THE DEMOCRACY'S RAILROADS: INTERNAL IMPROVEMENTS IN MICHIGAN, 1825-1846

Despite the wealth of recent publications attempting to define the role of government in American economic development, knowledge of the contributions of public and private enterprise to antebellum growth is far from complete. Concentration on national issues in an era of local government, and the absence of adequate statistical material have frequently resulted in the neglect of important public enterprises. In Michigan, the study of a state enterprise comparable in its planning stages to the New York canal system or the Pennsylvania Mainline, was left entirely to the mercies of state historians and local antiquarians. Michigan's program proved an attractive research project not only because of the local availability of materials, but because its unusually early choice of railroads in preference to canals and the long record of success of three of its major projects promised new insights into state enterprise.

Under the Northwest Ordinance, Michigan had been surveyed and organized into a system of uniform countries, running in rows or tiers from east to west. In the spring of 1837, only three months after admission into the Union, the Legislature responded to pressures that had developed over the course of a decade by adopting an omnibus bill embracing six major projects of internal improvement: transpeninsular railroads through the first, second, and fourth tiers of counties; a barge canal from the St. Clair river to Lake Michigan through the third tier; a ship or barge canal designed to connect rivers draining into Lakes Michigan and Huron in the fifth tier, and a ship canal around the Ste. Mary's Rapids at Sault de Ste. Marie.

Passage of an omnibus bill providing a major transportation project through the line of country centers of each of the five southern tiers was the result of sectional rivalries typical of those experienced by most states in the 1830s. Although economic needs were basic to the demand for improved transportation, sectional rivalry made it politically impossible to act with economic rationality. Except for the depths of the depression, when both Whigs and Democrats were forced to stave off bankruptcy by channeling resources into profitable projects, maintenance of sectional equality remained the decisive factor governing policy throughout the program. Even in 1845, under heavy financial pressures, forces behind the highly profitable Central Railroad were unable to gain funds for its completion on any basis except sectional equality, and only the Governor's veto stopped the passage of another omnibus bill. Unable to find a sectionally acceptable solution to its financial problems, the state was forced to sell its railroads the following year, even though economically the situation was far from impossible.

After sectional rivalry, finances proved the most serious obstacle to Original estimates by the Board of Internal Improvements placed the program's cost at 7.5 million dollars, although a figure of 10 million might have been more realistic. In addition to a bond issue of five million dollars, the Legislature depended on being able to mobilize funds from the federal surplus revenue distribution, five percent funds, and sale of half a million acres of land which, although not granted until 1841, were regarded as the state's by right. One by one, these resources either dried up or failed to materialize. Federal surpluses disappeared after the third quarter of 1837, and the five percent funds faded to insignificance when federal land sales decreased during the depression. In the absence of federal funds, the state was forced to rely exclusively on money raised by the sale of \$5,000,000 of bonds through the Morris Canal and Banking Company, and the Bank of the United States. Until 1841, when these companies failed to honor their obligations, the million dollars realized annually from these bonds would have sustained construction at a moderate rate if the Governor's attempts to speculate in Eastern exchange and stabilize the state's wildcat currency had not driven the state deposit bank to the wall. Loss of over \$600,000 from the bank's failure in 1839 left the state tempo-

rarily insolvent, forcing abandonment of the three northern projects when contractors refused to continue after the state failed to meet monthly estimates. Work on the Southern Railroad, the Central Railroad, Clinton and Kalamazoo Canal was sustained through 1841 by the issue of anticipations against installments on the loan. After the Bank of the United States defaulted in 1841, the state was forced to rely upon funds realized from the sale of 500,000 acres of land finally granted under the preemption act and the profits of the Central Railroad to finance further construction and withdraw anticipations from circulation. Work on the Clinton and Kalamazoo Canal was suspended when appropriations were exhausted, concentrated on increasing the profits of the Central and bringing the Southern into production. Seventy miles of the Southern were opened to traffic in 1844, but the road proved unable to return a net profit to the state, although an undisclosed amount of its receipts were reinvested in capital stock. Profits on the Central continued to increase as it was extended westward, reaching nearly 9 percent in 1846, when the road was opened to Kalamazoo, 145 miles west of Detroit. Unfortunately for the future of state enterprise, the Central was unable to bear the burden of interest on the entire internal improvements debt, which fell due in 1845, and the heavy traffic the road had developed made use of solid iron rails and other cost-reducing innovations necessary. As a result, overtures from eastern capitalists eager to gain control of the Central were received enthusiastically. Although reluctant to place an important public utility under private control, residents of the second tier realized that sectional rivalry would block the appropriation of funds for modernization. At the same time, other sections were eager to sell the Central to reduce taxes necessary to repay the debt created by unsuccessful projects through their own counties. Michigan's sale of the Central, therefore, can be interpreted only as a result of the road's success.

The study of a single program of public works cannot hope to offer sweeping reinterpretations of the history of internal improvement. It can shed light on problems of current interest, however, and add to the confusion surrounding others. While confirming the observation of Carter Goodrich that doctrinal strictures against government enterprise excluded the sectors of transportation and communication in the 1830s, it suggests that doctrines against government participation were applied more vigorously in the 1840s than Goodrich suspects. Segments of Michigan's population became convinced that private enterprise could manage transportation projects more efficiently than government, and the public became concerned not only with keeping business out of government, but government out of business.

Patterns of population change in Michigan's interior counties suggest that examples of the process of "anticipatory settlement" described by Albert Fishlow in his study of American Railroads can be found as early as the mid-1930s. By confirming the existence of such patterns, however, it takes issue with Fishlow's conclusion that Michigan's railroads were built "ahead of demand," and suggests that further case studies are necessary before his tautological statement that enterprises in the 1830s were automatically "ahead of demand" can be accepted. At the same time, the study adds grist to Fishlow's mill by providing further examples of premature state enterprise to replace the two railroads that acted as his prime examples.

Michigan's experience suggests that there were important reasons behind its early choice of railroads in preference to the dominant canal technology. Even in their primitive state in 1837, railroads represented a low cost alternative and promised maximum rewards. Cost estimates for the Clinton and Kalamazoo Canal were over twice that for either the Central or the Southern, a ratio which was proven by construction experience. For the original cost of the Clinton and Kalamazoo, Michigan could have constructed a transpeninsular railroad with heavy iron rails and adequate rolling stock, much more suited to its needs. Unlike the railroad, winter and ice would have closed the canal at precisely the time when roads became solid enough

to allow shipment of agricultural products. Wheat harvested in the summer and milled in the fall would have had to wait for the roads to dry up the following summer before shipment became possible. The canal system suggested by Robert Fogel illustrates the limits of absurdity that can be reached by a high level of abstraction and minimal familiarity with environment. bring the area beyond feasible commercial agriculture in Michigan into production, Fogel proposes a canal system adjacent to the Grand, Maple, Chippewa, Thornapple, and Kalamazoo Rivers, which he estimates would have cost \$7,000,000 or nearly twice the state's actual expenditure during the era, including suspended or abandoned projects and money lost in bank failures. Although Fogel's system could have been built, it would have placed the state's most productive counties on the fringe of feasible commercial agriculture, and forced the state to ship into Lake Michigan and through the treacherous Mackinac straits to reach Detroit and points east. Several of these rivers were actually opened to navigation under the program, without substantially stimulating output. Investment in one or more transpeninsular railroads clearly represents a more productive investment than any system of canals.

With the exception of agriculture, railroads seem to have had little influence on the state's economic growth. Backward linkages were extremely rare: industries producing wheels and rolling stock enjoyed a modest beginning, but iron and locomotives were purchased from other areas. Wood from local farm lots supplied fuel, and direct employment was minimal. Michigan's unfavorable balance of payments usually drained income from the state on the first round of spending, and after 1841, most construction expenditures were made in land scrip. Specie and the notes of specie-paying banks were usually sent east to pay for iron and locomotives. Agricultural development, on the other hand, seems to have been heavily stimulated. Flour and wheat production, land values, and wheat acreage per farm in interior counties within forty miles of the railroads grew in marked contrast to those in tiers beyond the reach of improved transportation. The stimulus proved so powerful that production outgrew carrying capacity, breaking down the road's superstructure and generating demand for solid rails and heavy capacity stock.

Finally, Michigan's railroads give proof to the fact that Democrats, as well as Whigs, gave strong support to internal improvements. Authorized, constructed, and finally sold by a Democratic legislature, Michigan's railroads were unique in their role as the Democracy's railroads.

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