parking areas

controls and screening of

outdoor storage

## IMPLEMENTATION

building plan review

enforcement

repurchase rights

starting and completion dates

property owners association

## ENVIRONMENTAL CONSTRAINTS

### Introduction

- o The development and establishment of industrial parks, especially those initiated by public sector agencies, must be accomplished in accordance with Federal, state and local environmental laws, orders and regulations.
- o Federal and state laws require that decision-making relating to the potential environmental impacts of a proposed action (such as the establishment of an industrial park) be considered prior to the undertaking of such action. Laws and regulations also require that the environmental process be an open one which takes place in full public view with full access by the public and its representatives.
- o Federal laws provide the basis upon which most state laws are enacted. State laws usually are most specific in relation to certain actions, and in many instances require the granting of permits before operations that may impact on the environment are undertaken.
- o Federal laws require that all federal department and agencies comply with provisions of the National Environmental Policy Act (NEPA) of 1969. For example, individuals or organization using Federal loan programs or technical assistance must comply with Federal and state environmental laws and regulations.
- o Professional development organizations such as the Southern Industrial Development Council have for some time recognized the link between environmental quality and protection and the achievement of desirable industrial growth.

### Significant Federal Laws

A large number of Federal laws, Executive Orders, and agency regulations are concerned with environmental protection and quality. Several states have also enacted a series of environmental protection and quality. Several states have also enacted a series of environmental laws and regulations. Some of the more

significant Federal laws are:

- o National Environmental Policy Act (NEPA) of 1969 -- the Umbrella Act.
- o The Clean Water Act of 1977 (PL 95-217)
- o The Federal Safe Drinking Water Act (PL 95-523)
- o The Federal Clean Air Act (PL 95-396)
- o The Federal Insecticide, Fungicide, and Rodenticide Act, As Amended (PL 94-140)
- o The Federal Resource Conservation and Recovery Act (PL 94-580)  
(Includes authority for development of guidelines and regulations for hazardous waste)
- o The Noise Control Act of 1972 (PL 92-574)
- o Toxic Substances Control Act (PL 94-469)
- o Other Significant Statutes
  - Cultural Preservation
  - Wildlife
  - Coastal Plains, Flood Plains and Wetlands

#### Environmental Factors

Some form of environmental assessment is usually required when planning the development and establishment of an industrial park. Essentially, the assessment is concerned with determining the probable effect that a proposed action will have on the human environment. Environmental impact of the proposed action (construction and operation of an industrial park) on the following environmental factors will usually be considered.

(Use the Simplified Evaluation Matrix, without much discussion). Point out that in-depth analyses require the employment of specialists in various fields or disciplines.

#### Environmental Requirements for Federal Grant and Loans

Each Federal agency has a set of "General Terms and Conditions" under which aid program agreements are reached. Most agreements now include requirements such as environment and energy such as EDA, HUD, etc.



## State Regulations and Permits

Although state environmental laws and regulations are generally patterned after Federal laws, each state has devised its own mode of operations including compliance procedures and permitting. Each individual or organization putting an industrial park project together must investigate and comply with regulations of the state in which the project is to be undertaken.

## Public Involvement

As noted earlier, national environmental laws require that the decision-making process relating to potential environmental impacts of proposed actions such as the development and construction of an industrial park be an open process and one that takes place in full public view with access by the public and its representatives. As a matter of fact, environmental considerations should be investigated early in the decision-making process and a strategy for public participation should be developed.

(Transparency on Lake Lanier problem is an example of what can result if the public is not properly involved).

## Summary

1. Industrial development practitioners must be reasonably knowledgeable about environmental laws and regulations.
2. Public must be involved.
3. The sooner a strategy for public involvement is created, the better.

# Public Hearings—New Turf for the Executive Crusader

By Jean Mater



Business can make better use of public hearings, say experts who note that more issues today are being brought into public forums. Organization and coaching will help business people have a bigger impact on vital decisions.

**P**UBLIC HEARINGS have become arenas for local regulatory battles, especially in burgeoning suburbs and rapidly expanding cities.

In some areas the permit explosion has spawned a public hearing explosion. Business executives often find themselves pitted against an army of no-growth advocates, protectors of air, water, scenery, and historical buildings, and street groups zealously guarding their turf.

Public hearings provide a platform for citizens to debate a variety of actions, from building highways and roads to installing microwave reflectors to constructing refineries, factories, and apartment complexes to establishing ski resorts and revising hunting regulations.

The public hearing frequently provides the only stage where citizens can explain their views. But in

this role business executives are frequently upstaged by the street-smart opposition, which has learned how to use public hearings to win public support.

Most business people still have to learn that it is folly to take public hearings lightly. You have to use them—or you lose them.

A city councilman in a small growing city notes: "I sit through at least 200 hours of public hearings every year. The business people whose proposals we're considering send their lawyers, while the opposition parades a string of housewives, professionals who volunteer their services, and other citizens to speak passionately against the proposal. And business people wonder why they lose so many decisions."

Business people who must put out a full day's work—no matter that they

stuck through a long session the previous evening—find the increasing demands of these hearings a drain on their time and energy.

Many cope by staying away. One developer reflects the majority opinion: "Public hearings don't solve anything anyway. Why waste time?"

## Input from a handful

Result? Except for the rare issue that mobilizes the business community, business people fail to use public hearings to communicate their views. The public decisions then reflect the opinions of the citizens who do speak out.

"A handful of citizens can stop any activity if there aren't two handfuls of business people to speak for the public benefit of the activity," a business executive observes.

William Sneath, chairman and chief executive officer of Union Carbide Corp., in a recent address urged business to know when to get involved.

"Business people were rightly heartened when the Supreme Court said that a corporation could speak out in a referendum that wasn't directly related to its business," he says. "Sometimes it seems there is precious little that isn't related to a corporation's business."

"The democratic system works by balancing interests, and that's all that anyone should expect. We should look for opportunities to set an example."

## A management task

Recognizing that public hearings are now as necessary an activity as personnel or financial management, some business organizations are training their members to be effective participants.

At a seminar on how to be more effective at public hearings, the Southwest Association of Chambers of Commerce in Oregon told participants

that preparing for public hearings increases the chances to be a winner.

There are four basic preparations: Be informed, prepared, organized, and there.

### **Be informed**

At a workshop on citizen activists, Oregon business people learned the necessity of determining the legal, procedural, and physical requirements of each public hearing.

"If you come to a public hearing without learning the authority of the hearing panel, what local ordinances apply, and the voting record of the decision-makers," a consultant warns, "you've lost your fighting chance."

Before stepping into the hearing room you should know:

1. Whether oral presentations will

## **How to Use Public Hearings**

### **Be Informed**

- Find out the order of testimony and time limits.
- Check the meeting room logistics.
- Determine who the opposition is. Are they political sophisticates?
- Who is their leader? How influential is the leader?
- Is the local press with you?

### **Be Prepared**

- Develop slides, graphs, and films.
- Assemble credible experts to testify.
- Prepare strategies and trade-offs.
- Prepare a list of people to testify.
- Contact each person on list.

### **Be Organized**

- Develop a fact sheet on the issue.
- Notify each speaker of time limits and procedure.
- Supply material to media.
- Identify your supporters with buttons or badges.

### **Be There**

- Organize a public hearing network.
- Form a special grass roots group for the issue.
- Develop a calling list.
- Find a broad base of community supporters—housewives, volunteer professionals, students, etc.

be made on a first-come, first-served basis or by random selection.

2. Which of your speakers must leave by 10 p.m., 11 p.m., midnight.
3. Where the microphones are.
4. Whether visual aids will be visible throughout.
5. Whether presentations will be limited to three minutes, five minutes, or no limit.
6. Who is leading the opposition, and whether they are experienced or new to local politics.
7. What their objections are.
8. Where the local press stands and if it is influential.

### **Be prepared**

Prepare for a public hearing the way you would for an important sales meeting. This may be one of the most significant sales you ever make: You're selling the practical benefits of our economic system.

Prepare by:

1. Obtaining slides, films, or illustrations to dramatize your message.
2. Assembling experts to testify. A public hearing on a new road calls for experts on transportation and noise. If the hearing is on a health hazard, find experts on health and medicine.
3. Coaching the experts to avoid presenting testimony as if they were speaking to a board of directors or scientific colleagues.
4. Devising strategies to defuse any controversy.

For example, a group of business people in a small city, weary of a five-year struggle to complete a scheduled road, determined to prepare fully for the next hearing.

They evaluated the strategies successfully used by the opposition to stall the road; they prepared counter strategies. They appeared themselves; they encouraged employees and associates to attend. They gave the hearing their best.

Result: A show of overwhelming support for the project, a dramatic turnaround from earlier hearings.

### **Be organized**

A city planning director who finds himself spending at least two evenings every week at public hearings remarks: "I can tell who's really determined to push a project by the way they are organized at the hearing."

Organization for public hearings means:

1. Furnishing speakers with fact sheets.
2. Asking speakers to bring written

remarks in addition to presenting oral testimony.

8. Urging supporters to be brief and to the point.

4. Recognizing that every public hearing plays to two audiences—the decision-makers and the media.

Colorful buttons or tags heighten the visibility of supporters and identify them for the media. Written handouts help in reporting facts. The most dramatic testimony should be presented while television cameras are there.

5. Appointing a floor manager to check speakers, call substitute speakers, and distribute buttons or tags.

### **Be there**

Turning out a sizable business contingent is the most difficult of the four tasks.

A mayor serving his third term warns: "Numbers count at public hearings. If 40 people object to a project and only five speak for it, we decide the public is opposed."

Public administration specialist Susan Walker Torrence confirms the mayor's warning in her book, *Grass Roots Government*: "Decisions of public officials reflect pressures from the general public and from special interests."

A chamber of commerce manager relates a typical story: "We had to phone 115 business executives to get ten to the public hearing for a project we're supporting. Businessmen haven't the time or don't want to get involved."

One solution: Reduce the individual work load by developing a network of business people who can be called on to testify at public hearings.

Another solution: Form a grass-roots group with a catchy name to beat the drums for an important local issue. This group can mobilize the testimony for public hearings.

### **Use them—or lose them**

Public hearings are the fighting front for decisions affecting business. If business doesn't use them to explain the business position, the battles will be lost.

One businessman regards it as an opportunity: "A battle is a risky business, but if we avoid it, we lose all chance of possible gain. If we don't engage in the battle, we lose all our clout." □

*DR. MATER is vice president of Mater Engineering, a consulting firm in Corvallis, Oregon, and director of the Portland branch of the San Francisco Federal Reserve Bank.*

## BIOGRAPHICAL SKETCH

WILLIAM C. ROGERS

Mr. Rogers is a consulting engineer with the Southern Engineering Company of Atlanta, being affiliated with that firm for fourteen years.

He obtained his civil engineering degree from Georgia Tech, and has done graduate work in water resource development. He is a registered engineer in Georgia, Alabama, Florida, and South Carolina.

His previous work experience includes engineering for the City of East Point, Georgia, airport planning technician for the Atlanta Regional Commission, and in heavy construction contracting. At Southern Engineering, he specializes in community and area development in airport, industrial park, and commercial projects, as well as water and sewer facilities, drainage, roads and railroads.

He is a member of the American Society of Civil Engineers, American Water Works Association, Water Pollution Control Federation, Georgia Water and Pollution Control Association, Georgia Industrial Developers Association, and the Southern Industrial Development Council.

# ENGINEERING ELEMENTS IN PARK DEVELOPMENT

WILLIAM C. ROGERS

- I. INTRODUCTION
- II. SITE ANALYSIS
  - A. Industrial Market Potential
  - B. Site Constraints
  - C. Site Advantages
  - D. Improvements
    - 1. On-site
    - 2. Off-site
  - E. Summary
- III. PRELIMINARY LAYOUT
  - A. Design Characteristics
  - B. Access
  - C. Utilities
  - D. Drainage
  - E. Unusable or Uneconomical Areas
  - F. Zoning
  - G. Layout
- IV. PRELIMINARY DESIGN
  - A. Detailed Layout
  - B. Pre-preliminary Design
  - C. Phase Design
  - D. Initial Occupant or Target Industries
  - E. Phase I Preliminary Design
- V. COST ESTIMATES
  - A. Land
  - B. Drainage
  - C. Streets
  - D. Water
  - E. Sewer
  - F. Power
  - G. Gas
  - H. Site Preparation
  - I. Lighting

# DEVELOPMENT COST ESTIMATES

(Oct. 1980)

## RAW LAND COSTS

Varies from \$300 to \$10,000 per acre

Average from \$800 to \$3,000 per acre

(Note: if not EDA eligible, final costs can be deferred through options)

## CLEARING & SITE PREPARATION (GENERAL)

	<u>Range</u>	<u>Average</u>
Clearing	\$100 to \$2,000 per acre	\$600
Clearing & Grub	\$800 to \$4,000 per acre	\$1,500
Earthwork (Balance)	\$ 0.80 to \$4.00 cu. yd.	\$ 3.00
Earthwork (Borrow)	\$ 1.50 to \$6.00 cu. yd.	\$ 4.00
Unsuitable Sub Soil Removal	\$ 2.50 to \$10.00 cu. yd.	\$ 6.00

## DRAINAGE\*

Pipe	About \$20/lin. ft. for 24"
	About \$100/lin. ft. for 48"
Catch Basin	\$1,200
Head Wall	\$1,000
Excavation (usually wet)	\$ 4.00 cu. yd.

## ROADS

Finished Roadway	\$15.00 to \$50.00 lin. ft.	\$ 30.00
Curb & Gutter	\$8.00 to \$15.00 lin. ft.	\$ 10.00
Asphalt Curb		\$ 3.00
Railroad	\$40.00 lin. ft. plus \$60,000 for switch	

\*Varies widely -- seek assistance

cu. yd. -- cubic yard  
lin. ft. -- linear foot



## WATER INSTALLATION

	<u>Range</u>	<u>Average</u>
Water Plant	\$1.25 to \$2.00 gpd	
Tank (.5 to 2 mg)	\$350,000 to \$800,000	
Line	\$8.00 to \$15.00 lin. ft. - 8" PVC- 12" DIP,	\$12.00
Fire Hydrant	\$800 to \$1,200	\$1,000
Metered Service	\$150 to \$1,500	\$ 400
Bored Crossing	\$1,200 to \$20,000	\$2,000
Well*		

## SEWER INSTALLATION

Treatment Plant (Tertiary)		\$1.50 gpd
Line		8" - \$8.00 to \$9.00 lin. ft. 10" - \$12.00 lin. ft.
Manhole	\$600 to \$1,200	\$900
Service		\$150
Lift Station	\$30,000 to \$200,000	\$70,000 lin. ft.
Bored Crossing		\$3,500

Other Costs - Gas, Electric Service, Lighting, Entrance, Landscaping,  
Public Service Facilities

Overhead - At Preliminary Level 20 to 40%, avg. 30%

\*Varies over large range -- check with local driller

gpd - gallons per day

mg - million gallons

lin. ft. - linear foot

Sources: Cost Estimates From

Georgia Department of Transportation Bids

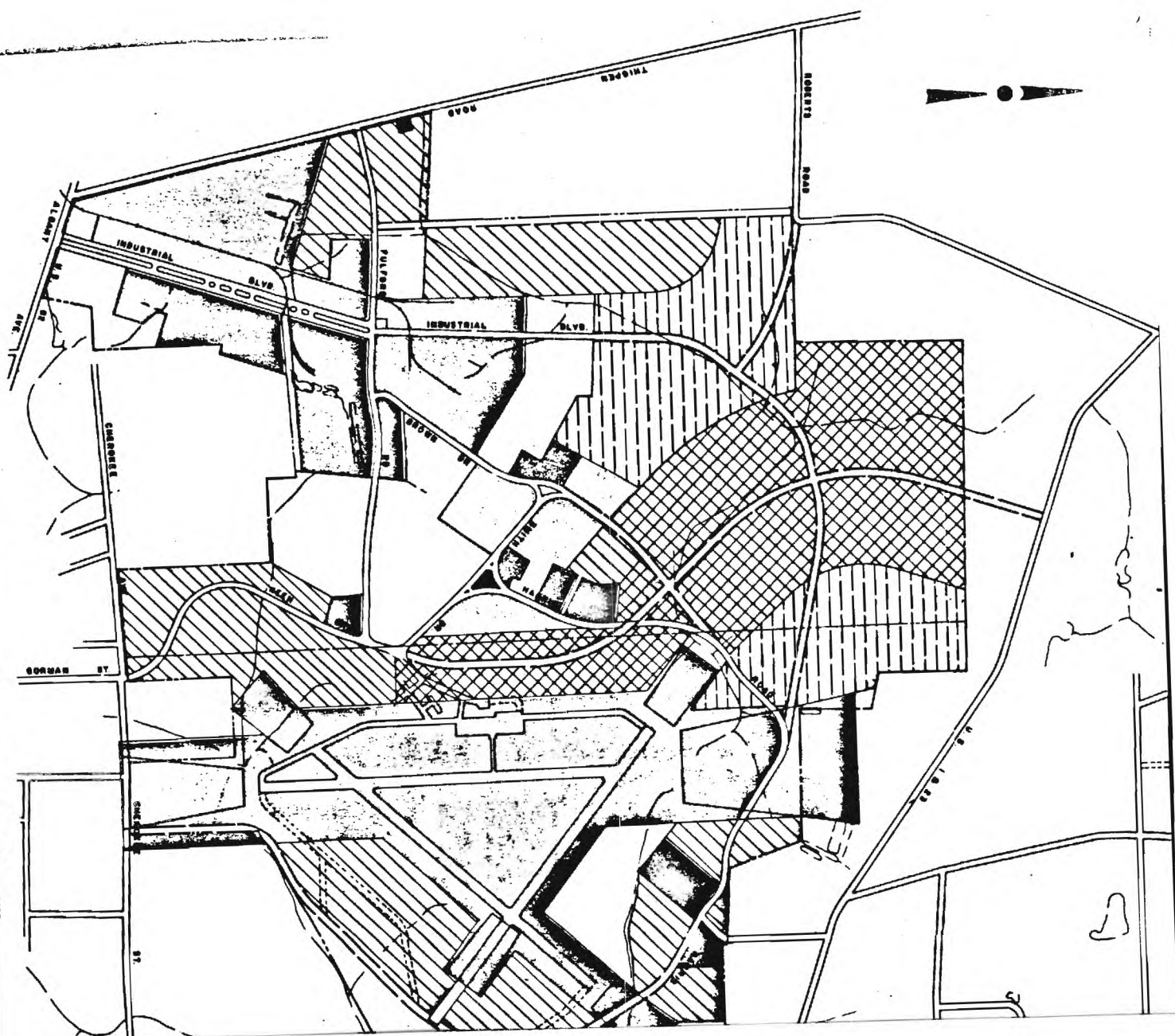
University of Tennessee

MEANS

Dodge Reports

The Bid Reporter

(Prepared by William C. Rogers, Southern Engineering Co.)





## BIOGRAPHICAL SKETCH

### ROBERT H. EVANS

Mr. Evans is executive vice president of the Toccoa-Stephens County Chamber of Commerce, a post he has held for eleven years. He is also executive director of the Stephens County Development Authority.

Prior to coming to Toccoa, he served for seven years as assistant manager of the Spartanburg, S. C., Chamber of Commerce. Earlier, Mr. Evans had worked with Sears, Roebuck and Reeves Brothers Textiles. He is a graduate of the University of North Carolina.

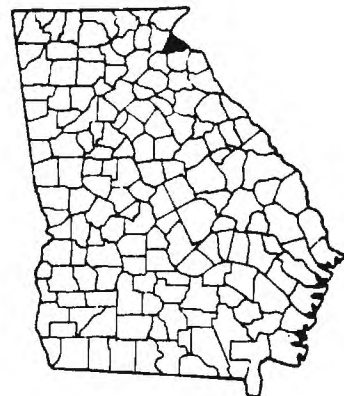
Mr. Evans is past president of the Georgia Industrial Developers Association and a member of the Southern Industrial Development Council. He is also a past president of the Georgia Chamber of Commerce Executives Association. He is a graduate of the Economic Development Institute at the University of Oklahoma and the U. S. Chamber of Commerce Institute programs at the University of Georgia and Notre Dame. He is a Certified Chamber Executive of the American Chamber of Commerce Executives and a former member of the Governors Council for Economic Development in Georgia.



## TOCCOA, GEORGIA



### AVAILABLE SITE DESCRIPTION



#### LOCATION

Name: Meadow Brook Drive Ind. District

Location: Ga. 145 at Meadow Brook Dr.

Within city limits: ( ) yes (x) no

#### TRANSPORTATION

Highway(s): Ga. 145, I-85 13 miles

Rail: Southern Railway System

Installed spur: ( ) yes (x) no

Airport: Toccoa Airport 5 miles

#### CHARACTERISTICS

Total acres in site: 211 ~~211~~ acres

Total available acres: 211 ~~211~~ acres

Zoning: none

Past use: farm land

River or stream: Eastanollee Creek

Average daily flow - cfs

Minimum daily flow - cfs

#### TERMS

Site for: (X) sale ( ) lease

Price: \$ negotiable

Option held by: none

#### COMMENTS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

#### UTILITIES

Gas: City of Toccoa

10" main

Electricity: Georgia Power Company

Sewer: City of Toccoa

10" main

Water: City of Toccoa 12" main

250,000 gal. elevated tank

Fire protection: City of Toccoa

Insurance rate classification: 6

#### OWNER

Stephens County Dev. Authority

see contact

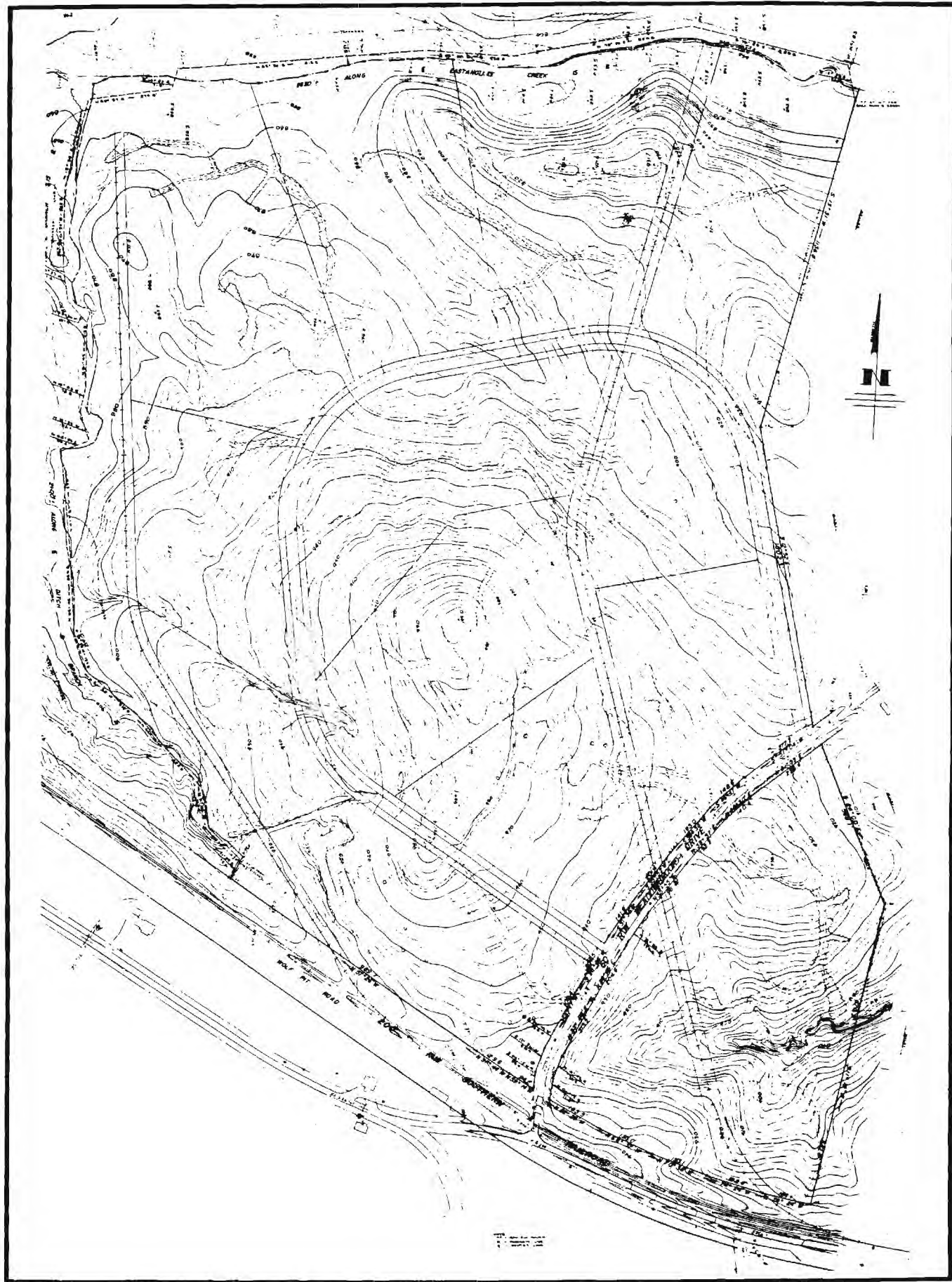
#### CONTACT

Robert H. Evans

Toccoa-Stephens Co. Chamber

P. O. Box 577, Toccoa, 30577

Phone: 404 886 2132



# MARKETING THE PARK/DISTRICT:

## A CASE HISTORY

ROBERT H. EVANS

### I. INTRODUCTION

- A. Toccoa's Development
- B. Camp Toccoa -- The First Park
- C. Stephens Industrial Park -- The Second Park

### II. MEADOWBROOK INDUSTRIAL PARK

- A. Justification and Decision
- B. Search and Research
- C. Funding
- D. Other Considerations

### III. MARKETING PROCESS

- A. Information
- B. Other Publicity
- C. Letters
- D. Spec Building
- E. Contacts

### IV. RESULTS

### V. CONCLUSION

### APPENDIX III

#### LISTS OF ATTENDEES

Attendance at Seminars on October 28 and 29

# Attendance

## PROSPECTING TECHNIQUES -- I

Memphis, Tennessee  
October 28, 1980

Jake Henderson	EDA	Atlanta, GA
Carlos E. Aybar	Alachua County R & D Authority	Gainesville, FL
Ed Sapinsley	Wilkinson & Snowden	Memphis, TN
Jim Stewart	Arkansas Department of Economic Development	Little Rock, AR
Bob Butler	Arkansas Department of Economic Development	Little Rock, AR
Tom DeLaughter	DeSoto Council	Hernando, MS
Robert G. Snowden	Wilkinson & Snowden	Memphis, TN
Ralph Damley	Holiday Industrial Park	Olive Branch, MS
Tom Brettschneider	Holiday Inns, Inc.	Olive Branch, MS
Vergil Saine	Coffee County Industrial Board	Manchester, TN
Steven Dust	Sedalia Dept. of Economic Development	Sedalia, MO
Jim Kinnett	Memphis Area Chamber of Commerce	Memphis, TN
Bayard Snowden	Wilkinson & Snowden, Inc.	Memphis, TN
Terre McLendon	IREC - University of Arkansas	Little Rock, AR
Wayne McCord	Pickering Wooten Smith, Weiss, Inc.	Memphis, TN
Herman N. Davis	Southeast Georgia Area Planning & Development Commission	Waycross, GA
Roger Mauzey	Allen & Hoshall	Memphis, TN
Curtis Burns	Memphis Light, Gas & Water	Memphis, TN
Bill Patrick	E. H. Crump & Co.	Memphis, TN
Bill Harrell	Wm. T. Harrell, Realtor	Memphis, TN
Johnny L. Mathis	Tennessee Dept. of Economic & Community Development	Memphis, TN
Tim Sikes	Tennessee Dept. of Economic & Community Development	Jackson, TN
Irlyn C. Toner	Mississippi Research & Development Center	Jackson, MS
Kay Robinson	North Mississippi Industrial Development Association	West Point, MS
Glenn Fatzinger	EDA	Washington, DC
Virgil T. Adams	Southeast Tennessee Development District	Chattanooga, TN

Attendance

PROSPECTING TECHNIQUES -- I  
Memphis, Tennessee/2

William B. Barrett	North Mississippi Industrial Development Association	West Point, MS
Clifford Stockton	Memphis Area Chamber of Commerce	Memphis, TN
D. Jack Lawson	First Tennessee-Virginia Development District	Johnson City, TN
Wayne Foster	Bluegrass Area Development District	Lexington, KY
Luchy D. Burrell	Regional Economic Development Center MSU	Memphis, TN

Attendance  
PROSPECTING TECHNIQUES -- II  
Memphis, Tennessee  
October 29, 1980

Susan Gertenbach	Mississippi Research & Development Center	Southhaven, MS
Jim McCulloch	Mississippi Research & Development Center	Jackson, MS
Herman N. Davis	Southeast Georgia Area Planning & Development Commission	Waycross, GA
Richard Clayton	Mississippi Research & Development Center	Jackson, MS
M. S. Worsham	Memphis Area Chamber of Commerce	Memphis, TN
Hale Booth	Chattanooga Area COG	Chattanooga, TN
Mitchell S. Parks	EDA - Nashville	Nashville, TN
Leon Harbin	Greater Grenada Economic Development Foundation	Grenada, MS
Thomas Cooley	Hickman-Fulton County Riverport	Hickman, KY
Tom Williamson	State University of N. Y.	Plattsburgh, NY
Malcolm Fairweather	State University of N. Y.	Plattsburgh, NY
Marty Borth	Central Texas Manpower	Belton, TX
Osbie L. Howard	Tennessee Valley Center	Memphis, TN
Bob Anderson	Southwest Tennessee Development District	Jackson, TN
Pete Gregan	IREC - University of Arkansas	Little Rock, AR
John H. Opitz	IREC - University of Arkansas	Little Rock, AR
J. Michael Mudd	Hickman Industrial Development	Hickman, KY
Camille Whitley	Chamber Industrial Development Board	Covington, TN
Chuck Hutchinson	Tennessee Dept. of Economic & Community Development	Nashville, TN
James Earnest	Tennessee Dept. of Economic & Community Development	Cookeville, TN
Mike Clayborne	Amory North Monroe Chamber of Commerce	Amory, MS
Charlie Gentry	Greenwood Chamber of Commerce	Greenwood, MS
Judy Holland	Sardis Chamber of Commerce	Sardis, MS
Debbie Brown	Tennessee Dept. of Economic & Community Development	Jackson, TN



Attendance  
PROSPECTING TECHNIQUES -- II  
Memphis, Tennessee/2

Rob Schmid	Tennessee Dept. of Economic & Community Development	Nashville, TN
Pamela R. Taylor	Tennessee Dept. of Economic & Community Development	Nashville, TN
William Hammon	City of Alcoa, TN	Alcoa, TN
Keith French	IREC - University of Arkansas	Little Rock, AR
Ken Burdick	Lone Star Gas Company	Dallas, TX
Bob Gray	Mississippi Research & Development Center	Tupelo, MS
Jim Anderson	Tennessee Dept. of Economic & Community Development	Nashville, TN
Ed Sapinsley	Wilkinson & Snowden	Memphis, TN
Tif Bingham	Chamber of Commerce	Memphis, TN
Bill Burnette	Mississippi Research & Development Center	Columbus, MS

Attendance  
DEVELOPING INDUSTRIAL PARKS  
Memphis, Tennessee  
October 29, 1980

Jim McCulloch	Mississippi Research & Development Center	Jackson, MS
Frank Rhodes	S & B Engineers	Houston, TX
Richard Clayton	Mississippi Research & Development Center	Jackson, MS
Robert G. Snowden	Wilkinson & Snowden	Memphis, TN
Ed Sapinsley	Wilkinson & Snowden	Memphis, TN
Mitchell S. Parks	EDA	Nashville, TN
Bill Harrell	Wm. T. Harrell, Realtor	Memphis, TN
Bill Patrick	E. H. Crump & Co.	Memphis, TN
Herman N. Davis	Southeast Georgia Area Planning & Development Commission	Waycross, GA
Marty Borth	Central Texas Manpower	Belton, TX
Ken Burdick	Lone Star Gas Company	Dallas, TX
Wilton Burnett	Tennessee Dept. of Economic & Community Development	Nashville, TN
Vergil Saine	Coffee County Industrial Board	Manchester, TN
J. Michael Mudd	Hickman Industrial Development	Hickman, NY
Thomas Cooley	Hickman-Fulton County Riverport	Hickman, NY
Pamela R. Taylor	Tennessee Dept. of Economic & Community Development	Nashville, TN
Chuck Hutchinson	Tennessee Dept. of Economic & Community Development	Nashville, TN
James Earnest	Tennessee Dept. of Economic & Community Development	Cookeville, TN
Carlos E. Aybar	Alachua County R & D Authority	Gainesville, FL
Rob Schmid	Tennessee Dept. of Economic & Community Development	Nashville, TN
Tom Brettschneider	Holidays Inns, Inc.	Memphis, TN
Judy Holland	Sardis Chamber of Commerce	Sardis, MS
Charlie Gentry	Greenwood Chamber of Commerce	Greenwood, MS
Mike Clayborne	Amory-North Monroe Chamber of Commerce	Amory, MS
Dick Walker	Tennessee Dept. of Economic & Community Development	Nashville, TN