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THE NEED FOR A WATERFRONT DEVELOPMENT PLAN
FOR THE CITY OF MONTGOMERY, ALABAMA

By

Dwight P. Stevenson

B.S., Muskingum College, 1964

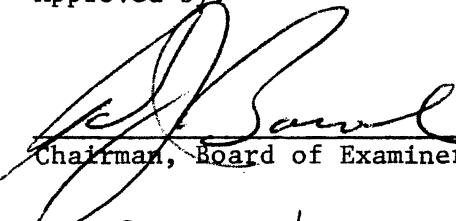
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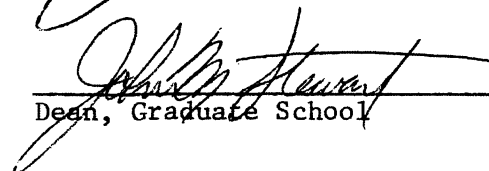
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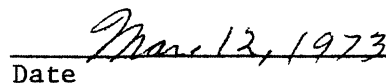
UNIVERSITY OF MONTANA

1973

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ACKNOWLEDGEMENTS

I wish to acknowledge the many individuals who have contributed to the accomplishment of this paper. Public officials, businessmen, and librarians have been extraordinarily cooperative and helpful. I wish to give special acknowledgement to Colonel Robert A. Snetzer, USA, (ret.), Executive Vice-President of the Coosa-Alabama River Development Association for his interest and for access to his library.

The guidance and encouragement of Dr. Bernard J. Bowlen, my advisor and chairman of my examining committee, was very helpful. Special appreciation is also extended to Dr. Rudyard B. Goode and to Dr. Donald C. Guy, members of my examining committee.

I give special thanks to my wife, Jo, for her moral support and assistance.

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CHAPTER I

INTRODUCTION

Background

The policy of the United States Government traditionally has been in favor of free waterways. Early statesmen believed that inland waterways were essential in unifying the colonies and promoting trade. The Northwest Ordinance of 1787 stated the intentions of Congress as follows:

The navigable waters leading into the Mississippi and the St. Lawrence and the carrying places in between the same shall be common highways and forever free...without any tax, impost or duty therefor.¹

In 1824 Congress passed an act of historical significance which read in part:

AN ACT TO PROCURE THE NECESSARY SURVEYS, PLANS, AND ESTIMATES UPON THE SUBJECT OF ROADS AND CANALS. (Sect. 1.) Be it enacted by the Senate and House of Representatives of the United States of America, in Congress Assembled, That the President of the United States is hereby authorized to cause the necessary surveys, plans and estimates, to be made of the routes of such Roads and Canals as he may deem of national importance, in a commercial or military point of view, or necessary for the transportation of the public mail; designating, in the case of each canal, what parts may be made capable of sloop navigation: the surveys, plans

¹National Waterways Conference, Inc., The Impact of Waterways User Charges: An Industry by Industry Assessment (Washington, D.C.: National Waterways Conference, Inc., 1968), p. ii

and estimates, for each, when completed, to be laid before Congress.
 (Sect. 2.) And be it further enacted, That, to carry into effect the object of this act, the President be, and he is hereby authorized to employ two or more skillful civil engineers, and such officers of the Corps of Engineers, or who may be detailed to do duty with that Corps, as he may think proper; and the sum of thirty thousand dollars be, and the same is hereby appropriated, to be paid out of any moneys in the treasure, not otherwise appropriated.²

This act and subsequent legislation gave the Federal Government the responsibility for maintaining and developing the nation's waterways. Today organized responsible groups of citizens of any community in the nation can submit a proposal to the Congress for the development of their waterways. If Congress feels there is a need, the United States Army Corps of Engineers will be directed to conduct the necessary engineering and economic investigations which are submitted to Congress for approval. If approved, the Corps will oversee the improvement of the waterways when funds are appropriated.³ Such a policy has resulted in the Tennessee Valley Authority⁴ and, more recently, the Arkansas-Verdigris Navigation System⁵ which provided Tulsa, Oklahoma with a port, plus other projects that have provided the nation with

²American Waterways Operators, Inc., Big Load Afloat (Washington, D.C.: American Waterways Operators, Inc., 1966), p. 6.

³Water Resources Development by the U.S. Army Corps of Engineers in Alabama (South Atlantic: U.S. Army Engineer Division, January, 1971), p. viii.

⁴Although the Tennessee Valley project was not developed by the United States Corps of Engineers, it still reflects the national policy.

⁵"Port Will Never Forget 1971...", Port Central, USA, January, 1972, p. 1.

over 29,000 miles of navigable inland waterways and many inland ports.⁶
Such a project has come to Montgomery, Alabama.

The Coosa-Alabama River System

The Coosa-Alabama River system is listed as one of the ten major river systems in the United States,⁷ second only to the Tennessee River system in size and length in the Southeastern United States.⁸ The Coosa River is formed by the Etowah and Oostanaula Rivers near Rome, Georgia. The Alabama River is formed by the Coosa and Tallapoosa rivers near Montgomery, Alabama. The Mobile River, which flows through the port of Mobile into the Gulf of Mexico, is formed by the Alabama-Coosa River system and the Tombigbee River system. Mobile is the sixth largest seaport in the nation.⁹ The Coosa Alabama River Development Association was formed in 1890 to sponsor the planning for development of this river system into a navigable waterway with river traffic eventually reaching from Mobile to Rome, Georgia. This goal will have far reaching effects on this area. It will mean not only river transportation, but also recreation, hydroelectric power, additional flood control and increased industry. The Tennessee Tombigbee Waterway has been authorized by Congress and would give Alabama direct access to the

⁶New Dimensions in Transportation, (Washington: American Waterways Operators, Inc.), p. 3.

⁷Speech by W. I. McElroy, Vice-President of Warrior and Gulf Navigation Co., to the Alabama-Coosa River Improvement Association, January 26, 1972.

⁸James E. Larson, Alabama's Inland Waterways (Montgomery: Brown Printing Company, 1960), p. 30.

⁹J. C. Goodrum and others, Rivers of Alabama (Huntsville: The Strode Publishers, 1968), p. 117.

Tennessee and Ohio River systems via a canal connecting the Tombigbee and the Tennessee.¹⁰ The completion of the Cross Florida Barge Canal would provide Alabama ports with access to the Eastern Seaboard through the inter-coastal waterways.¹¹ Navigation of the Alabama River makes it possible for the City of Montgomery to have access to most of the 29,000 miles of waterways in the United States as the river is now developed to a point above Montgomery, (see Figure 1). The waterway to Montgomery was officially opened with the completion of the Jones Bluff Dam and Lock on April 15, 1972, (see Figure 2). The first barge tow arrived in Montgomery the same day.¹²

The Alabama River flows along the northern edge of Montgomery in a series of deep U bends, (see Figure 3). Although most of the city lies to the east and south of the river on gently rolling hills above the flood plain, the land adjacent to the river is flat and, for the most part, below extreme high water levels. Improvements in the flood plain consist principally of industrial plants with some wholesale warehouses and residences.¹³ Approximately three and one-half miles of river frontage fall within the corporate limits of the City of Montgomery.¹⁴ A large stretch of river lies immediately above the city.

¹⁰Water Resources Development, p. 23.

¹¹The Nation's Water Resources (Washington: United States Water Resources Council, 1968), p. 6-2-9.

¹²"Cherokee Arrives," Montgomery Advertiser, April 16, 1972, p. 1.

¹³Water Resources Development, p. 45.

¹⁴This is as shown on the United States Department of Interior Geological Survey topographical map of the Montgomery quadrangle.

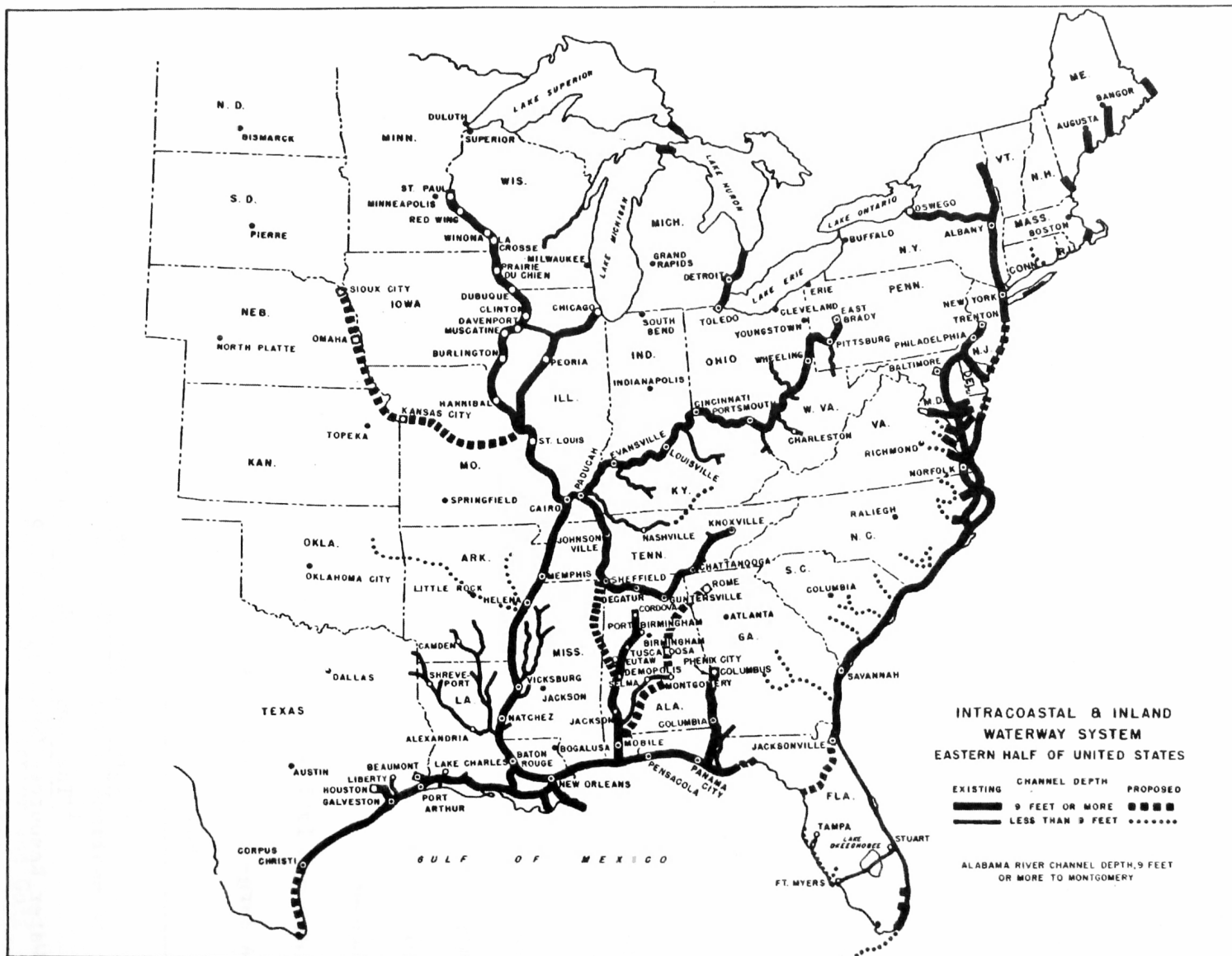


Fig. 1.--Waterway System of Eastern United States

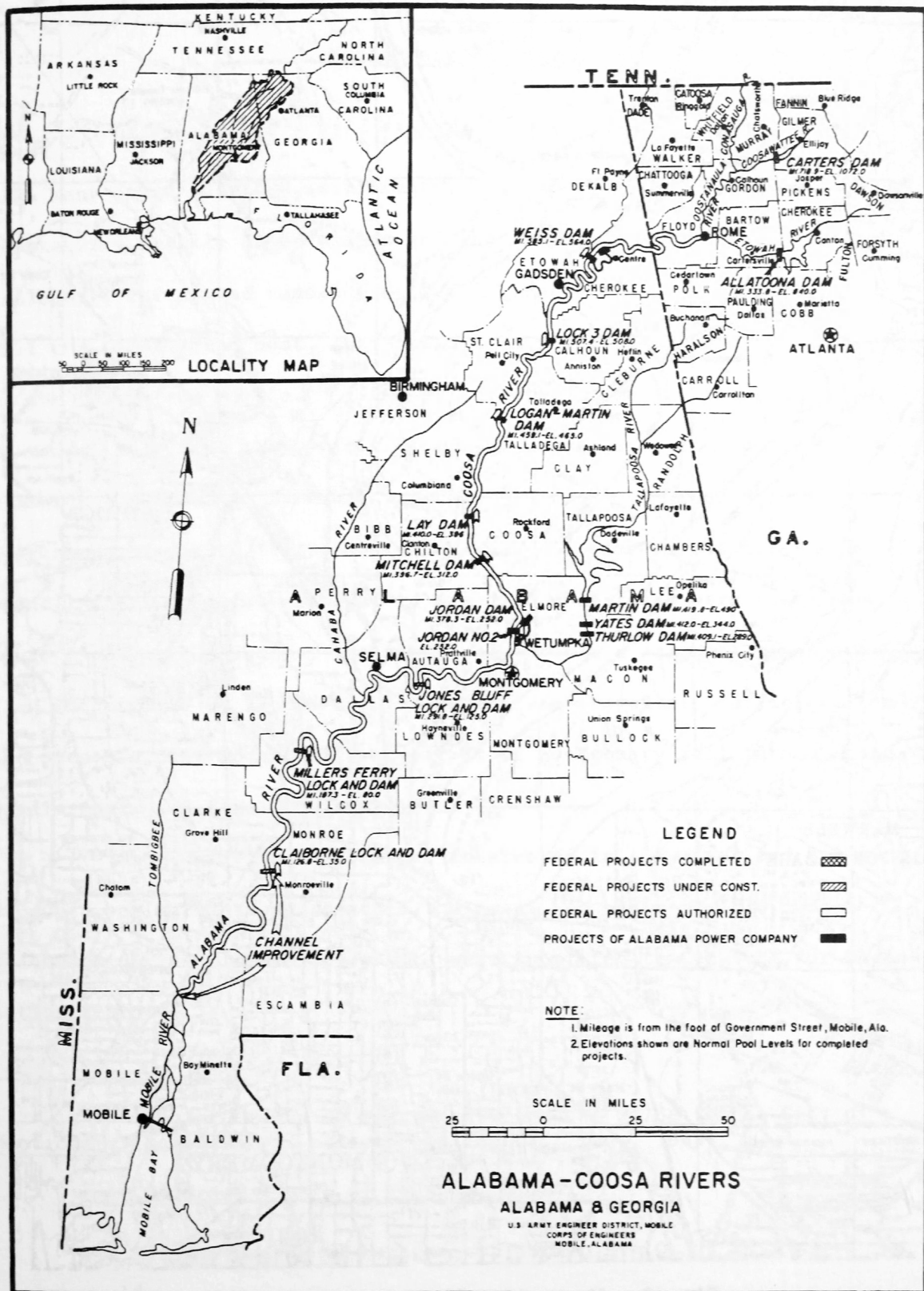


Fig. 2.--Coosa-Alabama River System

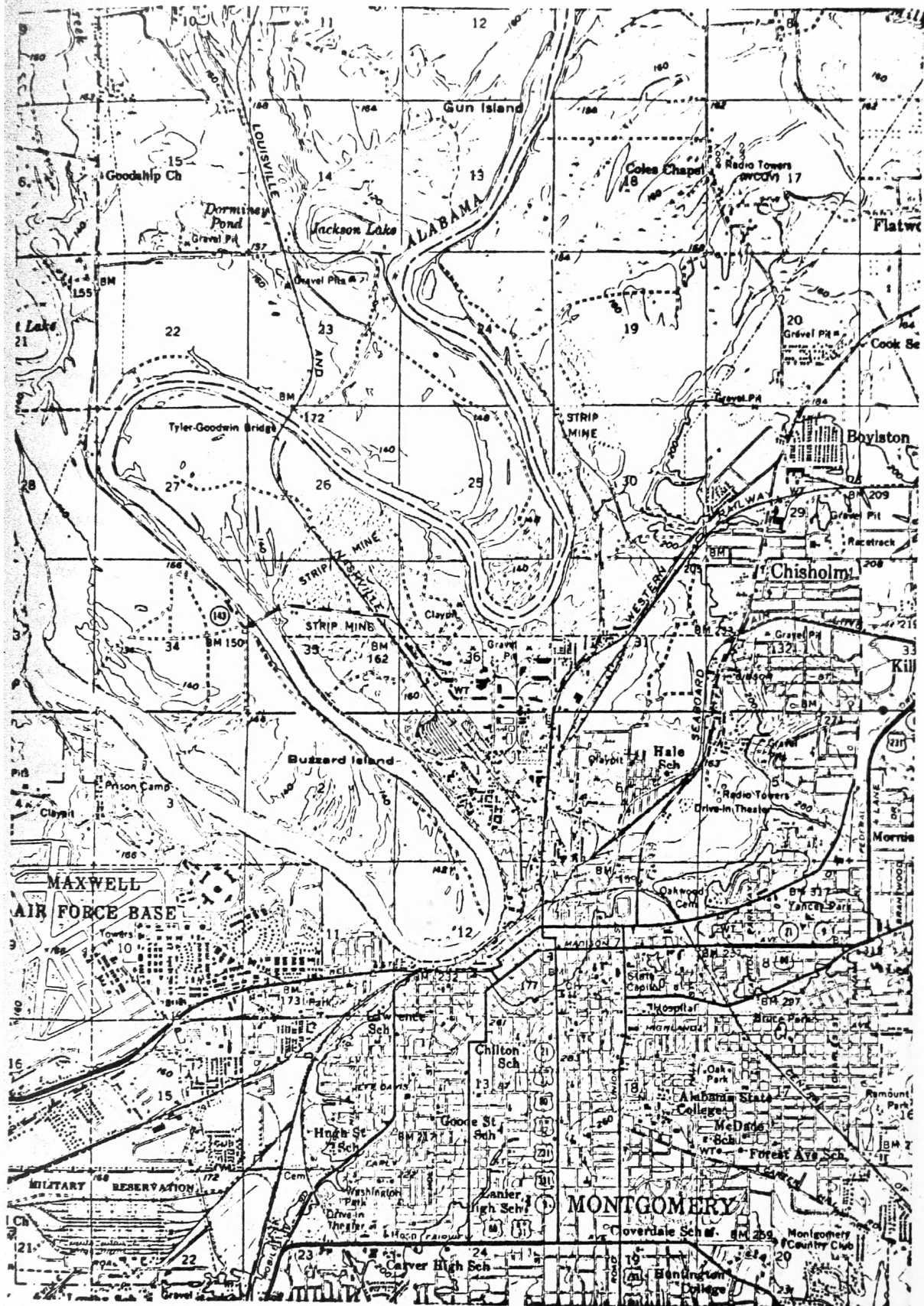


Fig. 3.--Montgomery Waterfront

Montgomery History

Montgomery is a city founded on the Alabama River in 1819.¹⁵ Like many other American settlements, its location was chosen because of the wide fertile flood plains and the available water transportation. Keelboats, rafts, and canoes provided the early modes of shipping. In 1821 the first steam boat, the Harriett, arrived in Montgomery, coming up the river from Mobile.¹⁶ The agricultural community then had a way to market cotton to the world. As cotton became a major export, river commerce flourished. However, in 1840, the first railroad came to Montgomery.¹⁷ As the railroads and highways became more extensive and efficient, river commerce began to decline. Railroads were faster and could reach more markets. The river only provided seasonal transportation interrupted by floods and low water. As the river traffic declined, the once bustling and scenic waterfront of Montgomery fell into a state of disrepair and finally disappeared.

Many individuals remained interested in the river and believed it could yet serve as an asset to the area. As early as 1870, Coosa-Alabama River development proposals were submitted to Congress for legislative approval.¹⁸

¹⁵Junior League of Montgomery, Inc., A Guide to the City of Montgomery (Montgomery: Walker Printing Co., Inc., 1969), p. 7.

¹⁶Goodrum, Rivers of Alabama, p. 141.

¹⁷Junior League of Montgomery, Guide, p. 10.

¹⁸John V. Krutilla and Otto Eckstein, Multiple Purpose River Development: Studies in Applied Economic Analysis, "The Alabama-Coosa River System," (Baltimore: Johns Hopkins Press, 1958), p. 170.

Waterfront Development

The Montgomery waterfront was a vital asset to the city in the early days of its history. The newly developed waterway presents the possibility of the waterfront reblossoming into a vital asset once again. Montgomery recognized the possibility of a revitalized waterfront. The need for a waterfront development plan has been recognized and recommended. A waterfront committee has been appointed to study the situation.¹⁹

The Montgomery Area Chamber of Commerce takes steps to advertise Montgomery attractions to potential new industry. Eight industrial parks and other attractions have been developed in an effort to attract industry, however, the possibility of the waterfront as a prime factor in attracting industry has been largely overlooked.²⁰ In order to provide a certain rate of employment and growth in local income, any area or locality such as Montgomery desires a rate of growth equal to or greater than the nation as a whole. The development of the Montgomery waterfront could be an opportunity consistent with locally held goals. Montgomery seeks growth by developing its assets to attract new industry. The opening of the new waterway has been heralded by many as the threshold of new prosperity for Montgomery.

The economic contribution of waterfront development could be considered in a manner similar to that applied to other developments,

¹⁹ Mayor James Robinson, interview with Mayor of Montgomery, Alabama, July 13, 1972.

²⁰ J. David Gladney, interview with Industrial Director, Montgomery Area Chamber of Commerce, Montgomery, Alabama, May 24, 1972.

such as an industrial park. A gain in overall economic growth is the ultimate objective. The U.S. Army Corps of Engineers conducted a cost benefit study prior to the improvement of the waterway. This study demonstrated a satisfactory overall return from the cost of the waterway. However, this return is projected for the entire waterway, not just Montgomery. The benefits are also measured in terms other than purely economic, such as flood control and recreational facilities. The benefits of a waterfront development would have to be considered in a similar scope encompassing economic return, recreation, esthetic, and prestige factors.

Montgomery has a potentially valuable asset in its waterfront. The city can plan the development of the asset or it can permit the situation to find its own solution. In the latter event, the city faces possible indiscriminate development by private enterprise not desirable or beneficial to the community.

Purpose and Objectives

This study was concerned with the need for a waterfront development plan for the City of Montgomery, Alabama. There were three primary objectives. First, a study of the industrial, commercial, agricultural and recreational opportunities was conducted to establish the development potential of the waterfront. It was not intended to recommend any particular opportunity, but merely to establish the possibilities, although some possibilities may be discussed more fully than others.

Secondly, an examination of common waterfront problems of other cities and those apparent in Montgomery was conducted to demonstrate the advantages of planned development. Problems in development plans were also identified.

Thirdly, possible approaches to developing a waterfront plan were considered. This was not an attempt to design a plan for Montgomery, but to identify the scope and considerations involved in waterfront planning.

This study was not concerned with providing cost estimates, or economic benefits of a waterfront plan. It was not intended to provide a waterfront plan. This study proposes to establish waterfront potential, to outline possible waterfront problems in the absence of planned development, and to suggest possible approaches to such planning. The desired result is for the reader to become aware of the waterfront potential in Montgomery, to realize the possible problems in uncontrolled development of this potential and to be basically knowledgeable of waterfront planning requirements.

CHAPTER II

WATERFRONT POTENTIAL

Agricultural

Montgomery, situated in a rich agricultural district,¹ produces and exports large amounts of cotton, soybeans, corn and wheat. An increasing amount of the corn is used locally in the rapidly expanding beef and poultry industries, (see Table 1 and Table 2). Water carried transportation would be a positive economic factor, not only in exporting these products, particularly cotton and soybeans, but also in importing fertilizers, farm implements and some additional feed grains. The State Docks at Montgomery already provide grain loading facilities.² A large fertilizer distributor, Agricultural Services of Alabama, applied for a permit to locate a dock facility in Montgomery, making that location a more efficient distribution center for the rapidly increasing demand for fertilizer in the immediate area and the state.³

¹Water Resources Development, p. 45.

²"River Channel Opens Doors for Montgomery Commerce," Montgomery Advertiser-Alabama Journal, Part 1, Section 2, Projection '72, February 20, 1972, p. 1.

³James Robinson, interview with the mayor of Montgomery, Alabama, July 13, 1972.

TABLE 1
CROP PRODUCTION FOR 1969

County	(Bales) Cotton	(Bushels) Soybeans	(Bushels) Corn	(Bushels) Wheat
Augauga	11,200	62,500	250,000	27,200
Elmore	12,700	130,000	256,000	10,200
Lowndes	17,860	190,000	104,000	16,300
Macon	19,500	66,000	105,000	31,300
Montgomery	13,950	295,000	118,000	40,400
Tallapoosa	13,940	2,100	144,000	1,450
TOTAL	89,150	745,600	977,000	126,850

SOURCE: River Development Plan, Central Alabama Region, (Montgomery: Central Alabama Regional Planning and Development Commission, July, 1971), pp. 20-21.

TABLE 2
LIVESTOCK ON FARMS, 1967

County	Beef Cows	Milk Cows	Poultry	Hogs
Augauga	11,800	800	65,000	13,000
Elmore	17,500	3,200	212,000	3,200
Lowndes	35,000	2,300	191,000	2,400
Macon	20,900	1,000	173,000	5,700
Montgomery	48,500	11,400	102,000	3,600
Tallapoosa	7,000	1,300	155,000	2,100
TOTAL	140,700	20,000	898,000	30,000

SOURCE: River Development Plan, Central Alabama Region, (Montgomery: Central Alabama Regional Planning and Development Commission, July, 1972), pp. 20-21.

Industrial

The surrounding region is rich in raw resources,⁴ labor,⁵ power sources, transportation, water and also has an excellent climate.⁶ The Coosa-Alabama River system is the second largest in the Southeast and industry can be expected to be attracted to this area much as it was to the largest Southeastern waterway, the Tennessee Valley area. Montgomery, the largest urban area on the river, would benefit appreciably from such industrial growth not only from firms using the water transportation but also from complementary industries.⁷ Possible industrial sites have been located on the river already, (see Table 3 and Figure 4). Several of these are located in or near Montgomery.⁸

Recreational

The opening of passable waterways and the lakes and pools formed by the project dams would increase the potentials for a recreational playground along the river. Montgomery lies at the head of one of these pools, the Jones Bluff Reservoir. The present waterfront development plans call for a number of park areas along the river. Several are planned for Montgomery.⁹ The Montgomery Jaycees have undertaken a

⁴Goodrum, Rivers of Alabama, p. 147.

⁵Fact Pack for Montgomery, Alabama, Montgomery Area Chamber of Commerce, Montgomery, Alabama, p. 18.

⁶The Nation's Water Resources, p. 6-2-1.

⁷Junior League of Montgomery, Guide, p. 94.

⁸Montgomery Area Chamber of Commerce, "Central Alabama Industrial River Sites," Industrial Committee Files.

⁹River Development Plan, Central Alabama Region, (Montgomery: Central Alabama Regional Planning and Development Commission, July, 1971), pp. 108-112.

project to float a replica of an old fashioned riverboat operating out of Montgomery providing tourists and residents with excursions on the river.¹⁰ The city built a wharf for the boat near the original waterfront location with easy access to downtown Montgomery.¹¹ Currently Montgomery is proceeding with an urban renewal project. The downtown shopping area is being revitalized. A convention center is planned and the reconstruction of old Commerce Street will provide shops and restaurants in the manner of yesteryear. This total development would be of interest to tourists.

TABLE 3

INDUSTRIES USING WATERFRONT SITES

<u>Industry</u>	<u>Typical Acreage Requirements</u>
Grain Terminals and Processing	30
Lumber Products	
Plywood	30
Hardboard	50
Particle Board	50
Chemicals	
Basic Chemicals-Acids-Alkalies	80
Finished Products	50
Petroleum Products	40
Rubber Products	30
Flat Glass and Containers	50
Structural Clay Products	50
Gypsum Products	50
Ferrous-Non Ferrous Foundries	50
Structural Fabricating	50
Heavy Machinery	50

SOURCE: Rust Engineering Company, Industrial Park and Terminal, Montgomery, Alabama, (Birmingham: Jenkins Brick Company of Montgomery, 1970), p. 24.

¹⁰"Float Boat Leaders Set Final Push," Montgomery Advertiser, March 5, 1972, p. 2-D.

¹¹Mayor Robinson, interview, July 13, 1972.

SITE INFORMATION						
SITE	COUNTY	ACREAGE	HIGHWAY	RAILROAD	POWER	GAS
1. Belcher	Dallas	1,500	Ala. 14	Southern	Ala. Power	So. Nat.
2. Minter	Dallas	6,400	U. S. 80	W. of Ala.	Ala. Power (10 miles)	So. Nat.
3. Beers	Dallas & Lowndes	4,300	U. S. 80	W. of Ala.	Ala. Power (10 miles)	Ala. Gases
4. Tyson	Lowndes	3,700	U. S. 80	W. of Ala.	Ala. Power (19 miles)	So. Nat. miles
5. Scott	Lowndes	6,400	U. S. 80	W. of Ala.	Ala. Power (15 miles)	So. Nat. miles
6. Burkville	Lowndes	2,500	Ala. 54 & U. S. 80	W. of Ala.	Ala. Power (7.5 miles)	Ala. Gases
7. Prattville	Autauga	700	Ala. 14 & U. S. 31	GM&O	Ala. Power (4 miles)	Ala. Gases
8. Parkers Ferry	Elmore	1,100	Ala. 143 & Ala. 14	L & N	Ala. Power	So. Nat.
9. Wetumpka	Elmore	510	Ala. 14	L & N	Ala. Power	So. Nat.

(Other river sites are under study and will be added as developed.)

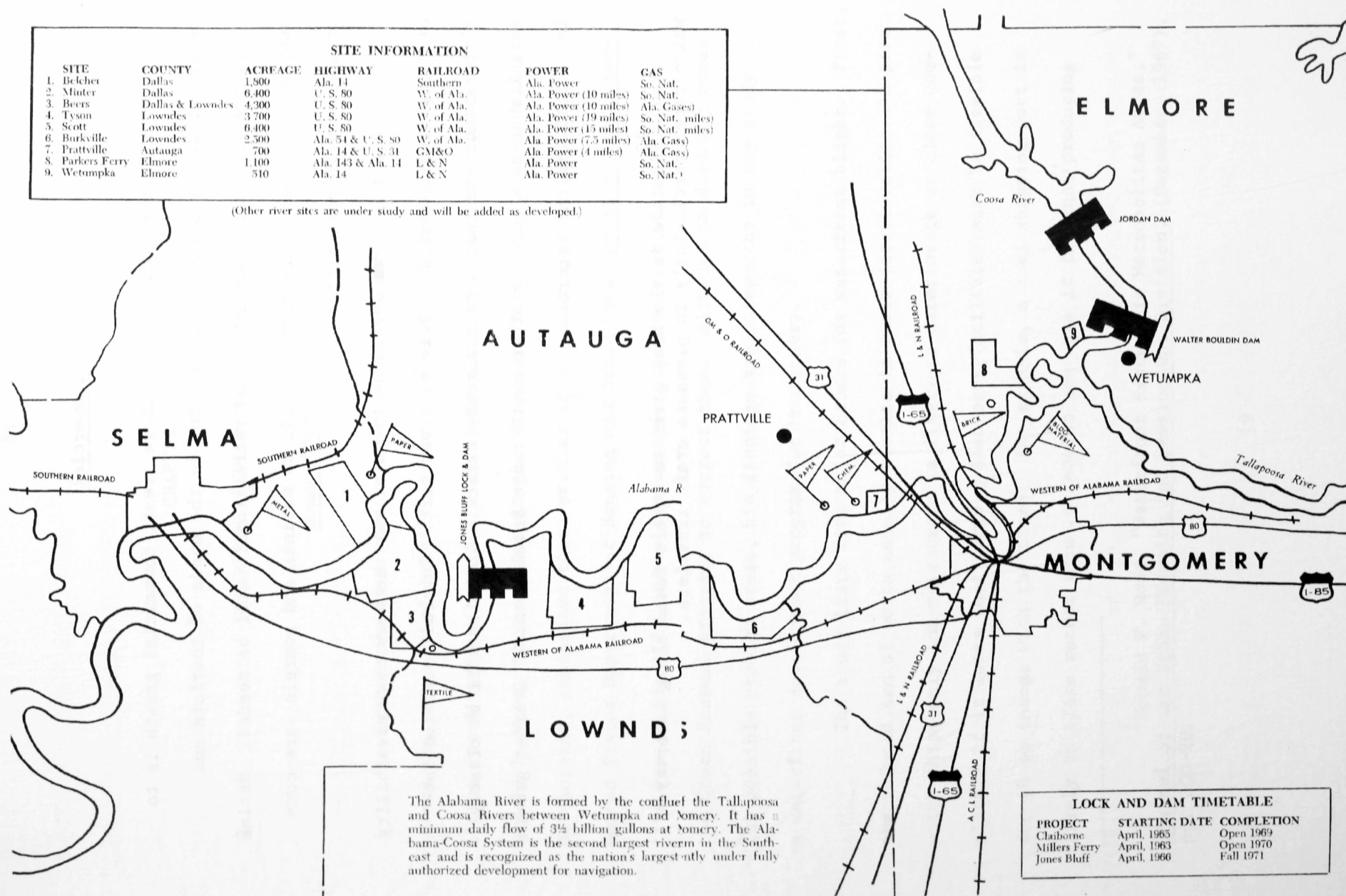


Fig. 4.--Proposed Riverside Industrial Sites

Fig. 4.--Continued

Commercial

With the growth in the above areas, commercial growth is to be expected. Establishments catering to the needs of tourists and river traffic, both commercial and recreational, will be needed. Marine supply and repair facilities, as well as marinas and boatels, are commonly found in port cities.¹²

All the above developments point out the very real possibility of Montgomery becoming a thriving river port. Several completed facilities indicate that a port already exists. The city will be clearly established as a port by other short range developments. Greater growth is probable in the future.

¹² Boatels is the name given to motels found along waterways which cater particularly to pleasure craft travelers.

CHAPTER III

WATERFRONT DEVELOPMENT PROBLEMS

Common Problems

Experience is a good teacher. The problems and mistakes of others can often be of benefit in port planning. Many American port cities faced various problems with their waterfronts over the past years. Donald F. Wood, port advisor to the Wisconsin Department of Resource Development, researched these problem areas under a grant from the United States Department of Housing and Urban Development.¹ The objective was to identify causes for waterfront deterioration and to apply the Urban Renewal programs to correct them. Although he does not cover all possible problem areas, his findings are noteworthy in the study of a waterfront development program for Montgomery.

The study lists five major causes for waterfront blight. First, the reduced use of ports usually results in their deterioration. A port which ships only one main cargo is likely to deteriorate or close completely if it loses that cargo. Also port facilities must be flexible enough to change with the times. For example, a coal shipping port is likely to close rather than to develop new uses if the coal producing

¹Donald F. Wood, "Waterfront Renewal in Metropolitan Areas," Journal of the Urban Planning and Development Division, (December, 1967), pp. 200-201.

mines in the area are shut down. Port officials must attempt to develop a multiple purpose port and continually update equipment and operations to avoid this problem.

A second cause of decay was inadequate access to ports. This was usually poor street access, lack of highways, railroads or interstate routes. Ports can become isolated from areas they are supposed to serve. Plans should be made by cities for maximum access to their waterfront by railroads, and streets leading to local or interstate highways, and air, rail, and trucking terminals.

The abandoning of facilities and lack of maintenance on port facilities was the third cause of waterfront blight. The scene is desolate but also becomes a hazard to navigation, as shore line retention structures deteriorate and pilings rot in the water. This affects the attraction of commercial river traffic but particularly affects the value of waterfront land. This can be avoided by proper maintenance, and by enforcement of zoning and building codes, all of which must be controlled and well funded by a responsible agency.

Floods and water pollution is the fourth case of waterfront blight. Not only do they cause severe damage to property but landowners are reluctant to develop or redevelop when they face possible recurring losses. Floods can damage industrial sites and pollution can ruin recreational spots as well as reduce the attraction for water using industries. A continuation of these factors results in the loss of industry and prevents new industry from moving into the area. Pollution also will stir citizen unrest due to the damaged environment. Cities can combat this situation in several ways. First, they can zone areas so as to let industry build only in flood free areas. They can also seek to develop

flood control projects through the Army Corps of Engineers or by their own efforts through dikes and canals. Pollution can be reduced by strict enforcement of anti-pollution ordinances, proper sewage facilities, and coordination with upstream water users. Many states have pollution laws that can be brought to bear in such cases.

Last, and perhaps the most important cause of deterioration is the improper use of waterfront land. Many cities have found their waterfront a disagreeable and ineffective mixture of industrial, commercial, residential and recreational sites. The City of St. Louis faced this problem in 1967 after over one hundred years of gradual waterfront development. Industry had developed sites free from flooding. These sites were serviced by an excess of railroads and streets. These streets, railroads and industrial sites isolated vast vacant areas along the river which could not be developed into parks, commercial centers, or residential areas because they were inaccessible. Since 1967, St. Louis has been gradually relocating industry, housing, and right-of-ways to gain the maximum use of the waterfront. Industry is being consolidated in suitable sites leaving other sites to be developed into residential, commercial and recreational areas in a manner that is agreeable to all.² It is important that waterfront land be developed in a way that is most compatible between recreational and industrial sites. Environmental and ecological factors are usually involved.

It is likely that the waterfront in Montgomery will suffer from some or all of the problem areas mentioned previously if development occurs without control. Arguments could be presented that several

²Saint Louis Riverfront Development Plan, (St. Louis, Missouri: City Plan Commission, 1967), p. 7.

of the problem areas exist presently. The important matter is to recognize these problem areas or the possibility of problems in these areas. The waterfront is only now beginning to develop, and with proper planning problems may be avoided both at the present and in the future.

Other Development Problems

The cost of waterfront development is tremendous. The determination of the money needed and the method of securing the necessary funds are major problems. Development costs can be estimated by careful planning and consulting proper sources. Public improvement projects such as a waterfront development can be financed by a number of different sources, such as property taxes, bonds, loans, or user fees.³ Many federal agencies have grants and loans available to assist in such projects. Getting voters to approve increased taxes or bond issues often requires a maximum effort on behalf of the project by supporters to educate the public on the benefits, desirability and financial returns of such a project. After public approval and federal grants are obtained, the mechanics of financial management and cost over-runs must be considered. This requires close management by an agency appointed or established to manage the project.

Land ownership is a problem in the development of waterfronts.⁴ The public owned land can usually be secured and developed as planned. Certain amounts of private land can be obtained if finances permit. Land

³River Development Plan, Central Alabama Region, pp. 121-122.

⁴Donald F. Wood and others, Waterfront Renewal: Technical Supplement, (Madison, Wisconsin, Wisconsin Department of Resource Development, 1964), pp. 107-109.

thus developed can be regulated and controlled even if reverted to private ownership. Not all land can be obtained and such is not always desired. It is important, however, to educate land owners in the proper use of waterfront property. This can be further controlled by vigorous enforcement of building codes and regulations in zoned areas.

Problems of Comprehensive Planning

Many cities in the nation have faced waterfront problems. Some cities have been old established ports concerned with the need for renewal and revitalization; while others have only recently become ports, as their waterways were developed. However, all faced essentially the same problem of how to develop the most efficient use of a valuable asset, their waterways and the adjoining land. Most of these cities recognized the need for a strong central agency responsible for the development and management of the waterfront. In St. Louis, Missouri⁵ and Norwalk, Connecticut,⁶ the city planning commissions were assigned the task; in Tulsa, Oklahoma⁷ and Winona, Minnesota,⁸ a port authority was established for this purpose. In all cases the need for a comprehensive study and plan was recognized.

The city of St. Louis had the resources at hand to complete a comprehensive plan. Individuals from various city departments were assigned to formulate the plan. Other cities used a combination of their

⁵St. Louis Riverfront Development Plan, p. 80.

⁶Martin Goldstein, Waterfront, (Norwalk, Connecticut: City Planning Commission, June, 1967), author's note.

⁷A Year to Remember, Tulsa Port of Catoosa, (Tulsa, Oklahoma: City of Tulsa-Rogers County Port Authority).

⁸725 Upper Mississippi, (Winona, Minnesota: The Port Authority of Winona, Minnesota, 1972).

own planning agencies and the services of consulting engineers to develop a comprehensive plan for port improvement. The details of such a plan are extensive and cover such items as currents, soil conditions, flood zones, locations of utility lines, right-of-ways for streets and railways, and many other items necessary for thorough planning. This detailed analysis enables the planners to make recommendations on the locations of sites for industrial, commercial, recreational and residential developments. Recommendations can also be made concerning shoreline improvement, methods of using flood plains and a possible time schedule for development. Cost estimates can also be prepared. The latter is important in budgeting available funds and applying for federal aid. It is recognized that such plans must be flexible. However, a basis for future plans and decisions is established in such a plan.

Montgomery's Present Waterfront Problems

Montgomery does not have a comprehensive waterfront development plan at this time.⁹ The South Central Alabama Regional Planning and Development Commission has completed a report to guide the use of and development of the Alabama River.¹⁰ However, this is a general development plan concerned primarily with the location of industrial and recreational sites. It touches on the recreational and industrial sites in Montgomery only briefly, as it is concerned with three counties. Recommendations for the locations of streets in the waterfront area are given. The establishment of a regional development authority responsible for implementation

⁹Mayor Robinson, interview July 13, 1972.

¹⁰Lloyd E. Schlicker, interview with Planning Director, Central Alabama Regional Planning and Development Commission. Montgomery, Alabama, July 11, 1972.

of a regional waterfront development is urged in this plan. A policy of comprehensive community planning as a prerequisite to urban development is recommended. Many other valid subjects for further study are recommended in this plan.¹¹

The Jenkins Brick Company employed the Rust Engineering Company to analyze its river location in Montgomery as a possible industrial park and terminal site. The result was a general plan utilizing land belonging to the Jenkins Brick Company and adjacent property. The plan proposed changes in the Army Corps of Engineers flood control plan to protect the area with levee and flood drainage ditches.¹² The plan could be an important step in the analysis of the waterfront for development purposes.

The Alabama Power Company has also conducted an investigation of possible industrial river sites in the state. A number of these sites lie along the Alabama River and several are near Montgomery.¹³ The Montgomery Area Chamber of Commerce identified additional river sites near Montgomery.¹⁴

The United States Army Corps of Engineers performed a study of the waterfront area in Montgomery for the purpose of proposing flood control measures. One such proposal was discussed in the Jenkins Brick plant study. Also the Corps has plans for recreational development in conjunction with

¹¹River Development Plan, Central Alabama Region, pp. 121-145.

¹²Rust Engineering Company, Industrial Park and Terminal, Montgomery, Alabama, (Birmingham: Jenkins Brick Company of Montgomery, 1970), p. 24.

¹³Alabama Power Company, Industrial River Sites in Alabama, Birmingham, Alabama: Industrial Development Department of the Alabama Power Company), pp. 9, 35.

¹⁴"Central Alabama Industrial River Sites."

the recently completed locks, dams and lakes.¹⁵ No other plans could be found but possibly other such plans do exist. Presently, however, no plan of a comprehensive nature is in existence for the entire Montgomery waterfront area.

Several events have occurred which emphasize the need for planned waterfront development. When the wharf was built for the Jaycee Riverboat, several problems were encountered. First, the starting date was delayed because proper permission had not been obtained from the city government. The project was further delayed when it was discovered during preliminary construction work that the site of the wharf pilings was on top of a sanitary sewer line. High flood water then swept the pilings away causing further delay. The Army Corps of Engineers then closed the gates on the new Jones Bluff Dam which caused high waters at the construction site and further delay. The project was finally finished when the Engineers opened the gates to reduce the water level. The project met with a \$5,000 cost over-run. The need for comprehensive planning and careful management was demonstrated by this situation.¹⁶

Presently there are two recreational parks being built along the river. There are plans for a marina. The Alabama State Docks have built a dock facility, primarily for grain, that is now operating. A fertilizer company has requested permission to build a dock facility. There is already some industry on the waterfront. The combination of these present factors and the potential of future development indicate definite planning requirements.

¹⁵River Development Plan, Central Alabama Region, pp. 95-98.

¹⁶"Wharf Delayed," Alabama Journal, November 4, 1971, p. 4.

CHAPTER IV

DEVELOPING A WATERFRONT PLAN

Introduction to Planning

In the preceding chapter, waterfront problems were discussed. The general conclusion of the discussion of these problems was the need for planning. In most cases, proper waterfront planning can eliminate many problems for cities. At this time the City of Montgomery has no specific waterfront development plan. The need exists and is recognized. A waterfront commission has been established but no plan has yet appeared.¹

Definition of Waterfront Plan

Waterfront planning is an aspect of conventional land use planning with the focus on community use of surface water and uses of the land which will take most advantage of access to the water and water-frontage. Thus it attempts to take into consideration both the uses of the water and the uses of the land around it.²

The planner can be guided in his plans for waterfront use by establishing goals. The goals he selects are usually determined by the city's particular circumstances. In cases where goals conflict, priorities

¹ Mayor Robinson, interview, July 13, 1972.

² Wood, Waterfront Renewal: Technical Supplement, p. 1.

must be determined and goals most important to the community selected as guide lines. Below are several basic goals that have been studied in other cities that could apply to Montgomery.

Waterfront Planning Goals³

The first goal for many cities is the maximum use of the body of water. It is regarded as a valuable asset that can be used for navigation, power, consumption, and recreation. The desired use of the water must be determined and land used accordingly. In Montgomery's situation, power sites both upstream and downstream have been established so there is little further possibility of using the water for hydroelectric power. There does remain the possibility of using the water as a coolant for other power generating systems. Montgomery already consumes water from upstream sources. There are plans for extensive use of the river in recreational development. River borne commerce also promises to develop in the future. City planners could therefore consider navigation, water consumption and recreation as uses of the river.

Secondly, the development of an efficient transportation network on the waterfront is an important goal. This system, of course, calls for two categories of transportation. First, all river transportation should be developed. The U.S. Army Corps of Engineers has provided a nine foot channel from Montgomery to the Gulf of Mexico, via Mobile.⁴ The improvement of the Montgomery waterfront could encourage shippers to utilize this form of transport. The establishment of a protected docking and

³Ibid., p. 2.

⁴Water Resources Development, pp. 27-33.

loading area could enable local industry to use the river. The establishment of marinas and public boat ramps would encourage pleasure craft in using the river also. Secondly, after river transportation has been provided, land transportation, more commonly referred to as waterfront access, must be developed. Light access roads might serve recreational areas but heavy duty streets would be needed in industrial and barge terminal areas. All would have to be well marked and provide direct access to major highways and interstate systems. Railways would be essential in industrial areas also. Railways, roads, and streets would be needed to provide access, but not restrict the area as was the case in St. Louis. Currently, several railroads enter the waterfront area. Their use and location should be studied, (see Table 4 and Figure 5).

A third goal of many communities is the attraction of new industrial or commercial firms. This is often accomplished by developing waterfront sites badly needed by some companies. Mr. Wood reports that:

Public port facilities are sometimes created to serve existing or attract new industries to an area. In some areas of the country public port authorities provide cargo-handling facilities and lease or sell industrial sites. These efforts are sometimes successful in enticing new industry.⁵

The Alabama State Docks already have some grain loading sites developed in Montgomery. They may be asked to develop more or the city could develop a river side industrial site. Fourteen industrial sites have been established in the area.⁶ A waterfront site could be very attractive to water using industries.

⁵Wood, Waterfront Renewal: Technical Supplement, p. 4.

⁶"Industrial Sites," Montgomery Area Chamber of Commerce, Montgomery, Alabama, Industrial Committee Files.

TABLE 4

RAILROAD SERVICE IN MONTGOMERY

Railroad	Direction	Cities Served
Southern Railway System	East	Union Springs Eufaula Atlanta Savannah
Gulf, Mobile & Ohio Railroad	North	Tuscaloosa St. Louis
Louisville & Nashville Railroad	North	Birmingham Louisville Memphis
	South	Mobile New Orleans
Seaboard Coast Line Railroad Company	East South	Savannah Troy Dothan Florida
Western Railway of Alabama	East West	Atlanta Selma New Orleans

SOURCE: Rust Engineering Company, Industrial Park and Terminal,
Montgomery, Alabama, (Birmingham: Jenkins Brick Company
of Montgomery, 1970), p. 26.

RAILROADS IN THE STATE OF ALABAMA

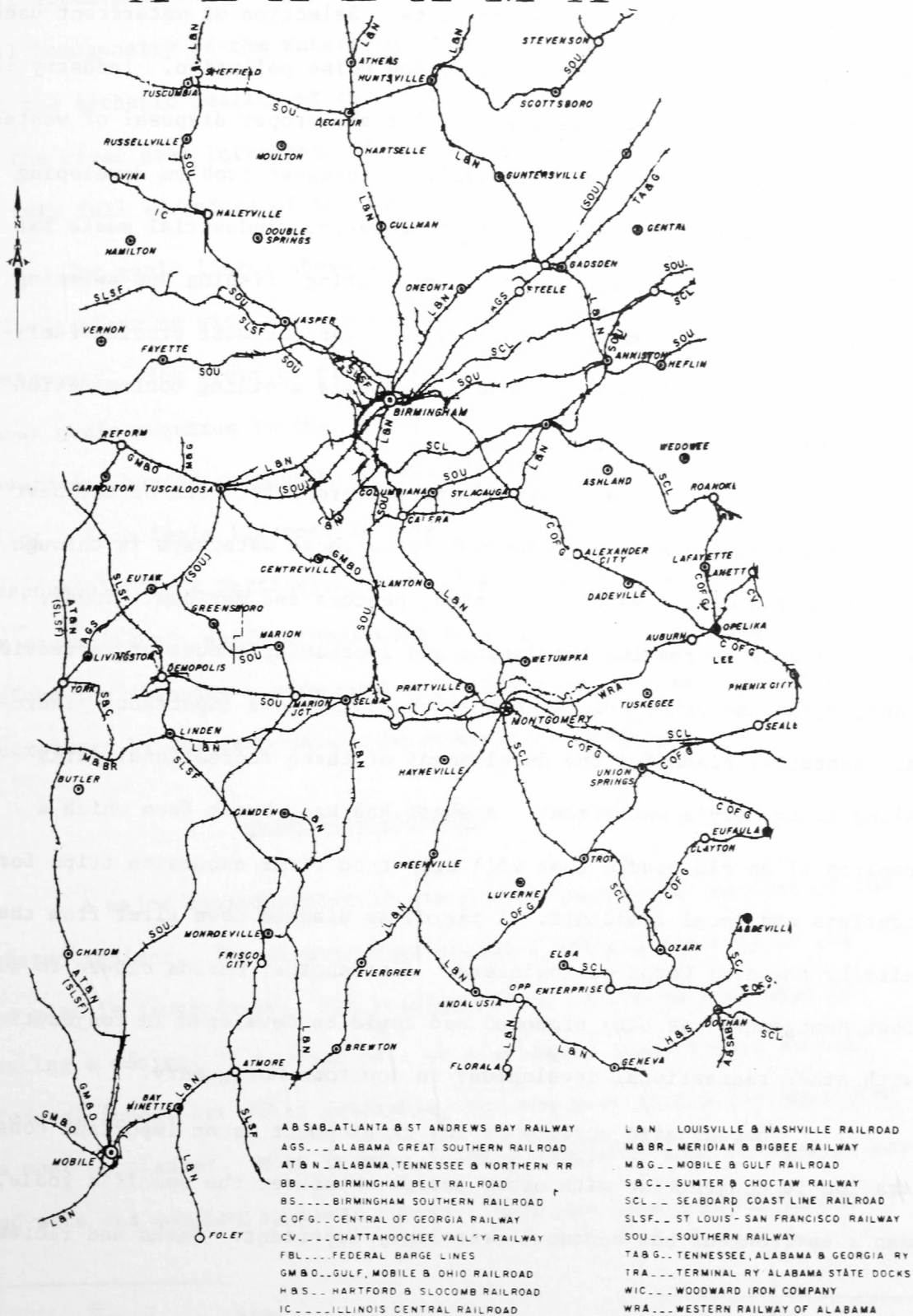


Fig. 5.--Railways Serving Montgomery

The reduction of pollution is a goal that has become very important in most urban cities and ports. Selection of waterfront uses should be made to prevent water, air, and noise pollution. Industry is desirable but should be developed so that the proper disposal of wastes is carried out. Pollution is probably the biggest problem developing out of the multiple use of waterfront property. Industrial waste has ruined countless streams and rivers for boating, fishing and swimming. Industry is a vital part of modern life. Planners must provide facilities to allow development of industries while avoiding contamination of the surrounding environment.

The surface waterways are public property. One of the best ways to insure the access of the public to these waterways is through the establishment of waterfront parks, beaches and marinas. Today, with the ever increasing population and decreasing amount of recreational land, parks and other free spaces are becoming more important. There are tentative plans for the development of three recreational parks along Montgomery's waterfront. A wharf has been built from which a replica of an old paddle boat will depart on river excursion trips for tourists and local residents. A marina is planned down river from the city by the Army Corps of Engineers. Also another marina closer to downtown Montgomery has been proposed and could be developed in conjunction with other recreational development in downtown Montgomery.⁷

The esthetic quality of any development is an important consideration in conjunction with other goals. Whatever the specific goals, man's environment has become increasingly important. Parks and recreational

⁷ River Development Plan, Central Alabama Region, pp. 104-112.

areas are valueless if not placed in a pleasing atmosphere. Therefore, special attention could be paid to building designs, pollution, and the overall homogeneity of the waterfront development. Certain areas that accent the esthetic quality of the river should be developed. The bluff above the river near Interstate 65 would make a beautiful overlook that would take full advantage of the river's esthetic qualities.⁸

The goals listed above are those considered basic to city waterfront planning with some interpretation as to how they might apply to Montgomery. The order of priority or in fact the actual feasibility of these goals requires further study. Often the different departments of government having responsibility for different goals are the cause of conflict. Each feels its goal is more important or that others should be responsible for a particular goal. The result is that some things are never accomplished, while others with lower priorities are completed. Therefore the planning agency must establish goals and assure that they are completed by the responsible departments or agencies.

Financial Planning

A major consideration of any plan is assessing the cost of the completed project. The planner must estimate costs accurately or the whole plan is jeopardized. The considerations of the various ways of financing a project is another part of planning. Local funds, as well as federal funds, are often available; but the best method for obtaining them must be planned. Most federal funding available must be applied for in advance and matched by local funds. There are also many different

⁸Ibid., p. 110.

federal agencies that have funds available, so coordination and planning is required.

Land ownership is important in planning and financing. It is easy to plan for public property that can be easily obtained or controlled. However, it is often necessary to obtain private property to accomplish development projects. This requires time, planning and financing. In many cases it may only be necessary to obtain the owners cooperation in development projects. Zoning laws, ordinances, building codes and other pressures can be used. The use of eminent domain is another method often used to obtain required property.

Coordination

At the present time, there are numerous groups with interests in the Montgomery waterfront. The city recreation department is currently planning development of a waterfront park. The city is building a wharf and another park in conjunction with the Urban Renewal Project. The Jaycees are buying the old-style boat for a tourist attraction. The State Docks department has built docks and grain loading facilities in the area, and the U.S. Army Corps of Engineers plans a marina. Various commercial concerns have interest in the area. It will be an important task for waterfront planning to coordinate the activities of these groups to meet established goals and plans.

CHAPTER V

CONCLUSION

Summary

It has been established during this study, that no plan for waterfront development exists for Montgomery, Alabama. There is interest in river development and a waterfront commission has been appointed. A waterfront plan is presently being considered.

The potential for development of the Montgomery waterfront area exists in several areas. Agriculture is already a major economic factor. Grain loading facilities and docks have been built. The Alabama Agricultural Services Company has applied for a docking permit and intends to make Montgomery the distribution center for the State of Alabama for fertilizer barged in from Mississippi. The development of such agricultural based industry is a strong possibility.

There are numerous industries in the Montgomery area already. They can be expected to use the river transportation as well as the new industry attracted to the area by water development. Primarily, industrial users of waterborne transportation and raw water will be attracted first. Montgomery presently has an active program to attract industry. Potential industrial sites could be developed on the river to provide real attraction to the water using industries.

Recreation promises to be an important growth factor. Much of the recreation is centered on or near the river. The area of down town, undergoing renewal, lies near the waterfront and includes plans for a convention center, a restored street of early vintage, and a museum in the old rail terminal building to attract tourists. The Jaycees are financing the purchase of an old fashioned paddle boat to provide rides on the river near Montgomery. The city has built or is building several waterfront parks. The new waterway promises additional small pleasure craft traffic to Montgomery. All of this should draw an increased number of tourists.

Commercial development is expected to result from the general waterfront development. Commercial firms will be needed to supply the needs of the tourist trade, river traffic, both pleasure and commercial, and industrial firms.

The problems associated with the development of a waterfront are common to many cities. Researchers have identified several problems as the cause of waterfront decay and inefficiency. Most have occurred because of the uncontrolled development of waterfront areas over years of growth. Many could have been avoided with proper planning and foresight. Montgomery already has some problems and there could be many more in the future, as experienced by other cities. A waterfront plan for the City of Montgomery could eliminate the problems in the future.

Recommendations

The City of Montgomery should direct the formulation of a waterfront development plan for the city's waterfront area utilizing the

surface waters and adjoining water frontage to the fullest extent, as would benefit the citizens of Montgomery.

The city should further direct the long range planning to expand the city boundaries to the north and to natural boundaries caused by the river, and to secure such property necessary for the planned development of potential waterfront.

The riverfront committee should examine the feasibility of securing and developing waterfront sites for the express purpose of attracting water using industries.

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