

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

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
Robert James Parks
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ABSTRACT

THE DEMOCRACY'S RAILROADS: INTERNAL IMPROVEMENTS IN MICHIGAN, 1825-1845

by Robert James Parks

Historians have recently recognized the importance of government enterprise in providing transportation to open new areas and facilitate economic growth in antebellum America. Between 1817 and 1860, almost every American state government became involved in a program of internal improvements. The purpose of this study was to examine the experience of a single state attempting to engage in an internal improvements program. Michigan was chosen because its program had not previously been studied, and because its unusual choice of railroads, in preference to the dominant canal technology, promised to add significantly to historical knowledge of early American transportation facilities. The study was based on research in both printed and manuscript government records, newspapers, and the private papers of public officials.

The first chapter serves the dual purpose of introduction and summary. The second and third chapters set Michigan's program in a national context, examining the influences of culture, national policy, and international cyclical movements. For a number of reasons, it is apparent that Michigan's experience was not a unique, but a predictable phenomenon.

The fourth and fifth chapters deal with the Territorial Period and its influence on the new state's decision to engage in a multiple program of public works. Roots of the internal improvements movement can be traced to the opening of the Erie Canal and its influence on the state's economic development. After 1825, the volume of settlement increased significantly, bringing with it an intensified demand for improved transportation. Territorial Roads failed to satisfy popular demands, and a strong movement for trans-peninsular canals developed. After 1830, this enthusiasm was quickly transferred to railroads, which promised special solutions to the region's transportation problems. At the same time, strong elements of sectional rivalry developed. By 1834, the Territory of Michigan was eager for statehood and the opportunity to engage in public works which statehood provided. Frustrated by the claims of Ohio to the Toledo Strip, Michigan assumed statehood and began to take steps toward adoption of a program. After abandoning its claim to the Toledo Strip in 1836 to gain a share of the federal surplus revenue distribution, sectional rivalry within the Democratic Party forced the adoption of a program of construction including three trans-peninsular railroads and three similar canals in 1837.

Chapters VI and VII deal with the program of construction, and operation of the state's public works. Failure of the state bank of deposit is found to be the cause of abandonment of two canals and one railroad. After 1839, economic necessity forced the state to confine its efforts to the Central and Southern Railroads, and the Clinton and Kalamazoo Canal. Until 1844, both Democrats and Whigs accepted the necessity of confining construction to partial completion of the Southern, and the Clinton and Kalamazoo, while pushing the Central west toward Lake Michigan in the hope of making that work profitable enough to pay the interest on all its public debts. Unable to meet this objective, and with public opinion demanding the adoption of the latest technological innovations, the state was forced to sell its public works to pay its public debts.

Chapter VIII examines the forces at work in legislative decision making, and concludes that sectional rivalry was a stronger force than party struggle throughout the period under study. At no time did it become a minor force, and in 1845 gained such strength that a new omnibus bill would have been passed had the Governor not vetoed appropriations.

In the eighth chapter, state finances are examined, and major losses, including the failure of the

state deposit bank, are traced to the Governor's use of state internal improvement funds for currency speculations. After 1841, when the Bank of the United States failed, the state was forced to finance the program on its own resources, and cope with the problem of outstanding securities for which it had received no payment. Although the state repudiated part of its debt, its repudiation was probably justified.

The final chapter deals with problems raised by current literature. Doctrinal preference for private enterprise is found to have a stronger influence than most literature on the national experience would suggest. The conclusions of Albert Fishlow concerning the prematurity of Michigan's program are examined and found wanting in respect to the southern two tiers of counties. Finally, Robert Fogel's program for the economic development of Michigan is found to be inadequate.

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By

Robert James Parks

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CHAPTER I

INTRODUCTION

In the spring of 1837, the Legislature of the state of Michigan formally decided to undertake a multiple program of internal improvement. The decision to build a comprehensive system of public works was the result of complex forces operating on American state governments with such strength that the synchronization of investment decisions generated a long cycle within the national economy. Underlying the course of action chosen by the Legislature was the intricate philosophic and economic transformation of the Atlantic industrial economy. The doctrine of progress approved transformation of environment and higher expected rewards, and in the American context suggested that determined effort could create an even greater rate of change. In early nineteenth century America, progress became a compelling duty. Spurred by the example set by canals and roads in Great Britain, Americans endorsed transportation improvement as a means of encouraging economic development.

By the beginning of the third decade of the nineteenth century, Americans had achieved an unparalleled degree of social and geographic mobility. As farmers

moved west of the tidewater, through the Appalachian barrier and into the middle west, the new mobility began to create problems incapable of individualistic solution. From the beginning, the American farmer was basically commercial. Unlike his European counterpart, he was never a peasant tied to the soil; he was an entrepreneur, governed by market forces and the profit motive. Even when he moved into isolated frontier regions, in which high transportation costs destroyed market incentives, it was with the hope of being able to market the abundant produce of his fertile and inexpensive land sometime in the immediate future. The American geographic environment, however, placed substantial obstacles in the path of an otherwise mobile population. Capital accumulations were small, large scale entrepreneurial skills scarce, and distances great. The absence of major population concentrations which could be connected by exploitative projects, when combined with the sheer physical size of obstacles and the necessity of depending on other works for feeder traffic, seemingly precluded dependence on uncoordinated private investment for the creation of transportation facilities. When physical obstacles threatened to block social and geographic mobility with barriers private capital would not overcome, Americans turned to their governments for help.

During the thirty years prior to Michigan's investment decision, the federal government vacillated in its response to popular demand for a comprehensive program of public works. Southern states, opposed to tax increases burdening the imports traded for their cotton, combined with representatives of states which had already financed their own programs to obstruct expenditures for public works. Although a series of executive reports gave broad interpretation to the government's ability to construct post roads and provide for the common defense, sincere constitutional scruples restricted the scope of federal action, and efforts to promote a constitutional amendment consistently met with failure.

Between 1816 and 1832, the limits of federal authority were spelled out in a series of executive vetoes. Although Madison's veto of the Bonus Bill in 1816 dashed the hopes of supporters of a federal program, his successors found room for increased federal activity within the existing constitutional framework. Through his veto of an act erecting toll gates on the National Road in 1822, and the constitutional essay attached, President Monroe effectively redefined the scope of federal authority. Although Monroe made it clear that he would prefer a constitutional amendment spelling out the limits of federal power, his veto prohibited only the exercise of federal jurisdiction: earning revenues from the public works,

application of the police power for protection, and the right of eminent domain. Federal powers of appropriation were practically unlimited, as long as expenditures were confined to great national projects. During the administration of John Quincy Adams, federal expenditures were increased to new heights through appropriations of funds and land for roads and canals. Land grants to Ohio, Indiana, and Illinois raised the expectation of similar treatment within Michigan. Finally, Andrew Jackson's Maysville Road veto reasserted the necessity of confining federal spending to projects of national importance, yet during Jackson's administration, federal appropriations increased substantially over the levels achieved under John Quincy Adams. Although the funds were spent primarily for old projects, Jackson signed the appropriations into law, and failure to engage in new programs reflects the high priority assigned to liquidating the public debt, rather than basic constitutional scruples.

Between 1816 and 1836, federal actions and the success of several states in undertaking independent programs of transportation improvement fostered ambitions in other states to attempt similar projects. New York's success in completing the Erie canal, after Madison's veto had dimmed hopes of federal aid, generated a cycle of competitive projects designed to penetrate the Appalachian barrier and maintain the commercial position of

New York City's seaboard rivals. Completion of these projects in the early 1830's gave rise to project proposals in the Old Northwest to extend external feeder routes and facilitate the exportation of domestic agricultural surpluses. Federal land grants during the Adams administration added weight to state confidence, and the expectation of gaining a share of the surplus revenue consistently produced by the federal government after the war of 1812 heightened expectations. Early in his administration, President Jackson had made it clear that the federal surplus could be distributed among the states after the national debt had been repaid, and as the date of final liquidation approached, states began to anticipate their shares and engage in elaborate programs of internal improvement. The promise of federal distribution, although not the only factor exerting an influence, was at least partially responsible for the clustering of state investment decisions between 1834 and 1837.

Between 1830 and 1840, state investment decisions were facilitated by the easy availability of foreign capital. Beginning in the late 1820's British overseas investment underwent structural changes which channeled funds from political loans and commercial credit to long-term capital projects. The shift was facilitated by the Bank of England when it was forced to extend credit to

bill brokers and merchant bankers in order to pay interest on large deposits by the East India Company. The resulting high level of capital transfers could be sustained only by transmission of capital without serious inflation in America, or gold drainage from England. In combination with speculation in Great Britain, Jacksonian economic policies expanded the domestic money supply by destroying central banking, placing federal deposits in favored banks of issue, repaying the public debt, and devaluating the currency to facilitate specie importation. A speculative bubble was created which threatened to destroy the equilibrium existing between England and the United States. Contractions by the Bank of England late in 1836, when combined with Jackson's specie circular and the means adopted for effecting the federal surplus distribution, produced a panic in 1837. Equilibrium was temporarily restored by the market support operations engaged in by Nicholas Biddle and the Bank of the United States, using American cotton and state securities to restore the balance of exchange. In 1839, however, new forces attacking Britain's foreign markets destroyed the basis of Anglo-American equilibrium, producing a five year depression that resulted in the inability of many American states to meet their obligations and forced the Bank of the United States to the wall. When the Bank's foreign creditors attempted to support its sinking credit by extending

advances to liquidate pressing foreign obligations, Michigan's securities were hypothecated abroad with the bonds of several other states. In the early 1840's, default and repudiation effectively destroyed the market for state securities, and forced many states to abandon their programs of public works. Failure of the international transfer mechanism to sustain investment throughout the duration of the long cycle and create the basic prosperity essential to successful repayment brought state investment to an abrupt halt and explains the precipitous decline of the interrupted investment cycle generated between 1834 and 1837. In this respect, Michigan's experience was universal, and governed by forces far beyond the state's control.

From the beginning of its existence, the Territory of Michigan had been plagued by transportation problems. Prior to completion of the Erie canal, settlers had bypassed the territory in favor of lands situated closer to the main routes of national commerce. With the opening of the Erie canal, however, important changes began. Construction of major wagon roads by the federal government allowed the mounting volume of settlers entering the Territory through the new lake-canal route to gain access to their lands and begin producing a commodity surplus. At the same time, the Territory attempted to reform its road administration with a system which placed the responsibility for construction and maintenance of its roads on

the township level. Although the system was abstractly more democratic than state or territorial administration, it created heavy burdens with minimal results. By the end of its territorial period facilities had been opened to introduce settlers to the land, creating a substantial demand for improved transportation to market the products of their farms, but existing roads were grossly inadequate for carrying bulky agricultural commodities.

Organized demand for improved transportation facilities appeared at the same instant as demands for improved road facilities, and sectional rivalry dominated the conduct of petitioners almost from the first. In the beginning, demand centered in Detroit and Monroe, eastern lake port towns determined to create a hinterland for commercial exploitation and to become a part of the major east-west transportation route promising to develop between Albany and the Mississippi. As settlement increased, rivalry extended to the tiers of counties west of Monroe and Detroit, and by 1835 had emerged as full scale sectional rivalry. Prior to 1835, sectional ambitions found expression primarily in petitions and massive public meetings, but when the question of paying for a federal survey of the Detroit and St. Joseph railroad came before the Legislative Council in late 1834, the sectional alignment of the northern and southern tiers against the center emerged full blown. Although a temporary compromise was reached

which would last until 1837, sectional rivalry would remain the strongest political force in the state for over a decade.

Early petitions for federal construction asked the government to construct trans-peninsular canals from Lake Erie or the Detroit River to Lake Michigan, but as early as 1830, under the leadership of Governor Cass, public attention began to focus on railroads. Although the region had ample water resources and low summits, residents became impressed with the "peculiar suitability" of the terrain for the new steam-powered transportation. By 1834, there was apparently no doubt in the public mind that if a trans-peninsular project were attempted, it would be a railroad. At the same time, a growing public hostility to toll facilities was demonstrated in attempts to remove private bridges from the federal road between Detroit and Toledo.

Efforts to construct railroads under private control soon proved a failure. Between 1832 and 1837, charters were granted to twenty-five corporations to construct railroads between various cities and villages in Michigan. Only seven of the corporations ever managed to meet capital requirements for incorporation, and of these, only three showed any significant growth. The Erie and Kalamazoo, constructed entirely by private capital, managed to complete its first segment from Toledo to

Adrian in 1836. Financially successful, the road was forced to purchase iron and rolling stock from revenues when stockholders refused to honor further capital calls on their stock subscriptions, and the company proved unable to complete construction to its final terminus at the navigable waters of the Kalamazoo River. The Detroit and Pontiac was completed to Royal Oak, before its backers ran out of capital and were forced to turn to the Legislature for aid. Finally, the Detroit and St. Joseph was able to mobilize capital for initial construction, but only with assurances that the Legislature would authorize state purchase in the near future. In the five years prior to Michigan's admission into the Union, private entrepreneurs proved their inability to mobilize capital for construction. Even had it proved capable of mobilizing capital, there is no assurance that private owners would have been allowed to retain control. Corporate charters granted by both the Legislature and the Legislature Council reserved the right of purchase at cost plus interest after a stipulated period of private ownership.

In 1835 and 1836, Michigan became a major center of the furious speculation that was sweeping the country. Land sales doubled and quadrupled, and the pace of settlement accelerated. In attempts to sell town sites platted for quick sale, town promoters chartered railroads in increasing numbers to convince potential settlers that means

would be provided to market their crops and link them to the outside world. The strongest appeal to settlers, however, seemed to be exercised by the Detroit and St. Joseph, which had recently had its charter renewed with banking privileges, and had been surveyed by the federal government at the expense of the Legislative Council. When the Governor submitted a request for the terms of purchase by Legislative order, construction began and settlement pressed heavily into the central tier in anticipation of the road's completion. By 1837, all except the westernmost county of the second tier, which was unpromising in terms of possible wheat production, was regarded as fully settled by contemporaries.

As the speculative bubble of 1835 and 1836 began to expand, the question of statehood came to a head in Michigan. With the exception of abstract political equality, statehood offered little to Michigan except the opportunity to engage in a program of internal improvements. Indeed, it was the question of possession of Toledo, at the head of the strategic Maumee river system, that precipitated the crisis with the federal government. Approval of future plans for a public works program was so strong that it never became a point of contention between either parties or party factions. Within itself, Michigan's Democracy suffered serious divisions over questions of suffrage and the expediency of assuming statehood,

divisions which were never successfully healed. During the constitutional convention, the factions were so equally divided that even though the Party held almost complete control of the convention, a Whig was elected to the presidency because the Democracy was unable to compromise on a candidate. Although the convention split seriously over questions of suffrage and political policy, an internal improvements clause was incorporated into the constitution without opposition. Under its provisions, the new state government was obligated to engage in a program of internal improvements which would be equal, systematic, and economical. Attached to the constitution was a demand that the federal government supply 500,000 acres of land for the program's support.

In the high pitch of excitement created by the bubble and Michigan's assumption of statehood, Governor Mason and his faction of the liberal wing of the Democracy were able to gain control of the state government. By his skillful and flamboyant handling of the Toledo War, and his firm statement of the state's demands, the young Acting-Governor was able to win the public imagination, and gain the executive office as well as important federal appointments for his faction in the fall elections of 1835. In the beginning, the new Governor adopted a strong stand against the federal government, refusing to compromise the state's ownership of the Toledo strip for federal

grants in aid that were regarded as Michigan's by right. During the Legislative session of 1836, however, the basis of an internal improvements program was passed by the House of Representatives on the Governor's recommendation, only to be defeated in the Senate because of the doubtful legality of acts passed under assumed statehood. In the fall, conservatives rejected the federal government's compromise offer of the upper peninsula in return for Toledo, along with a reduced package of federal grants. In the meantime, however, Governor Mason had shifted ground in his stand, and under his covert leadership, an extra-legal session of the Democratic party acting for the people in their original capacity, agreed to federal terms in order to participate in the distribution of federal surplus revenues. When the Legislature met in 1837, the stage had been fully set for authorizing a program of internal improvements.

Compared to the program adopted by the Legislature, the recommendations included by the Governor in his annual message were conservative. Had the Legislature followed his suggestions, the Detroit and St. Joseph would probably have been purchased, and a board of internal improvements created to survey and recommend feasible projects. Canals would have received preference over railroads, because railroads created a natural monopoly not present in canals. The Legislature, however, was guided by more pressing

considerations. The House Committee on Internal Improvements, in presenting its guidelines for legislative action, suggested immediate construction of the Detroit and St. Joseph with a branch to Monroe, and put forth several project proposals for consideration in the future. When the Legislature got down to business, however, it became apparent that no rational or limited proposal could receive a majority, and the House finally passed a program of multiple works.

Unlike the House, the Senate was able to work out a political solution to the problem of adopting a limited and rational program of internal improvements, and amended the bill to provide for construction of a railroad through the central tier with a branch to Monroe. The amended bill was rejected by the House, however, in an intense battle of sectional rivalries, and the Senate was forced to accept multiple projects, or reject internal improvements entirely. In the end, the determination of the southern tier to have its railroad at all costs triumphed, and the state was saddled with construction of three railroads and three canals. In the conflict of sectional interests in which the multiple program developed, party affiliation played only a minor role; the contest was fought out between representatives of sectional factions within the Democracy.

It is clear from the circumstances under which Michigan's multiple program was adopted that the decisive criterion in project choice was political and not economic; projects were chosen primarily on the basis of equality. Each row of counties in the first five tiers was guaranteed a work of internal improvement running as nearly as possible through its line of county seats in order to spread the bounties of public enterprise to all without discrimination. Except for the automatic assumption that all its works would be naturally profitable, economic criteria played only a second role. Although both the Governor and the House Committee on Internal Improvements offered economic justifications, the Legislature authorized projects for its own reasons.

Within this framework, however, it is possible to determine the criteria exercising the greatest influence on the public mind. Choice of technology was determined by geography and the popular will. Low summits, gentle hills, and ample water resources made it technically possible to construct either canals or railroads with ease. In the southern and central tiers it had been apparent since nearly 1830 that railroads had captured the public mind, and the Legislature authorized the projects without question. In the third tier, public opinion seemed to favor the older and proved form of transportation, and the question was decided after public hearings. A railroad

was adopted in the fourth tier because it would complete a planned route connecting Albany with the Mississippi through Ontario, Michigan, and Wisconsin. The Saginaw canal was authorized because of its proximity to two great river systems, separated by an extremely low summit.

A high level of importance was attached to the ability to facilitate existing lines of communication and become a part of future national routes, in addition to allowing local farmers and merchants access to markets. The Southern was designed to carry traffic from the western end of Lake Erie to the shores of Lake Michigan, while on the Central, great weight was attached to proposed plans for constructing a railroad from Niagara to Windsor. The Saginaw Canal was supposed to allow merchandise and passengers carried on the Great Lakes to avoid the ice and storms of Mackinac by trans-shipment through the Grand and Saginaw River systems. Heavy freight, which the railroads could not carry, was to be shipped through the Clinton and Kalamazoo Canal. In this regard, route length became an important consideration; each project was justified because it was the shortest in respect to some major continental route.

A wide variety of factors governed final location of the projects within each tier. In all projects, cost, technical problems relating to grade and curve, and length played a significant role, but the Board of Internal

Improvements was willing to overlook them when more important objectives could be attained. The Central was diverted from its original route to take advantage of major population concentrations in the Kalamazoo valley, emphasizing the ability of the road to exploit existing markets. In contrast, great stress was placed on the "shortest and most direct route" in locating the Southern, and major deviations from the shortest route were planned to develop potential milling centers, and destroy the Erie and Kalamazoo. By diverting trade from northern Indiana, the Board hoped to end the possibility of the state being bypassed by a direct route from Toledo to Chicago. On projects in the third, fourth, and fifth tiers, population concentrations were generally disregarded in favor of cost and developmental factors. West of the eastern two counties in these tiers, population was a negligible factor. The Clinton and Kalamazoo Canal was located through Mount Clemens and Pontiac because of their population, but between these points, route cost was the decisive factor. Finally, on the Northern, the eastern terminus was selected because of its freedom from ice. Aside from the political necessity of connecting the line of county centers as nearly as possible, no single factor seemed to determine route location.

The program adopted by the Legislature was not designed to preclude construction of projects by local and private enterprise. If the concepts of ownership

outlined in the Governor's annual message of 1837 can be used as a guide, state enterprise was primarily concerned with constructing and controlling main trunk lines across the peninsula to prevent their monopolization by private enterprise. Even the most radical members of the Democracy, however, realized that state resources were inadequate for construction of the feeders and branch routes demanded by a comprehensive system of transportation. During 1837 and 1838, \$320,000 was granted to four private corporations to facilitate construction, and charters were extended freely to companies planning to build connectors into remote areas.

To finance its multiple projects, the state depended on being able to mobilize a series of resources. In addition to funds raised by a bond issue of five million dollars, the Legislature planned on being able to use money available from the federal surplus revenue distribution, the five per cent fund, and revenues from the sale of half a million acres of land which, although not granted until 1841, were regarded as the state's by right. Without these resources, the state had no hope of completing a program estimated in 1837 to cost over seven million dollars. By anticipating sources of funds, the state set the stage for later financial tragedy. One by one resources either disappeared or failed to materialize. Federal surplus revenue funds, for which the Democrats

had sacrificed Michigan's claim to Toledo, dried up after the first three quarters of 1837 and failed to appear again for nearly half a century. At the same time, federal land sales within the state fell off in response to the depression and the Specie Circular, diminishing receipts from the five per cent fund. Between 1838 and 1841, when the long-expected half million acres of public domain was finally granted, Michigan was forced to rely heavily upon the proceeds of her bond issue.

Under a law passed the day following the Internal Improvements Act of 1837, the Legislature authorized the Governor to negotiate a loan of five million dollars to finance its program of internal improvements. Due to difficulties stemming from the panic of 1837 and the Governor's financial manipulations, the bonds were not marketed for more than a year. Under a contract signed on June 1, 1838, the Morris Bank and Canal Company became the state's authorized agent, and in return guaranteed quarterly installments of \$250,000 after an initial payment of \$1,300,000, in case the bonds could not be marketed. In November, 1838, three-fourths of the Morris Bank's installments were taken over by the United States Bank of Pennsylvania and the balance guaranteed, in return for possession of bonds for the unpaid balance. Both banks continued payments until April, 1840 when the Morris Bank failed, and although the Bank of the United States refused to honor

its guarantee, it continued to pay installments until October, 1841. Under these arrangements, the state received over \$2,560,000 to support its internal improvements program.

Failure of the state's agents confronted the Legislature with the problem of prematurely providing for the payment of interest and gaining control of bonds covering the unpaid balance of its contract. By the time the Legislature met in January, 1842, the state was already in default of six months interest on its bonds. Unable to distinguish between bonds receiving full and partial payment, the Legislature offered to redeem all its bonds by allowing their holders to return them for cancellation of the unpaid balance, but the bondholders refused to respond. The following year, under pressure from stockholders who had purchased their securities prior to November, 1838, and able to discriminate between these purchasers and those who had acquired the state's obligations from the Bank of the United States, the Legislature adopted a new solution to the problem. Bonds purchased prior to November 15, 1838, were honored at their full value, with interest funded through July, 1845. Bonds purchased subsequently were credited with payments received, minus twenty-five per cent damages on the unpaid balance, with interest funded in the same manner as full paid securities. Under this formula, the state paid

approximately three hundred dollars on the thousand against the par value of its part-paid bonds. Although parties holding the bonds hypothecated abroad by the Bank of the United States against loans to liquidate its losses on cotton speculations considered the state's policy one of repudiation, Michigan's Democrats were never of the same opinion. Convinced that the Bank held final possession until after the state announced its policy, the state treated the matter as a broken contract and attempted to pay value for value received. Confronted in 1846 with the alternatives of default and repudiation, or selling the public works, the Legislature liquidated the internal improvements program to avoid dishonor.

In addition to losses suffered by the abandonment of its canals and the Northern Railroad, Michigan suffered substantial losses through the financial manipulations of its Governor. Abandonment of projects after the failure of the Michigan State Bank, and losses suffered when the Clinton and Kalamazoo Canal proved to be unprofitable, cost the state about \$600,000. Governor Mason's misuse of funds resulted in an equal loss to the state. Over \$100,000 was lost in negotiation of the original loan contract and its subsequent modifications because of complications caused by the Governor's desire to use the proceeds to speculate in exchange, engage in central banking, and benefit his friends. Even larger amounts,

however, were lost by the use of state funds to stabilize Michigan's wildcat banks and profit from exchange speculation through the state deposit bank. When the bank failed in February, 1839, it carried with it over \$500,000 in state assets, and resulted in suspension of construction on the Northern Railroad, and the Northern and Soo Canals. Abandonment of projects and the loss of funds through the Governor's speculations accounted for the major financial losses suffered by the state in its program of internal improvement.

Next to financial shortages, sectional rivalry created the largest obstacle to successful completion of the state's public works. After the legislature battle in the spring of 1837 between sectional factions of the Democracy, the struggle between competing sections continued unabated through 1846. After the fall elections of 1837, sectional rivalry carried increasing overtones of party politics, and in 1840 the Whigs were carried into power on a platform containing the program favored by the central tier. In power, however, the party proved unable to enforce organizational discipline, and the necessity of making the Democrat's investments productive forced them into policies markedly similar to those of Michigan's Democracy. Sectional struggle continued to overshadow party politics even in the Whig dominated Legislature. In mid-1841, the Democrats managed to gain

control of the Whig party machinery, and carried the state in the fall elections. After 1842, the Democracy had full control of the machinery of state government for more than a decade. During 1842 and 1843, while the state was staving off bankruptcy and attempting to make the Central and Southern Railroads productive, sectional interests allowed the concentration of resources in these projects. As the state began to recover in 1844, however, sectional rivalry appeared again with renewed vigor. Representatives of the third and fourth tier began to demand an equal application of government funds to their sections, and in 1845, an omnibus bill of greater proportions than that of 1837 was passed. Had it not been for the Governor's veto, the state would have again found itself heavily committed to a multiple program of public works. Faced with the problems of meeting interest on its debt and rebuilding its railroads to increase their efficiency, and unable to find an acceptable solution to its sectional problems, the state was forced into selling.

Although confined to a single state in a short period, a case study of Michigan's internal improvements program throws light on major problems in American economic history. Even though confirming Carter Goodrich's observation that doctrinal strictures against government participation in economic activity excluded the transportation and communication sectors in the 1830's, it suggests

that doctrines against government participation were applied more vigorously in the 1840's than Goodrich suspects.¹ The public was deeply concerned not only with keeping business out of government, but with keeping government out of business. Study of patterns of population change in Michigan's interior counties suggests that examples of the process of "anticipatory settlement" described by Albert Fishlow in his study of American Railroads and the Transformation of the Ante-Bellum Economy can be found as early as the mid-1830's.² By confirming the existence of such patterns, however, the study takes issue with Fishlow's conclusion that Michigan's railroads were built "ahead of demand," and suggests that further case studies are necessary before state projects in the 1830's can automatically be classified as "ahead of demand." Finally, examination of Michigan's transportation requirements points out that the pattern of canal construction formulated for the state by Robert Fogel as an alternative to railroads is a high cost alternative, and totally out of context with the state's special problems.³

¹Carter Goodrich, Government Promotion of American Canals and Railroads, 1800-1900 (New York: Columbia University Press, 1960).

²Albert Fishlow, American Railroads and the Transformation of the Ante-Bellum Economy (Harvard Economic Studies, Vol. CXXVII; Cambridge, Mass.: Harvard University Press, 1965).

³Robert Fogel, Railroads and American Economic Growth: Essays in Econometric History (Baltimore: Johns Hopkins University Press, 1964).

Michigan's experience in the construction of the Democracy's railroads embraces more than the laying of ties and rails. It deals with a society in motion attempting to find solutions to problems of transportation, political structure, sectional rivalry, and financial responsibility. Finally, it illustrates the problems created by attempting to engage in social overhead capital creation in the face of regional conflict.

CHAPTER II

INITIAL EXPECTATIONS

In 1837 the newly admitted state of Michigan launched a program of social overhead capital creation designed to facilitate its economic development. Nine years later, when the flush of initial enthusiasm had faded in the harsh light of depression and financial disaster, the state sold its holdings and abandoned the policy of direct investment in its economic destiny. In 1850 this decision was formalized in the new state constitution by a prohibition of state participation in internal improvement. Thus marked with the seal of disrepute and failure, scholars have long regarded the program as a "white elephant." At best, apologetic historians have excused it as the result of being inevitably "caught up in the mania for internal improvements," in a boom period in which it is difficult to understand why the people of the time could have ignored clear indications that they were riding for a fall."¹ A less sympathetic observer has characterized the state as "led astray by the example set by older and more populous states," into the

¹Willis Dunbar, Michigan: A History of the Wolverine State (Grand Rapids, Michigan: William B. Eerdmans Publishing Company, 1965), pp. 330, 335.

task of supplying "an extensive system of public works out of all proportions to their local wants and utterly beyond their limited means."² Even the most recent analysis of the developmental impact of American railroads has suggested that the Michigan program was ahead of demand.³

The result of Michigan's experiment in internal improvement is far from unique. Indiana and Illinois entered programs at the same time with the same result, and all of the Old Northwest had similar experiences. Even the older, more populous, more developed states found their programs in difficulty, and a few experienced bankruptcy and repudiation. Such a broad similarity in timing and experience suggests a similarity in stimuli and parameters for state programs in the 1830's and 1840's. The most commonly cited are the "mania for internal improvements" and the Panic of 1837, although such a list is far from exhaustive. It seems important, therefore, to examine the stimuli and parameters of social action in the 1830's and 1840's before turning to a specific analysis of the state's internal improvements program.

Historians have labeled the apparent compulsion of states to engage in social overhead capital creation in the

²Reginald C. McGrane, Foreign Bondholders and American State Debts (New York: Macmillan Co., 1935), p. 144.

³Fishlow, p. 190.

Jacksonian period as the "mania for internal improvements." Of limited descriptive value, the label also has the unfortunate denotation of irrationality, of subconscious, neurotic compulsion as the basis for decision making. It seemingly renders further investigation unnecessary. It is not satisfactory, however, to dismiss the ardent desire of Americans in the second quarter of the nineteenth century to engage in state sponsored transportation projects as a simple mania, for deeper investigation reveals the desire to be a manifestation of basic American intellectual dynamics, and more broadly, an outgrowth of fundamental ideals shaping modern western civilization. Specifically, the "mania for internal improvements" is an outgrowth of the American adaption of the doctrine of progress.

In the history of ideas, the idea of progress is relatively new. Yet, in terms of its impact, it is perhaps the most important factor shaping modern times. E. E. Hagen, the economist, has rated it as the most important factor in beginning economic development. According to Hagen, only when the rate of change becomes sufficient to bring the realization that pursuit of change might be rewarding can sustained economic growth begin. Until change, or progress, is consciously pursued, the sociological transformations necessary to economic growth will be suffocated

by traditional authoritarianism.⁴ J. B. Bury, in his Idea of Progress, suggests that the idea was probably widely discussed in French salons and drawing rooms early in the eighteenth century, but finds the first written expression in 1837 in the works of the Abbe de Saint-Pierre.⁵ In Bury's thinking, the Abbe's Observations on the Continuous Progress of Universal Reason represents the transition from earlier Cartesianism, with its preoccupation with purely intellectual problems, to the later thought of the eighteenth century and its concentration on social problems. He was apparently the first to proclaim the new creed that man's destiny was infinite social progress.⁶

Space does not permit a detailed analysis of the development of the doctrine of progress and its national manifestations in the eighteenth century. It is sufficient for our purposes to note that by the end of the century, a widely accepted framework of ideas had been erected among intellectuals which, based on the idea that man was inherently good despite the erosion of behavior by degenerated

⁴Everett E. Hagen, On the Theory of Social Change: How Economic Growth Begins (Homewood, Illinois: Dorsey Press, Inc., 1962), pp. 12, 13, 52, 35, 26, 8.

⁵J. B. Bury, The Idea of Progress: an Inquiry into its Origin and Growth (New York: Dover Publications, 1955), pp. 128, 136.

⁶Ibid., pp. 142-143.

institutions, extended the hope that he was perfectible. As a vehicle for human transformation, it suggested the perfection of civil and social institutions. For proof of this proposition, it offered the assertion that mankind was capable of learning from experience, as proven by the superiority of modern man over his ancestors. History assumed new dimension as a source of vicarious experience, and as an illustration of the past progress of mankind. A salient example of this belief is Adam Smith's Wealth of Nations, which was written as much more than a treatise on economics. It was "a history of the gradual economic progress of human society, . . . [which] suggests the expectation of an indefinite augmentation of wealth and well being."⁷

If the idea of progress was immediately evident to intellectuals taking the long view, the masses were slow to accept it. Bury, in his study of the idea, dates its penetration of the general level of the community between 1820 and 1850 in Europe.⁸ Ekirch, in his study of America, dates the beginning of widespread mass appeal in the period after 1815.⁹ Bury feels that rapid transformation of external conditions in this period brought home to the common

⁷Ibid., p. 220.

⁸Ibid., p. 324.

⁹Arthur A. Ekirch, The Idea of Progress in America, 1815-1860 (New York: Peter Smith, 1951), 32-33.

man's mind the conception of an indefinite increase of man's power over nature as his brain revealed its secrets, and that continuing material progress sustained the belief.¹⁰ Thus, in the first quarter of the nineteenth century, the words, "progress" or "improvement" became examples of what Carl Becker characterized as "Words with uncertain meanings that are permitted to slip off the tongue or the pen without fear and without research; words which having from constant repetition lost their metaphorical significance, are unconsciously mistaken for objective realities."¹¹

Although America shared in the development of the doctrine of progress, various studies indicate that the American version was an adaptation with significant deviations from the European. Arthur Ekirch has concluded that "in the United States, . . . the American people felt that, although progress was indeed certain, it could nevertheless be impeded or accelerated by human will and effort."¹² It was not merely a prophecy or a theory, but a call to action. In the eighteenth century, the concept fell on fertile soil in a society which was rapidly carving a new land out of the wilderness. Franklin, writing to Europeans in the 1780's, repeatedly mentioned "Progress," and the "right road of

¹⁰Bury, p. 324.

¹¹Carl L. Becker, The Heavenly City of the Eighteenth Century Philosophers (New Haven: Yale University Press, 1932), p. 47.

¹²Ekirch, p. 11.

improvement."¹³ John Adams and Thomas Jefferson expressed similar faith in the Doctrine, and Ekirch finds its expression in the writings of both Federalists and Republicans.¹⁴ In the early years of the republic, external struggles consumed a major portion of national attention, and it was only at the close of the War of 1812 and the Napoleonic convulsions, that the doctrine revealed its true proportions.

Peace in 1815 brought more than a simple ending of hostilities. "In 1815 for the first time Americans ceased to doubt the path they were to follow. Not only was the unity of their nation established, but its probable divergence from older societies was also well defined."¹⁵ At a time when Europe was plunging into the grip of political, social, and economic reaction, America was the last remaining stronghold of the democratic optimism which had swept the world at the close of the eighteenth century. This sense of uniqueness and mission was reinforced by the rapid material and political advances in subsequent decades. The rapidly expanding population was provided for by the land's abundant resources and growing frontier. New techniques of production were applied, and industrial growth

¹³Ibid., pp. 26, 27.

¹⁴Ibid., pp. 30-32.

¹⁵Henry Adams, History of the United States, IX, 220, quoted in Ekirch, pp. 32-33.

began; with the exceptions of the serious panic of 1819-1820 and the depression of 1839-1844, the era was one of general prosperity. State constitutions were liberalized, and suffrage was broadly expanded:

The reality provided by this material and cultural advance also served to strengthen the old idea that America enjoyed an especial and unique position in the world. The American people, imbued with a strong faith in the efficacy of their own physical and intellectual achievements, universalized their experience into a general theory of progress to which the rest of the world was expected to accede. In the eyes of the Americans the older civilization of Europe was already in a state of decay. Confident of their own future in the 'era of good feeling' and of youthful nationalism between the Old and New World with the proclamation of the Monroe Doctrine in 1823. Later during the forties and fifties, the concept of a peculiar American mission, under the slogans of Manifest Destiny and of Young America, became transformed into a rationalization for territorial expansion in those regions considered necessary for the westward movement of the Republic.¹⁶

Foreign observers were keenly aware of the American faith in its own progress and cultural uniqueness. Toqueville was awed by the rapidity with which the wilderness was tamed, and even more amazed at the ease with which the American accepted change, almost as if it were the natural order.¹⁷ Conquest of nature and the continent, he said haunts "every one of them in his least as well as in his most important actions and [seems] to be always flitting

¹⁶Ekirch, p. 36.

¹⁷Alexis de Toqueville, "Fortnight in the Wilderness," Toqueville and Beaumont in America, ed. George W. Pierson (New York: Oxford University Press, 1938), p. 232.

before his mind." He traced the roots of this passion to the state of equality of social condition, or democracy, which he saw as the basis of the dynamic belief in the perfectibility of man.¹⁸ Mrs. Trollope, in her distinctive fashion, observed the same thing, and was amazed at the audacity of Americans who considered themselves superior to Europeans. "It is amusing to observe how soothing the idea seems, that they are more modern, more advanced than England."¹⁹ "A single word indicative of doubt, that any thing, or every thing, in that country is not the very best in the world, produces an effect which must be seen and felt to be understood."²⁰ If other foreign commentators on America are to be believed, Mrs. Trollope was not atypical in finding Americans boastfully preoccupied with their progress and "institutions."

The doctrine of progress was an important component of the "mania for internal improvements." Indeed, during the period the term "improvement" seems to have been used interchangeably with the word "progress." Writers of the era often spoke of the "progress of

¹⁸Alexis de Toqueville, Democracy in America (New York: Vintage Books, 1960), II, 232.

¹⁹Frances Trollope, Domestic Manners of the Americans (New York: Vintage Books, 1960), p. 161.

²⁰Ibid., p. 408.

improvement," and the "spirit of Improvement" when discussing progress. Indeed, not "progress" but "improvement" seems to have been the more common term. The concept that man's progress depended on the fullest use of the resources of his environment was central to the doctrine. According to Ekirch, "During the 1820's, this philosophy was given a practical application in the programs for internal improvement suggested for the Federal government's adoption."²¹ The justification of internal improvements by the doctrine of progress is perhaps nowhere more eloquently revealed than in the writings of John Quincy Adams. Adams devoted a major portion of his inaugural address to listing the achievements of the nation since its foundation in 1789 "as an experiment upon the theory of human rights." Among these achievements, he listed the fact that "the dominion of man over physical nature has been extended by the invention of our artists."²² But Adams was not content with the successes of the past, and if his inaugural was devoted to outlining past progress, his First State of the Union Message was a plan of action for its extension. In what might be considered as a corollary to the theory of government outlined in the Declaration of Independence, Adams stated:

²¹Ekirch, p. 51.

²²Ibid., p. 73.

The great object of the institution of civil government is the improvement of the condition of those who are parties to the social compact, and no government, in whatever form constituted, can accomplish the lawful ends of its institution but in proportion as it improves the condition of those over whom it is established. Roads and canals, by multiplying and facilitating the communications and intercourse between distant regions and multitudes of men, are among the most important means of improvement. But moral, political, and intellectual improvement are duties assigned by the Author of Our Existence to social no less than to individual man. For the fulfillment of those duties governments are invested with power, and to the attainment of the end--the progressive improvement of the condition of the governed--the exercise of delegated powers is a duty as sacred and indispensable as the usurpation of powers not granted is criminal and odious.²³

To institute this program, Adams recommended a national university, government sponsored voyages of discovery, a uniform system of weights and measures, a national astronomical observatory, the improvement of agriculture, commerce, and manufactures, and encouragement of the mechanical and liberal arts. In addition, he recommended the establishment of a program of transportation improvements for projects too great for the resources of a single state.²⁴

Although Adams plea is for special action--federal participation in internal improvements--it characterizes the force with which the doctrine of progress served as a

²³A Compilation of the Messages and Papers of the Presidents, 1789-1897, ed. James D. Richardson (10 vols.; Washington: Government Printing Office, 1896-1899), II, 295. Cited hereafter as, Messages of the Presidents.

²⁴Ibid., pp. 299-317.

justification and a stimulus for social action. I do not mean to suggest that the programs of internal improvement in ante-bellum America were solely the product of a philosophic impulse, because both specific and general economic needs played an important causative role. I do maintain that there was a justification transcending the purely economic which makes the "mania for internal improvements" an understandable phenomenon and explains the often apparently irrational compulsion to engage in such projects. This justification also helps to explain the absence of specific identification of expected results in project proposals, and the high general level of expectations. The fact that Michigan was seduced by the spirit of internal improvement could almost have been predicted. Had the state stood aloof from the currents of the age and evaluated its needs and resources with perfect rationality, its reaction would have been far more worthy of note.

Armed with the tools of economic analysis, the modern historian has a distinct advantage over earlier writers in judging the success or failure of public works. Although project proposals in ante-bellum America sometimes described general economic needs and occasionally recognized specific elements of what is now known as public utility theory, contemporaries failed to cope with the special problems posed by social overhead capital. Indeed, the creation of a comprehensive body of knowledge to

deal with social overhead capital is relatively recent, and still in the process of refinement. Used in its broadest sense, the term social overhead capital embraces such diverse activities as law enforcement, education, sanitation, transportation, power, communication, and water supply--in short, any basic service without which primary, secondary, and tertiary productive activities cannot survive. In practice, the concept is most frequently applied to power and transportation.

Criteria for including an activity in the category of social overhead capital are varied, but within a broad range, agreement exists. Services provided should facilitate, or be basic to, a great variety of economic activities. In the twentieth century, these services are usually controlled or owned by public agencies, and provided free of charge, or at a regulated rate. In most cases, the services cannot be imported. And finally, the investment required is characterized by technical indivisibility or "lumpiness," increasing returns to scale, and an unusually high capital-output ratio.²⁵

Combined with the need for special pricing policies, these characteristics of social overhead capital have been used as a justification for government investment and

²⁵Albert O. Hirschman, The Strategy of Economic Development (New Haven: Yale University Press, 1958), p. 83.

control. Because final outputs are utilized by a broad range of industries and services as an input factor, it is seldom that more than a small portion of the benefits created by social overhead investment can be realized by its owners; hence the low rate of return. Without government financing, private enterprise would postpone investment in such large-scale, long-term projects until short-term alternatives with a higher rate of return were exhausted, delaying growth in sectors or industries dependent on the project's external economies as input factors. In addition to the large scale of risk involved, technical indivisibilities tend to create monopolies calling for special pricing policies. If profits are maximized by limiting services to the point where marginal revenue equals marginal cost, full utilization of resources will be frustrated. Similarly, if facilities are operated at cost, so that total cost and total revenue are equal, maximization of external economies may still be restricted. Maximum returns to the economy from such investment can only be realized by operating at levels at which marginal use value equals marginal cost, even though such a policy involves running the project at a financial loss. A railroad, for example, involves heavy fixed capital investment with relatively small variable costs. Operation at maximum profits without price discrimination would mean excess capacity and a waste of resources. Even operation at a

price sufficient to cover interest and variable costs would forbid those goods produced efficiently enough to enter the market at cost plus the additional charges necessary to cover variable costs from being shipped. Maximum returns to the community would be realized only when the excess capacity was absorbed and goods could be shipped at prices sufficient to cover marginal or variable costs. Under these circumstances, community welfare would be increased by operating at variable cost, allowing society to absorb capital costs, which would be more than paid for by the income realized from economies not absorbed in the road's revenues. Taxation to cover capital costs would be much less damaging than losses suffered by profit maximization or policies leading to financial solvency in the railroad.²⁶ Although the classical justification of investment, that profits equal the cost of capital, appeals to political and economic conservatives, the criterion of profits leads to misapplication of resources when applied to social overhead capital.

Developing criteria for evaluating social overhead project proposals and allocation of capital has proven the most serious obstacle to objective application of the

²⁶Stephen Enke, Economics for Development (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1963), pp. 284-297.

theory. It is inappropriate here to discuss the series of tests which have been designed, and sufficient to note that all of them flounder when confronted with the necessity of assessing the absolute value of external economies. Perhaps the best summation is provided by Albert O. Hirschman, when he suggests that:

The trouble with investment in SOC [Social Overhead Capital]--or is it its strength?--is that it is imper-vious to the investment criteria that have been devised to introduce some rationality into development plans. The computation of capital-output ratios often presents almost insuperable statistical difficulties (as in the case of highways) and is moreover considered to be misleading anyway because of the igniting effect SOC investment is expected to have on DPA [Direct Productive Activity]--As a result, SOC investment is largely a matter of faith in the development potential of a country or region.

The fact that there is so little possibility of evaluating objectively how much investment in SOC is really indicated in any given situation should give us pause. Such a situation implies at least the possibility of wasteful mistakes.²⁷

Because of its unquantifiable returns, social overhead capital projects have often become a favorite tool of planners--failure is difficult to prove statistically when external economies can be cited.

Recent studies, however, have cast some doubt on the wisdom of placing disproportionate emphasis on social overhead capital creation. Citing the asymmetric behavior of investment cycles in developed and underdeveloped economies, and introducing the element of imperfect foresight

²⁷Hirschman, p. 84

to his analysis, Paul Cootner has suggested that investment may be pulled into underdeveloped nations by developed countries' demand for raw materials, and that most external economies may be realized by the investing areas. At the same time, he suggests, foresight, however imperfect, may induce private enterprise to invest in social overhead in the hope of realizing its economies if a sufficient pace of growth is sustained to produce faith that returns will eventually be realized. However, Cootner warns that provision by private enterprise may tend to lag and bunch, with entrepreneurs waiting to invest until demand is more than sufficient to justify additional capital creation and then, because of the high level of demand and the need for lowering resource prices, overshoot requirements in their building program.²⁸ Another study by Albert Hirschman, has gone so far as to suggest the possibilities of development by way of social overhead capital shortages.²⁹ Nevertheless, at this point in its growth, the basic elements of the theory of social overhead provide useful tools for assessment of past projects, and a useful backdrop for explaining the developmental expectations of early nineteenth century Americans.

²⁸Paul Cootner, "Social Overhead Capital and Economic Growth," The Economics of Take-off into Sustained Growth, ed. W. W. Rostow (New York: St. Martin's Press, 1963), pp. 261-284.

²⁹Hirschman, p. 87.

Although a study of project proposals indicates a general absence of specific economic expectations and a lack of analytical models explaining the effects of canal construction, it would be hasty to conclude that economic expectations were absent. As Harvey Segal has pointed out, a more reasonable explanation for the lack of explicitly stated expectations probably lies in the opening statement of Gallatin's Report, that: "The general utility of artificial roads and canals is at this time so universally admitted as hardly to require any additional proofs."³⁰ The example set by Great Britain seems to have been a major factor stimulating Americans to promote economic growth by improving internal transportation.

Prior to 1759, improvement of water transportation in England was confined to the deepening of navigable rivers. In that year, James Brindley undertook the cutting of the Worsley Canal for the Duke of Bridgewater, a project which took two years to complete, and which cut the price of coal in Manchester by half. Bridgewater followed this canal by one from Manchester to the Mersey, and still later, the Grand Trunk was undertaken.³¹ The success of

³⁰Harvey Segal, "Canals and Economic Development," Canals and American Economic Development, ed. Carter Goodrich (New York: Columbia University Press, 1961), p. 219; Albert Gallatin, Roads and Canals, American State Papers, Miscellaneous, I, p. 724.

³¹Paul Mantoux, The Industrial Revolution in England in the Eighteenth Century: an Outline of the Beginnings of the Modern Factory System in England (revised edition; New York: Harper and Row, 1961), pp. 124-125.

these projects triggered a "canal mania" similar to that of the United States, and within thirty years, England was furrowed with canals built by private concerns bent on extracting profit from the new mode of transportation. From 1000 miles of navigable waterways in 1750, England produced a system of about 4250 miles of navigable waterways by 1850.³² Although Paul Mantoux regards the mania as a transient phenomena resulting from the industrial revolution, Witt Bowden has extended a more provocative explanation.³³ Bowden feels that in addition to the direct benefits realized in reduced transportation costs, canals also had an indirect result of incalculable importance--the stimulation of interest in material improvement of all kinds. As the most phenomenal engineering feats of the time, they were visited by the nobility and gentry of the entire nation, and the tremendous profits said to have been made was a further stimulus to engagement in cost-reducing innovation.³⁴ Bowden feels that canal construction was especially important in the complex of factors creating the industrial revolution "because of

³²Charles Hadafield, "Canals: Inland Waterways of the British Isles," A History of Technology, ed. Charles Singer, E. J. Holmyard, A. R. Hall, and Trevor I. Williams (Oxford: Clarendon Press, 1958), IV, 563.

³³Mantoux, p. 63.

³⁴Witt Bowden, Industrial Society in England towards the end of the Eighteenth Century (second edition; New York: Barnes & Noble, Inc., 1965), p. 63.

the accompanying nation-wide stimulation of mechanical ingenuity:. . ."35

The effect of canals on economic growth was so apparent to contemporaries that Adam Smith gave them a pivotal importance in economic growth. According to Smith, "The greatest improvement in the productive powers of labour and the greater part of the skill, dexterity, and judgement with which it is any where directed, or applied, seem to have been the effects of the division of labour."³⁶ He believed the increase of productive power to be proportional to the extent of the division of labor because of three effects; improved dexterity, saving in time, and the application of machinery to specialized functions, creating "a general plenty that diffuses itself through all the different ranks of society."³⁷ While Smith's model implied infinite possibilities for expansion, Smith applied definite and finite limits because "this division must always be limited by the extent of the market."³⁸ Since water carriage was cheaper, Smith suggested that enterprises be located along seacoasts and navigable rivers, expanding

³⁵Ibid., p. 65.

³⁶Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations (New York: Modern Library, 1937), p. 3.

³⁷Ibid., p. 5, 7, 8, 9, 11.

³⁸Ibid., p. 17.

their market to the whole world.³⁹ Later in his analysis, he characterized good roads, canals, and navigable rivers as the "greatest of all improvements" because they equalize the rent of the land by allowing farmers in remote districts to market their crop surplus and break the monopoly of lands adjacent to towns.⁴⁰ As we shall see later in this chapter, the doctrine of surplus disposal was the most frequently cited in American project proposals.

Transportation improvements and their effects in England were an important component in America's desire to engage in internal improvements. The attention of Americans became focused on the burst of canal construction in the last half of the eighteenth century. They were impressed by their stimulus to trade, ports, and towns, as well as by their reduction of the cost of raw materials, their small cost to the state, and their profitability. Success in England was repeatedly cited by Americans favoring canals.⁴¹ Even though Americans protested strongly at social and governmental practices with British or "monarchical" overtones, they had few scruples against adopting practices

³⁹Ibid., p. 18-19.

⁴⁰Ibid., p. 147.

⁴¹Carter Goodrich, Canals in American Economic Development, pp. 1-2.

which were leading England to economic eminence. As Samuel Rezneck has pointed out; "Paradoxically, American industrial consciousness grew out of the broad wave of political and economic resentment, but was mainly directed almost from the start toward the transfer of English skill and technique to this country."⁴² After 1787, urban activity in America was characterized by a growing zeal for manufactures, which was expressed by the formation of associations offering prizes and circulating propaganda. Support for these efforts was often expressed by the patriotic consumption of home manufactures in preference to superior British goods.⁴³

Historians studying transportation have found occasional proposals for canals in the Colonial Period, but the first important recommendation for construction of canals and turnpikes appears in Hamilton's famous Report on Manufactures. Although he quarreled with Smith's recommendations for American development, which would have forced the nation into agricultural specialization, Hamilton accepted his analysis of specialization and division of labor, with its resulting saving of time, dexterity, and application of machinery, along with the importance of market expansion. Included in Hamilton's list of measures

⁴²Samuel Rezneck, "The Rise and Early Development of Industrial Consciousness in the United States, 1760-1830," Journal of Economic and Business History, IV (1932), 778.

⁴³Ibid., p. 795.

for promoting manufactures was the "facilitating of the transportation of commodities."⁴⁴ He noted the assistance transportation improvements had given manufacturers in Great Britain, and expressed the wish that Americans could duplicate it. He hoped that citizens in every state and their state governments would turn their attention to these improvements, but he was also aware of the danger that local interests and jealousies might sacrifice the welfare of the whole. He therefore made improvement a proper sphere for national action, and asked for a clear-cut authorization for the federal government to act in such a capacity. Finally, in a full paragraph quotation of Adam Smith, he presented the latter's doctrine that roads, canals, and improved rivers were "the greatest of all improvements" because they reduced the rent of land by facilitating the disposal of the agricultural surplus of distant producers.⁴⁵

In the press of events and political antagonisms, Hamilton's Report on Manufactures was shelved by Congress, and aside from a few private turnpikes, American transportation remained unchanged for a decade. It was not until

⁴⁴Alexander Hamilton, "Report on Manufactures," Alexander Hamilton's Papers on Public Credit, Commerce and Finance, ed. Samuel McKee Jr. (New York: Liberal Arts Press, 1957), p. 246.

⁴⁵Ibid., p. 246; Smith, p. 147, 681-686.

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the Jefferson administration that the cause was taken up again. Indeed, it was during this administration that the components of the ante-bellum problem of internal improvements came to the fore.

It would be inappropriate here to present an analysis of the complex forces leading the champion of limited government and agrarian democracy to adopt a plank from the program of his former rival. As one writer has pointed out, "his behavior in office becomes clear when we realize that he sought to give expression not to his private values but to the majority will."⁴⁶ There is ample ground for the belief that the problems of transportation were of major concern to the American people. Recent authors have emphasized that the American farmer was far different from his European counterpart, and that the basis of this difference lay in his fundamental commercialism. The American farmer was never a peasant with a rural culture, tied to the soil by an emotional dedication to a traditional and precapitalistic outlook; he was an entrepreneur, governed by market forces and the profit motive.⁴⁷ Even in the eighteenth century complete self sufficiency was very rare, and farmers constantly sought a marketable product.

⁴⁶Stuart Bruchey, The Roots of American Economic Growth, 1607-1861: an Essay in Social Causation (New York: Harper & Row, 1964), p. 118.

⁴⁷Fishlow, p. 165-166.

Usually, the elements of self sufficiency present can be traced to the inadequacy of transportation at a particular time and place.⁴⁸ As settlement moved beyond the fall line and the mountains, the problem became more and more acute. The Whiskey Rebellion had made that lesson clear, and Jefferson had one of its leaders, Albert Gallatin, in his cabinet. Jefferson had even attempted to purchase New Orleans to secure an open route of transportation for the trans-mountain West. In 1800, with the Indian menace quieted in the Old Northwest, it must have been apparent to Jefferson that the future of his agrarian democracy rested on the development of marketing facilities.

The developmental expectations of contemporaries add to the suspicion that even a purely agrarian democracy could not have avoided roads and canals. Even Jefferson, in his private desire for an agrarian utopia, only contemplated the reduction of commerce to the level necessary to carry off the agricultural surplus, and it is precisely on this ground that many contemporaries justified internal improvements. The possibility of raising the level of national income by providing means for marketing the commodity surplus, pointed out by Smith and Hamilton, appeared again in Gallatin's Report, in 1808, in the speeches of Dewitt Clinton in 1815, and in the

⁴⁸Bruchey, pp. 26-27.

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statements of Governor John Schulze of Pennsylvania, the latter two embodied in arguments for the programs of their respective states.⁴⁹ Harvey Segal, in examining project proposals in the ante-bellum period has commented that in view of the enormous risks borne in undertaking the early American canals, he is struck by the lack of a systematic analysis of their long range impacts. Nowhere does he find an exposition of Adam Smith's dictum that "the division of labour is limited by the extent of the market." Aside from the statement of Governor Schulze, that lower transport costs would lead to increased consumption and create induced investment in "mills and manufacturies," there is little suggestion that industrialization was seen by contemporaries as a consequence of internal improvements.⁵⁰ It is possible, however, that such effects were among the aspects of the utility of internal improvements which "is so universally admitted as to hardly require any additional proofs." In any event, disposal of the commodity surplus remained the most important economic expectation of advocates of internal improvements, a goal which was perfectly compatible with the Jeffersonian system.⁵¹

⁴⁹Canals and American Economic Development, p. 217.

⁵⁰Ibid., p. 217.

⁵¹Gallatin, American State Papers, Misc., I, p. 724.

Even before the decision to build the National Road, the federal government assumed authority for internal improvements in a general way in the Ohio Enabling Act, which set aside five per cent of the net proceeds from the sale of public lands in the state for the provision of roads. Congress later accepted the stipulation of the Ohio Legislature that three fifths of the money be spent within the borders of the state on projects accepted by the state. "For each new state formed between 1802 and 1820, and again for Iowa in 1841, a fraction of the land sold within its borders was allotted to the state for road building and other internal improvements."⁵²

Three years later, Jefferson introduced another, and most important element into the mainstream of the internal improvements movement: the promise of the application of surplus federal funds when the debt was repaid, provided that the constitution could be amended to authorize it. Under the stimulus given to American trade by the Napoleonic wars, American government revenues had risen from seven million dollars in 1798 and 1799 to an average of twelve million dollars for the first four years of Jefferson's administration, and the financial attitude of the government shifted from cautious austerity to

⁵²Goodrich, Government Promotion, pp. 24-26, 170.

flushed optimism.⁵³ In his Second Inaugural, Jefferson expressed the hope that, having abolished internal taxes, and with receipts mounting, the national debt could be paid. After that, with a "corresponding amendment of the constitution,. . ." surplus revenues could be applied in peacetime to "rivers, canals, roads, arts, manufactures, education, and other great objects within each State." Under this program, war would be only an interruption of useful works, and peace would bring a "return to the progress of improvement."⁵⁴ Nowhere did he suggest a reduction of the tariff as a means for reducing excess revenues. In this statement of position, Jefferson gave official sanction to one of the central themes of improvements history, the feeling that tariffs would result in a chronic government surplus, and the hope that the surplus could be devoted to internal improvements. And, so long as the government could marshal sufficient revenues to make consistent payments on the debt, hope remained alive that debt extinction would bring this financial plum into the hands of Congress or the states for financing roads and canals. This motif, as we shall see, not only remained operative, but was encouraged by the Jackson administration.

⁵³U. S. Bureau of the Census, Historical Statistics of the United States: Colonial Times to 1957, Washington, D. C., 1960, p. 711.

⁵⁴Messages of the Presidents, I, 378-382.

During Jefferson's second term in office, significant steps were taken towards the shaping of a future program of American internal improvements. In 1806, Congress authorized the survey of the national road. A year later, in response to a message from the President, and a series of petitions and proposals before Congress, the Senate directed the Secretary of the Treasury to prepare "a plan for the application of such means as are within the power of Congress, to the purposes of opening roads and making canals, together with a statement of the undertakings of that nature, which, as objects of public improvement, may require and deserve the aid of government."⁵⁵ The result was the justifiably famous Gallatin Report on Roads and Canals, a document which not only gave America her first ten-year plan, but gave national shape and direction to American transportation aspirations and provided a substantial justification for them.

The justification Gallatin posed would be characterized as a "vicious circles" type of argument in modern terminology.⁵⁶ He argued that "It is sufficiently evident that, whenever the annual expense of transportation on a certain route, in its natural state exceeds the interest on capital employed in improving the communication, and

⁵⁵Goodrich, Government Promotion, p. 27.

⁵⁶Hirschman, p. 187, n. 5a.

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the annual expense of transportation (exclusively of the tolls,) by the improved route, the difference is an annual income to the nation."⁵⁷ Besides savings on commodities already in transit, improved transportation would give commercial value to commodities formerly too bulky or too distant from market, and create a second addition to national income. These advantages were so obvious, Gallatin concluded, that in countries with adequate amounts of capital and dense populations, private enterprise could be counted on to carry transportation improvements into effect. In the United States, he suggested, the very factors which gave internal improvements their desirability also militated against their being built by private capital. These factors were the scarcity of capital, thin population along the routes, and the fact that because of these conditions, American projects had either to connect with navigable waterways or depend on other projects being built in order to earn a profit. In Gallatin's mind, the general government alone could remove these obstacles, both because it had the resources to see projects through, and because it had the financial power to construct the feeder routes necessary to make any given line of transportation profitable.

⁵⁷American State Papers, Misc., I, 724.

The program proposed by Gallatin was designed to give the United States a comprehensive system of internal transportation and called for the expenditure of twenty million dollars in equal installments over a ten year period. A system of protected coastal navigation was to be provided by cutting four necks of land by canals, and a turnpike was to be built from Maine to Georgia. Four turnpikes across the mountains were to connect four pairs of rivers on which the navigation was to be improved, providing connecting routes from the Atlantic coast to the Mississippi River. Finally, Gallatin proposed construction of a canal to the northwest, the Great Lakes and the St. Lawrence from the Hudson. A sum was also to be expended for a number of unspecified local improvements of national importance.⁵⁸

Several of Gallatin's suggested improvements were of importance for Michigan and the Old Northwest. The most important of these was the canal from the Hudson to the Great Lakes, which would open more than 1000 miles of waterway navigable by vessels of more than 100 tons from Ontario to the southern tip of Lake Michigan. Eventually, he hoped that the Lakes would be connected to the Mississippi by canals through Ohio, and from Lake Michigan by the Green

⁵⁸Ibid., p. 725-ff; Goodrich, Government Promotion, pp. 29-32.

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Bay-Fox River route and a southern route directly to the river. In addition, he hoped that such improvements would allow the capturing of the Indian trade to the northwest of the boundaries of the United States through the western tip of Lake Superior, via a canal around the St. Mary's Falls. Finally, he suggested the allocation of \$200,000 for roads to Detroit, St. Louis, and New Orleans.⁵⁹

Unfortunately for the nation, the Gallatin plan was never implemented. A major obstacle to its adoption appeared even before its adoption in the form of Jefferson's Embargo, passed in December 1807. For the next decade, diplomatic difficulties and their effects on international trade diminished government revenues, and effectively suspended any implementation of the Gallatin plan.⁶⁰ The surplus disappeared into the gunboat scheme and general government expenditures, and in 1816, the nation emerged from war with a renewed burden of debt.

Although the war had suspended programs of internal improvement, it had not killed the desire for them. Indeed, difficulties during the war pointed up the need for improved national transportation. In his annual message in December 1815, President Madison pointed out to Congress

⁵⁹American State Papers, Misc., I, 733, 735, 740.

⁶⁰Goodrich, Government Promotion, p. 36.

"the great importance of establishing throughout our country the roads and canals which can best be executed under national authority."⁶¹ Even the increased debt of the nation did not seem to be a handicap, because a surplus appeared again in 1816 and, although unexpected and quickly spent, it excited the hopes and expectations of Congress.⁶² In December 1816, an opportunity was presented when John C. Calhoun sponsored a bill to earmark for internal improvements the bonus due the government for rechartering the Bank of the United States. In March 1817, Congress passed the measure known as the Bonus Bill and sent it to the President for approval. Two days later, Madison sent the bill back with his veto, expressing his conviction that the general power to construct roads, canals, and improve navigation was not possessed by Congress under either the commerce or the defense and welfare clauses. In so doing, Madison hoped not to destroy the prospects of federal sponsorship of internal improvements. As he pointed out, "I am not unaware of the great importance of roads and

⁶¹George Rogers Taylor, The Transportation Revolution, 1815-1860, Vol. IV of The Economic History of the United States, ed. Henry David and others (9 vols.; New York: Rinehart & Co., Inc., 1951) p. 19; Messages of the Presidents, I, 567.

⁶²Edward G. Bourne, The History of the Surplus Revenue of 1837 (New York: G. P. Putnam's Sons, 1885), pp. 4-5.

canals and the improved navigation of water courses, and that a power in the national legislature to provide for them might be exercised with signal advantage to the general prosperity." He suggested an amendment to the Constitution as a solution to the problem of authority, for he could find no room in the existing document for federal sponsorship.⁶³

Although Madison's veto was a blow to supporters of internal improvements, it did not end their hopes for a national program. The veto was Madison's last official act, and the next day a new president was inaugurated who might prove favorable to national action. Congress did not have long to wait; in his first Annual Message to Congress, President Monroe spelled out his views on the subject. American products and distances, he said, called for the construction of roads and canals. "Never did a country of such vast extent offer equal inducements of this kind, nor ever were consequences of such magnitude involved in them." However, because of Madison's veto and the constitutional question it raised, Monroe felt obligated to say that in his opinion, Congress did not have the right, and recommended that they ask the states for an amendment giving the national government power to act.⁶⁴

⁶³Messages of the Presidents, I, 585.

⁶⁴Ibid., II, 17-18.

Congress, however, failed to heed Monroe's warning, and on April 4, 1818, the House passed a resolution instructing the Secretary of War to prepare a plan for roads and canals essential to military operations and the transportation of munitions.⁶⁶ Calhoun's report, transmitted to the House in January 1819, gave additional direction and dimension to the debate over internal improvements, and added to the hopes of the Old Northwest.

The report opened with a definition of military necessity designed to expand the constitutional authority to construct military and post roads to its widest possible limits: "A judicious system of roads and canals, constructed for the convenience of commerce, and the transport of the mail only, without any reference to military operations, is itself among the most efficient means for 'the more complete defense of the United States.'" He pointed to the fact that any increase in national wealth increased the capacity of the nation to wage war, and then dropped the subject.⁶⁶

The principal focus of Calhoun's report was on tapping the resources of the interior. The roads and rivers of the east, from the mountains to the coast, were in good

⁶⁵John C. Calhoun, Report on Roads and Canals, American State Papers, Misc., II, p. 533.

⁶⁶Ibid., 534.

condition, and their improvement could safely be left to the states. The coastal waterway, however, could only be built by federal moneys. In the case of the great commercial routes over the mountains, he felt the government had a stake in them and ought to bear a proportional share of their cost. In addition, he recommended a series of lesser projects for the defense of specific frontiers.⁶⁷

Several of these specific proposals affected the Old Northwest as a part of the northern frontier. Calhoun recommended the opening of a line of water communication from Pittsburgh to Lake Erie, and a road from Detroit to Ohio. To this he added a canal from the Illinois River to Lake Michigan.⁶⁸

The optimism of Congress under the new President was not completely misplaced, for although Monroe proved to have as strong a set of constitutional scruples as his predecessor, his overwhelming desire for a national program of internal improvements allowed him to find an escape clause. Critics of Monroe's internal improvements policy or of internal improvements have long pointed to his veto of the Cumberland Road Act of 1822 as the second in a series of vetos leading to the abandonment of federal leadership. Even George Rogers Taylor, in the Transportation

⁶⁷Ibid., 534-535.

⁶⁸Ibid., 535.

Revolution, notes only Monroe's veto and his stated belief that federal sponsorship of internal improvements was and always had been unconstitutional.⁶⁹ I believe that the opposite is true: that the position taken by Monroe gave new life to hopes for national leadership, and that these hopes grew through the Jackson administration to a peak in 1836.⁷⁰ This peak of excitement was responsible for the rash of state decisions to finance massive programs of internal improvement.

Monroe's veto of "An Act for the preservation and repair of the Cumberland road" was short and to the point: the right to establish a turnpike with gates and tolls implies a power to adopt and execute a program of internal improvement, and such a power could only be added by an amendment to the Constitution.⁷¹ Nothing in this position was unique; it repeated essentially the position taken by Hamilton, Jefferson, Gallatin, and Madison. Monroe's new position was revealed only in the long and involved constitutional dissertation attached to the veto message.

Monroe's longest state paper, "Views of the President on the subject of Internal Improvements," was a

⁶⁹Taylor, p. 21.

⁷⁰For an opposite view, see Goodrich, Government Promotion, p. 38.

⁷¹Messages of the Presidents, II, 142-143.

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discussion of the origins and development of the American Constitution that was designed to support the unique constitutional position of the chief executive. Monroe did not object to federal sponsorship of internal improvements. Indeed, as his biographer, W. P. Cresson tells us, he had decided to favor all works of internal improvement early in his first administration, but he had also decided to require better sanction than the existing Constitution afforded.⁷² In the line of argument developed in his essay, he maneuvered not only to force the issue of a constitutional amendment, but also to leave himself a safe path of retreat. He accomplished this by tracing the development and purpose of the constitution from revolutionary times, and placing the emphasis of his objections on the precedent set by violating the constitution to achieve a desirable object, rather than on the object itself. Indeed, he praised the object.

Monroe not only noted the prevailing opinion that a great advantage could be derived from exercising the power of internal improvement; he gave it praise and justification.⁷³ "It cannot be doubted that improvements for

⁷²W. P. Cresson, James Monroe (Chapel Hill, N.C.: University of North Carolina Press, 1946), p. 387.

⁷³Messages of the Presidents, II, 144.

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great national purposes would be better made by the National Government than by the several States." After all, he reminded his audience, it was the inability of the states to cooperate in national action which had led to the formation of the national government in the first place, and "Congress would look to the whole and make improvements to promote the welfare of the whole."⁷⁴ What Monroe objected to was the right of jurisdiction implicit in any program of internal improvements; a power which included "taking land from the proprietors by force, passing acts for the protection of the road, or to raise a revenue from it by the establishment of turnpikes or tolls, or any other act founded on the principal of jurisdiction or right."⁷⁵ The federal government had no power to exercise jurisdiction, and the states could not grant it. The only means for adding this power to the federal government was a constitutional amendment. "On full consideration, therefore, of the whole subject I am of the opinion that such an amendment ought to be recommended to the several states for their adoption."⁷⁶ If this were not done, he added, he would be powerless to prevent the disintegration of the Cumberland road, or to allow

⁷⁴Ibid., p. 178.

⁷⁵Ibid., p. 164-170.

⁷⁶Ibid., p. 179.

further programs. His message was dominated by a sense of urgency as he pointed to the damage spring floods in the mountains would do to the road.⁷⁷

In spite of his advocacy of an amendment and the sense of urgency, Monroe left open an alternate course of action. According to his own statement, he had recently changed his mind about the boundaries of federal power, particularly the right of appropriation.⁷⁸ He had come to believe that since Congress had the power to tax, and therefore to appropriate, the authority to construct military and post roads could be broadly construed:

Good roads and canals will promote many very important national purposes. They will facilitate the operations of war, the movements of troops, the transportation of cannon, of provisions, and every warlike store, much to the disadvantage of the enemy in time of war. Good roads will facilitate the transportation of the mail, and thereby promote the purposes of commerce and political intelligence among the people. They will by being properly directed to these objects enhance the value of our vacant lands, a treasure of vast resource to the nation. To the appropriation of the public money to improvements having these objects in view and carried to a certain extent I do not see any well-founded constitutional objection.⁷⁹

Although Monroe's position did not allow the adoption of a national plan, it gave a broad interpretation to the power of constructing military and post roads, and apparently to

⁷⁷Ibid., pp. 164-167.

⁷⁸Cresson, p. 394.

⁷⁹Messages of the Presidents, II, p. 167.

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the general welfare clause, thereby overriding Madison's objections to federal expenditures for broad national purposes. If this had not been his intention, there would have been no need to mention canals, which were not authorized by the Constitution, and the phrase "carried to a certain extent;" the constitutional authority to construct roads was limited and explicit. It seems to me that Monroe's position had more in common with that of John C. Calhoun, when he suggested an identity between the needs of commerce and defense, than that of Madison when he vetoed the appropriation of funds for internal improvements projects. As Monroe stated, it would be a strange world indeed, in which a government possessed less discretionary authority in disposing of its funds than the average corporation. As long as federal expenditures were for great national purposes, and did not trespass on the rights of states by exercising jurisdiction, Monroe indicated he would not raise constitutional objections.⁸⁰ Monroe's veto may have shattered hopes of a self financing national program, but there is no indication that it destroyed the possibility of the government's sponsoring individual projects.⁸¹ Monroe's subsequent actions seem to bear out this interpretation.

⁸⁰Ibid., 168-169.

⁸¹For an opposing view, see Goodrich, Government Promotion, p. 38.

In his annual message for 1822, Monroe repeated the stand taken in the veto message on jurisdiction and the need for an amendment, but he also expressed anxiety over the disintegration of the Cumberland road. He pointed out that Congress still had the right to appropriate money for its superintendence and preservation.⁸² The following year, he advocated building a canal from the Chesapeake Bay to the Ohio River at federal expense, with the sections to be turned over to the states on completion.⁸³ In 1824, the General Survey Act, authorizing the President to arrange for surveys of roads and canals of national importance, became law, and finally, on March 3, 1825, he signed a bill extending the National Road from Canton to Zanesville and authorizing its survey to Missouri.⁸⁴ Although most of these measures could be justified under the Constitution's provision for military and post roads, the canal could be justified only under the broadest possible interpretation.

Historians agree that the Administration of John Quincy Adams was a new highpoint for internal improvements. Important bills were passed, and an annual average of

⁸²Messages of the Presidents, II, 190-191.

⁸³Cresson, p. 398.

⁸⁴Goodrich, Government Promotion, pp. 38-39.

\$702,000 was expended for internal improvements by the government.⁸⁵ Several states received grants of public lands to aid specific projects: Ohio for construction of a turnpike from Columbus to Sandusky; Illinois for a canal from the Illinois River to Lake Michigan; Indiana for a canal from the Wabash River to Lake Erie, and a road from Lake Michigan to the Ohio River. Three of these measures set the important precedent of granting alternate strips of land along the route of the improvement. As we shall see later, the grants were important factors in raising the expectations of Michigan and in her decision to undertake a program of internal improvements. At the close of the Adams administration, the government had granted more than two million dollars for stock subscriptions, and two and one-half million acres of public lands to projects.⁸⁶

There is less agreement in interpretation of the actions of Andrew Jackson, Adams' successor. Interpretations of the period, particularly state histories, have long pointed to Jackson's Maysville Road Veto as the terminal point for federal aid to state projects. At least two biographers have taken the position that Jackson was opposed to improvements, or at least opposed to them without

⁸⁵Taylor, p. 21.

⁸⁶Goodrich, Government Promotion, pp. 39-43.

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a constitutional amendment.⁸⁷ More recently, however, cautious doubts have been expressed. George Rogers Taylor suggests that Jackson only opposed internal improvements for the moment, and points to a rise of average annual expenditures from the \$702,000 annual average of the Adams administration to \$1,323,000.⁸⁸ Glyndon Van Deusen seems to concur, and suggests that the veto was a political blow at Henry Clay.⁸⁹ But Carter Goodrich has pointed out that the increase in federal expenditures resulted from an increase of spending on old projects, rather than new ones.⁹⁰

Jackson's Veto Message itself seems to suggest that it was aimed at a purpose other than that of ending federal aid. In fact, the argument developed by Jackson was remarkably similar to that of Monroe. He took it for granted that the government had no right to exercise jurisdiction over internal improvements, but in reviewing the positions taken by Madison, Monroe, and Adams, he found precedent for federal appropriations. It was in these opinions that he

⁸⁷James Parton, Life of Andrew Jackson (3 vols.; Boston: James R. Osgood and Company, 1876), III, p. 285; Harold C. Syrette, Andrew Jackson and his Contribution to the American Tradition (New York, Bobbs-Merrill Company, Inc., 1953), p. 135.

⁸⁸Taylor, p. 21.

⁸⁹Glyndon Van Deusen, The Jacksonian Era (New York: Harper & Brothers, 1959), p. 51.

⁹⁰Carter Goodrich, Government Promotion, p. 42.

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found an escape clause allowing him to avoid a general veto by ruling that the Maysville Road was a project of local, rather than national importance. John Spencer Bassett, the distinguished biographer of Jackson, concurs in this interpretation, and suggests that although Jackson had decided scruples about state's rights, "Jackson's views on the Constitution were formed through feeling, rather than intellect," and as such could be mixed. His thinking generally lacked the cold intellectual consistency that characterized the arguments of Calhoun.⁹¹ Marquis James agrees with Bassett on this point, and sees Jackson's action as inspired by Van Buren, an ardent opponent of federal aid, whose intent was to strike at political log-rolling in Congress.⁹²

Evidence presented by Bassett tends to support the conclusion that the actions of Monroe, Adams, and Jackson depart from Madison's strict constructionist interpretation of federal authority. Van Buren, who drafted Jackson's Veto Message, later admitted that the message's version of Madison's veto was of doubtful validity. His doubts were

⁹¹John Spencer Bassett, The Life of Andrew Jackson (New York: Macmillan Co., 1925), pp. 483, 484.

⁹²Marquis James, The Life of Andrew Jackson (New York: Bobbs-Merrill Company, 1938), pp. 524-525.

confirmed by Madison, who, on receiving a copy of Jackson's message, wrote to Jackson that he had vetoed both the jurisdictional and appropriative powers.⁹³

If the veto and the Jackson administration wrote an end to hopes for federal aid, contemporaries were not keenly aware of it. Historians witnessing the surge of state programs after the veto have often attributed it to the realization that the states would have to undertake improvement projects themselves, and the confidence created by New York's success that they could do so by their own means. But I believe that the statements and actions of the administration fostered these programs, and that the rash of investment decisions creating what has been called the "second canal cycle," was the result of heightened expectations of federal aid in a new form.

Carter Goodrich believes that the election of Andrew Jackson marked the beginning of the end of the era of national projects. Yet, he has also pointed out that the vetos of Madison, Monroe, and Jackson did not put an end to federal aid, but only confined it to closely defined limitations. The government could aid transportation projects as long as it did not produce a direct revenue, because collection of tolls would require use of federal police power and violate state sovereignty. It could not

⁹³Bassett, p. 495.

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subscribe to the stock of improvement companies, and finally, it could not undertake a planned system of internal improvements.⁹⁴ However, federal aid was not prohibited; Jackson's veto had not altered Monroe's interpretation, which allowed direct federal construction if works were turned over to the states for operation after completion. The fact that Jackson allowed appropriations to continue on projects authorized by previous administrations is in itself an indication that he had no strong constitutional objections to federal aid which did not create federal jurisdiction; Jackson was not a man to hesitate where his personal conception of right and wrong was concerned. On several occasions, Jackson raised the possibility of a new form of aid: direct grants of federal money to the states on a prorated schedule and on an implied permanent basis. In both his first Annual Message and his veto of the Maysville Road, Jackson made it clear that he had a distinct set of priorities for the allocation of federal funds. First, and above all else, he wanted to extinguish the national debt. Since a protective tariff was desirable, and not likely to be reduced, he thought revenues would continue to be high and a surplus would always remain. He believed this surplus ought to be distributed to the states. An amendment would be preferable, but he thought it would

⁹⁴ Goodrich, Government Promotion, pp. 41-43.

not be too difficult to obtain. To avoid a battle of sectional jealousies, he stated a preference for a distribution based on the ratio of representation.⁹⁵

E. G. Bourne, in his History of the Surplus Revenue of 1837, has pointed to the sustained level of expectation of the states in sharing the surplus revenues from the time of Jefferson's administration. The application of an annual surplus of from two to six millions from 1816 to 1826 not only reduced the public debt to the point where extinction could be foreseen within a dozen years; it heightened expectations. A bill was introduced in 1826 to distribute a portion of the surplus, but nothing came of it.⁹⁶

Jackson's suggestions, however, set off prolonged debate. Congressional quarreling centered on the problem of equity in distribution, and plans were advanced favoring the use of land area, population, and the use of imports as a basis for division, but no truly equitable solution could be reached. By the early 1830's, Jackson finally became so irritated that he declared he could sanction no scheme, and recommended tariff reduction. But pressure for a distribution continued in Congress.⁹⁷

⁹⁵Messages of the Presidents, II, 451, 484.

⁹⁶Bourne, pp. 5-6.

⁹⁷Ibid., p. 7-9.

Despite Jackson's stand, the possibility of sustained distribution of excess revenues heightened the expectations of the states and contributed to the desire to launch improvements. Michigan's Governor Porter, in his opening address to the Legislative Council in January 1834, gave ample evidence of the continued expectation of federal support when he recommended application to Congress for aid to a railroad across the peninsula. "It is believed," he told the Council, "that no more propitious period has occurred in the history of our country for presenting these subjects to the consideration of congress. By wise and prudent administration of the general government, the national debt is nearly extinguished,. . ." and the troubles threatening dissolution of the Union were past.⁹⁸ As an intimate friend of Andrew Jackson, and an appointee of his after the Maysville Road veto, Porter must have seemed to speak with more than average authority.⁹⁹

At long last, in January 1836, the hope of harnessing federal resources to the projects of the states seemed about to be fulfilled. With the debt extinguished, and the surplus rapidly mounting, a bill was introduced for the

⁹⁸Messages of the Governors of Michigan, ed. George N. Fuller (4 volumes; Lansing: Michigan Historical Commission, 1925), I, 103-108. Cited hereafter as Messages of the Governors of Michigan.

⁹⁹Ibid., pp. 77-85.

distribution of federal surplus land revenues. Jackson's constitutional scruples stood in the way, however, and it was only in June, after receiving an amended version providing for deposit of the funds with the states that he signed the bill into law.¹⁰⁰ For the states, January 1, 1837, when the first installment was due, must have appeared as the beginning of the millennium. Since the act provided only for surpluses as of January 1837, Congress turned quickly to the problem of future surpluses before any appeared.¹⁰¹ During the panic, the surplus vanished and failed to reappear for more than half a century. In several states, however, surplus payments provided vital support just as the strain of heavy state financing was beginning to be felt, and in Michigan, it proved a stimulus to state enterprise and provided support for initial construction.¹⁰²

Although hopes of a comprehensive program of national planning were dashed by the vetoes of Madison and Monroe, federal aid continued in various forms through 1837. The constitutional authority to provide military and post roads was broadly construed to include any facility which might in some way possibly contribute to national

¹⁰⁰Bourne, pp. 18-19.

¹⁰¹Ibid., p. 29.

¹⁰²Taylor, Transportation Revolution, p. 50.

defense, add to federal revenues, or strengthen the national economy. In addition, the federal government was allowed to build projects under its authority to appropriate funds, as long as it did not assume jurisdiction and tax or charge tolls for maintenance. That this authority, accepted by Monroe, Adams, and Jackson, was not more widely applied is a tribute to the strength of special interests in opposition to federal construction, rather than to constitutional objections. Finally, aid was extended directly to the states in the guise of deposits, although it seems to have been understood that the deposits would not be called in. The new form of aid was actually broader than that previously extended, for it overcame the obstacle of opposition by special interests and allowed the application of federal funds to local, as well as national projects. The extension of aid was delayed by Jackson's preference for prior payment of the public debt, and federal funds were sharply reduced during the depression. In the last years of Jackson's administration, however, the promise of renewed federal aid helped to give substance to state plans and encouraged states, including Michigan, to undertake internal improvements programs with their own resources.

CHAPTER III

CYCLICAL INTERFERENCE

Between 1834 and 1837, a number of American states responded to growing pressures for programs of internal improvement by government units below the federal level. In addition to widespread cultural approval and the possibility of federal subsidies, state action was encouraged by temporary reversals of the balance of payments and terms of trade which added depth to the capital market and allowed the sale of securities abroad. Success or failure of state programs, however, hinged on more than intelligent planning and faithful application of funds; sudden changes in the condition of the world market created conditions beyond state control that destroyed many programs before they could reach completion and placed severe pressures on those states which managed to continue.

Recent studies of the ante-bellum canal movement by H. Jerome Cranmer, and Harvey Segal, have shown that the period witnessed not one, but three distinct movements.¹

¹Segal, in Canals and American Economic Development, p. 170; H. Jerome Cranmer, "Canal Investment, 1815-1860," Trends in the American Economy in the Nineteenth Century, ed. William N. Parker and Others "National Bureau of Economic Research: Studies in Income and Wealth," Vol. XXIV; Princeton, N.J.: Princeton University Press, 1960), p. 554. Cited hereafter as Trends in the American Economy.

Building on data presented by Cranmer, Segal has presented the picture of ante-bellum canal development summarized in Table 1. These movements are long cycles, much longer than concurrent business cycles in the forty-five year period covered, and generally independent of them. Since their shape and duration does not seem to be dictated by the business cycle, explanations must be sought elsewhere. Several factors seem to be responsible: the technology of canal construction, commercial and political rivalry, and the availability of funds for construction. The principal reason for the existence of long cycles is the clustering and spacing of new construction starts with only short gaps between them. In a model, if the starts are staggered at dates longer than a year, short cycles would result.²

The first cycle was primarily the result of attempts of the seaboard states to breach the Appalachian barrier and capture the trade of the West. Dominated by uninterrupted completion of projects in New York, Pennsylvania, and Ohio, the cycle not only produced the most longlived and successful of the period's state enterprises, but changed the direction and channels of American inter-regional trade. The end of the cycle can be traced to the successful completion of improvements early in the decade.

²Segal, in Canals and American Economic Development,

TABLE 1.--Cycles of canal construction, 1815-1860^a

Cycle	Duration (Years)	Peak Year	Completed Mileage	Investment Over Cycle (Millions of Dollars)	% of total
1st Cycle, 1815-1834	19.5	1828	2,188	58.6	31.1
2d Cycle, 1834-1844	10	1840	1,172	72.2	38.4
3d Cycle, 1844-1860	16.5	1855	894	57.4	30.5
Total for all Cycles	46.0		4,254	188.2	100.0

^aHarvey H. Segal, "Cycles of Canal Construction," Canals and American Economic Development, ed. Carter Goodrich (New York: Columbia University Press, 1961), p. 172.

The second cycle can be accounted for by the unfulfilled demand for laterals in New York, Pennsylvania, and Ohio, and for routes to supplement and complete the Mississippi-Erie transportation network.³ This cycle, which included Michigan's internal improvements program, exhibited several distinguishing characteristics. Its peak was higher, its duration shorter, and its contraction phase, occurring over a four year period, was more precipitous than that of either the preceding or following cycles. It was accompanied by a sharp inflation of land and commodity prices, a heavy expansion of the money supply, increased uncertainty in banking, and a massive influx of foreign capital.⁴ In the Old Northwest, the land boom and improvements program coincided with accelerated immigration and settlement induced by the opening of markets to these formerly isolated territories. The cycle was also marked by a greater proportion of public investment and construction in the West than other periods. Public investment rose from less than sixty to almost seventy per cent of expenditures, while Western investment rose from ten to thirty per cent of the total.⁵ Finally,

³Ibid., pp. 178-179.

⁴Ibid., p. 189.

⁵Cranmer, Trends in the American Economy, p. 554.

the cycle is the only one whose shape is heavily influenced by concurrent business cycles.

The third cycle, from 1844 to 1860, has been characterized as an "echo effect," with funds and initiative devoted to salvaging and completing projects stalled by the depression. This characterization, however, gives a distorted picture of American social overhead capital creation due to its focus on canal technology, which was rapidly approaching obsolescence. Inclusion of railroad data, although of negligible importance in the second cycle, would undoubtedly alter the shaping and magnitude of the third. Although the third cycle falls outside the scope of this essay, it is important to note that the investment of the late 1830's and early 1840's was part of a continuing, and not a declining trend.

The second cycle, and Michigan's internal improvements program, was brought to a precipitous conclusion by the depression of 1839-1843. This simultaneous downturn was more than the simple coincidence of phase by cycles of differing periodicity; the relationship was one of cause and effect. The depression not only lowered the general level of economic activity and profitability of public works, it destroyed the supply of capital essential to the construction cycle's successful completion.

Assessment of the role of foreign capital in American development has been the source of frequent and

lively debate among scholars. Its role, as the counterpart of capital scarcity in ante-bellum America, has often been cited as central to the assumption of economic planning by the states.⁶ More recently, doubt has been cast on its importance. Nathan Miller, in his study of the Erie Canal, has pointed to the critical role played by small domestic investors, and concluded that foreign capital never played a dominant role. The bulk of New York's canal stock was still in domestic hands in 1825, and large amounts invested in stock, both foreign and domestic, came only after the canal was obviously a safe investment.⁷ The practical absence of foreign investment in American investment between 1840 and 1860, adds to the suspicion that its role in economic development was less than crucial, for it accounted for less than one-third of total investment before the Civil War. However, these factors are offset by the disproportionate concentration of foreign investment between 1825 and 1840. From the last half of the first, and through the whole of the second canal cycle, foreign capital played a dominant role, linking investment to international commodity movements and prices, foreign banking and speculation,

⁶Goodrich, Government Promotion, p. 9.

⁷Nathan Miller, The Enterprise of a Free People: Aspects of Economic Development in New York State during the Canal Period, 1792-1838, (Ithica, N. Y.: Cornell University Press, 1962), p. 85.

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and the international balance of payments. Even the final collapse of American investment credit ultimately stemmed from foreign political and economic changes. Thus, for an explanation of the conditions governing Michigan's investment program, we must turn to foreign investment, particularly that of Great Britain.⁸

Investment in American stocks and bonds was not new to Englishmen in the 1820's. Large amounts of the Revolutionary debt and Louisiana purchase bonds were transferred from Amsterdam to London during the Napoleonic Wars. Investment in the Bank of the United States was popular, and by 1820, three million dollars worth of its stock was held in England. In addition, British merchants extended large amounts of credit in attempts to control the market on their own account.⁹

Around 1825, the structure of British foreign investment began to shift. Previously, the bulk of it had been channeled into securities of the restored Bourbon Monarchy and South American republics, but between 1825 and 1830, not a single foreign government was able to float a loan in London, despite heavy demand for political loans. At the same time, heavy losses suffered in 1825 in Britain

⁸Segal, in Canals and American Economic Development, p. 180.

⁹Leland H. Jenks, The Migration of British Capital to 1875 (New York: Knopf, 1927), p. 65.

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by merchants extending credit to Americans put an end to that system of commercial credit, while exchange and shipment became concentrated in a few houses on both sides of the Atlantic--The Bank of the United States in America, and eight "American houses" led by Brown Brothers and Baring Brothers in England.¹⁰ The British investor shifted his preferences from financing foreign trade through political loans to productive loans creating their own means of repayment. A new flow of funds opened from country investors who had made their fortunes in the industrialization of England, and sought safe ways to tap the increment of progress elsewhere. To these investors, American state and municipal securities for promotional activities seemed highly desirable. Such bonds were seldom sold in the London market, but sold in blocks to bankers and brokers in America and transferred to merchant-bankers in London. There, they were transferred to country bankers and favored clients, who usually bought the stock not on its merits, but on the recommendation of a banker.¹¹

Estimates of the total quantity of British and other foreign investments between 1825 and 1840 exhibit

¹⁰John Harold Clapham, The Bank of England: A History (2 vols; New York: Macmillan Co., 1945), II, 136-142.

¹¹Jenks, pp. 71-78.

little basic agreement, except that the quantity was large. According to Historical Statistics of the United States, net foreign liabilities increased from 81 million in 1825 to 129 million in 1834, at the beginning of the second cycle, and jumped to 292 million by 1839, for a total increase of 211 million.¹² No attempt is made to estimate how much of this was purely mercantile credit, and how much was advanced to finance transportation projects. Leland Jenks, in an older estimate, arbitrarily sets the figure for British holdings at a figure approximately equal to American state debts. This procedure sets the figures at 66 million in 1835, and the increase for the next three years at 108 million.¹³ Bray Hammond, using the orthodox derivation of the excess of imports over exports, has cited an increase of foreign investment of 140 millions from 1830 to 1837.¹⁴ Harvey Segal has estimated that 43 million, or over 60% of the second canal cycle was financed by foreign loans.¹⁵ This divergency of estimates

¹²Historical Statistics of the United States, p. 556.

¹³Jenks, p. 85.

¹⁴Bray Hammond, Banks and Politics in America from the Revolution to the Civil War (Princeton, N. J.: Princeton University Press, 1957), p. 450.

¹⁵Segal, in Canals and American Economic Development, p. 191.

stems from a multitude of factors, most of them definitional, but one important area of agreement emerges from them. All seem to agree that foreign investments grew by more than fifty per cent between 1825 and 1835, and doubled or tripled in the next three years.

Capital shifts of this magnitude are dependent not only on the availability of willing investors, but on the smooth functioning of financial mechanisms facilitating their transfer. Prior to 1845, when private risk capital was scarce in America, the states were forced to rely on loans to finance improvements projects. "The ability to raise funds in this manner was proximately determined by the reserve position of banks, that is, by the ratio of specie held in banks to note and deposit liabilities."¹⁶ During periods of optimism, banks in the United States and Britain were able to purchase readily and shift the stocks to individuals, but they were extremely sensitive to internal or external disturbances. Any shift in the public desire to hold specie, crop failure, or change in the relationship of foreign and domestic prices could quickly dry up the supply of foreign funds. In short, instability was definitely on the supply side.

During the period under study, structural changes in the loan and discount policy of the Bank of England

¹⁶Ibid., p. 180.

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played a crucial role in determining the volume of available funds. After 1825, London banks stopped channeling surplus funds into government securities discountable at the Bank, and placed their funds with bill brokers, because the Bank discount rate was above the market rate of brokerage on bills. Bill brokers were discounting at one-eighth per cent above the Bank's loan rate of three and one-half, and well below its discount rate of four. As a result, discounting fell off, and British banks enjoyed unusual freedom. The Bank could control the flow of funds only in difficult times when the market rate rose above the discount rate.¹⁷ In succeeding years, the Bank adopted a new set of policies for controlling the currency which were to have important consequences later. On December 6, 1827, it reversed its previous position and decided that when unfavorable gold exchanges threatened, it would react by contracting the currency, selling exchequer bills to dry up funds in the market, and selling silver for gold in Paris. In November 1830, the Bank notified country bankers that they must curtail loans in times of foreign gold demand, or face the possibility of having discounting services withdrawn. In March 1831, it was decided that the Bank's specie reserves should not be allowed to fall lower than 17 million, and that reaching that mark should be the signal

¹⁷Clapham, II, 136, 142.

to begin contraction.¹⁸ During the next decade, these policies and practices were to have important effects on the flow of funds.

Through 1835, economic conditions in Britain favored capital export. Good harvests from 1831 to 1835 allowed the price of wheat to fall to a fifty year low, and the decline in food imports allowed gold exchanges to remain steady and specie reserves to remain between twenty and thirty percent of total obligations.¹⁹ In 1832, because of the loss of its monopoly, the East India company began to liquidate its assets, and through pressure persuaded the Bank to give interest on its deposits. This sum grew from £3 million in December 1833 to nearly £4.7. Most of these funds went out to bill brokers as loans. In February 1836, £2.75 million was out to four brokers, and £.9 million was with Nathan Rothschild.²⁰ Such conditions facilitated easy credit in London and the flow of capital to America.

Massive capital transfers, such as those sustained by the United States and Great Britain require a delicate balance of complex economic forces, and the higher the

¹⁸Ibid., 116-117, 118, 119.

¹⁹Ibid., 146.

²⁰Ibid., 147; Jenks, 69-70; Ralph W. Hidy, The House of Baring in American Trade and Finance (Cambridge, Mass.: Harvard University Press, 1949), p. 183-184.

level of interdependency, the more complex the balance becomes. The transfer process is not in itself complex; it calls simply for the importation of gold or goods in excess of exports. Problems develop only in the primary and secondary effects: in maintaining a level of dynamic equilibrium in both the lending and borrowing countries, without serious inflation or misallocation of resources. Under the strain of capital transfers in the late 1830's, both the American and British economies broke down.

In its simplest form, the American problem was to maintain the balance of payments and exchanges under the pressure of an imbalance of merchandise shipments, without heavy inflows or outflows of specie or serious inflation. An important component of this stability was maintenance of the world market price of cotton, primarily because between 1836 and 1840, cotton constituted sixty-three per cent of the value of American exports, and as a major component of the balance of payments, was the major source of funds for the repayment of foreign claims.²¹ Maintenance of the balance of specie flows was important because it could not only effect the domestic price level, but because any heavy outflow of specie from Great Britain would

²¹Douglas C. North, The Economic Growth of the United States, 1790-1860 (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1961), p. 75.

force the Bank of England into contraction and dry up America's sources of foreign credit. Inflation in America would not only raise the cost of investment, but would ultimately lead to deterioration of exchanges and recession in the economy as a whole.

Economic and political policies followed by the Jacksonian administration led to the first crisis of the Anglo-American credit system. Too rapid repayment of the national debt and surplus revenues from the tariff and land sales brought funds which would have been neutralized into the market and increased inflationary pressure. At the same time, the government lost all control of the currency by withdrawing its funds from the Bank of the United States, and aggravated the situation by depositing its funds in banks of issue, where they could serve as reserves for unlimited currency expansion. Between 1834 and 1839, the supply of money expanded fifty-five per cent, and the number of banks increased from 501 in 1834 to 901 in 1840.²² At the same time, attempts to establish a specie currency set up a heavy short-term gold drainage into the United States. In 1834, Congress had changed the mint ratio from 15:1 to 16:1, thus changing the sterling-dollar mint-par

²²Thomas P. Govan, Nicholas Biddle: Nationalist and Public Banker, 1786-1844 (Chicago: University of Chicago Press, 1959), p. 297; Segal, in Canals and American Economic Development, p. 190; Hammond, pp. 453-454; Clapham, II, 150.

ratio from 4.44:1 to 4.87:1, a ratio favorable to gold imports. Many of America's creditors left their funds in America to collect the higher rates of interest and avoid losses by conversion. At the same time, Jackson insisted on collecting the indemnities due from France and Naples in gold. The result of these policies was an average net gold import of 10 million dollars per annum from 1833 to 1836, at a time when capital importation was increasing rapidly.²³ As a result, America became Europe's short-term creditor.

The first substantial break in the credit system came with the Panic of 1837. Like the system itself, the Panic is an involved story, displaying such a high level of action and reaction among a multitude of interlocking variables that any complete explanation and assessment of causation is nearly impossible. Salient characteristics, however, are evident and deserving of attention. Both America and Britain were caught up in an obvious speculative bubble, and early in 1836, actions began on both sides of the Atlantic designed to slow down the rate of expansion. British speculation in American bonds and import commodities was so great that it forced exchanges below the gold points and made it profitable to export gold.²⁴

²³Clapham, II, 151; Jenks, p. 85; McGrane, p. 14.

²⁴Govan, p. 305.

In late March 1836, an outflow began which lasted for eleven months, becoming a source of great concern to the Bank of England. Inquiry began early in the summer into the causes of the drainage, and the directors became convinced that loose practices by the "American houses"--particularly Overend, Gurney, and Co.--using discounted bills based on uncovered credits and remitted securities as collateral for loans from the Bank, were the basis of the problem. The Bank was displeased, and expressed its displeasure by an increase of the discount rate to four and one-half per cent.²⁵

Contraction had scarcely begun in England when Jackson applied drastic surgical techniques to the American boom, and followed it with fiscal bungling which aggravated the crisis. The Specie Circular of July 1836, designed to slow the speculative boom in Western lands by curbing the dangerous note issue-land purchase spiral created by deposit of federal revenues in state banks, locked up specie in Western land speculation at a time when it was badly needed in the Northeast. By November, commerce was paralyzed. The crisis was seriously prolonged by Secretary Woodbury's decision to distribute federal funds by actual transfer of funds, instead of simply granting drafts on the deposit banks. These two measures virtually exhausted

²⁵Hidy, p. 205; Clapham, II, 151.

the exchange of the seaboard banks, while locking specie up in land sales and the transfer of federal deposits.²⁶

By August 1836, the discount rate of the Bank of England was up to five, and bills on Anglo-American houses were being refused for discount. The directors were afraid that the specie circular would lead to an even heavier gold drain. In Ralph Hidy's opinion, the ensuing crisis was fabricated by the Bank of England. The Bank began putting pressure on the Anglo-American houses, and announced a rejection of all bills issued by joint-stock banks. Its purpose was to check the granting of unlimited credits, which it considered responsible for the flow of gold to the West. The three major offenders in this connection were Wilson's, Wiggan's, and Wildes', popularly known as the three W's. By September, the Bank's bullion reserves had fallen from £7.8 million in April to £5.5 million. The bottom was not arrived at until February 1837, when a low point of £4 million was reached.²⁷ In October 1836, the Governor of the Bank of England interviewed representatives of six of the "American houses" and "explained to them that excessive facilities given to foreign bankers, 'either as open Credits or in anticipation of the sale of

²⁶Govan, p. 298, 302.

²⁷Hidy, p. 206, 207, 209; Govan, p. 305; Clapham, 151, 153.

State Securities in this country,' were objectionable to him and the Company as note issuers."²⁸

By November, this pressure began to take effect, and overextended banks began to go to the wall. Heavy runs on British banks forced the Bank to extend over three million pounds in aid. In March, Wilson's, Wiggan's and Wildes' asked for help, and in June, these houses suspended. Baring's, following a more conservative course, cut advances on consignments to two-thirds, and between August 1836 and March 1837, allowed only one draft against remitted securities.²⁹ British curtailment brought a heavy return of protested bills to America in the spring of 1837, at a time when specie was being tied up and driven out of circulation by Jacksonian fiscal policies, and the recession expanded to include America.³⁰ On May 10, 1837, American banks suspended.

Although the Panic of 1837 administered a severe shock to the credit system, it did not make great changes in the flow of long term credit. In fact, as has previously been indicated, the volume of capital imports increased every year from 1835 through 1839. Evidence seems to indicate that the Panic did not reflect a fundamental

²⁸Clapham, II, 154.

²⁹McGrane, pp. 14-15; Hidy, p. 210.

³⁰McGrane, p. 14.

alteration of economic forces. So long as interest payments were maintained, the panic had relatively little effect on the willingness of the British public to lend. American credit was still good, and even as panic began to sweep American financial centers, recovery had begun in England. Securities and long-term credit began to move again.³¹ As Douglas North has described it: "The Panic of 1837 was an interruption and not an end to the underlying expansive forces in the economy. The sharp drop in cotton prices reflected the readjustment of the American price level, rather than any larger increase in supply as the result of new lands being put into cultivation."³² The bottom of the panic was reached in the summer of 1837, and by spring 1838, the economy was experiencing full scale recovery.³³ The suspension of American Banks did not reflect a heavy specie drainage abroad, but an internal drainage into public and private hoards.³⁴

Even before the suspension of American banks, forces had been set in motion to aid recovery. The central figure in financing recovery, and in decisions which would have important repercussions on Michigan's internal improvements program, was Nicholas Biddle and the Bank of

³¹Hidy, p. 237.

³²North, p. 200.

³³Ibid., p. 201.

³⁴Hammond, p. 461.

the United States, now under Pennsylvania charter. Thomas Govan, Biddle's biographer, believes that Biddle's purpose in rechartering the Bank was to "make it a national bank having the same control functions as its predecessor." Believing that individuals must act when government abdicated its responsibility, Biddle set out to establish a national currency, check other banks, and dominate the foreign exchange market.³⁵ In an attempt to protect its reserves and slow down specie drainage, the Bank, in agreement with the seaboard banks, offered four million dollars in post-notes for domestic use, and an equal amount of one-year bonds for sale abroad in April to secure exchange and prevent suspension. A week later, however, news arrived of a further decline in European cotton prices, along with a flood of protested bills on the West and South. With American specie out of circulation, the banks were faced with the alternatives of failure or suspension. On May 10, they suspended.³⁶ Suspension, however, did not end American difficulties and called for radical departures in policy to protect American credit and liquidate outstanding debts held abroad.

³⁵Govan, p. 294-295.

³⁶Ibid., p. 308-316.

After suspension, Biddle and the Bank began a program to restore credit and gain control of exchange in the London market. The operation depended on the marketing of one or both of two commodities: cotton and securities. What Biddle did was to gain control of the cotton market by cornering supplies and holding them against advances. Agencies were set up throughout the South, drawing on Bevan and Humphries for notes of the Bank, to buy cotton and ship it to London to be held. In October, Samuel Jaudon, cashier of the parent bank in Philadelphia, was sent to London to market American securities which the Bank of England would not permit the "American houses" to handle. These transactions led to hostility between the Bank of England and the Bank of the United States. Funds from Jaudon's securities were used to honor drafts on Humphries and Biddle for cotton purchased from Bevan and Humphries, and also post-notes as they fell due. In this way, Biddle was able to harness capital available to state enterprise to stabilize the cotton and exchange markets, liquidate outstanding mercantile indebtedness, and end a major grievance of American merchants--the dumping of American staples on arrival by consignment merchants. Operations were an immediate success, mainly due to the willingness of Englishmen to invest in American securities. The first eighteen months operations netted \$800,000 profits, and saved Americans an estimated ten to twenty-five million

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dollars when mercantile indebtedness was liquidated by November 1838. By April 1838, full scale recovery was under way, and by August 13, specie payments were resumed on the East coast. Biddle's operations, which Bray Hammond has characterized as "brilliant, bold, and napoleonic," had not only outwitted the Old Lady of Threadneedle Street, but restored the balance of payments and the flow of capital.³⁷ The renewed flow of foreign capital allowed the second cycle to continue through 1839.

American difficulties in the Panic of 1837 had been surmounted without great difficulty, mainly because of the continued willingness of foreigners to invest in American economic development, and the continued stability of basic relationships within the Atlantic economy. The depression of 1839 was another story. It began abroad, and was transmitted to the American economy through the flow of investment capital and the primary product export sector. Unlike the Panic of 1837, recovery depended not only on a basic readjustment of economic forces, but an alteration of international and domestic political conditions.

As early as 1836, harvests had lost their brilliance in Britain, and by 1838, the price of wheat had doubled.³⁸

³⁷Jenks, pp. 88-92; Hammond, pp. 467-470; Hidy, pp. 185-186; Govan, pp. 295, 300, 327, 339.

³⁸Clapham, II, 161.

Pressure on reserves in England was increased in December 1838 when a bank war in Belgium resulted in the suspension of the Banque de Belgique. Suspension was followed by a heavy run on the house of Lafitte in Paris. Continental commercial credit collapsed, and as French and Belgian exchanges fell, gold began to flow out of England. The Bank's bullion reserves fell £1,230,000 from January to March, and then at the rate of £1,000,000 a month until by July 23d, they had fallen to £3,785,000--only twenty per cent of the Bank's circulation. The Bank's discount rate rose to an unprecedented six per cent, while the market rate rose above Bank rate for the first time in twenty years. The Bank's discounts rose from £1.5 million in 1838 to £15 million in 1839.³⁹ As Clapham explains it, the Bank's problem stemmed from the fact that only twenty per cent of its loss was due to presentation of its notes for redemption. The balance of its loss was caused by deposit withdrawal. By August, reserves had fallen to £1,174,000 "and that was not the bottom." The Bank of England narrowly missed suspension, and then only because of specie borrowed in Paris.⁴⁰

Although the Bank of England's plight graphically illustrates the depth of the crash, and helps to explain

³⁹Ibid., 166-167.

⁴⁰Ibid., 170.

the drying up of funds, it does not explain the web of events reinforcing the economic depression. The crop failure of 1838 forced Britain to purchase almost £10 million worth of grain abroad, while foreign earnings fell off. Yarn exports to Belgium, Prussia, and Saxony dropped drastically, as a crisis struck their young textiles industry. At the same time, political tensions caused economic repercussions which could be removed only in years to come. At one point, the pretensions of Mehemet Ali brought England and France to the brink of war in the Near East, and trouble flared up again on the Afghanistan border. Meanwhile, the trade of both the United States and Britain was disrupted by disputes with China over the opium trade, and a French blockade of Buenos Aires destroyed trade with that sector. At the same time, the Maine boundary incidents increased tension between America and Britain. Political problems, so basic to the disruption of British trade, destroyed the markets through which the finished products made from American cotton were distributed.⁴¹ Unfortunately, political problems could not be solved by financial manipulation.

In America, pressure transmitted from England turned to panic in June. Biddle was gone from the Bank of

⁴¹Jenks, p. 95.

the United States, and lesser men were in control of America's most powerful financial institution. Through June, the Bank followed a counter policy by selling bills of exchange on Jaudon and Hottinguer, but late in June, Hottinguer gave notice that drawing must halt. By July, a million dollars in specie had been lost. The Bank then began to draw heavily on Jaudon, backed by cotton held at Humphries and Biddle.⁴² For the second time, America's credit and exchange position were staked on sales of securities and on the price of cotton.

In 1839, the price of cotton could not be raised by cornering the market. In the spring of 1839, British spinners had agreed to combine against cost cutting and price increases by American monopolies. To force home their point, they restricted purchases and went on short time, while the contracted textile market made breaking the agreement unprofitable.⁴³

As time passed, Jaudin's position in London became progressively worse. A million pounds in stocks was maturing in the autumn, and American stocks were unsalable. Then, in August, the United States Bank made his position untenable by selling a mass of drafts on him to organize a run on the New York banks. Hottinguers sustained him

⁴²Govan, pp. 360-361.

⁴³Jenks, pp. 92-93.

until September, when he was forced to give up. Jaudin and the Bank would have been ruined, but friends of the Bank in Europe whose fortunes were staked on American prosperity combined to support American credit. Rothschild, and Hope's, advanced £800,000 secured by American state bonds to liquidate outstanding debts. Cotton held in London had to be sold at a loss. Although the Bank was solvent, failure stripped it, the credit system, and American securities of financial respectability.⁴⁴ The bonds used to secure the loan of exchange, and others sent abroad to secure the Bank's debts in later years, would have important and unfortunate effects on Michigan.

The depression was long and continuous. Recovery was not experienced until 1844. Douglas North, among others, has compared it to the Great Depression of 1929 in both length and severity.⁴⁵ As time passed, conditions became worse. Work on internal improvements did not stop immediately, but proceeded slowly until already borrowed funds ran out. Several projects were financed by state notes and post-dated checks through 1840, but after that, work was slow and sporadic. Eventually, most states were unable to meet interest payments on their debts.⁴⁶

⁴⁴Hidy, pp. 275-276; Clapham, II, 168-169; Jenks, p. 95-98; Govan, p. 363.

⁴⁵North, 202.

⁴⁶Segal, in Canals and American Economic Development, pp. 198-201.

As the depression deepened, a wave of hostility against borrowing, credit, the credit system, and financial institutions swept the United States. As people began to see homes, farms, and businesses swept under by forces they did not understand, and through no apparent fault of their own, they began to react against the institutions apparently at fault. Worst of all, the feeling that credit was a fraud led politicians to call for repudiation. Between June 1840 and August 1842, the market for American securities moved from bad to progressively worse. When the failure of the Bank of the United States was added to the default or repudiation of the states in 1841, the market was badly damaged. Even solvent states and institutions were refused credit and forced to suspend operations. Americans were pictured abroad as a "nation of swindlers," because Europeans regarded the failure of one state as the responsibility of all.⁴⁷

By 1844, an era was ended. The surplus was gone, and the people were disillusioned. State enterprise was in disrepute, and railroads were beginning to challenge canals for supremacy in transportation. State credit was gone, at least as far as foreign capital was concerned. Many of the states adopted constitutional restrictions against state support of internal improvements.

⁴⁷Hidy, pp. 289, 309; Jenks, pp. 99-101; Govan, p. 376.

Michigan's experience was far from unique. The optimism and sense of mission exciting ambitions was universal to Americans of the era, and the need for improved transportation was widespread. Even her timing coincided with other state's decisions to the point that a cycle was generated. Finally, the forces leading to her financial failure, forces outside her control, led to similar experiences in most of the states in the Union. Michigan's program was far from a self-contained phenomena. Events controlling it occurred in Philadelphia, Washington, London, Paris, and Amsterdam. Forces creating it reached back half a century in political and economic development, through a complex network of economic variables. None of this, of course, completely explains or justifies the decisions made by Michigan's leaders between 1830 and 1850, but it does frame them in an understandable national context.

CHAPTER IV

THE TERRITORIAL IMPETUS

The land settlers found in 1837--indeed, their very immigration and settlement--was the product of internal improvement. Nature had played cruel tricks; when the great glaciers that carved the twin peninsulas receded, they left a land out of context with its geographic environment. Though west of the Appalachians, Michigan was really the western-most extension of the Atlantic seaboard, draining its waters through the St. Lawrence basin, while nationally annexed to the economic and political culture of the Mississippi Valley. To the east, she was cut off by the falls of Niagara and the mountain barrier, while to the west and south, the ridge separating the basins of the Ohio and Mississippi from the Great Lakes frustrated travel. Over land, the obstacles were almost insurmountable.

The land itself was not new. The first white men began exploring the waters of the upper lakes before Boston was founded, and by 1701, settlements had been located at Detroit and the Soo. Still, for more than two centuries after Etienne Brulé entered the St. Mary's River, Michigan remained the domain of the voyageur and

the coureur de bois. Transfer from France to England in the 1760's made little difference in its basic economic pattern, and transfer to the United States had little more effect. Even after 1795, when the British relinquished control, the land was valued less for its wheat and corn than for its furs. As late as the War of 1812 there was neither a mile of improved road in the territory, nor a mile of road linking it to the rest of the United States. In 1810 the population numbered 4,762, and by 1820 it had increased to only 8,896, with both figures including territory west to the Mississippi. Yet, the tide of settlement rolling down the Ohio Valley had already bypassed the region; in 1820, Ohio, Indiana, and Illinois had already achieved statehood, and Missouri was knocking on the door. In Michigan, the federal government had not even bothered to open a land office until 1818.

A few feeble attempts were made to connect Michigan with the rest of the Union. In 1806, the Territorial Government authorized a lottery to raise \$6,000 for a road from Detroit to the foot of the Miami rapids at Lake Erie (now the Maumee River, the present site of Toledo).¹ Apparently nothing came of it, for during the War of 1812, Detroit was still cut off from the rest of the country

¹Michigan, Laws of the Territory of Michigan, IV, 35-ff. Cited hereafter as Territorial Laws.

whenever the Lakes were closed. In the course of the war and its aftermath, three passable routes were constructed from the Ohio Valley to the rapids of the Maumee. The first, from Lower Sandusky (Fremont) was cut through the great Black Swamp over 15 miles of corduroy to the rapids. The second, Middle, or Hull's route, ran from Urbana by way of Findlay to the rapids. The third, Wayne's route of 1794, and Harrison's and Clay's of 1813, traveled by way of Fort Recovery and Greenville to Defiance and then to the Maumee.² The roads, however, ended at the rapids and the route to Detroit remained unimproved.

After the war, Detroit was finally connected with the rest of the country by an over-land route. In May, 1816, the Secretary of War ordered troops under the command of Alexander Macomb at Fort Meigs to construct a road from the rapids to Detroit. By November, the road was completed to the River Raisin, when the troops retired for the winter. By the fall of 1818, Macomb was able to report seventy miles of road constructed, and probable completion to the rapids by the next meeting of Congress. Meanwhile, attempts to connect the rapids with Ohio at the western border of the Connecticut Reserve were frustrated by Indian troubles and difficulty in throwing a

²Caroline E. MacGill and Others, History of Transportation in the United States before 1860, ed. Balthasar Henry Meyer (Washington, D. C.: Carnegie Institution of Washington, 1917), p. 27.

causeway across the Black Swamp. In 1820, official correspondence still spoke of the "Proposed road through the Black Swamp."³ Although official reports stated that the Detroit-Miami road was constructed in a "masterly manner," the bridging was apparently inadequate for civilian transportation. In four acts between 1816 and 1819, the Territory granted corporate charters to companies planning to bridge the rivers Rouge, Ecorces, Huron, and Raisin. The bridges were not considered part of the public road, but were given monopolies for a mile on either side of the bridge with a life of twenty to twenty-five years, as long as they remained toll free to troops and the mail.⁴ The roads remained little more than military trails fit only for the transportation of troops and military supplies,⁵ but, as we shall see, the bridges formed an important component in the later movement for free public transportation.

Until 1824, settlement and road building proceeded slowly. Several towns were founded in a circle within thirty miles of Detroit: Utica in 1817; Rochester in

³United States, Department of State, The Territorial Papers of the United States, ed. Clarence Edwin Carter (Washington: U.S. Government Printing Office, 1942), pp. 639-640, 670, 782, 820, 859, 691. Cited hereafter as Territorial Papers.

⁴Michigan, Territorial Laws, I, 290, 295, 306; II, 144.

⁵George B. Catlin, The Story of Detroit (Detroit: Detroit News, 1923), p. 259.

1818; Pontiac in 1819; Ypsilanti in 1823; and Ann Arbor in 1824. The new settlements were concentrated in the valleys of the Clinton and Huron rivers.⁶ At the same time, there is little evidence of road building activity by the territorial government. Five hundred dollars was appropriated in 1818 to extend Congress Avenue in Detroit forty miles, and a hundred was appropriated in 1822 for a road from the Huron River to Swan Creek. The same year, two hundred dollars was appropriated for a road from Pontiac to Saginaw.⁷ But these sums were scarcely adequate for improving the transportation of the territory. Although some form of overland communication must have been maintained, the routes could have been little more than trails.

Michigan's development reached a watershed in 1824. In that year, the territory was organized under a popular government with the Territorial Legislative Council replacing the older Governor and Judges. New promise was given by the pending completion of the Erie Canal, the effects of which were already being felt in the Old Northwest. Land sales in 1824 soared to over twice the previous record, and the first of the "Territorial Roads" was authorized.⁸ The surge of change forecasts the

⁶Ibid., p. 281.

⁷Michigan, Territorial Laws, I, 290, 295, 306.

⁸See Appendix I.

the beginning of a massive transformation in the forested peninsula to the north and west of Lake Erie.

Contemporaries were keenly aware of the new wind sweeping into the West. Lewis Cass, the Territorial Governor, bespoke this awareness in his opening address to the new Legislative Council when he said:

. . . an auspicious change has taken place in our situation and prospects. . . . That great artificial river, which is about to unite the Lakes with the Ocean, one of the proudest monuments of human genius and industry, has brought us almost in contact with the Atlantic border, and furnished a communication with the commercial metropolis of the nation, with an economy, safety, and facility, which have almost annihilated the intervening distance.⁹

Completion of the Erie had an important impact on the growth of the Old Northwest. Within twenty-five years, the population of Ohio, Indiana, Illinois, and Michigan grew from 792,000 to over 4,200,000. Equally as important was the shift in the geographic origins of immigrants after a convenient route was opened to the residents of New York and New England into the West. At the same time, the canal brought about important changes in the trade patterns of the nation. In the decades between its opening and the Civil War, trade via the northern route through the Great Lakes and the Erie Canal, and by railroad in the 1850's, broke the dominant hold of the Ohio-Mississippi Valley route on the trade of the Old Northwest,

⁹Michigan, Journal of the Legislative Council of the Territory of Michigan, 1st Council, 1st Session, 1824, p. 6. Cited hereafter as Journal of the Legislative Council.

and channeled goods north and east through New York. Trade on the northeastern route increased not only absolutely, but took a greater portion of western trade every year. From 23.7 per cent of Northwestern trade in 1835, it rose by 1853 to 62.2 per cent. During a period when national commodity output increased 145.5 per cent, freight from the West on the Erie Canal grew 718.1 per cent.¹⁰ Although substantial portions of this increasing trade originated in western New York, its effect on Michigan cannot be minimized. The Erie not only created an easy route for shipment of the produce of the farms of the Great Lakes region and an opportunity for agricultural development; it gave an opportunity to participate in the benefits of a shifting pattern of national traffic and earn an income from the transportation of goods and services.

Trade from and through the Great Lakes had long had access to the Mississippi by three major routes: by way of Chicago and the Illinois River; through Green Bay over the Fox and Wisconsin Rivers; and through Lake Superior over a chain of lakes and rivers to the Mississippi.¹¹ And, although early trade was channeled through the supplementary canals in Ohio to the valley of the

¹⁰Segal, Canals and Economic Development, 229-230.

¹¹Territorial Papers, X, 574-575.

Ohio River, hope existed in the upper lakes of providing more economical routes for the trade of New York with the Mississippi Valley, particularly over the two southern routes. In 1829, and again in 1834 and 1835, the Legislative Council granted charters to canal companies to build either canals, rail, or macadamized roads between the Fox and Wisconsin Rivers.¹² Apparently, none of these companies fulfilled its charter obligations, and by the time Michigan had begun its internal improvements program, the area had been removed from its jurisdiction. The companies, however, provided an example of the inadequacy of private enterprise for improving the transportation of frontier regions.

Other important alternatives, however, held pregnant promise for the peninsula. During the Adams administration, federal land grants were awarded to three important projects. The first two, for the Maumee and Erie Canal under the state of Ohio, and the Wabash and Erie under the state of Indiana, had their outlets in Toledo, then within the boundaries of Michigan. A third, with even greater promise, was for the Illinois and Michigan Canal, connecting the navigable waters of Lake Michigan with the Mississippi River. In 1831, the Detroit Democratic Free Press reported that a merchant, E. C. March,

¹²Michigan, Territorial Laws, II, 720; III, 1296; IV, 138.

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had sent goods from New York to Buffalo, where they were shipped by schooner to Chicago, transported by wagon around the rapids of the Illinois River, and placed on a steamboat bound for the Mississippi. Merchandise, they reported, could be shipped at two-thirds of the cost of the New Orleans ocean route, and in less than half the time. The article expressed hope that a profitable trade could be built with Illinois and Missouri, and perhaps even with Tennessee and Arkansas.¹³

In sum, the opening of the Erie offered more to the region bordering the lakes than an economical means of marketing heavy agricultural commodities; it offered an opportunity to participate in the income and business opportunities of an expanded and redirected national trade. To the burgeoning cities of the Michigan peninsula, Toledo, Monroe, and Detroit, it offered more than a chance to become merchandising centers for a fertile hinterland: it contained the promise of commercial empire. There is an illusive vision in the documents, growing stronger through the twenties and powerful in the thirties, of a great commercial metropolis somewhere on the lakes; of a Chicago, or what Chicago was to become, channeling the trade of the West and the Mississippi Valley into a single track, be it road, canal, or railroad,

¹³Democratic Free Press (Detroit), December 1, 1831, p. 2.

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into the new northern route through Buffalo and Albany into New York and Boston. The vision was as real and as powerful as that held on the Atlantic seaboard by cities attempting to penetrate the Appalachian barrier, and gave added dimension to agitation for internal improvement in the decades that followed. In the rivalry of lake port states and cities for control of the route west, a full comprehension of the rewards of success increased the urgency with which demands were pressed.

It was against this backdrop that roads began to be built in earnest. The subject of roads is, in itself, an immense undertaking, and a detailed examination is not within the scope of this study. There are, however, important facets of the road building program which give insight into the impulse for internal improvements.

The heart of the transportation problem lay in the existence of a belt of land varying from twenty to forty miles in width, which cut the eastern coast line of the state off from the interior, a belt of clay soil, running from Ohio to Saginaw Bay which was wet, wooded, and practically impassable.¹⁴ As one early resident later described it, "For forty miles in every direction around Detroit lies one heavy timbered, level, muddy plain, where the soil is alluvial on the surface and a cold, squeasy,

¹⁴ John M. Gordon, "Michigan Journal, 1836," ed. Douglas H. Gordon and George S. May, Michigan History, XLIII (1959), 258.

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heavy clay beneath, through and over which, even now, transit is almost impossible.¹⁵ Penetration of this barrier, and the keeping of facilities constructed in a condition to transport goods from the interior, remained major problems throughout the period of this study.

In the next decade, two types of road were undertaken in the territory. The first, a series of wagon roads built by the federal government, became popularly known as "Territorial Roads." The second, little more than trails, were built under the authority and control of the territorial government.

Between 1824 and 1835, Congress authorized and built five major wagon roads and several lesser roads in the territory. Typical of these roads and of methods of construction was the Fort Gratiot Turnpike, running from Detroit to Fort Gratiot, near the present site of Port Huron. Passage of the bill in March, 1837, was the result of persistent efforts by Michigan's congressional delegates together with numerous popular petitions. Surveying began in June of the same year, and eighteen months later, in the winter of 1828-1829, Congress appropriated \$15,000 for construction. In May 1829, contracts were let in half mile sections for nearly sixteen miles of the

¹⁵George C. Bates, "By-Gones of Detroit," Michigan Pioneer and Historical Collections, XXII (1893), 348.

road at a cost of \$12,000, and it required three years of building before the last seven miles were let in September 1832. Total cost for fifty-six and one-half miles and five bridges was \$44,575.31. After 1833, Congress made no further appropriations for its repair until 1911, when the origin of the road was used as a justification for federal highway improvement. The road was supposed to be two rods wide, with a crown two and one-half feet above the surface level; it became known as the Fort Gratiot Turnpike because of its raised crown construction. Although the importance of the road to national defense was stressed in the passage of appropriations, it was used only once for the transportation of military supplies. But, during the land rush of 1835, settlers generally located on or near the road.¹⁶

Similar stories could be told for the other "Territorial Roads" built under federal authority. The Detroit to Saginaw road was surveyed in 1828, and construction began in 1829. In 1831 the road was opened as far as Pontiac, and by 1835 it was completed five miles beyond the Flint River, at which point the government abandoned construction. The Detroit-Fort Meigs road, authorized in 1824, was opened to Toledo by 1829, at a cost of about \$38,000. Surveys were made on the Grand

¹⁶William L. Jenks, "Fort Gratiot Turnpike," Michigan History, IX (1927), 150-161.

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River road from Detroit to the rapids of the Grand River (now Grand Rapids) in 1832, and between 1832 and 1837 it was cleared and grubbed to Howell. By 1837, however, it could only be used as far as Howell, and no major wagon road existed to the west through the third tier of counties.¹⁷

The Chicago road, on the Old Sauk Trail from Detroit to Chicago through the southern tier of counties, was the result of determined legislative pressure by Father Gabriel Richard during his term as Territorial Delegate. At Richard's request, the Secretary of the Treasury authorized withholding sections for one mile on either side of the road in July 1825, but Richard's successor, Austin Wing, was either unwilling or unable to gain a federal land grant for its construction. On June 23, 1826, the reserved sections were returned to the market.¹⁸ Meanwhile, surveying was completed in November 1825, and by 1830, sixty-four miles had been completed. The road reached the Indiana line in December 1835, at a cost of about \$87,000. A connector from Monroe, known as

¹⁷R. Carlyle Buley, The Old Northwest (3 vols., Bloomington, Inc.: Indiana University Press, 1951), II, 83; Roger L. Morrison, The History and Development of Michigan Highways, (reprinted from the Michigan Alumnus Quarterly Review, Autumn, 1937, pp. 59-73), p. 4; Henry M. Utley and Byron M. Cutcheon, Michigan as a Province, Territory and State, the Twenty-sixth Member of the Federal Union (4 vols; New York: American Press, 1906), II, 273-283.

¹⁸Territorial Papers, XI, 691-693, 623, 976, 980.

the La Plaisance bay road was completed from Monroe to Tecumseh between 1833 and 1837.¹⁹

In addition to road construction, the federal government undertook a canal linking Monroe, on the River Raisin, with the navigable waters of La Plaisance Bay. Between 1827 and 1836, \$49,000 was appropriated, but the canal remained uncompleted for two decades after federal abandonment in 1836. Although Monroe's charter authorized the village to build the canal by voluntary subscription, there is no record of locally financed construction. In 1833, Army surveyors recommended construction of a ship canal, and organized pressure was placed on Congress from the village through the Territory's Congressional Delegate. The promise of becoming a lake port spurred Monroe's ambitions to become the commercial metropolis of Michigan and the West.²⁰

The last of the major traffic arteries of Territorial Michigan was established by the Legislative Council. Territorial Road, as it came to be known, was authorized by the Legislative Council under an act of November 4, 1829, to run west from the Chicago road at the inn of Timothy Sheldon in Plymouth, down the St. Joseph

¹⁹Morrison, p. 4; Utley and Cutcheon, II, 282.

²⁰Michigan, Territorial Laws, IV, 141; Utley and Cutcheon, I, 283; Territorial Papers, XII, 592, 594-595, 633, 635, 639, 640.

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Trail to the mouth of the St. Joseph River at Lake Michigan. Although it was not officially surveyed and opened until 1836, it was passable and in use five or six years earlier.²¹ Writers discussing the Territorial Road have often appeared puzzled at the lack of energy displayed by the Legislative Council in prosecuting the work, and their confusion stems from a failure to realize that the road was never intended to become a wagon road at all. Instead, it was one of hundreds of roads authorized by the Council in the decade preceding statehood under the stipulation that "the expenses or damages of laying out and establishing said road shall not be charged upon, or paid out of the territorial treasury."²² Unlike the other territorial roads established by the Legislative Council, its strategic position through the center of the second tier of counties spurred its growth into a major traffic artery. As the pressure of immigration mounted in the early 1830's, settlers poured west through the second tier, establishing towns, opening lands, and producing crops, but it was external pressure rather than territorial construction that made it an important route. The system under which it was established and maintained was a major reason for persistent complaints at the condition of the roads.

²¹Buley, II, 83.

²²Michigan, Territorial Laws, I, 744.

During the decade prior to admission, the territory developed the basic system of construction and maintenance that was retained by the state for the balance of the century. With few exceptions worthy of attention, Michigan's system of road maintenance was typical of those adopted by other states during the century. Most early nineteenth century public roads were little more than rutted lanes, hewn through the forests, with the stumps cut below axle height or sometimes even removed. Local units of government were responsible for construction and maintenance. A road tax was assessed, but a "man could, and often did, work on the road a certain number of days a year and supply a team of horses in lieu of payment."²³ Both as a territory and a state, Michigan operated under a similar system, with a subtle but significant difference in the degree of compulsion, that made it more nearly resemble the corvee than the system described above.

The first act regulating highways was passed in September, 1805.²⁴ Seven times in the next twenty years, similar acts were passed, suggesting the basic inadequacy of the system of highway regulation.²⁵ With remarkable

²³Charles R. Adrian, State and Local Governments (New York: McGraw-Hill, 1960), p. 472.

²⁴Michigan, Territorial Laws, I, 177.

²⁵Ibid., I, 449-461, 611; II, 93-102, 118-125, 132, 289; IV, 43-ff.

regularity, the speeches of Governor Cass could be counted on to raise three basic issues: the disgraceful condition of the militia; the wisdom of refraining from changing the laws; and the need for revising existing highway legislation. But each time the Council responded the new act proved as unsatisfactory as the old.

Historians have long commented on the role of territorial governments in preparing frontier areas for statehood. It would appear, however, that under the leadership of Lewis Cass and his fundamentally Jeffersonian policy, Michigan moved away from the establishment of an experienced and comprehensive government. It was under his recommendation that the machinery of taxation was dismantled and the remaining fiscal resources of the territory surrendered to county level government, a policy which would leave the newborn state saddled with the endless problems of constructing fiscal machinery from the ground up.²⁶ And it was under his influence that more and more power was vested in the township, on the basis of the principle that "In proportion as all governments recede from the people, they become liable to abuse."²⁷

²⁶Michigan, Journal of the Legislative Council,
1st Council, 1st Session, 1824, p. 7.

²⁷Ibid., 2d Council, 2d Session, 1826, p. 9.

From the very beginning, the Legislative Council demonstrated an aversion to taxation for the purpose of providing roads. At its first session, the Council petitioned the United States Senate, stressing among other subjects the importance of providing a systematic program of road construction without taxation. It characterized taxation for roads as poor and unjust policy because it fell upon the migrating farmer who was buying land, erecting shelter, and preparing the land. "Before he can fit his newly acquired land for cultivation, a year at least must elapse, during which he and his family must subsist upon what may remain of means, . . ." On the basis of this need, the Council asked that five per cent of the receipts of federal land sales be reserved for construction of roads.²⁸

In addressing the opening of the Legislative Council in November 1826, Governor Cass restated principles stressing the need for stronger township government and the need for improving the roads. Good roads, he told them, were everywhere essential, but in a new country with a thin population and scattered settlement, good roads were basic to supplying the most common needs. He warned the members, however, that present taxes both in labor and money were as much as the people ought to

²⁸Territorial Papers, XI, 604-ff.

bear, and left the Council to find the solution to the problem.²⁹ They responded by producing the Highways Act of 1827, the longest and most comprehensive of the highways acts to date. From it, subsequent acts can be discussed in terms of their deviations, since it appears to have been the basis for the state's road policy almost to the close of the internal improvements era.³⁰

The act of 1827 placed responsibility for the roads squarely on the township authorities. Commissioners elected on the township level were authorized and compelled to lay out and alter roads, and to assess labor to be used on the highways within their township. Townships were further divided into road districts with elected overseers, who were responsible for overseeing work, warning persons of labor assessed, and collecting commutation money. They were also responsible for keeping the roads in repair. All free males over twenty-one years of age were liable for two to thirty days labor on the roads, with three days per poll the minimum average assessment. The rate of commutation was raised to seventy-five cents per day, and failure to appear for labor was subject to a fine of one dollar. Provision was made for laying out private roads, and public roads at popular request.

²⁹Michigan, Journal of the Legislative Council, 2d Council, 1st Session, 1826, p. 7.

³⁰Michigan, Territorial Laws, II, 495-508.

Subsequent acts added to, rather than revised the structure of the act of 1827. An act of July 30, 1830, placed all roads constructed by the United States government under township jurisdiction, to be cared for in the same manner as existing highways.³¹ In June 1832, the act was amended to raise the limit for labor assessments from thirty to fifty days labor.³² Finally, an act of the newly created state legislature on March 28, 1836, placed all roads created by the state under the jurisdiction of township commissioners.³³

Available evidence suggests that the system adopted by the state more closely resembled a system of forced labor than one of taxes payable in labor. The act itself spoke of assessments in terms of days labor convertible into money, rather than the reverse. Affidavits and remonstrances, among them one signed by Henry Schoolcraft, submitted during the disputed election of 1825, testified that payment in labor was accepted as a tax receipt for purposes of voting, and that fully twenty-five per cent of the voters of the territory would be disenfranchised by the decision of the board of canvassers

³¹Ibid., III, 820-821.

³²Ibid., 947, 1049.

³³Michigan, Acts of the Legislature of the State of Michigan, 1835 & 1836, pp. 102-103. Cited hereafter as Legislative Acts.

to accept only monetary tax payments as a basis for suffrage.³⁴ In 1833, Governor Porter vetoed a highway bill which he felt set commutation prices out of proportion, stating that the long accepted hire of a horse, cart, and man was \$1.25 per day.³⁵ Since the acts of the period accepted the three components at an equal value, it suggests that both the earlier rate of sixty-five cents, and the later rate of seventy-five, were substantially above the common wage rate, particularly for the eight-hour day specified by the act. During the inflationary period of 1837, the commutation rate was raised to an even dollar.³⁶ A study of state taxation ordered by William Woodbridge in 1840 showed returns as high as five dollars from an eighty acre lot, and several counties with four dollar average returns. Since taxes were often evaded, and unequally distributed within the counties, depending on the proximity of road districts to major roads and the composition of the soil, taxation on many farms must have been substantial. At the reduced rates of the depression, between a week and two weeks labor would have been consumed by road taxes.³⁷

³⁴Territorial Papers, XI, 711-781, 843-844, 862.

³⁵Messages of the Governors of Michigan, I, 98.

³⁶Michigan, Legislative Acts, 1837, LII.

³⁷Michigan, Legislative Acts, 1841, p. 262, Appendix no. 9.

The Legislative council also provided guidelines for allowing private enterprise to construct roads, by passage of "AN ACT relative to turnpike companies," on August 5, 1824. The act allowed corporations to be formed for building turnpikes, under territorial supervision of routes and rates. On the same day, the Pontiac and Paint Creek turnpike company was incorporated.³⁸ Little apparently came of it, because capital was scarce and the crushed stone used for macadamization was practically unavailable in the south-eastern portion of the state. In time, the title of turnpike came to be applied to any road with ditches and a raised crown. At the same time, public hostility to toll facilities increased.

Between 1827 and 1833, a wave of popular indignation rose against the toll bridges erected on the Detroit-Miami road under the acts passed from 1816 to 1819. In March 1827, a select committee of the Legislative council headed by McDonell recommended repeal of the toll bridge authorization, charging that the bridge acts were illegal and the bridges in poor repair. When the report was tabled, McDonell sent a copy to the Secretary of War. A petition complaining of the "heavy and enormous toll" was forwarded to Congress in November with two hundred fifteen signatures. According to McDonell, even the bridge

³⁸Michigan, Territorial Laws, II, 202, 212-214.

proprietors signed the petitions. The following year, a similar petition was sent to Congress with over one hundred forty signatures attached.³⁹ Finally, in 1829, the Legislative Council authorized a lottery to raise \$10,000 to buy the bridges or build turnpikes around them, proclaiming: "free roads and a free communication to and through all parts of this territory are highly necessary to the growth and prosperity thereof, . . ."⁴⁰ Apparently, the act never went into effect.

At the same time that the Highways Act of 1827 was passed into law, the Council passed an act defining the method of laying out and establishing Territorial Roads (i.e., those authorized by the Council). The act provided that all road bills should appoint commissioners who would hire surveyors. The surveyor's charges and all damage claims submitted within six months were to be paid from the county treasury, which would be reimbursed by territorial funds.⁴¹ In practice, however, the provision was nullified as early as 1828 by insertion of a clause stipulating payment of expenses by county commissioners. By 1830, the clause stating that "the expense of laying out and establishing said roads, and any damages to

³⁹Territorial Papers, XI, 1123-ff, 1127, 1129, 1124.

⁴⁰Michigan, Territorial Laws, II, 731.

⁴¹Michigan, Territorial Laws, II, 593.

individuals, . . . shall not be charged to, or paid from the treasury of the Territory" became the standard final clause of bills passing the Legislative Council.⁴² The same practice was followed by the state. Between 1832 and 1835, the total spent by the territorial government for transportation improvement amounted to \$3,700 for roads, and \$1,030 for a railroad survey, although hundreds of roads were authorized. During the same period, fuel and stationery cost \$3,857 during sessions of the Council.⁴³ For nearly fifty years after statehood was achieved, the same basic system was followed; county level administration was not provided until 1893, and the last county administration was not formed until after 1920.⁴⁴

It is not difficult to understand the complaints voiced in the mid-1830's by a generation hardened to bad roads about the condition of Michigan's roads. Toqueville, traveling the uncompleted Saginaw road in the early 1830's, described the road by saying "there is only a narrow path, scarce recognizeable to the eye."⁴⁵ Thomas Cather,

⁴²For example, see Michigan, Territorial Laws, II, 744, 746. Phraseology changes slightly from act to act.

⁴³E. Grosvenor, "Financial History of Michigan," The Semi-centennial of the Admission of the State of Michigan into the Union (Detroit: Michigan Commission for the Semi-centennial Celebration, 1886), p. 41.

⁴⁴Morrison, pp. 9, 10.

⁴⁵Toqueville, Toqueville and Beaumont in America, p. 250.

traveling the Chicago road in 1836, described his experience even more vividly:

This has been a very tedious and toilsome journey. Where there were roads, they were execrable, such as a European could have no conception of. If a man were to set about describing bad roads and were to draw on the powers of the liveliest imagination, he would fall far short of the realities which I have experienced. Sometimes the horses were swimming in the water, sometimes floundering through quagmires. At times the wagon was all but upset over the stumps of trees. At some places where attempt had been made to form corduroy roads, it went bumping and crashing along in such an awful manner that I did not know whether to wonder more at its timbers not being shaken to pieces, or at our bones escaping dislocation.⁴⁶

Testimony given by other contemporaries indicates that Cather was actually guilty of understatement. Even Lanman, whose state-subsidized history was actually an attempt to draw settlers by singing the state's praises, was forced by honesty to comment that:

During the spring and fall, the roads across the state are such as to try the patience of the traveler. Those on the level and heavily timbered land are almost impassable. . . . Composed, as the soil is, of new rich loam and clay, which retains and mixes with the water, it forms a deep mud, except during the summer and winter, when it is dried up or frozen.⁴⁷

With all that can be said against them, however, the roads served a function by giving settlers access to the land. As R. C. Buley has pointed out, "while soil,

⁴⁶Thomas Cather, Voyage to America: The Journals of Thomas Cather (New York: By Author, 1961), pp. 128-129.

⁴⁷James Henry Lanman, History of Michigan (New York: E. French, 1839), p. 254.

timber, availability of damsites, the nature of the scenery even, where all important factors in determining settler's locations, most important was the lack of roads."⁴⁸ Henry Utley, in his history of the state, has cited the Erie Canal and the Territorial Roads as the two most important factors in the settlement of the state between 1824 and 1834.⁴⁹ As the tide of settlement swelled, the influence of the roads was quickly apparent. The chips from the surveyor's axe had scarcely fallen to the forest floor, than a town site was platted adjacent to the road, and men took up farms along the trail of blazes because a road would be built there. Bad as they were, the roads served the purpose of bringing in population and bare necessities.

But, once that purpose had been served, it was clear that more was necessary. The settler could bring his family, his tools and possessions into the interior by cart or wagon; he could clear the brush and girdle the widely spaced burr oaks of the oak openings. He could even plant his first crop of wheat, avoiding the progression from corn to pork to wheat necessary in the heavy forests of Ohio and Indiana, but then he had to market his crop. This could not be done economically over roads

⁴⁸Buley, II, 83.

⁴⁹Utley and Cutcheon, II, 337.

on which ten miles a day was difficult for a loaded wagon, on which wagons were smashed and livestock drowned. A second alternative was provided by the rivers, but these, too, had their limitations. The state was well supplied with navigable waters capable of floating flatboats and barges to the lakes, but first the rivers required extensive clearing and improvement. An additional handicap was raised by the fact that in the southern half of the state, the peninsular watershed is located only a third of the distance to the west of Lakes Erie and St. Clair. West of Jackson, goods shipped by water had to be carried a hundred miles west, and hundreds of miles north and south through the storm-tossed Straits of Mackinac on lakes closed by wind and ice for six months of the year, to reach a point less than a hundred miles to the east of their point of origin. Wheat milled into flour in the summer and fall, might not reach market before the following June. Under these conditions, it is not difficult to understand why the farmer in the interior was as eager as his lake shore cousin, to find an economical means of artificially shipping his produce.

As the volume of immigration rose in intensity and a marketable crop was produced, the need became increasingly urgent. From a population of 8,896 in 1820, the total swelled to 31,639 by 1830, only five years after the Erie had opened. Within two years, responsible people began

talking of the population having reached the 60,000 required for statehood. The census authorized by the Legislative Council in 1834 revealed that the population had increased to 87,273, and by state census in 1837, it was found to have grown to 175,000. Three years later, when the depression had appreciably slowed the rate of settlement, the federal census showed a population of 212,267.⁵⁰ During the same period, sales of public lands increased rapidly. In 1831, the previous year's record was doubled as sales jumped to over 320,000 acres, and in 1834, they reached nearly 500,000. During 1835 and 1836, sales reached epic proportions as the "Michigan Fever" struck in full force. In 1835, 1,817,000 acres of the public domain were purchased, and the following year's total dwarfed those sales. In 1836 alone, 4,189,000 acres, more than twenty-five per cent of the lands sold by the government in that record breaking year of speculation, were bought in Michigan alone.⁵¹ Undoubtedly, many of the purchases were speculations without real occupation of the land, but the substantial increase of population over the same period indicates that many of the purchasers were actual settlers. In the area west of the peninsular

⁵⁰See Appendix I.

⁵¹See Appendix I.

divide, where a cash crop could be produced almost immediately, the heavy volume of pent-up productivity must have added to the urgency for improved transportation.

The inflow of population did not occupy the state with a uniform density. Population was concentrated in the three southern tiers of counties, decreasing in numbers from east to west. Newer settlers were forced to go farther west to take up lands, increasing the difficulty of transportation. Settlement in the first tier of counties, from Monroe through the valley of the St. Joseph River lagged behind that of the second or central tier, stretching west from Detroit to Lake Michigan. The third tier, west of Mount Clemens and Pontiac was only thinly populated, and the fourth tier, between Port Huron and Grand Rapids along the valley of the Grand River, was the least populated area in the southern half of the state. To the north and in the upper peninsula, there was little population outside of isolated pockets at Saginaw and the Soo.⁵²

During the decade of popular territorial government, the region witnessed far-reaching changes but limited accomplishments. The opening of the Erie Canal promised to place the peninsulas in the main current of American economic life and astride a major transportation

⁵²See Appendix II.

route. The Territorial Roads opened lands and facilitated the settlement of increasing numbers of immigrants. A system of road building and maintenance was developed that served the state, however poorly, for the rest of the century. Finally, a population was developed sufficient to create demands for statehood. It is under these conditions that the demand for internal improvement grew into a significant movement which culminated in adoption of a formal program in 1837.

Events leading to the decision of the Legislature to undertake a program of internal improvements began long before statehood was even envisioned, and encompassed a wide range of factors. It had its roots in both the national internal improvements movement, and in a long history of agitation, speculation, political factionalism, sectional rivalry, and heightened expectations.⁵³ Historians describing state investment decisions in the first cycle of constructions, particularly in the East, have the advantage of dealing with established societies and established social orders. The societies are comparatively well

⁵³During the century which has elapsed since the state's works were abandoned, a substantial folklore has grown up concerning the decision to build. Through constant repetition in meetings of the Pioneer and Historical Society, and incorporation of these tales into the better volumes of state history, a standard version has emerged in which the boy governor, Stevens T. Mason, recommended a multi-faceted program to the Legislature in 1837, which responded by passing his program. A few of the more perceptive have even noticed mention of a program of internal

ordered, pressure groups and social demarcations are, comparatively speaking, both stable and established, and political factions and their leadership are readily identifiable. Frontier Michigan offers a startling contrast. In addition to the excited flux characterizing Jacksonian America, its burgeoning industrial capitalism, social mobility, newly discovered political techniques, and budding political parties, the frontier environment offers complicating factors. In the midst of a population which doubled or tripled every two or three years, in which the centers of political power shifted with the progress of settlement, and in which men unacquainted with each other two or three years before were meeting and forming political organizations, the ordinary pace of time was compressed as people attempted to build a system of laws and government with which to meet their most pressing needs. When attempts were made to reform their creation in the midst of gestation, the limits of coherent description are approached. Because of the turmoil in frontier Michigan, coherent description requires a topical approach, even though much of the essence and simultaneity is lost.

improvements in his annual message of 1836. Even the most scholarly of the recent state histories clings to this version, but examination of readily available documents reveals another story.

Agitation for a government program of internal improvements appeared coincidentally with demands for increased federal road construction. The vast number of petitions for roads, canals, and railroads preserved in the Territorial Papers indicates that the frontier farmer had few qualms about appealing to the federal government for aid. Indeed, if the number and bulk of petitions sent to Washington is any indication, the demand for improved roads far outweighed the demand for canals and railroads. Petitions for canals and railroads, however, are raised to a position of importance by the quality of the signatures appended to them. Often, they were submitted by the Legislative Council itself, or by large municipal committees. And regardless of their origin, they were usually headed by the signatures of men of territorial and national importance. Concurrent with increased demands for a federal program, the sectional rivalry which was to play a decisive role throughout the period appeared.

The first of the petitions to Congress preserved in the records was submitted by the citizens of Detroit in November, 1827, asking for a canal linking Lake Erie with Lake Michigan through Detroit. The petitioners argued that such a canal would have distinct advantages. It would make navigation of the lakes perfectly safe in the storm season, while cutting the distance between the terminal points from eight hundred to two hundred miles,

forming an important link in the national line of communication between New York City and the Mississippi. It was expected to open large tracts of public land, make travel to the west easier for settlers, and give the territory a dense population. The petitioners sought to impress Congress with the practicability of such a project, citing the absence of rock, easy grades, and sufficient water levels at the summit. Total lift was expected to be only one hundred fifty feet, at a point about sixty miles west of Detroit. They argued that the present was the best time to begin, because the possession of most of the right-of-way land by the government would be an important cost-saving factor, and asked that Congress undertake federal construction, aware a land grant to the territory, or charter a corporation for the purpose. So that there would be no doubt as to the most desirable eastern terminus, they added "that this canal should commence at Detroit, is beyond question; it has never been doubtful that Nature has marked out that city for the emporium of Michigan."⁵⁴

Counter petitions were not long in developing; in February 1828, the southern interests submitted their petition, asking for a canal from La Plaisance bay at the mouth of the River Raisin to the mouth of the St. Joseph. In addition to the arguments submitted by the Detroit

⁵⁴Territorial Papers, XI, 131-ff.

petitioners, they claimed that their route would serve the Kalamazoo Valley, as well as the St. Joseph, and that it would end the threat of British domination of the straits between Port Huron and Lake Erie from cutting off all western shipment in time of war.⁵⁵

Partisans of a southern route were not content, however, with merely petitioning Congress, and in June of the same year, they took the matter to the Legislative Council. Henry R. Schoolcraft, representative from the Soo, put a resolution before the Council, reporting the Council's awareness of the economic potential, praising the first tier's economic promise, and recommending the project be submitted to Congress. The resolution was assigned to a committee of five, including four from areas that would eventually belong to the northern-southern coalition, who recommended its passage. The committee was also assigned the task of determining what means, if any, should be employed to undertake a survey, but the records do not indicate that the committee made any further recommendation. No further action seems to have been taken.⁵⁶

In 1829, both interests again petitioned Congress. Partisans of the central route, west from Detroit, asked

⁵⁵Ibid., 1163-1164.

⁵⁶Ibid., 1190.

Congress for an unspecified number of sections of land or dollars for surveying a canal route from the Detroit River to Lake Michigan, and an unspecified number of sections for construction of the eastern portion. Among the signatures were those of C. C. Trowbridge, Conrad Ten Eyck, and John Biddle.⁵⁷ In December, the southern interests submitted another petition asking for lands or money, citing the practicability of a canal. "A connection between the waters flowing into the head of Lake Erie with some of the streams falling into the Southern Part of Lake Michigan," said the petition, "is obviously a necessary part of the great scheme of internal navigation uniting the Mississippi [sic] with the city of New York."⁵⁸

In 1830, new dimension was added to the movement for a federally sponsored program. In May, in his annual message, Governor Cass brought the whole matter formally to the Council's attention. The territory, he told them, has facilities and advantages rarely equaled by any region in the nation:

But there is one obvious and signal improvement, which could be made, which no doubt eventually will be made. And that is, to unite the mouth of the St. Joseph with our eastern coast, by a canal or railroad, as experience may establish the superiority of either, across the base of the Peninsula. The country presents no formidable obstacle to the execution of these works. It is generally level and well watered.

⁵⁷Ibid., XII, 12.

⁵⁸Ibid., 102-ff.

And the summit on each side, with the exception of one small tract, is attained by a gradual and imperceptible elevation. There is probably no similar extent of country in the Union, where less labor or expense would be required, to produce so important a result."⁵⁹

Citing its importance as a national work and to national defense, he suggested that if a survey could be obtained from the President, information would be more definite, and the route would become known to the public. It is an interesting comment on his political sagacity that Cass, the man who favored local government, did not hesitate to call on the resources of the federal government when the opportunity presented itself. Both positions undoubtedly enjoyed widespread support within the territory by maximizing returns and minimizing taxes.

Two salient features of the Governor's message are characteristic of the balance of the territorial internal improvements movement: advocacy of railroads and the assumption of latent profitability. Suggested at a period when there were less than seventy miles of operating railroad in the United States, the promise of railroads in Michigan nevertheless quickly took hold of the public mind. All the advantages cited for canals--particularly the freedom from mountains, low summits, and light grades--were repeatedly enlisted to support the contention that Michigan had a "peculiar suitability" for railroads. For

⁵⁹Messages of the Governors of Michigan, I, 48.

a time, the petitions would continue to ask for either a canal or railroad, but by 1834, railroads had gained ascendancy in the public mind. Gerald Reagan, who has studied public opinion during the era of internal improvements programs through its expression in newspapers, has reported failing to uncover a single expression of doubt in the possibility of a railroad across the peninsula, and my own research entirely supports him.⁶⁰ I would add, however, that there does not seem to have been any doubt concerning profitability, either. Indeed, prior to the depression, it appears that the thought that such a work might lose money never crossed the public mind.

At the end of July, the Council acted on the Governor's suggestion, and a memorial to the President was adopted, pointing out the advantages of a railroad across the peninsula. The Council recorded its opinion, however, that the terrain and location on the water might favor a canal, and argued that when the federally-aided canal through Illinois was completed, a canal across Michigan would form an all water connection between the Gulf of St. Lawrence and the Gulf of Mexico. They asked

⁶⁰Gerald M. Reagan, "The State Railroad Program in Michigan as a Public Issue, 1834-1846" (Unpublished Master's dissertation, Dept. of History, Western Michigan University), p. 6.

in addition that the government survey a canal route across the peninsula.⁶¹

The following year, the Legislative Council petitioned Congress for a topographical survey to determine the practicability of a canal connecting Lake Huron and Lake Michigan through the Saginaw and Grand Rivers. Such a canal, said the Council, would connect two of the largest rivers in Michigan, freeing the Grand River Valley and the whole West from the storms and ice closing the Straits of Mackinac six months of the year. Although the summit level was unknown, the area was expected to produce coal, gypsum and saline waters, while the rivers ran through a belt of the richest soil in the territory.⁶² Four years later, a second petition was sent by territorial residents, asking for light houses and removal of obstructions from the Flint, Shiawassee, and Maple Rivers. The petitioners guaranteed the building of a canal within two years if this was done.⁶³

In the fall of 1831, a public internal improvements meeting described by the petition it produced as "large and respectable" was held in the Council Room in Detroit. Marshal Chapin, Mayor of Detroit, was elected president,

⁶¹Michigan, Journal of the Legislative Council, 4th. Council, 1st Sess., 1830, pp. 127-128.

⁶²Territorial Papers, XII, 254.

⁶³Ibid., 1031-1032.

and General John R. Williams read a memorial that he had drafted and the meeting endorsed it. The petition argued that the people of Michigan were migrants from other states and should not be deprived of their privileges as citizens by moving to an area which had not yet achieved statehood. Citing the precedent set by the United States in granting internal improvements lands to Ohio, Indiana, and Illinois, it asked that "the same favor and measure of justice be extended to Michigan. No district of the country seems to be more favorably adopted [sic] either to railroads or canals." The flourishing state of the treasury and the general prosperity of the nation, were expected to furnish "ample means for the improvement of every portion of the Union."

The petitioners asked for government promotion of several projects. A ship canal to Lake Superior, they said, would allow exploitation of the region's vast copper deposits and fisheries, and could be built at a "trifling" expense. In addition, they asked for completion of the Chicago road and all others started by the federal government, for bridges over the rivers, and improvement of the St. Joseph River. They suggested, too, that the region was well suited to canals and railroads. A committee of the most important residents of the territory was appointed

to circulate the petitions in Michigan and neighboring states.⁶⁴

So far as the surviving documents are concerned, 1832 was a quiet year, but in the winter of 1833, agitation was renewed. In November, a petition containing over three hundred signatures was sent to Congress by residents of St. Joseph county, asking for a railroad to connect Lakes Michigan and Erie. Along with the usual arguments and appeals, the petitioners complained of inability to market their crops, and asked that a charter be granted with a grant of contiguous lands along the route. In addition, they asked that commissioners be appointed by the national government to determine the route, and thus "prevent the baneful influence of conflicting private interest."⁶⁵ A similar petition containing one hundred forty signatures was sent from the residents of Calhoun county, in the second tier.⁶⁶

In the fall, Detroit interests culminated a massive petition drive, and sent to Congress a series of

⁶⁴Ibid., 365-ff. The committee included John R. Williams, Andrew Mack, Charles Larned, A. D. Frasier, John Biddle, Oliver Newberry, Marshall Chapin, E. P. Hastings, T. H. Rowland, D. G. Jones, James Abbott, Reynolds Gillett, Ralph Wadhams, Henry V. Disbrow, and Levi Cook.

⁶⁵Territorial Papers, XII, 621-625.

⁶⁶Ibid., 626.

duplicate petitions, with the original headed by the name of John Biddle, and with over four hundred signatures attached. The petitions asked for a federal land grant similar to that granted to Illinois and Indiana, for the purpose of a trans-peninsular railroad from Detroit.⁶⁷

Your petitioners believe that the opinion is now nearly universal in the territory that a rail-road would be the preferable mode of connecting Lake Michigan with the waters of the Eastern side of the Peninsula.

And further, that there is a well founded belief that a rail-road on the route would in connexion with a similar work uniting Chicago with the Illinois river become one of the great lines of travel between the Atlantic and the West.

As 1833 rounded into 1834, excitement rose to a fever pitch. Notice was given in the Ann Arbor Michigan Emigrant of a forthcoming meeting to take measures relating to a railroad across the peninsula.⁶⁸ On January 13, Congress received the first of seven petitions with duplicate headings that arrived between then and March, bearing a total of over five hundred signatures of residents along the proposed route of the Detroit and St. Joseph railroad. The origin of the group circulating the petitions is not given, but the signatures on the several sections originated in Comstock, Spring Arbor, Washtenaw, Grass Lake, and Sandstone. Since the petitioners asked

⁶⁷Ibid., 656.

⁶⁸Michigan Emigrant (Ann Arbor), December 12, 1833.

for a grant of land for the Detroit and St. Joseph, it can be assumed that they were circulated by Detroit and central tier interests.⁶⁹

Late in 1833, a citizen's committee requested through Lewis Cass, recently promoted from Governor to Secretary of War, and one of the largest land owners near Detroit, that the federal government make a railroad survey across the peninsula. Cass replied by letter that the government policy was to furnish an engineer and assistants, and that whoever made the request would have to pay for the survey. The committee accepted the proposal, and the Detroit Journal and Michigan Advertiser applauded the acceptance.⁷⁰

On January 8, Governor Porter sent his annual message to the Legislative Council, advising that the time was propitious for appealing for federal aid. He urged application for aid to improve the St. Joseph, Kalamazoo, Grand and St. Clair rivers, and the Fox-Green Bay route, and he told the Council:

A liberal provision has heretofore been made for works connected with the internal improvement of this territory. Is there any subject more worthy of their fostering care than the construction of this Rail Road? A large revenue is derived from the sale of public lands within this peninsula. Nature has prepared the ground, and the small expense which would be incurred in constructing a Rail Road, would soon be

⁶⁹Territorial Papers, XII, 688-690.

⁷⁰January 22, 1834, as cited in Reagan, p. 8.

reimbursed by the increased amount of sales, and the numerous advantages that would result as well to the government as to individuals.

May we not, therefore, reasonably ask the Federal government to construct this road;--forming as it does, so important a link in the chain of communication between the Atlantic and the Mississippi;--in which all the North, Northeast, and Western sections of the Union are so deeply interested?⁷¹

Porter was convinced, as were others of his day, that the railroads could be inexpensively built and operated, and that they could be rapidly constructed. It appears that part of the enthusiasm for railroads was not only the speed of transportation and the ability to harness motive power, but their apparent inexpensiveness when compared to canals, whose approximate costs could be imputed from that of the Erie and other works.

On the same day that the Governor's Message was delivered, the southern interests met at Jonesville, in Hillsdale county, for the purpose of memorializing Congress for a trans-peninsular railroad through their section. Although the convention claimed to be an impartial body, "unshackled by local or sectional interests," only two of the thirty-four delegates were from the central tier. Sixteen, nearly a majority, were from Monroe, and the balance were distributed among the counties of the southern tier. Only Cass county failed to send a representative. Austin E. Wing was elected president. The convention

⁷¹Messages of the Governors of Michigan, I, 104.

asked Congress to continue the chain of communication from New York to Lake Erie across the state, and to send a Corps of Engineers surveying team to examine the potential route from Lake Erie. Since Detroit was at the northern end of the Detroit River at the foot of Lake St. Clair, a Lake Erie route can only be construed as running from Monroe or Toledo to the West.⁷²

After the Jonesville Convention, agitation apparently quieted through the summer, as results of the survey were awaited. During the summer, sudden and unexpected changes were forced upon the territory that would have important effects in the next ten years. On July 6, 1834, Governor Porter died suddenly and was buried quickly. He was succeeded in his post temporarily by the twenty-three year old Territorial Secretary, Stevens Thomson Mason, who was to remain in the governor's office for the next six years. Three weeks after the Governor's death, the awful truth came out, as Detroit found itself in the grips of Asiatic Cholera. For nearly a month, plague ruled the city, carrying off seven per cent of its population and striking rich and poor alike, among them, Charles Larned, one of the major promoters of Detroit's railroad interests. Over a quarter of the people fled the city, spreading the disease to Ypsilanti and Ann Arbor. Though it momentarily slowed

⁷²Territorial Papers, XII, 688-690.

the rapidly increasing tempo of territorial events, the epidemic cast only a shadow over the rising tide of territorial excitement, while the young Governor's firm actions in resisting the spread of cholera brought him a new popularity in the public mind.⁷³ In September, the Legislative Council convened in a session producing measures of crucial importance to the future of the state.

It was during this session, that sectional rivalry emerged as an important factor in legislative policy. In his message to the Council, the Governor pointed to the federal survey, emphasized its importance to Michigan, and asked the council to assume financial responsibility through an appropriation.⁷⁴ His suggestion precipitated a major legislative struggle, as representatives of the northern and southern sections vied for extension of the survey to their districts. No one was able to gain sufficient strength to pass a bill for his section, but voting revealed the existence, at this early date, of a northern-southern coalition to frustrate attempts by the Detroit-central tier interests to use their numerical superiority to their own advantage. Attempts to gain passage of a

⁷³Lawton T. Hemans, Life and Times of Stevens Thomson Mason, the Boy Governor of Michigan (Lansing: Michigan Historical Commission, 1920), p. 119.

⁷⁴Messages of the Governors of Michigan, I, 123.

second route survey from Monroe to the mouth of the St. Joseph River failed by a vote of five to five in the Council. It was supported by representatives of the northern and southern tiers. In subsequent voting, members of the coalition failed to support projects running exclusively through their tiers, but apparently retained sufficient strength to block passage of appropriations for the Detroit-St. Joseph route alone. The bill was referred to a select committee of southern, Wayne county, and western representatives.

The Legislative Council adjourned on the same day that the bill was assigned to committee, and although the adjourned session sat through November and December, the bill was not reported.⁷⁵ Meanwhile, private forces were working for a compromise to the deadlock. A meeting was called in Detroit for December 24, to support efforts for a land grant for a railroad across the Peninsula by putting petitions in circulation throughout the Territory. In Ann Arbor and elsewhere, meetings were called to elect delegates to the convention. The Ann Arbor Whig reported such a meeting, and passage of the following resolution.

Resolved, that we respectfully request the people of Monroe to send delegates to said meeting at Detroit on the 24th instant with a view to reconcile the conflicting interests of the different sections of the

⁷⁵Michigan, Journal of the Legislative Council, 6th Council, Extra Session, 1834, pp. 14-16, 132.

country in relation to the contemplated Rail Road, and thereby the better to ensure the success of our applications to Congress.

They also promised to work for passage of a Territorial Road from the bend of the River Raisin to Ann Arbor.⁷⁶

On December 18, 1834, the federal surveyor, John MacPherson Berrien, Jr., submitted his report. The route he had surveyed from Detroit to St. Joseph was reported favorable, with few obstacles. The surveyed line followed the Chicago road to the forks of the River Rouge, then turned to Dearborn and Ypsilanti. From there it followed the valley of the Huron River to Ann Arbor, and then along Territorial Road to Jackson. The highest point of rise was found to be 438 feet above the reference point, west of Jackson. Berrien was afraid of following either the valley of the Kalamazoo or the ridge between it and the St. Joseph Valley, so he projected a line from Jackson to the St. Joseph River at Prairie Ronde. The reported route had the advantage of crossing streams at their sources, avoiding costly bridging. The only steep grade encountered was at the headwaters of the Paw Paw River, for which Berrien recommended the use of an inclined plane. Total length of the surveyed route was one hundred ninety-two miles, with no heavy embankments or cuts necessary. Most of the soil was reported good enough to be built on

⁷⁶Michigan Whig (Ann Arbor), December 11, 1834.

directly. And, since there was no source of stone located on the route, local timber would have to be used for the bed. Oak was reported to be abundant and available locally.⁷⁷

On December 24, the citizen's convention met in Detroit and elected John R. Biddle president. The Berrien report was endorsed and forwarded to Congress with a Memorial. The convention asked for a grant of land to the Territory to construct the Detroit and St. Joseph route, with a branch to Monroe and such other places as might be directed. They argued that the route was the shortest, central to the state, and that Detroit offered more facilities to the traveler and businessman than any other place.⁷⁸

On March 18, 1835, the select committee of the Legislative Council reported a bill and the cost of the survey. The committee, under Daniel S. Bacon of Monroe, expressed its concurrence with the Detroit Convention that application should be made to the government for lands or money for a railroad from Detroit to the mouth of the St. Joseph River, according to Berrien's survey, with a

⁷⁷Territorial Papers, XII, 825-ff. a negative photocopy of the survey map is available in the special collections of the University of Michigan Transportation Library.

⁷⁸Territorial Papers, XII, 850-ff.

lateral branch to the village of Monroe. A copy of Berrien's survey was placed in the library, "politely furnished" by John Biddle, and a statement from Biddle was attached and presented. The appropriations bill passed its first and second readings, and there the record ceases. There are other indications, however, that the bill passed and the territory paid for the survey.⁷⁹

The survey bill was the final act of the Legislative Council, so far as internal improvements are concerned. Within the next six months it would pass out of existence and allow a state government to replace it. In the field of internal improvements, its accomplishments were many. It had endorsed a railroad through the central route, a canal between the Saginaw and Grand Rivers, improvement of several rivers, and a canal through the southern section. The Council appears to have paid for Berrien's survey, and endorsed the idea of government-sponsored internal improvements under a federal land grant. In sum, they had done everything in their power to promote internal improvements for almost a decade.

Although not as important as the agitation of citizens' committees and government encouragement, private enterprise made important contributions to the internal

⁷⁹Michigan, Journal of the Legislative Council, 6th Council, Extra Session, 1835, p. 132.

improvements movement. Between 1830 and the end of 1837, twenty-five railroads were chartered by the Territory and State.⁸⁰ In the vast majority of cases, the records of the roads end with their charters. Seven were definitely started, and two more were possibly started. Of these, only four showed any significant growth: the Detroit and St. Joseph; the Detroit and Pontiac; the Erie and Kalamazoo; and the Palmyra and Jacksonburgh. A fifth, the River Raisin and Lake Erie, was to play a political role out of all proportion to its actual achievements.

Early charters offered an interesting mixture of corporate privilege and public safeguards, several of which would become important in subsequent railroad policy. The first charter, given to the Detroit and Pontiac on July 31, 1830, was the first granted west of the Appalachian barrier, and was somewhat irregular. The second, granted to the Detroit and St. Joseph on June 29, 1832, assumed a standard form which was followed throughout the period. Generally, the charters conformed to provisions outlined by George Rogers Taylor as characteristic of the pioneer railroad era, with significant exceptions.⁸¹

The charter of the Macomb and Saginaw, granted in

⁸⁰See Appendix IV.

⁸¹Taylor, pp. 86-94.

the middle of the period, provides a typical example of charters issued prior to 1837.⁸² The act appointed commissioners to open books for capital subscriptions, and specified the limit of capitalization and minimum subscription for beginning operations. A few charters allowed books to be opened "at such times and places as they shall direct," but usually, sale points were specified. Most often, stock was to be sold locally, at the terminal points and in important villages along the route. Acts allowing sale at Detroit or in the East were the exception, and it is apparent that both promoters and legislators were neither willing nor anxious to allow "foreign" capital to dominate or profit from local transportation projects.

Deadlines were stipulated for completion of sections as well as the entire road, under penalty of forfeiture. In addition, a provision which became increasingly common as the period progressed made it mandatory for any road receiving net profits of fourteen per cent to begin construction of subsequent sections within five years, or lose all profits above fourteen per cent to the state. To facilitate construction, companies were given the right of eminent domain not only over right-of-way, but also over materials used for construction and maintenance. Any time the company could not agree with private persons on a

⁸²Michigan, Territorial Laws, IV, pp. 124-134.

reasonable price, it could petition the courts for condemnation. Local rights were safeguarded by requiring a twelve man jury for condemnation.

In all cases before 1837, the territory or state retained the right of purchase after a period of time, usually twenty years, for original cost plus fourteen per cent. In 1836, a clause was added allowing state purchase at seven per cent if the company had realized twelve per cent profits on its investment. At a time when state enterprise was impossible because of territorial status, such provisions were probably regarded as public safeguards against abuses by a natural monopoly, while at the same time providing monopoly privileges sufficient to attract private investment. At least, this was the justification given by the legislature for inserting a similar provision in the charter of the Michigan Central in 1846.⁸³ In the case of railroad-banks, where under specified conditions reversion to the state became automatic, roads were to be operated by the state free of charge except for a toll sufficient to cover costs.⁸⁴

⁸³Michigan, Legislature, "Report of the Select Committee on the Sale of Works of Internal Improvement upon Introducing a Bill for the Sale of the Central Railroad" (House Documents, 1846, H. D. No. 2), pp. 1-6. Cited hereafter as House Document No. 2, 1846.

⁸⁴Michigan, Territorial Laws, III, 1387-ff, sec. 18.

In March 1835, the Legislative Council chartered two railroad-banks, and during the closing days of its last session, three existing charters were amended to include banking privileges. The group of five railroad-banks included the Detroit and Pontiac, the Erie and Kalamazoo, the Detroit and St. Joseph, the Macomb and Saginaw, and the River Raisin and Lake Erie.⁸⁵ The charters granted were a simple combination of standard banking and railroad charters, with a few special exceptions. Debts, excluding specie on deposit, were limited to three times the amount of paid-in capital. Notes were payable on demand, or at sixty day's sight, on penalty of forfeiture of charter. In order to obtain its charter, the company was required to raise \$10,000 within two years, and to construct ten miles of road inside of six years. Until ten miles of road was constructed, \$50,000 collateral was required to be deposited with the state treasurer to secure notes issued. In addition, the stock of the railroad was to be delivered to the bank to act as security for all notes and debts. When the roads were completed, and had returned proceeds equal to costs, operating expenses, repairs, and a sum ranging from seven to fourteen per cent, the road would revert to the state to be operated on tolls

⁸⁵Ibid., III, 1392-ff; IV, 112-ff, 112-ff, 124-ff, 142-ff.

covering costs, and the bank would become a separate institution. The state also had the right of purchase included in almost all other railroad charters.

Railroad-banks were the final policy development of the Legislative Council in attempting to induce investment by exploiting the banking mania following the Bank War. Since the state legislature failed to follow its lead, it represents a temporary departure, rather than a trend in state policy. Records of railroads chartered by the state, if they ever existed, have either been destroyed or are not in public archives. The only collection which seems to have survived consists only of right-of-way quit-claims and a very few business papers, non of which have any significance. Thus it is seemingly impossible to evaluate the importance of these joint corporations. It is worth noting, however, that of the four roads achieving significant construction before 1846, three were chartered as railroad-banks: The Detroit and Pontiac, the Detroit and St. Joseph, and the Erie and Kalamazoo.

All three of these roads achieved their most significant growth in the period between assumption of statehood and formal admission into the Union. The Detroit and Pontiac was chartered in 1830 to "boom" Pontiac, and books were opened in February 1832 in banks in Detroit and

Pontiac.⁸⁶ Apparently, no significant capital subscriptions were raised; the charter had to be renewed in 1834, and banking privileges added in 1835. Unable to raise significant capital in Michigan, the local promoters went to Buffalo, where they contacted Sherman Stevens, former Michigan fur trader who was then in business as a bill broker. According to Stevens, it was the prospect of becoming a banker that attracted him to the investment. Stevens, who had only \$5,000, was unable to persuade his two brothers, who had \$100,000 each, to join him. He was finally able to form a partnership with Alfred Williams, who had \$5,000 too. Arriving in Pontiac in May 1835, with \$10,000 in coin, he began banking operations, realizing a profit of \$30,000 the first year.⁸⁷ At the same time, work began between Detroit and Royal Oak. Unlike the roads northwest of Detroit, the bed of the railroad was kept dry by elevation and ditching. On oak rails, two horses could haul three tons or twenty-four passengers at charges of a dollar for passengers and fifty cents per hundred weight on freight. Revenues were sufficient to finance construction as far as Birmingham. There, the road

⁸⁶Democratic Free Press (Detroit), February 10, 1832; Catlin, p. 364.

⁸⁷Sherman Stevens, "Continuation of Early Days in Genessee County," Michigan Pioneer and Historical Collections, VIII (1884), pp. 394-ff.

began to experience difficulties. The soil was not solid enough to provide a firm footing for the road, and right-of-way difficulties developed. Stevens later claimed that farmers refused to sell necessary land for fear that their local markets would be damaged by imported products, and that each farm crossed required a separate condemnation suit. Stevens was defensive about the charges, claiming that under his management, the cost of transporting a barrel of flour from Pontiac to Detroit dropped from \$1.00 to .18 3/4, doubling the value of local farm lands. By 1838, business had increased to the point that rails were being crushed, and money good in the East was necessary for strap iron and a locomotive. A loan of \$100,000 was secured from the Legislature, and another for a similar amount from the state of Indiana. With this money, iron and a locomotive were procured. The road was completed to Pontiac in 1843. The Detroit and Pontiac was apparently a financial success until 1839, when failure of the bank drove it into insolvency.⁸⁸ Substantial difficulties were encountered with the state, but that is part of another story.

The Erie and Kalamazoo was chartered in 1833 to run from Toledo to the navigable waters of the Kalamazoo

⁸⁸Buley, II, 313.

River. Construction was undertaken by a group of investors from Lenawee County, Toledo, and New York.⁸⁹ When construction began is not clear, but the road was completed to Adrian in 1836. For the first year, it operated as a horse drawn road on oak rails, but in 1837 strap iron rails and a locomotive were added. Total costs were reported in its annual report to the State at \$300,000, and in that depression year its net earnings were reported as \$15,804.32, or slightly over five per cent.⁹⁰ The Erie and Kalamazoo never attempted construction beyond Adrian, but contributed to the construction of the Palmyra and Jacksonburgh as far as Tecumseh, for use as a branch.⁹¹ It remained content to drain traffic from Lenawee and Jackson counties, and the milling centers around Clinton and Manchester. When Toledo was officially transferred to Ohio, the road changed from the pride of the southern tier into a "foreign corporation," and acted as a constant source of irritation to the state, draining trade from Michigan merchants to those in the "foreign port" of Toledo, and substantial revenues from the Southern. The road was leased to the

⁸⁹Letter of A. J. Comstock to J. A. Barker, April 18, 1836, in Jacob A. Barker Papers (Michigan Historical Collections, Ann Arbor).

⁹⁰Michigan, Legislature, "Report of the Erie & Kalamazoo Railroad," (House Documents, 1841, II, H. D. No. 40) pp. 149-150.

⁹¹Clarence Frost, "The Early Railroads of Southern Michigan," Michigan Pioneer and Historical Collections, XXXVII (1913), pp. 498-501.

Michigan Southern in perpetuity in 1849 for an annual rental of \$30,000, and became a major component linking the Lake Shore and Michigan Southern and eventually part of the New York Central system.⁹²

The Detroit and St. Joseph, chartered in 1832 to cross the peninsula, received little financial support despite its central position in the agitation for internal improvement. Its advocates were content to petition the national government privately and through the Legislative Council. Construction began only when state aid or purchase became imminent. Papers of the road, if there ever were any, seem not to have survived, and there at least are three plausible and conflicting accounts of its beginning, none of which is documented.⁹³

⁹²Buley, II, 313: W. C. Ransom, "Address in the Senate Chamber," Semi-Centennial Addresses, p. 187.

⁹³There are at least three conflicting accounts of the sources of investment in the Detroit and St. Joseph Railroad, none of which have any evidence to support them. According to Arthur S. Hill, "The Romance of a Railway," Michigan History, XXIII (1939), p. 58-59, \$50,000 was contributed by the city of Detroit, in essence making it a quasi-municipal railroad. Alvin F. Harlow, The Road of the Century: the Story of the New York Central (New York: Creative Press, 1947) pp. 213-214, in what is apparently a company history, says in an implausible account that the money was raised by stock subscription, \$9,000 in Ann Arbor, \$70,000 in Detroit, and \$100,000 in Ypsilanti. Finally, according to George Bates, "By-gones of Detroit," Michigan Pioneer and Historical Collections, XXII (1893), 248, Lewis Cass, John Biddle, and two others each subscribed to \$25,000 in stock, and large subscriptions were also made by Trowbridge, Newberry, Jones, Shubael Conant,

The project had been supported since 1833 by a group of Detroit businessmen, apparently led by John R. Biddle, clerk of the Detroit land office.⁹⁴ When the charter was finally taken up, Biddle was elected president of the board of directors. Two apparent motives led to its construction: sectional rivalry and the certainty of state aid or purchase. The Ann Arbor Michigan Whig ran two articles in 1835, encouraging its readers to subscribe to the road. The second, reviewing progress on the Erie and Kalamazoo, complained that: "The people of Monroe will draw the trade of the Western counties to Toledo unless communication with Detroit is made equally easy."⁹⁵ Estimating the cost of the road to Ann Arbor at \$100,000 they speculated that completion would add seventy-five per cent to the value of property along the route. Similar statements appeared in the Detroit papers.⁹⁶

and Major Whiting. None of these accounts have any documentation, and the Burton Historical Collections was unable to find documents supposedly in their custody relating to the Detroit and St. Joseph. I favor the Bates version because it is supported by more facts than any of the others.

⁹⁴Nicholas Biddle's brother.

⁹⁵Michigan Whig and Wastenaw Democrat (Ann Arbor), July 2, 1835; July 15, 1835.

⁹⁶Detroit Journal and Courier, July 8, 1835; July 15, 1835; and the Detroit Daily Advertiser, July 6, 1835; August 5, 1835; December 28, 1835; as cited in Reagan, pp. 14-16.

An even more powerful stimulus was provided by a joint resolution of the State Legislature in July 1836, authorizing the Governor to receive proposals from the Detroit and St. Joseph and all other railroads, to surrender their charters. Biddle replied in August to Mason's inquiry, saying that he could not give a definite answer without a stockholders meeting, but that he was sure they would agree because their purpose was to secure the work's completion.⁹⁷

By May 1837, when the state took the road over, the company had cleared and grubbed a hundred foot right-of-way from Detroit to Ypsilanti, graded thirteen miles, laid mud sills for ten miles, and ironed two miles. Total cost was reported at over \$116,000.⁹⁸ By its efforts, and the cession of Toledo to Ohio, Detroit had gained two years in its battle with the southern section.

The rash of railroad charters granted by the state from 1835 through 1837 was an intimate part of the speculative bubble that enveloped Michigan. Growing in part from

⁹⁷Michigan, Legislative Acts, 1836, p. 150; Michigan, Legislature, "John Biddle to Stevens T. Mason, August 8, 1836," (Senate Documents, 1837, S. D. No. 1), p. 1.

⁹⁸Michigan, Legislature, "Annual Report of the Board of Internal Improvement, 1838" (Senate Documents, 1838, S. D. No. 11), p. 161. Cited hereafter as Senate Document No. 11, 1838.

national fiscal and banking policies, and from conditions in the international capital market, the bubble was magnified in Michigan by the influx of settlers and speculators eager to buy up public lands in the rapidly developing area. During the peak of the bubble in 1836, when over four million acres of public lands were sold, speculative frenzy reached a pitch that came to be described as the "Michigan Fever." John M. Gordon, who came to Michigan that summer to speculate in lands and left with 6,764 acres, was attracted by reports coming East from Michigan. Even before he left, he noted in his journal that lands taken at a dollar and a quarter an acre doubled in price as soon as they were taken up. Land patents, he understood, were three years in arrears, and offices so crowded that people would buy land second hand outside the office for fear of not getting in to file. In May, 1836, he understood that over 500,000 acres were taken in the Bronson (Kalamazoo) office alone. He had even heard of an eighty acre plot on the rapids of the Grand River which had been purchased for \$100 and sold for \$40,000, and he was afraid that by the end of the year, all of the good lands would be gone.⁹⁹

Equally as important was the small speculator; the farmer whose played-out or marginal lands forced him west

⁹⁹Gordon, Michigan History, XLIII (1959), 4-12.

to compete and survive, and who bought a parcel of land for himself and another for speculation or for his sons. The small man participated with zeal in the growing land bubble. As Lanman phrased it, "The habitudes of thought connected with the constantly advancing value of real property; the custom of 'dickering' makes almost every individual a speculator."¹⁰⁰ Thomas Cather, a European traveler crossing the state in the fall of 1836 described the emigrants he encountered on the Chicago Road:

During my journey across Michigan, I met numbers of emigrants from the old states on their way to settle in the Western forests. Each emigrant generally had a wagon or two, drawn by oxen. These wagons contained their wives, children, and the rest of their baggage. The man walked by the side of his team with his rifle over his shoulder, driving before him a load of pigs. . . .

Many of these people, he said, would stop any place, farm for a while, hoping to sell their improvements, and move on.¹⁰¹ According to Gordon, every farmer he met along the Territorial Road knew the current market value of his lands, and was ready to quote the price which would induce him to sell and move on.

Turnerian historians have taken great pains to describe the stages of the western movement. After the hunter and trapper, they have described in turn the squatter-speculator, living on lands he did not possess in hope

¹⁰⁰Lanman, p. 299.

¹⁰¹Cather, p. 132.

of selling his improvements, followed by the speculator who bought up quantities of desirable land to sell at a profit, and the farm maker, who with his small capital carved a homestead on his own land in the wilderness. Finally, the big farmer bought out the farm makers and established large scale, commercial agriculture. In Michigan, between 1830 and 1837, the stages were compressed into a single, fevered movement.

Equally as important as the farm maker and speculator, was the town site and its promoter, the town "boomer." Gordon, reflecting on the living patterns of New Englanders and New Yorkers when they came west, observed that:

If one considers that Michg. has now none or few towns, that its population is pouring in at the rate of 50 thousand a year, that they have been accustomed to and must have their villages, that the soil is of excellent quality generally, it will be perceived that these speculations have a real basis of intrinsic value & are not like investment in town plats in old states, where the wants of the people have been supplied in this particular gradually with their slow growth. Suppose New York without towns & villages tomorrow, that all are sunk by an earth quake. The wants of the people would soon build them up again with great rapidity--such on much smaller scale is the process of town manufacture now going on in Michg. However I shall invest nothing in Lots.¹⁰²

If Gordon's Southern agrarian prejudices kept him from engaging in town lot speculation, there were others who were more willing. Speculators and surveyors,

¹⁰²Gordon, Michigan History, XLIII (1959), 448-449.

"cruising" the territory in search of valuable land, looked not only for fertile soil and location, but for sites with water power where towns could be platted. After filing on the land, a grist mill and saw mill would be erected, a general store built, and a bank chartered, promising settlers a continuation of services customary in the East. Every addition enhanced the value of the platted lots and country adjacent. Ambitious promoters added a railroad charter to their list of inducements. At Port Sheldon, the grandiose speculation of Alexander Jaudon and a group of eastern capitalists on Lake Michigan at the mouth of the Pigeon River, a fortune was invested in a projected commercial metropolis. In addition to the usual inducements, they added a hotel, and chartered a railroad to Grand Rapids. Two miles of the road were cleared and grubbed, ties laid, and a railway depot with Greek columns was added.¹⁰³ Another speculation, Biddle City, with forty eight full and seventeen partial blocks, was laid out in the portion of section 21 between the Grand and Red Cedar rivers at their junction. After the promoters had cruised

¹⁰³Catlin, p. 349; Buley, II, 89; Ralph Meima, "A Forgotten City," Michigan History, V (1921), 296-ff. None of these sources are highly accurate, although the vague outlines of the speculation at Port Sheldon are apparent. The speculation and the involvement of the eastern capital, particularly the role of the BUS, deserves further investigation.

and platted the city (there is some question as to whether they bothered to purchase it), they returned to New York and sold a substantial number of lots.¹⁰⁴ Before they left, however, they stopped at Detroit and gained an amendment to the charter of the Detroit and Shiawassee railroad, extending it to Biddle City.¹⁰⁵

In peoples' minds, too, the addition of a railroad charter added real value to property. Lucius Lyon, Michigan's congressional delegate and one of the state's richest land speculators, advised a friend in Michigan not to sell his land at Mount Clemens at the price offered, because the Legislative Council had granted a railroad charter through it to some point west, and the charter added great value to the property.

In his own promotions, Lyon, who seems to have owned most of the strategically placed land in the Grand River Valley, engaged in transportation projects to enhance the value of his speculations. It was Lyon's land that Gordon had been discussing at the Rapids of the Grand River, where he and Isaac Crary sold 145 town lots for

¹⁰⁴Samuel W. Durrant, History of Ingham and Eaton Counties, Michigan (Philadelphia: D. W. Ensign and Company, 1880), p. 122.

¹⁰⁵Michigan, Legislative Acts, 1837-1838, No. 106.

\$106,156.89 between 1836 and 1839, and Lyon also held the town site at the junction of the Maple and the Grand which became Lyons.¹⁰⁶ Because his land was on navigable water, Lyon tried to increase its value by undertaking half the expense of a canal around the rapids, and building a steamboat to navigate on the Grand.¹⁰⁷ When his fortunes collapsed during the depression, he lobbied in the Legislature for completion of the Northern Railroad.¹⁰⁸

Speculation was rampant in established commercial centers, too, when it became apparent that transportation projects would be undertaken and trade would course through the ports. Early in 1836, a speculative mania was reported sweeping Monroe, with town lots changing hands rapidly and corner lots selling for two and three thousand dollars. In Detroit, part of the Cass farm adjacent to Detroit was sold for \$175,000, and most of the money invested in banks and railroads in the state.¹⁰⁹

¹⁰⁶Gordon, Michigan History, XLIII (1959), p. 12, n. 21; Letter from Lucius Lyon to Edward Lyon, Feb. 24, 1836; Letter from Lucius Lyon to Arthur Bronson, Jan. 8, 1836, in "Letters of Lucius Lyon," Michigan Pioneer and Historical Collections, XXVII (1896), 471, 481. Cited hereafter as Lyon Papers, MP&HC, XXVII.

¹⁰⁷Letter from Lucius Lyon to Lucretia Lyon, Oct. 9, 1835, Ibid., 449-450.

¹⁰⁸Lucius Lyon to Gen. Burdick, Feb. 2, 1838, Ibid., 502.

¹⁰⁹Frank Woodward, Lewis Cass: The Last Jeffersonian (New Brunswick, N. J.: Rutgers University Press,

It is of course dangerous to draw general principles from a few specific examples, but events in Michigan during the bubble seem to support conclusions formulated by Paul Gates concerning the basic nature of the American farmer.¹¹⁰ The settlers who went west in the 1830's were not frontiersmen in the classic sense, but commercial farmers attempting to salvage economic positions threatened by the opening of more efficient lands in the West by the Erie Canal. In locating their farms in the wilderness, the existence of adequate facilities linking them with the market, or at least the promise of facilities being opened within the immediate future, was a primary consideration as important as the fertility of the soil itself; an importance which is reflected in the inclusion of railroad charters in the list of social services provided by town promoters.

In a recent study, American Railroads and the Transformation of the Ante-Bellum Economy, Albert Fishlow has pointed to the important role played by "anticipatory

1915), p. 191; Letter from J. Q. Adams to Alpheus Felch, Jan. 10, 1836, in the Alpheus Felch Papers (Michigan Historical Collections, Ann Arbor, Mich.). Cited hereafter as Felch Papers (MHC).

¹¹⁰ Paul Gates, The Farmer's Age: Agriculture, 1815-1860, Vol. III of the Economic History of the United States, ed. Henry David and others (9 vols.; New York: Rinehart & Company, Inc., 1960), p. 400.

settlement in the growth of railroads.¹¹¹ Fishlow suggests that transportation improvements breaching the Appalachian barrier and pushing west, created settlement in the path of potential routes in anticipation of improvements projected along a specific route, or through a general region. He is of the opinion, however, that the pattern was more prevalent in the 1850's than in the 1830's. The adequacy of Fishlow's conclusions for Michigan's experience under state enterprise will be dealt with in a later chapter, and for the moment, examination will be directed solely to the process of anticipatory settlement.

Although it was obvious to residents of the territory from the moment the Erie was opened that some form of cross-peninsular transportation project would probably be engaged in to shorten the distances of the northern transportation route and eliminate the hazards to navigation posed by the Straits of Mackinac, anticipatory settlement failed to develop between 1825 and 1834. The supposition is basic to petitions submitted to Congress for railroad and canal projects between those dates, and usually stated as a basic argument in favor of government support. To a limited extent, the motive was probably operative in the concentration of settlement in the seaboard counties of

¹¹¹Fishlow, p. 165-166.

Wayne and Monroe, and in the immediately adjacent counties of Lenawee, Washtenaw, and Oakland, in preference to the equally fertile Saginaw Valley. But settlement to the northwest of Detroit and in the St. Joseph Valley seems to support the argument that anticipatory settlement was not the dominant motive as late as 1834.

It can be clearly seen by reference to Appendices II and III that patterns of settlement were transformed between 1834 and 1837. In 1834, settlement in both the central and southern tiers declined toward the interior counties, and increased again in the west as distance from Lake Michigan decreased. The low level of settlement in western counties bordering on Lake Michigan can be attributed to soil quality. In 1837, however, while the southern tier continued to follow earlier patterns, population in the interior counties increased substantially. Settlement in the third and fourth tiers in 1837, continued to follow the pattern of the southern, declining toward the center of the state and increasing again as the counties approached Lake Michigan. In the central tier, population growth was so heavy in the interior counties that settlement was heavier in the interior than in western counties which were closer to Lake Michigan.

The changing pattern of settlement in the central tier becomes more significant when it is remembered that settlers had easier access to the southern tier along the

federally constructed Chicago Road, a major traffic artery, than along Territorial Road, which had been haphazardly constructed under the territorial government, and that settlers began using the road well before it was officially opened. Heavy settlement in the first and third tiers in Oakland and Lenawee counties during the same period can be accounted for by the construction of the Detroit and Pontiac, and the Erie and Kalamazoo Railroads. After the announcement of a federal railroad survey through the central tier, the rate of settlement grew substantially. At least part of this pattern may be attributable to the fact that the clerk of the Detroit land office was also the head of the Detroit railroad interests, and in a position with great potential for creating "anticipatory settlement." Such evidence suggests, but cannot confirm a process of anticipatory settlement. The period is too short, and other factors and other railroad charters exerted influence on the pattern of settlement. In terms of fertility, however, it should be pointed out that the land in the southern tier was regarded as highly as any in the state, particularly that in the St. Joseph Valley. The statistical evidence would be more convincing if the time span were longer and events had moved at a slower pace.

Impressionistic evidence, with all its limitations, seems to substantiate the conclusions indicated in Appendix II. John M. Gordon, the land speculator, was acutely

aware of the potential of the railroad in developing the value of lands, and observed the effects of efforts to build west from Detroit in 1836. Gordon thought the peninsula would become one of the granaries of the country. "When the railroad to St. Joseph from Detroit is finished, immigrants will pour in, and the improvement of the former advance with rapid strides thence forward. The first 30 miles of this road will be completed next spring, if the work goes as fast as is expected."¹¹² Gordon's cruising took him down Territorial Road through the central tier and the route of the Detroit and St. Joseph. At every town, he was told that the railroad would soon be coming through. He was impressed with the slow graduation of the land, and the small cost at which railroads could be built. The level of the country, he noted, made it perfect for railroads. In Jackson county, he found all the good lands taken up, and to the west, around Marshall, settlement was thin, but most of the land located. Town lots were selling for \$100 to \$500 because both the Detroit and St. Joseph and the Maumee Railroads were to pass through it. Even at the western end of the central tier, in Van Buren county, he found it was the railroad that gave the lands their value, along with the facilities offered by the Paw Paw

¹¹²Gordon, Michigan History, XLIII (1959), 435.

River.¹¹³ He regarded the land in the interior in the central tier as having been "settled thickly 4 or 5 years."¹¹⁴ Gordon's observations as a land speculator show that residents were keenly aware of the potential effects of the railroad on property values. Anticipatory settlement can explain the surge of population into the interior of the central tier when other factors, such as fertility of the soil and the presence of roads and rivers cannot. There can be little doubt that settlement was strongly influenced by the certainty of a railroad from Detroit to Lake Michigan. Such a conclusion does no damage to Fishlow's general hypothesis, but it does speak to the fact that anticipatory settlement could be generated in the 1830's by the probability of railroad construction through a given area, and suggests that, with reference to specific projects, the commercial nature of the American farmer was as strong a factor in his choice of location in the 1830's as the 1850's.

It is doubtful, in fact, whether the designation "frontier railroad" strictly applies to the Detroit and St. Joseph, even from its beginning in 1836. Half a century after the fact, the investors who took over the roads

¹¹³Ibid., 143, 260, 269-273.

¹¹⁴Ibid., p. 262.

from the state in 1846 fondly remembered how they had taken over a broken-down strap iron road built through virgin wilderness, and breathed new life into it, bringing population and civilization to the frontier. And, state historians have been quick to accept these seemingly substantial and authoritative generalizations. But, the census of 1837 suggests that the frontier, in the officially designated sense as an area with a population of two per square mile, had been left far behind, and that the concentration was approaching ten per square mile in the western central tier. The same census reveals that all the counties of the central tier, except Wayne, which did not report, and the sand hills of Van Buren county, produced over a hundred thousand bushels of wheat the same year.¹¹⁵ Instead of "frontier," moderately developed would be a more adequate description.

¹¹⁵Michigan Census of 1837, in Lanman, p. 301-ff.

CHAPTER V

THE DECISION TO BUILD

By the time Michigan was admitted into the union, the demand for internal improvement had developed into a strong movement. The Erie Canal had opened the way to market, and the Territorial Roads had opened the land. As settlement increased and a marketable surplus developed, demands for improved transportation grew more powerful. They were heightened and led by commercial ambitions in cities on the coast, eager to develop an interior market and to tap the growing trade channeling through Buffalo to New York from the Mississippi Valley and trans-Mississippi West. Congress was repeatedly petitioned by the people and the Legislative Council, and in the decade preceding statehood the Council put its stamp of approval on nearly all of the major projects embodied in the omnibus bill of 1837. Official sanction and private attempts to begin construction led to anticipatory settlement, which in its turn increased public expectations and reinforced demands. At the same time, the sectional rivalry that plagued the state throughout its program developed and increased in intensity. Even before 1835, when a

temporary truce checked its growth, Detroit's opponent was being referred to as the "independent state of Monroe."¹

Despite the intensity of petitioning and lobbying, federal aid was neither fast enough nor in sufficient volume to satisfy local needs and ambitions. The roads were built only slowly, no money was appropriated for repair, and the canal undertaken at Monroe moved only slowly toward completion. Under these conditions, and a more abstract desire for political equality, pressure mounted for statehood and the opportunities for exploitation of a developing region and a dynamic economy that statehood was supposed to endow. I would argue that the implementation of a program of internal improvements was the single most important objective in the quest for statehood; that the omnibus bill of 1837 was the culmination of a single movement to which other events played a secondary and subordinant role.

The Northwest Ordinance provided that:

There shall be formed in the said territory, not less than three nor more than five states; . . . And, whenever any of the said states shall have sixty thousand free inhabitants therein, such State shall be admitted, by its delegates, into the Congress of the United States, on an equal footing with the original States in all respects whatever, and shall be at liberty to form a permanent constitution and State government: Provided, . . .so far as it can be

¹George H. White, "Townsend E. Gridley," Michigan Pioneer and Historical Collections, XIV (1894), 407.

consistent with the general interest of the confederacy, such admission shall be allowed at an earlier period, and when there may be a less number of free inhabitants in the State than sixty thousand.²

Residents of the Territory took the provisions of the Ordinance literally, construing it to mean that statehood was a right when population reached the requisite sixty thousand, and the equality provision to mean that in addition to political equality, federal aid for internal improvements and other projects would be awarded in quantities sufficient to create retroactive equality.

The Census of 1830 was disappointing in its results; only thirty-one thousand inhabitants were reported. But the influx of population in the next two years convinced the Legislative Council that growth was sufficient to petition Congress for an enabling act authorizing a constitutional convention. A bill was introduced into Congress, but was tabled because of congressional reluctance to become involved in the potentially volatile Ohio boundary question.³ For the next two years, Congress turned deaf ears to pleas from the territory, when unilateral action by residents forced its consideration.

No scholarly examination has ever been undertaken of political forces and alignments in Michigan under the Territorial government. In fact, the only work dealing

²Italics mine.

³Dunbar, 301-303.

with party structure between 1835 and the Civil War is a hopelessly outdated study which is useful only for describing membership in various political factions, but woefully inadequate in its assessment of causation.⁴ It is not within the scope of this essay to attempt a complete analysis of political forces within the state, but some attention must be given to political factors because of the very nature of the topic.

A recent study of party formation in Jacksonian America by Richard P. McCormick, suggests the possibility of a more meaningful analytical vehicle than the obsolete debtor farmer analysis undertaken by Streeter. Instead of concentrating on the stated issues and differences uttered by parties and their leaders during the period, McCormick has chosen to focus his attention on the emergence of organizational techniques and procedures that determine the dynamics of American party structures. After studying the emergence of political parties in states admitted into the union before 1824, McCormick has reached the conclusion that party structure did not emerge from any polarization of attitudes on specific issues or from Congressional cleavages, nor did it represent the revival of party alignments preceding the era of good

⁴Floyd Benjamin Streeter, Political Parties in Michigan, 1837-1860 (Lansing: Michigan Historical Commission, 1918).

feeling. It emerged from the successive contests for the Presidency between 1824 and 1840, at different periods in different regions, governed primarily by regional identification with the presidential candidates. McCormick feels that the party system was unique in American experience because of its "balanced" and "artificial" nature: balanced because it produced parties of nearly equal strength in every region, and artificial because it could survive only by avoiding regionally divisive issues.⁵ What the McCormick study suggests, although McCormick does not go so far as to state it himself, is that party struggle in the Jacksonian era is essentially a struggle for power between similar groups divided by the possession and lack of power--more succinctly, between the "ins" and the "outs," or a patronage-oriented party structure.

Between 1833 and 1835, Michigan was essentially what McCormick has characterized as a "no-party" system, with a nascent party developing. Federal elections and issues were of little importance in an area that could only send non-voting delegates to the national capital. Political struggles within the Territory were largely personal and factional without party overtones, although the Territory was governed by appointees of the Democracy,

⁵Richard P. McCormick, The Second American Party System: Party Formation in the Jacksonian Era (Chapel Hill, N. C.: University of North Carolina Press, 1961), 13ff.

and the Territory was generally Democratic. Two letters from Stevens T. Mason, then Territorial Secretary, to his father, give brief insight into the developing party system in the state. An apparent rift had developed between the Secretary and the Governor, over what, is not disclosed. But Mason reported that neither he nor the Governor had yielded an inch, and apparently they were not on speaking terms. The Governor, he told his father, had alienated everyone in the territory by refusing to either veto or sign some favored measure. At the same time, attempts were in the making to tighten the organization of the party:

The approaching contest for the election of Delegate bids fair to be warm and bitter, but not closely contested. 'The Democratic Republican Convention' as they style themselves, which met at Ann Arbour, as was anticipated nominated Lucius Lyon as their candidate, and intend making the support of him the test of every mans faith and principles. The presumption of this little faction would almost provoke one, if it were not that their assumption of consequence has made them ridiculous [sic]. The unfortunate people of Michigan have set over them a Regency more formidable than the famous Albany Regency itself, and have only to bow their necks and be trampled on by Andrew Mack, David C. McKinstry, John P. Sheldon and Elliott Gray.

The Ann Arbour convention has constituted [sic] those gentlemen a committee to regulate all appointments, whether comming [sic] from the Executive of the United States or the Territory, and have proclaimed to the world that no man can receive an office in this Territory, without first receiving the Sanction of this Committee, and procuring from them an endorsement that he is a 'true Democrat dyed in the Wool.'

Mason told his father that he was against this kind of organization, which he found typical of "New York

politics." But he believed that the intelligence of the people would overcome it. He reported that Wing, who had served six terms as delegate, was making a strong bid, but that the Ann Arbour Convention had been so cut and dried that he was defeated with only two votes. He was confident, however, that the nomination of a candidate by the Anti-mason's on March 10th would split the factions and insure Wing's election.⁶

On April 16, Mason reported that the Anti-masons had nominated William Woodbridge, and that the nomination hurt Wing by attracting the opposition. Woodbridge, later the Whig governor, was not running as an Anti-mason, but as an independent, which Mason decided meant that he wanted to represent someone besides the people who had elected him. Wing's friends, he reported, were not able to hold a convention, but were nominating him by means of county meetings.⁷

The significance of Mason's observations lay in the revelation of a tightening party organization in the Territory. Factional splits were nothing new; Austin Wing, the sheriff of Monroe county, was a perennial candidate, and usually successful. Elections for delegates

⁶Letter from Stevens T. Mason to John T. Mason, March 1, 1833, in Stevens T. Mason Papers (Burton Historical Collections, Detroit, Mich.). Cited hereafter as S. T. Mason Papers (BHC).

⁷Letter from S. T. Mason to John T. Mason, April 16, 1833, Ibid.

had often been bitter struggles between opposing candidates. For the first time, however, the Democracy was attempting to build a party structure controlling not only elections but federal and local appointments. Of equal significance is the fact that the convention, held in the central tier, nominated a candidate from the western part of the state, signifying the growing political power of the region. Mason, who seems to have favored Wing, was also apparently outside the confines of the newly organized party. Whig organizational efforts began about the same time, for early in January, 1835, George Corselius was able to report to Woodbridge that Washtenaw County was solidly organized and subordinant to the party central committee, and that efforts would be concentrated on bringing Oakland county into the fold.⁸

In the struggle for statehood, internal dissension within the Democracy led to the brink of dissolution. Liberal Democrats, under the leadership of Mason, John Norvell, James Doty, John R. Williams, and Ross Wilkins led a faction of Lawyers, office holders, and farmers anxious for admission and strongly in favor of democratic reform. A second faction within the party, led by Robert McClelland, Lucius Lyon, Edward Ellis,

⁸Letter from George Corselius to William Woodbridge, January 5, 1835, William Woodbridge Papers (Burton Historical Collections, Detroit, Mich.). Cited hereafter as Woodbridge Papers (BHC).

Elijah Cook, Ralph Wadhams, and John Clark, opposed any course of action that would lead to a break with the national government under its Jacksonian leadership. In the struggle that followed, Lyon's absence in Washington and his failure to pass an enabling act, combined with the death of Governor Porter, weakened the conservatives' control.⁹

During the factional and party struggle that followed internal improvements never became a divisive issue. The truce negotiated early in 1835 quieted sectional rivalries until 1837, and the basic consensus that a program should be undertaken was reflected by the absence of controversy. Issues dividing the parties and factions centered on the method of acquiring statehood and extension of suffrage. The same unanimity was displayed in the state's opposition to Ohio's claim on Toledo, which was an important part of plans for internal improvement. As William Woodbridge, leader of the Whigs stated on two separate occasions, "No complex proposition was ever perhaps presented for the consideration of a whole people,

⁹Harold M. Dorr (ed.), The Michigan Constitutional Conventions of 1835-36: Debates and Proceedings ("University of Michigan Publications: History and Political Science Vol. XIII; Ann Arbor: University of Michigan Press, 1940), p. 9. Cited hereafter as Michigan Constitutional Conventions (Dorr). Draft letter from William Woodbridge to "Dear Sir," 1836, Woodbridge Papers (BHC). Burton Historical Collection uses "Dear Sir" to indicate that the correspondent is unknown.

in respect to which there was so little Diversity of Opinion, as, that, as regarded the obnoxious claim of Ohio to the disputed Country, . . . "¹⁰ The reason, he told Daniel Webster, was that "The comprehension is the Miami Bay is considered indispensable to our future importance & prosperity--It constituted our Only harbor on Lake Erie--The statute books and acts of congressional appropriation may indeed show some colors for the pretext that La Plaisance Bay & the Mouth of the River Raisin May furnish a harbor there--but that is only on paper--Nothing can compensate us for the loss of Miami Bay."¹¹ Throughout the struggle for statehood the end of internal improvement was never lost from sight, even when factions differed over the means of policy implementation.

When the Legislative Council met in special session in September 1834, they took the first steps toward statehood. The acting Governor's address to the session was energetic and forceful, as he told them that statehood was a right, not a privilege, and that if Congress would not extend the right, they must seize it; he recommended a census, followed by a constitutional convention. The Council authorized the census, and

¹⁰Ibid.

¹¹Draft of a letter from William Woodbridge to Daniel Webster, ca. 1835, William Woodbridge Papers (BHC).

adjourned.¹² At the same session, the question of payment for the survey of the Detroit and St. Joseph was introduced.

When the Legislative Council met in January, 1835, they came to grips with the problem of statehood. In his message to the Council, Mason repeated his arguments supporting Michigan's right to statehood, and warned them not to "barter away their sovereignty," by accepting five per cent of federal land revenues and a land grant in exchange for the Toledo strip. The grant and the five per cent funds were the state's by right, supposedly awarded by the provision in the Northwest Ordinance that new states would be admitted on an equal footing.¹³ On January 26, 1835, the Legislative Council passed its own constitutional enabling act.¹⁴

Between passage of the enabling act and the constitutional convention, the Toledo question came to a head. The "Toledo War", as it came to be known, with all its intricacies of conflicting claims, does not fall within the legitimate scope of this essay, but certain effects were important to the internal improvements movement. The importance of the port, with its access to the Maumee and

¹²Messages of the Governors of Michigan, I, 136: Michigan, Territorial Laws, III, 1423.

¹³Messages of the Governors of Michigan, I, 136.

¹⁴Michigan, Territorial Laws, III, 1356-59.

the canals being planned by Ohio and Indiana, as well as the railroad which was an outlet to the southern tier, was of crucial importance to Michigan's plans, and its loss a severe blow. The marching of militia and hurling of insults kept the territory in a state of excitement that was high even for a Jacksonian America in the midst of a speculative bubble. Letters received by William Woodbridge from his Whig lieutenants impart a real sense of fear and a picture of a people in fantastic motion. There is a fear clearly expressed that the will of the people will lead to mob rule, and that events will seize control of the movement's leaders.¹⁵ Finally, the Governor's resolute action in dealing with Ohio and the national government raised him to new peaks of popularity and strengthened the liberal's control of the government. As Woodbridge phrased it, "The puerile extravagancies of our Young Secretary, (then acting Govr) were proofs of patriotism & high honor!--& he, & his Magnus Apollo, were wafted together, into high favour, by the storm of passion that swept over the country!"¹⁶

On April 4, 1835, eighty-nine delegates were elected to the Constitutional convention. Under the

¹⁵Letter from Henry Cole to William Woodbridge, November 28, 1835; letter from R. Sprague to William Woodbridge, Woodbridge Papers (BHC).

¹⁶Draft letter from William Woodbridge to "Dear Sir," ca. 1835, Woodbridge Papers (BHC).

provisions of the enabling act, aliens were permitted to vote, as well as citizens, and Woodbridge suggests that many people were so disgusted that they boycotted the polls.¹⁷ Only ten or twelve Whigs were elected; the balance of the delegates were equally divided between the two wings of the Democracy. At a convention held in January, the Democrats had laid down the lines of the upcoming struggle, focusing attention on the problems of immediate statehood, and free white male suffrage.¹⁸ When the constitutional convention met it appears that the two wings of the Democracy were as divided as the two parties on the question of alien suffrage.¹⁹ Unable to cooperate within the party, the convention was forced to elect a Whig, John Biddle, to the presidency. The rift was so deep that the leader of the conservatives, Lucius Lyon, doubted it could ever be healed.²⁰

Once convened, the convention became a revolutionary body. Since the Legislative Council had only the

¹⁷Ibid.

¹⁸Proceedings of the Democratic Territorial Convention, Held at Ann Arbor on the 29th and 30th January 1835 (Detroit: Free Press, 1835), bound in a volume of Misc. Docs. of House and Senate, 1838-1840 [sic] in the possession of the Michigan Division, Michigan State Library, Lansing, Michigan.

¹⁹Draft Letter from William Woodbridge to "Dear Sir," ca. 1835, Woodbridge Papers (BHC).

²⁰Letter from Lucius Lyon to Col. Geo. Wm. Boyd, December 29, 1835, Lyon Papers, MP&HC, XXVII (1896), 468-469.

authority to recommend, the convention regarded itself as the representative of the people, directly elected and free to define its own jurisdiction. Once assembled, it assumed its own authority, appropriating money, remodeling the capital, and authorizing elections for its ratification. The convention went so far as to attempt to make a compact with the federal government on the disposal of public lands within the Territory.²¹

When the convention met in May, it proved too bulky to proceed with the business of drafting a constitution, and a committee was appointed to write the rough draft. The committee, in turn, proved too unwieldy, and the first draft was finally drawn up by five men headed by Edward D. Ellis of Monroe, in secret session. Their draft was unanimously accepted by the committee, and submitted to the convention on May 19.²² Between then and its adjournment on June 24, the convention debated the draft submitted by Ellis, centering its attention on the issues of suffrage and education. By June 18, when the basic issues had been settled, the internal improvements clause was submitted, and passed with only one minor grammatical alteration. In its final form, the constitution required that:

²¹Dorr (ed.) Michigan Constitutional Conventions, p. 15.

²²White, Michigan Pioneer and Historical Collections, XIV (1894), 407.

Internal improvements shall be encouraged by the government of this state; and it shall be the duty of the legislature, as soon as may be, to make provisions by law for ascertaining the proper objects of improvement, in relation to [roads], canals, and navigable waters; and it shall also be their duty to provide by law for an equal, systematic, and economical application of the funds which may be appropriated to these objects.²³

As adopted, the constitution did more than authorize internal improvements; it required them. It required also that the application of funds be equal, systematic, and economical; terms which would later prove contradictory.

When the convention adjourned, copies of the constitution were sent to Washington, accompanied by the Census of 1834 and an Ordinance adopted by the convention, requesting certain acts by Congress which would be binding on the state as a condition of admission. Congress was asked to grant the state section sixteen for public schools, four sections of land for a seat of government, and convey the seventy-two sections of land granted for the University in 1826 to the State. It asked in addition for seven hundred sections of land for the purpose of building one or more railroads or canals across the peninsula from Lake Erie or the Detroit River to Lake Michigan, and improvement of such other roads, rivers, or

²³Dorr (ed.) Michigan Constitutional Conventions, pp. 394, 479, 462: Michigan, Constitution (1835), Art. XII, sec. 3. Dorr, p. 606, inserts "roads" which was adopted by the convention, but dropped in the formal copy through a clerical error.

canals as the state should stipulate. The convention asked for five per cent of the net proceeds of land sales after January 1, 1836; three fifths for schools and two fifths for internal improvements. Finally, they asked for all the salt springs in the state, with one section of land for each, and completion and repair of all roads authorized and constructed by the national government. In submitting these requests, the convention pointed out that the United States Constitution was a compact between the United States and the state, and that they regarded these conditions as basic to being admitted on an equal footing.²⁴ In short, the convention was offering prior terms for proceeding with negotiations.

When the convention adjourned, a new political balance had been struck in the state. Suffrage had been extended to all white males, including aliens, after six months residence. Elections for ratification of the constitution were scheduled for October 5, and the convention was so confident of its approval that state elections were held the following day. Terms had been submitted to the federal government under which the state

²⁴ Ordinance adopted by the Constitutional Convention and submitted to Congress with the Constitution, Territorial Papers of the United States Senate, 1789-1873, File Microcopies of Records in the National Archives: No. 200, roll 6 (Washington, D. C.: National Archives and Records Service, General Services Administration, 1951).

would consider admission, and an internal improvements program had been authorized.

During the summer, the high level of excitement continued, and Mason was dismissed as territorial secretary by the President. After having his life threatened in Monroe, and his lodging pelted with stones and horse dung in Ypsilanti, Jackson's appointee, John Horner, quietly isolated himself in Detroit and ruled over a territorial government that had meanwhile voted itself out of existence.²⁵ The voters knew what kind of a man they wanted in office, and the Michigan Whig listed those qualifications. In addition to generally high and admirable qualities, they demanded that: "he be a man of good sense, competent information, experience, business habits; attached to the true interests of Michigan, has head full of plans of internal improvement--rail-road cars, schools, and colleges:--a correct judge of men to fill the Judiciary; who does justice and is charitable; . . . "²⁶ In October, Mason was overwhelmingly elected Governor, and the Democrats established a comfortable majority in both houses of the Legislature.

The new Legislature met briefly in November, but little was accomplished. In February, 1836, the program

²⁵Hemans, pp. 178-183; Dunbar, p. 305.

²⁶Michigan Whig (Ann Arbor), July 2, 1835.

began to take shape. After discussing the statehood-boundary problem at length in his opening address, the Governor turned to the subject of internal improvements. Pointing to the constitutional imperative, he urged them to make it one of the first objects of their attention, and warned them that too much attention could not be devoted to it:

The spirit and enterprise which has arisen among our citizens, if fostered and encouraged by the State, cannot fail to lead to lasting prosperity. Your liberal legislation should embrace within its range every section of the state. No local prejudice or attachments should misdirect the equal liberality with which you should guard the interests of your constituents. The wealth of the state must be composed of the individual wealth of its citizens, and in this respect no portion of them are independent of the other.

Mason suggested the appointment of an engineer, commissioner, or board of commissioners, regulated by law, to provide for the equal, systematic, and economical application of funds, and required by law to report at each session of the Legislature. Such a system, he argued, would prevent waste due to misinformation given to the legislature, and channel funds into projects doing the "greatest good for the greatest number of our fellow citizens." The lands requested in section four of the ordinance attached to the constitution, which he felt Congress would surely grant, "will afford a fund ample to give effect to our plans of internal improvement." He asked that the attention of Congress be called to this

application, before all the valuable lands in Michigan were exhausted.

Projects undertaken by private citizens formed another problem. While it was the duty, he said, of the legislature to afford them every aid, "it is also desirable, that they should never be beyond at least, the partial control of the state." He recommended state subscriptions to large amounts of their stock, paid for by a loan contracted at eastern banking houses for a "trifling" commission.²⁷ "The land which must be obtained by Michigan from congress [sic] for purposes of internal improvement, if guarded with a prudent husbandry, would enable us to extinguish the debt contracted, and ultimately become a source of additional revenue to the state." At the same time, he urged that strict economy be observed to conserve the state's resources, and reliance on loans to pay the expenses of government; postponing taxes until the people would be more able to pay.²⁸

The Governor's message reveals several important factors in the plans for internal improvement. Writers skeptical of the program's wisdom have missed the point

²⁷Dunbar, p. 333, errs when he says that Mason preferred investment in corporate stock. Mason offered several courses of action, of which this was only one, and was willing to adopt any method which would allow the state to control main trunk lines.

²⁸Messages of the Governors of Michigan, I, 169-171.

when they have criticized the state for undertaking massive programs on the slender financial resources then possessed. Aware of the limitations of its own resources, the state was counting on federal aid to finance its programs, and if the aid had materialized, it would have been adequate. The seventy-two sections of land granted by the government for a university, chosen from the best virgin lands in the territory, were selling for over ten dollars an acre. Five hundred thousand acres, handled similarly, would have netted between five and ten million dollars for internal improvements, if prices had held. It was the absence of financial resources that added to the urgency of the program. Faced with the problem of taxing a population in the process of farm-making, with inadequate facilities for marketing their products, the liberals turned to the alternative of improving transportation and then using the proceeds to diminish or abolish the burden of taxation.

Within a week, petitions began arriving in the House. Between February 4th and the 9th, a flood of petitions from drives led by John Biddle and O. Wilder, promoters of the Detroit and St. Joseph, began to arrive asking for construction of a railroad from Kalamazoo to Allegan, up the Kalamazoo Valley, which had been bypassed by Berrien's survey of the Detroit and St. Joseph. Similar petitions arrived from the residents of Calhoun,

Allegan, and Kalamazoo counties.²⁹ The same week, Henry Lothrop brought in a petition from Kalamazoo county, asking that the state appoint a committee to report objects of internal improvement to the House, and report on their expediency. The committee was authorized, and seven members appointed by the chair.³⁰ Two weeks later, the legislature passed resolutions asking for federal appropriations for river improvement.³¹

On March 1st, Ely, Chairman of the House Internal Improvements Committee, reported on the section of the Governor's message relating to the intended program; the report was accompanied by a bill that was referred back to the committee with instructions to include provisions authorizing the Governor to borrow three million dollars for internal improvements. Two days later, a resolution was passed instructing the committee on internal improvements to inquire into the expediency of constructing a railroad from Monroe to the Detroit and St. Joseph at Ypsilanti, either under state ownership or corporate charter. On March 8, Ely reported bills authorizing the appointment of a board of commissioners of internal improvement, and a three million dollar loan. On the 25th,

²⁹Michigan, House Journal, 1835, p. 91.

³⁰Ibid., p. 123.

³¹Ibid., pp. 164-166: Michigan, Senate Journal, 1835, p. 70.

the bill was recommitted on Ely's motion, and remained in committee for the rest of the session. A few days earlier, the committee on internal improvement had been instructed to bring in a bill repealing the limit on assessments of highway labor and increasing the amount of commutation, but actions on the bill are not apparent.³²

A week after the legislature reconvened in July, the three million dollar loan bill was reported, and on July 19, the House accepted a substitute with similar provisions. On July 25, the bill was passed and sent to the Senate. The following day, on a motion by John Barry, conservative senator from the southwest district, the bill was tabled and not revived during the session.³³ In failing to pass, the bill suffered the fate of most major legislation passed by the House during the session, when the Senate refused to act because of doubts raised by a minority of conservatives as to the legality of proceedings under assumed statehood. All definite action was avoided.³⁴

On July 12, Mason returned a bill chartering the St. Clair and Grand River railroad to the Legislature

³²Michigan, House Journal, 1835, pp. 170, 179, 197, 227, 228.

³³Ibid., 333, 335, 366, 408: Michigan, Senate Journal, pp. 388-389.

³⁴Alpheus Felch, "Early Legislation," Semi-Centennial Addresses, p. 515.

with a veto message. He objected to provisions allowing the company to buy lands along the route because the speculation would be harmful to settlement. It would be better, he argued, if the state built the road by taxing the settlers, because it would be less of an absolute burden, particularly since the state was contemplating such a road, anyway. Lack of a provision allowing the state to control tolls, limiting profits to a reasonable return on investment, was characterized as "extortion from the public." Finally, he objected to a provision which had been standard in previous charters, allowing the company to increase its stock if the state took its allotted number of shares, because the provision would neutralize state control.³⁵

On July 22, a resolution was introduced into the Senate by Conrad Ten Eyck, authorizing the Governor to purchase the "Detroit and Grand River [sic]" railroad. Three days later, the resolution was amended to include the Detroit and Maumee, and on the third reading, Comstock added, "and all other railroads of the state." The resolution passed the Senate, and was returned from the House the same day without amendment.³⁶ During the same

³⁵Messages of the Governors of Michigan, I, 185-188.

³⁶Michigan, Senate Journal, 1836, pp. 88, 362, 380, 386.

session, acts were passed authorizing the state treasurer to receive deposits from the federal surplus and the five per cent funds.³⁷

During 1836, the outlines of a program of internal improvements emerged in the sessions of the Legislature, with passage halted only by senatorial doubts about legality. A three million dollar loan was authorized by the House, and the Governor was authorized by joint resolution to inquire into the purchase of the Detroit and St. Joseph and other railroads. A select committee had been appointed to investigate the feasibility of projects, and required to report their findings. By the end of the session, most of the projects undertaken by the Legislature during 1837 had assumed a general form. It was understood that a trans-peninsular railroad would be built, with a branch to Monroe, and that river clearance would be undertaken. A canal from Detroit to the rapids of the Grand River was projected.³⁸ Had it not been for the doubtful legality of acts passed under assumed statehood, it seems likely that the internal improvements program would have been undertaken in 1836 instead of in 1837.

³⁷Michigan, Legislative Acts, 1836, pp. 61, 62.

³⁸Gordon, Michigan History, XLIII (1959), p. 262. Although there seem to be no records of a projected state canal, Gordon speaks of one as a certainty.

During the transition to statehood, bipartisan hostility to control of major transportation routes by private enterprise gained strength. In the fall of 1834, the Ann Arbor Michigan Emigrant, a Whig paper, reprinted an article by Robert Mills, from the National Intelligencer, advocating the use of steam engines on turnpike-type roads instead of railroads. Not only would they be more efficient, Mills argued, but "railroads have a tendency to monopolize the travel, whereas the common road, improved, would be of use to all."³⁹ As spokesman for the liberal Democrats, Mason warned the Legislative Council early in 1835 against the issue of too many corporate charters because they were aristocratic and stifled individual enterprise, and on February 11, 1835, he vetoed the issue of charters to two steamboat companies, repeating his warnings and cautioning the Legislature not to interfere with a branch of business unless it was important to the public and could not be undertaken by individual citizens.⁴⁰ In late 1836 and early 1837, Whig journals expressed agreement with this point of view. When it was reported that the Legislature was likely to purchase the Detroit and St. Joseph in 1837, the editor

³⁹National Intelligencer, September 17, 1834, as quoted in the Michigan Emigrant (Ann Arbor), October 16, 1834.

⁴⁰Messages of the Governors of Michigan, I, 136, 140.

of the Detroit Daily Advertiser commented that:

Objections have been made to this policy, but we see no evil likely to arise from it, but greater benefit rather; after the completion of the work, the state may reduce the tolls to the lowest rate sufficient to pay the expenses of its construction and keep it in repair. When Ohio commenced her great work, the Cincinnati and Cleveland Canal, the state followed the earnest recommendation of Dewitt Clinton, and built the canal with the funds of the state. What would be thought of the policy of surrendering that great work to the control of a private corporation?

Early in 1837, the Whig paper echoed Mason's sentiments in his annual message expressing a distrust of private ownership.⁴¹

During the summer and fall of 1836, the admissions issue came to a climax. Outlines of the settlement to be offered became known as early as March, and the liberals used the terms as grounds for further attacks on the conservative Democrats. Mason used a letter sent to him by Senator-elect Lucius Lyon to discredit the leader of the conservatives. Lyon blamed John Biddle for the attack, but thought that it would harm his opponents more than himself.⁴² On June 15, Congress passed the well-known boundary compromise, and a week later, a supplementary act dealing with the financial terms submitted with the constitution. Besides the upper peninsula in

⁴¹Detroit Daily Advertiser, December 28, 1836; March 9, 1837, as cited in Reagan, p. 18, 21.

⁴²Letter from Lucius Lyon to H. H. Comstock, March 29, 1836, Lyon Papers, MP&HC, XXVII (1896), pp. 291-292.

exchange for the Toledo strip, Congress awarded the section sixteen lands, the capitol and University lands, and five per cent of the net proceeds of land sales. The state was also given six salt springs with a section of land attached to each.⁴³ Neither the seven hundred section grant for internal improvements, nor federal completion and maintenance of roads were granted.

Smarting under the terms of the compromise, a convention assembled under legislative authorization in September and rejected the terms offered by Congress. Almost before the convention was over, regrets began to be expressed, but with the Legislature adjourned, no authority existed to call another convention. By the time the Legislature could have been recalled, it would have been too late for the state to gain admission in time to come under the federal surplus distribution. As an alternative, the Governor suggested that the people act in their original capacity and call a spontaneous convention. The convention was duly called through the party machinery of the Democracy, and met in Ann Arbor on December 14, 1836. With the Whigs refusing to participate in a convention of such dubious legality, the outcome was never in doubt. In two days, the "Frostbitten Convention," little more than a caucus of the Democratic

⁴³U. S., Statutes at Large, V, 59.

party, decided to accept the terms of the Government.

A special messenger was dispatched to Washington, and on January 26, 1837, President Jackson signed the act granting Michigan statehood. Many reasons can be advanced for what was in effect a fiat accompli by the Democracy, and many have been cited.⁴⁴ But a letter from Mason to his sister Emily expresses it best: "I must not omit to tell you, that our recent convention has saved us our share of the surplus revenue; that a bill has passed the Senate of the U.S. for our admission, and that in a few days our troubles will be ended by the State of Michigan becoming a member of the Confederacy."⁴⁵

On January 2, 1837, the Governor delivered his annual message, dealing at length with his recommendations for internal improvements. "The period," he said, "Has arrived when Michigan can no longer, without detriment to her standing and importance as a state, delay the action necessary for the development of her vast resources of wealth." After asking the Legislature to make a disposition of the federal surplus payments, he reported the results of inquiries made about the purchase of railroads under the joint resolution of the previous session. Only two roads had reported, The Detroit and St. Joseph, and

⁴⁴Dunbar, p. 315; Hemans, 241-247.

⁴⁵Letter from Stevens T. Mason to Emily [Mason], January 13, 1837, S. T. Mason Papers (BHC).

the St. Clair and Romeo. The first would surrender its charter if the state would cover its advances, while the St. Clair and Romeo had reported it would surrender its charter only if the state guaranteed completion to Lake Michigan within six years. Mason suggested that if the state did not wish to become engaged in construction of these roads, it could take enough stock on the major routes to "secure to the people a controlling influence over them." And he warned against letting the major routes of the state fall under private control.

The Governor repeated, in essence, his recommendations of the previous year. He suggested that a board of internal improvements be set up during the present session, to employ engineers to investigate routes and other evidence. No project, he said, should be undertaken without their approval. He hoped this would help the state avoid "extravagant, unprofitable and useless expenditures." The state, he said, was quite capable of constructing its own internal improvements, and if it were careful, it could "supercede the necessity of placing all those resources of wealth in the hands of private companies."

Mason's specific recommendations sounded a strange note, by giving canals preference over railroads. He suggested that several surveys be undertaken connecting rivers within the state: the Grand River to the Black

River of St. Clair county, the Looking Glass and the Shiawassee, continuation of the Looking Glass-Shiawassee to the Detroit River or to Saginaw, the Huron to the Red Cedar, and the River Raisin to the head-waters of the St. Joseph or Kalamazoo Rivers. When the rivers were surveyed, he suggested that the Legislature select one or more routes. "In the event, however, that sufficient water for canal purposes cannot be obtained at the summit level between Lake Michigan and Lake Erie, the state will be compelled to direct all her energies and resources to the construction of rail or Macadamized roads, or roads laid with wood, and to the improvement of the navigation of her inland streams."

In view of the acquisition of the western upper peninsula, he suggested that a ship canal be opened around the falls of the St. Mary's River to exploit the fisheries and commerce of the region, suggesting that its resources might be beyond the wildest expectations. Since the distance to be covered would not exceed one mile, Mason felt that a hundred thousand dollars would cover construction and at such a minute sum, the project should be undertaken even if the federal government refused to help.

The Governor warned the Legislature against excessive issue of corporate charters to railroads, stating that he felt it his duty to approve such charters

only when he was satisfied that public, and not private interests were the object of the charter:

In assuming this rule of conduct, I shall not fail at the same time to keep before me the fact that railroads are only of advantage to the great body of the people where they tend to increase the value of the products of agriculture and the demand for labor. These results are only to be expected from such railroads as open a market for produce, by supplying better and cheaper facilities of transportation to such parts of the state as were in a measure before deprived of them. I am led to these suggestions from the circumstance that all applications for railroad charters are apt to be too readily granted, whether running from one section to another, from village to village, or from neighborhood to neighborhood. The result of this course of legislation, if persevered in, must be that the common roads of the country will become neglected and forgotten, will be rendered unfit for the ordinary purposes of travel, and the farmer must ultimately be dependent on private companies for the transportation of his produce, upon such terms and at such prices as individual interests may dictate.

Mason's fears on this point show the early date at which the danger of the natural monopoly of railroads was realized, and that they were part of the reason why the state undertook its own program of construction. Had the program been more successful and set a better example, it is possible that state enterprise might have assumed an important role in the development of American railroads.

Finally, the Governor asked for authorization to borrow funds necessary to carry out the program. He recommended a loan of five million dollars, which would be sufficient to cover all the important improvements demanded by the state. "That economy may be considered as misjudged," he told them, "which, for the sake of

avoiding an immediate advance of money would subject the community to inconveniences and evils a hundred fold greater than the benefits to be derived from procrastination."⁴⁶

It has been traditional, in discussing Michigan's internal improvements program, to give causal significance to the Governor's messages, either in 1836 or 1837. In part, this stems from the assumption that the demand for a program sprang full blown from the soil in 1837 and was adopted by promiscuous whim of the Legislature, and in part from the conclusion that the program adopted by the Legislature was identical to that recommended by Mason. Mason's program called for creation of a board of internal improvement which would investigate projects and report on their feasibility, with the Legislature adopting those projects which were found to be practicable. Giving primary emphasis to canals, he recommended the construction of railroads only as an alternative in the event canals should prove physically impossible. Even then, he recommended stock subscription, instead of state involvement in actual construction, with emphasis on control rather than ownership. Only his recommendations about the size of the loan and the Soo canal were finally adopted. The demand for a program of internal

⁴⁶Messages of the Governors of Michigan, I,
192-200.

improvements was long-standing, and definite ideas had been formed. As we shall see, when the Legislature got down to work, it took the bit in its teeth and adopted a program which bore little resemblance to that outlined in the Governor's message.

Mason's address dealt with other problems which would in time bear on the program undertaken in 1837. He cautioned the Legislature against allowing excessive issue of bank paper as an answer to pressures on the money market. Banks, he said, were not the foundation of public wealth, but only facilitated trade. Wealth could be found only in the labor of the people. Pressure on the money market stemmed from the diversion of capital into speculation, and excessive note issues would only increase the evil. While asking the Legislature to build all possible safeguards into bank charters, the Governor warned that "It is impossible, and perhaps not to be desired, that a metallic circulating medium should be altogether substituted for bank paper." Instead, enough should be kept in circulation that bank notes would pass at par. He asked that notes be limited to denominations of five dollars and above, and that the usury laws be repealed. The latter, he complained, only aggravated capital shortages in periods of high demand, and were an abridgement of the individual freedom of contract.⁴⁷

⁴⁷Ibid., 200-220.

In addition, he asked them to investigate the charter of the River Raisin and Lake Erie Railroad. By an oversight in granting the charter, the Legislature had failed to insert a clause prohibiting banking, and the company was issuing notes which it could not be forced to redeem in specie. Even though not chartered as a bank, it had banking privileges, and Mason asked the Legislature to correct the error.

In his first speech touching on the subject, Mason showed an unusual grasp of the problems of banking and currency which were to plague his administration. Later speeches would show a deeper and growing knowledge of the subject, and as time passed, it was to assume greater and greater importance in his messages. The source of his knowledge is obscure. His father, John T. Mason, had been a director at the Lexington branch of the Bank of the United States, and the younger Mason was an interested student who often reflected his studies, his early speeches showing traces of Bentham. But whatever the source, he had a grasp of the subject equaled by only a few contemporaries, and very few Democrats. Unlike the leaders of his party, he understood the impossibility of an entirely metallic currency, and assigned banks and banking a useful role in the community, preferring control to elimination. In time, an intricate linkage would develop between banking and internal improvements that

would eventually lead to the downfall of Mason and the program.

Four days after the Governor's message, a special committee was appointed by the House to investigate the suggestion of a canal around the St. Mary's rapids, and the Ways and Means Committee was required to report on the means for redemption of principal and interest on a foreign loan.⁴⁸ On January 24, the Committee on Internal Improvement reported, bringing forth a plan that gave basic shape to the program adopted by the Legislature.⁴⁹

In opening, the committee submitted a classic statement of the spirit of internal improvement which summarized their motives and goals, and overcame the confusion of terms and ideological ambivalence that Marvin Meyers has found characteristic of the Jacksonian Persuasion:

The Progress of Centuries in other lands, is here realized in as many years. The sound of the falling forest is everywhere heard--abundant harvests usurp the rank luxuriance of her prairies--farms, villages and cities spring up on every side under the magical hand of intelligent labor--the wide embracing arms of her surrounding seas bear to her indented shores a thousand keels, freighted with tribute to the enterprise and industry of her numerous and enlightened population. Peopled as Michigan is, in great measure, from the most intelligent and enterprising of her sister states, she justly looks forward to stand beside them on an equal footing in the great family of states.

⁴⁸Michigan, House Journal, 1837, pp. 45, 49.

⁴⁹Ibid., pp. 112-131. I believe this to be the committee appointed in 1836.

This can alone be accomplished, in the opinion of your committee, by advancing with them pari passu in the high road of national prosperity--internal improvement.

The subject of internal improvement is one occupying the intelligence of the age. . . . It is no longer an experiment. It has ceased to be a question, whether the calm and peaceable occupations of a pastoral and agricultural life, are more conclusive [sic] to human happiness than the excitement and activity of commerce and manufactures. Every portion of our community, whether near the seaboard or remote, is struggling to obtain its due share of the general wealth. Internal improvement is the great lever which is opening the sealed up fountains of natural wealth and civilization.⁵⁰

Only a few years ago, the committee said, experiments in England established the superiority of railroads for internal communication. And, if Michigan were not held back by timidity, it could become the focal point of East-West communication, the junction at which roads of the seaboard states connected with roads tapping the Mississippi valley. The roads were envisioned not as feeders to the Great Lakes, as critics have charged, but as part of a "great northern chain of communication" completing railroads already chartered through the center of New York and Massachusetts, and connected with roads chartered in Rhode Island, Connecticut, New Hampshire, Vermont, and Pennsylvania. Michigan's railroads were to connect with the New York system by the "Detroit and Niagara", and it was Michigan's duty to complete the system to Lake Michigan by way of the Detroit and St.

⁵⁰Ibid., p. 113.

Joseph, where fifty miles of steam navigation would connect the route with Chicago and its canal to the Mississippi. The road was expected not only to give the state markets and sources of raw materials, but revenues from through traffic. A short line from the main route to the Maumee would complete the linkage to the Mississippi valley, and tap the whole trade of that region by freeing it from the hazards of river and lake navigation. According to the Committee, works in progress to the south threatened to sweep trade from the state unless the crisis was met by energetic action. "The present is in the opinion of your committee the proper period to carry through at least one perfect line of communication across the state."

The committee urged that private enterprise be harnessed to aid in the completion of a statewide transportation net. Under its program, the state would concentrate its efforts on cross-peninsular routes, and leave the building of short connectors to private capital. "The end in view being the prompt effectuation of a full development of our internal resources, the attempt by the state to grasp the entire control of all such works, will of necessity, impede the progress of the whole." A few leading routes in successful operation, on the other hand, would attract capital for successful completion of the rest, and thereby avoid both the waste and delay of

too many projects at once, and local and sectional struggles. The committee urged the state to strive for completion of a single route before concentration of wealth and population at particular points led to heavy and insurmountable sectional rivalry. They also recommended a southern railroad to connect with the works of other states.

The Committee's recommendations encompassed a series of projects. The Detroit and St. Joseph was recommended to complete the line of communication from the Atlantic to the Mississippi. A Northern route, from Fort Gratiot to the mouth of the Grand River, would unite the links of a contemplated route through the Canadas to the foot of Lake Huron with a railroad being considered in Wisconsin from Milwaukee to Cassville by sixty miles of navigation, and would constitute the shortest route to the Mississippi. A canal from the headwaters of the Saginaw to the Grand would advance the interests of the northern section of the state. Finally, the committee thought that it might be desirable to build a railroad through the center of the peninsula to Mackinac at some time in the future, to complete the central line of communication.

It is clear that the committee had a larger picture than outlets for local markets in mind when it recommended these projects. The roads that it recommended

were all presented in terms of the works with which they would connect in the development of railroad systems linking Michigan with the Atlantic coast. Its basic program was correct and visionary; with some alteration, all the roads and networks recommended would eventually be built. Its error lay in confusing the plans and charters of other states with actual construction and the reality of completion. Most of the lines discussed would not be completed for at least two decades, but the sense of urgency in the committee's recommendations gave the impression that they were practically on Michigan's doorstep.

In addition to the trans-peninsular projects, the committee recommended two other works. A canal around the Sault de Ste. Marie was suggested because it would open the trade of the Northwest, as well as the fisheries and mines of the Superior country. Finally, because the Erie and Kalamazoo Railroad made the southern portion of the state tributary to Ohio, the committee suggested the building of a railroad from Havre to Adrian. With the aid of the port of Monroe, it was hoped that this measure would "afford us the ability to compete with our grasping neighbor" for the trade of the southern tier and the commerce of Lake Erie. Finally, a geological survey of the state was advocated to increase knowledge of the state's resources and attract population and capital.

The committee justified its recommendations by citing both the economic development and financial returns the program would bring. "Whatever will tend to multiply our population and increase the amount of industry, which is the prime and only source of wealth, and whatever may allure the investment of capital and skill to sustain and direct that industry is manifestly the true policy of the State." Such works were expected to benefit the whole spectrum of economic activity; agriculture, trade, commerce, and manufacturing.

The works were expected to raise the real income of the people by reducing transportation costs. The committee argued that transportation costs were a part of the price of every article, and that works would reduce these costs and would reduce the price paid for every article imported, at the same time allowing farmers to compete on the Eastern market and bring marginal lands into production. Finally, the committee argued that withdrawal of horses from the transportation of people and goods would save about a third of the farm products currently consumed in their support. In putting forth this justification, the committee cited a Doctor Lardner as their authority.⁵¹

⁵¹This may be Dionysius Lardner, F. R. S., LL. D., Trinity College, Dublin, Author of Popular Lectures on the Steam Engine and a noted railroad advocate.

Satisfied with its justification of the developmental implications of the program, the committee turned to the financial aspects. To complete such a program, a loan must be obtained, if the state was to have enough money to proceed without embarrassment and be able to hire competent engineers. Such money, said the committee, would not be an expenditure but an investment. "It is an investment which will afford an ample profit, and that profit, instead of swelling the wealth of individuals and companies, will be equally divided among the whole mass of our population, by creating and maintaining public revenue, which, in the process of time, will materially lessen the public burden." The committee reasoned that if five million dollars could be borrowed at five per cent and invested to bring returns of ten per cent, the state would realize five per cent or two hundred-fifty thousand dollars a year. If the money could be borrowed for twenty-five years and taken at the rate expended, with five years taken to complete the program, twenty years would remain to repay the debt. The income of the sixth year, invested at seven per cent, would be \$582,500 at the end of twenty years. Total income of the works, assuming an annual income of \$250,000 invested progressively at seven per cent over a period of twenty years, would yield the sum of \$8,325,000. after paying back the principal of five million dollars, and a small

sum of arbitrarily estimated costs, \$2,925,000 would remain in the possession of the state, along with public works valued at five million dollars. With the principal repaid, income from the works would double, and either rates would be reduced or the public coffers filled. The committee concluded that "the investment of such a sum cannot therefore be considered great, when compared with the importance of the work and the advantages to be realized." The committee's financial model is unimpeachable, but the basic assumptions, particularly those involving rate of return, were heroic.

The committee, however, considered ten per cent a conservative estimate of returns to be realized. It estimated that 57,000 tons of merchandise were shipped west from Detroit in 1836, and that there were 11,494 arrivals and departures from the port (and that this was only twenty per cent of the persons in transit between Detroit and Lake Michigan). Using the mid-point distance as an average, it calculated that freight at six cents per ton mile would return \$342,000 plus \$85,000 for return freight. Forty thousand passengers, for the same 100 miles at five cents per mile, would return an additional \$200,000. Subtracting twenty-five per cent for repairs and expenses, estimated net income would be \$470,000, or thirty per cent on the estimated cost of the Detroit and St. Joseph. Even these estimates were

conservative, the committee felt, because they did not allow for revenue from the mails or the growth of traffic. The freight rates cited must have been considered low, too, for the committee stated elsewhere that if the cost of transport could be reduced to \$40/100 ton-miles on freight, it would save \$32/100 ton-miles over current costs.

The Committee realized that five million dollars would never be sufficient to build all the projects it was recommending; it was counting on federal aid to make up the deficit. "This aid," it reported, "will justify an extended system and liberal expenditure without which the whole must fail." They recommended application to the federal government for aid, and suggested the Legislature stress the military importance of these works in case of another war with England.

In closing, the committee recommended a five point program for immediate consideration. The Detroit and St. Joseph Railroad should be purchased, and a St. Clair-Grand River Railroad surveyed. A railroad should be constructed from Monroe to the navigable waters of the Kalamazoo (probably Marshall), and from there to the terminus of the St. Clair-Grand River route. A ship canal should be constructed at the Soo, and a canal built through Oakland county from Detroit to the Grand River. Although it had wholeheartedly recommended railroads, the

committee refused to pass judgement on the superiority of either canals or railroads until a survey had shown the suitability of the terrain.⁵²

On January 27, three days after the report was delivered, Ely, chairman of the House Internal Improvements Committee, reported three bills into the House: a bill authorizing the five million dollar loan, a bill for the purchase of the Detroit and St. Joseph Railroad, and a bill establishing a board of internal improvements.⁵³ The debate that followed consumed nearly two months, bringing to a head the sectional rivalry that had been quieted by the truce of 1835. In the struggle that followed, party politics played only a minor role.⁵⁴

The bills submitted bore little resemblance to the slate of projects recommended by the committee in its report. The program presented for legislative consideration consisted of a single cross-peninsular railroad, authorization to borrow money, and the creation of a board of internal improvements. In the months that followed, legislative struggle focused on the bill for purchasing the Detroit and St. Joseph, with the lines of battle drawn between representatives of the southern and

⁵²Michigan, House Journal, 1837, p. 131.

⁵³Ibid., p. 144.

⁵⁴An opposite point of view is taken by Streeter, pp. 6-9.

central tiers of counties. In order to gain inclusion of their project in the internal improvements bill, the southern forces resorted to delaying tactics, postponing debate and gaining passage of a resolution instructing the Committee on Internal Improvement to inquire into the propriety of constructing a second road west through the line of county centers in the southern tier and report a bill to that effect.⁵⁵ Although the central counties had the largest group of votes, neither tier controlled a numerical majority in either the house or the Senate. Southern interests used the second tier's advocacy of their advantage by advancing a multiple project program designed to swing the balance of power held by the sparse population in the north to their side. Alpheus Felch, a leader of the Monroe Democrats, later recalled:

I remember very distinctly when the proposition was made to amend the bill by substituting three roads in the place of one. It created great alarm among the special friends of the bill. They looked upon it as indicating a design to defeat the entire project, and they knew well that a combination of votes north and south of the line would seal its fate. But in this they were mistaken. The proposition was made in all sincerity. The proposed loan was large and they reasoned that as near as possible the benefit of it should be given to all who, as members of the State, were to bear the burden of paying it.⁵⁶

Supporters of the single central railroad based their arguments on expediency and profitability; advocates of

⁵⁵Michigan, House Journal, 1837, p. 157.

⁵⁶Felch, Semi-Centennial Addresses, p. 519.

the multiple route rested their case on the more abstract grounds of equality.

House debate continued on the internal improvements program until after the middle of February. Most of the discussion was conducted in the committee of the whole, and fails to appear in the records. But newspaper battles reflected the major arguments being advanced by sectional opponents. Central interests argued in favor of a single road, claiming that the southern section did not have sufficient population to justify more than ten or twenty miles of road, and offered to construct branch lines connecting points in the south with the central railroad. Southern interests countered with the argument that more than one railroad was within the capability of the state to finance, and would produce public benefits in which they were entitled to share. The major difference between opponents was not the desirability of roads, but the number to be built and their location.⁵⁷ On February 11, the bill creating a board of internal improvements passed the House, and loan authorization followed shortly thereafter.⁵⁸ Debate continued on the purchase bill, often lasting the entire day. On February 16, the House

⁵⁷Detroit Daily Advertiser, February 4, 1837, as cited in Reagan, p. 22.

⁵⁸Michigan, House Journal, 1837, pp. 188, 206.

unanimously adopted a resolution instructing the Judiciary Committee to inquire into the propriety of granting \$100,000 to each of the railroads in the state, but no report was made during the balance of the session.⁵⁹

Finally, the bill was passed by a vote of thirty-four to eight, and its title changed to "A Bill to provide for the construction of certain works of Internal Improvement and for other purposes."⁶⁰

On February 25, the bill was received by the Senate and submitted to committee, where it remained until March 6, when it was reported out and sent to the committee of the whole. There it was debated until February 14, when it was reported with an amendment.⁶¹ On the afternoon of March 14, the full force of sectional struggle broke loose.

The exact provisions of the Senate amendment, which was really a substitute bill, are not clear. The amendment was not printed, and no record of it seems to exist. Its general outlines, however, are apparent from the context of Senate debates. The Senate substitute seems to have embodied the recommendations of the House Committee on Internal Improvements, authorizing a railroad

⁵⁹Ibid., p. 226.

⁶⁰Ibid., 180, 222, 223, 225, 227, 237, 238, 247-248.

⁶¹Michigan, Senate Journal, 191, 227, 240-241, 285.

through the central tier with a branch from Monroe through Tecumseh to the Central, which would be continued to the rapids of the Grand River. The context of the debates makes little mention of provisions for the northern tiers of counties.

No record was kept of the political affiliation of legislators prior to the Civil War, but available data indicates that the sixteen member Senate was composed of fourteen Democrats, and two members with no recorded political affiliation.⁶² The Senate substitute was supported by nine members and opposed by seven. Amendments offered in the course of debate made it clear that the opposition was willing to make any concession, including continuation of the Detroit and Pontiac west to the mouth of the Kalamazoo, to secure a direct route from Monroe to New Buffalo through the southern tier. Supporters of the bill rejected every inducement, and exhibited a determination to build no more than one route across the state.

⁶²Michigan Historical Commission, Michigan Biographies (Lansing: Michigan Historical Commission, 1924), was used to determine the political party of state officials when such information was given. Unfortunately, the Commission interested itself in antiquarian details more than political affiliation when it compiled these short biographies of state officials. In other cases, membership in party central committees or signature of party campaign literature was used as a basis for determining membership. Lists for the Senate are almost complete, but it proved impossible to determine the party affiliation of a majority of the members of the House. Control of the Legislature was determined by contemporary statements, and the party or factional affiliation of the state printer.

In ten roll call votes, the opposition was unable to gain a single supporter, regardless of the inducements offered for defection. The substitute was finally adopted by a vote of nine to seven, and the following day, the bill was adopted by a vote of eight to seven.⁶³

Streeter, in his analysis of political parties, has stressed the support given by Whigs to the center routes, and Democrats to a multiple program. His conclusions rest, however, on sample votes taken from the House in 1838 and subsequent years, votes in gubernatorial contests, and the editorial positions of the Detroit Advertiser. Had he bothered to ascertain the political affiliation of legislators instead of assuming that the gubernatorial votes of counties reflected the political affiliation of representatives sent to the Legislature, and included the Senate in his calculations, his results would have been substantially different. Instead, he chose to assume that elections in the fall of 1837 reflected the composition of the Legislature the previous spring, and that the sectional struggle in the Legislature was in part the result of political affiliation.

⁶³Semi-Weekly Free Press (Detroit, March 17, 1837, p. 4. Just before the crucial debates, the Democratic Free Press burned to the ground. The Semi-Weekly Free Press, its political propaganda column, was published separately for about three months as a bi-weekly, and presents a different version of debates from those found in the legislative journals or the Free Press.

⁶⁴Streeter, 6-9.

Analysis of the Senate vote cannot utilize the conventional assignment of votes to districts, because under the system of apportionment, Senatorial districts were composed of several counties and cut across sectional lines. Each district was entitled to three members, who might, or might not reside in different sections.⁶⁵ Striking results can be obtained, however, if the Senators are separated by their village of residence. Of the seven Senators in the opposition, all reported residences in the first or third tier of counties. The one exception to the rule of local self interest among the Senate opposition was Calvin Britain, who reported his residence as St. Joseph, proposed terminus of the Central Railroad. All of the supporting Senators, except two, lived either in towns on the proposed road, or within a county through which the road passed. These two, who held the balance of power, were Raynale of Oakland county, whose voting is unexplainable, and Hough, who lived in Tecumseh, through which the proposed branch to Monroe would pass. It is evident that in the Senate, proponents of the central route had found the key to obtaining a majority for their bill without resorting to multiple trans-peninsular routes.⁶⁶

⁶⁵Four districts with three Senators, and one with four.

⁶⁶Michigan, Legislative Manual, 1837, p. 88: Michigan, Senate Journal, 1837, pp. 297-299.

All this was clear to John Barry, apparent leader of the opposition, when he rose on the floor of the Senate to deliver a thunderous protest against the substitute bill. Barry warned the Senate that they were putting the interests of the southern tier in jeopardy, as well as the interests of the whole state, and violating the golden rule, which he saw as the essence of all religion and morality. "Now Sir," he stormed, "if this Grand River Rail Road charter is to be forced upon the South, as a part of the great southern thoroughfare, by whom is it to be done? I answer, Sir, by those living in the second tier of counties. You impose upon the south what they would almost unanimously reject." He claimed that the south was not selfish; it wanted only a share in proportion to its population and the taxes it paid. What it wanted was a railroad from Monroe to New Buffalo with no specified mid-points. The proposition before the Senate, he said, gave the south nothing more than it was getting from the Erie and Kalamazoo, except that the road would run through Tecumseh instead of Adrian. "We think it is asking too much, when you say construct for us the middle route, and also a Branch of that route to Monroe before any other great thoroughfare shall be provided for or authorized." If the best policy dictated building only one road at a time, he said, he would accept it. But, if the branch to Monroe was built and called the Southern,

it would mean that the south would never get its road. "In the Middle Tier of counties, you are asking everything: you ask for the seat of government, the University, and the penitentiary." The south would allow that, but it wanted its own railroad. He charged that central interests were attempting to make the whole state tributary to them, and that the people would not stand for it, even with the five or six local routes added as stops to gain a majority for its passage. The bill, he repeated, was a local bill: "It does not provide for internal improvements on that great, broad, and liberal policy, which the people have a right to expect at your hands."⁶⁷ Barry's speech, so full of anger and insult that it involved him in a verbal battle with the president of the Senate, illustrates the high level of antagonism that could be created among Democrats when local or sectional interests were threatened.

By the time the bill was adopted in the Senate, feeling was running high in the state. Newspapers along the southern route had joined those in Monroe in advocating multiple routes across the state.⁶⁸ Meanwhile, the Democratic Free Press was exciting readers with reports of the progress of Canadian railroads that would

⁶⁷Semi-Weekly Free Press (Detroit), April 25, 1837, p. 1.

⁶⁸Reagan, P. 28.

link Michigan with New York. On February 1, the Free Press reported that the Detroit and Niagara Railroad had done everything necessary to begin work but survey the route. It estimated the cost of the road at \$6000 per mile, or \$1,320,000, and reported that the wooden superstructure of the road, buried in dirt, would last forty or fifty years. A week later, it carried a letter from E. A. Brush, a major stockholder in the Detroit and St. Joseph, encouraging investment in the Detroit and Niagara. Brush, the financial agent of Lewis Cass, cited the flat land of Ontario and the railroads chartered and under construction from Boston to Buffalo to support his arguments. As soon as the state assumed the burden of the Detroit and St. Joseph, he said, the stockholders intended to transfer their funds to the project. As he phrased it, "Buffalo and Detroit can never suffer such a project to sleep." Finally, on March 17, the Free Press announced the chartering of the Great Western Railroad by the Canadian Parliament, by amending the charter of the London and Gore Railroad to give authority to continue their road west to either Port Sarnia or Port Edwardsburg, with an accompanying loan of £200,000 from the government.⁶⁹

⁶⁹Democratic Free Press (Detroit), February 1, and February 8, 1837; Semi-Weekly Free Press (Detroit), March 17, and April 4, 1837.

Such reports could have only added to the urgency with which supporters of the single central route pushed for passage of their bill. It should also have given weight to arguments in support of the Northern route, which was to continue the Great Western. Purchase of the Detroit and St. Joseph would not only ensure the completion of the road, but would allow the stockholders to participate in building the connecting link that was to tie Detroit to the coast, perhaps making it the merchandising center of the west.

The Senate substitute was reported back to the House on the afternoon of March 15, and instantly became the subject of discussion. Several amendments were attempted and defeated to give priority to local projects. It is apparent from the amendments offered that the short local projects attached by the Senate to draw away support from multiple road plans of the House included the St. Clair and Romeo, and perhaps a northern railroad through the third or fourth tier of counties. When the question was taken on the Senate version, the House rejected it thirty-eight to six.⁷⁰ The opposition consisted of three Democrats and three whose political affiliation was not recorded, while the whole House consisted of twenty-two Democrats, four Whigs, one

⁷⁰Michigan, House Journal, 1837, pp. 352-356.

independent, and twenty with no recorded affiliation. Since the opposition votes, both of February 23 and March 23, show no correlation with either party affiliation or section, it can be assumed that party politics played little role in opposition or support of either the compromise bill passed by the House in February or the Senate version rejected in March. Indeed, the sections within the House appear to have been contented with the bill they had worked out, since they rejected the Senate version with such surprising unanimity.

On March 17, the Senate appointed members to a joint conference committee consisting of Davis, Barry, and Moore. The House appointed Felch, Monfore, and Ward. The following day, the conference committee reported, and both houses concurred unanimously.⁷¹ On March 20, 1837, the Governor signed the internal improvements act into law. Official records are not clear on the course of action taken by the conference committee, but the event is explained by a letter of Robert E. Ward to his constituents in New Buffalo:

The Internal improvement bill became a law this day
\$100,000 are appropriated for a Rail Road from Monroe to New Buffalo--The Vote was almost unanimous--The House Bill was lost in the Senate, but the House refused to adopt the Senate amendment. A committee of Conference was appointed and the original bill

⁷¹Ibid., 377; Michigan, Senate Journal, 1839, 325.

restored. I was on the conference committee & insisted on your road--If they would not allow it, I had it in my power to defeat the whole bill--

Your property is now doubled in value--you must have a hearty rejoicing--

The General Bank Law has also passed--You also can now have a Bank⁷²

With the internal improvements act passed, the other acts of the program were signed into law on the twenty-first. A board of internal improvements was created, and authorization given for negotiation of a five million dollar loan. The loan bill was passed with little difficulty; the only amendment made in the Senate struck out provisions for repayment in Europe, and was offered by Barry.⁷³ A ship canal was authorized around the falls of the St. Mary's River.⁷⁴ Authorization for a geological survey passed a month earlier.⁷⁵ Finally, commissioners were appointed to the board of internal improvement.⁷⁶ The following day, the Legislature adjourned.

The program created by the Legislature had moved well beyond the recommendations of Governor Mason in his annual message. The internal improvements act authorized

⁷²Letter from R. Ward to the Citizens of New Buffalo, March 18, 1837, in the Wessell Whittaker Manuscripts, Michigan State University Historical Collections.

⁷³Michigan, Senate Journal, 1837, 147, 250, 348, 366, 385.

⁷⁴Michigan, Legislative Acts, 1837, No. LXXV.

⁷⁵Ibid., No. XX.

⁷⁶Michigan, House Journal, 1837, p. 405.

the construction of three railroads and two canals across the state. A road was to be constructed from Detroit to the mouth of the St. Joseph River, and called the Central. A second, the Southern, was authorized from the navigable waters of the River Raisin through Monroe by the most direct route to New Buffalo. A third, the Northern, was to be surveyed and constructed through the fourth tier of counties from Palmer on the mouth of the Black River in St. Clair county to the head of navigation of the Grand River in Kent county, or the mouth of the Grand in Ottawa county. The Board of Internal Improvements was instructed to undertake surveys of the roads, and to hold open hearings on the routes selected, provided that the state purchased so much of the Detroit and St. Joseph as had been completed. In addition, \$550,000 was appropriated for the three roads: \$100,000 for the Southern; \$400,000 for the Central; and \$50,000 for the Northern. Twenty thousand dollars was appropriated for surveying a canal or canal-railroad combination from Mount Clemens on the Clinton River to the mouth of the Kalamazoo River, and a canal to unite the Saginaw River with the Maple or Grand Rivers. The St. Joseph, Kalamazoo, and Grand Rivers were to be surveyed with a view to constructing slackwater navigation. An additional \$40,000 was appropriated for construction on the Clinton-Kalamazoo route, and \$15,000 on the Saginaw-Grand or Maple route. Finally, the

commissioners were authorized to purchase the Havre branch railroad company charter.⁷⁷ By separate acts, the Board of Internal Improvement was authorized to purchase the Detroit and Pontiac Railroad at cost plus seven per cent, and the Governor was authorized to survey a ship canal around the falls of the St. Mary's River.⁷⁸

Construction and control was to be undertaken by the Board of Internal Improvement, a seven member body appointed by the Governor with the consent of the Legislature. The board appointed in 1837 was to continue in existence until January, 1838. The commissioners were to supervise and oversee works, and given direct control. A permanent paid secretary was to be appointed, and an annual report required.⁷⁹

An internal improvements fund was created to finance the state's public works. Money received from the federal government through the surplus revenue distribution and the five per cent fund were assigned to the fund as a loan, till an internal improvement loan could be negotiated, and the board was allowed to loan the funds to specie paying banks that would post security for not

⁷⁷Michigan, Legislative Acts, 1837, No. LXXVII.

⁷⁸Ibid., No. XX, CXX.

⁷⁹Ibid., No. XCVII.

less than five per cent.⁸⁰ Long term finance was provided by what became popularly known as the five million loan. The Governor was authorized to negotiate a loan of \$5,000,000 redeemable at the pleasure of the state at any time after twenty-five years following the first of January 1838. The Governor was to negotiate the loan at the best and most favorable terms available, at not more than five and one half per cent, and the funds were to be credited to the internal improvement fund and appropriated by the Legislature. Bonds were to be payable in New York or elsewhere in the United States, and could not be sold at less than par. In return for the funds to be obtained by the loan, the state pledged the proceeds of all railroads and canals, the interest on all loans made from state internal funds, and the interest on all bank stock held by the state. The pledged funds were to act as a sinking fund for payment of principal and interest on the loan.⁸¹

During the same session, other laws were passed having some effect on the internal improvements program. On March 15, the Legislature passed a free banking law, the first in the nation, allowing banks to be organized on application to the treasury with a minimum of \$50,000

⁸⁰Ibid., No. CXVII.

⁸¹Ibid., No. LXXVII.

capital, of which thirty percent must be paid in.⁸² According to Felch, the act was passed to relieve financial pressure by increasing the supply of money, and the Legislature was practically unanimous in its passage.⁸³ A few days later, a general charter act was passed for manufacturing corporations.⁸⁴ Finally, in chartering the City of Monroe, the Legislature gave it the power to finish the canal and piers started by the federal government, allowing the city to raise \$200,000 either by borrowing or direct taxation.

The program adopted in the spring of 1837 was vastly more complex and inclusive than that projected in the truce of 1835. Even when the Governor suggested a multiple slate of improvements in January 1837, there was little sense of immediacy for any of the projects except the Central. Adoption of a program projecting a trans-peninsular route through the center of each of the lower four tiers of counties, was the result of political log-rolling by politicians from the southern section who harnessed Jacksonian rhetoric to justify their demands on the basis of equality. The inability of proponents to harness a working majority for their own projects, forced

⁸²Ibid., No. XLVII.

⁸³Felch, Semi-Centennial Addresses, pp. 521-522.

⁸⁴Michigan, Legislative Acts, 1837, No. CXXI.

the adoption of improvements satisfying the demands of politicians representing large and sparsely populated districts.

I have used the term sectional rivalry to describe the forces in the state's political life, and shall use it again, but in the largest sense the term is a misnomer. Sectional rivalry, as it appeared in Michigan was really rampant local interest expressed in approval of projects that temporarily linked local interests together in a locus of interests; sectional loyalty could prove as transient as state loyalty when local interests were at stake. People who were incapable of uniting to choose the most economically feasible route across the state were as incapable of uniting when it came to choosing a route through their own section.

Neither political ideology nor party struggle played an important role in the decision to undertake the program. The plan for a single road was passed by a Democratic Senate and rejected by a Democratic House. The following year, struggle would be just as bitter within the solidly Democratic sections along the Southern and Northern Railroads when the question of route location arose. The battle was fought, and issues settled, by Democrats fighting among themselves, and the projects undertaken were truly the Democracy's railroads.

Analysis of the political forces pressing for adoption of the state's multiple program of public works gives strong support to the conclusion of Carter Goodrich that:

In state politics, the suggestion that Whigs favored and the Democrats opposed internal improvements should be viewed with equal caution. . . . In most cases, programs of state action had at their inception wide popular support more often traceable to conflicts of local and sectional interests than to differences in party doctrine.⁸⁵

As Goodrich suggests, in Michigan the pattern was reversed, but although it can be shown that the Democracy was the political force behind the program, caution must be used in adopting the conclusion of Whig opposition. The complete reversal of party patterns suggested by Goodrich cannot be substantiated. As we shall see later, in chapter seven, that although the Whigs were swept into power in the fall of 1839 on a program of opposition to internal improvement, it was a sectional and not a political desire. Michigan's Democratic Governor endorsed policies similar to those pursued by the Whigs. Once in power, faced with the reality of limited alternatives, the Whigs proved much less antagonistic to internal improvements than their campaign promises would suggest.

⁸⁵Goodrich, Government Promotion, p. 266.

CHAPTER VI
CONSTRUCTING THE PUBLIC WORKS:
THE CENTRAL

When the Legislature adjourned on March 22, 1837, it had created a comprehensive program of internal improvements, and delegated authority for construction. Commissioners for the Board of Internal Improvements had been nominated and confirmed, and while the Governor was negotiating the authorized loan, temporary funds were provided by earmarking federal funds from the surplus revenue distribution and five per cent grant for internal improvements.

When the Board met on May 1, it quickly took action to implement programs outlined by the Legislature. Money belonging to the internal improvement fund was loaned to the Michigan State Bank at six per cent, and bond accepted for the deposits. Levi S. Humphrey was assigned to survey the Southern, Havre Branch, and the St. Joseph River. D. C. McKinstry was appointed to construct the Central from Detroit to Ypsilanti, while James B. Hunt was given the job of surveying a rail or canal route from Mount Clemens to the mouth of the Kalamazoo River, the Northern railroad, and the Saginaw-Maple Canal. Chief engineers were employed at a salary of \$2000 per year: Joseph Dutton on the Southern,

Jarvis Hurd on the Central and Clinton and Kalamazoo, and Tracy McCracken on the Northern.¹ With its formal organization completed, the Board began to construct the projects authorized by the Legislature.

While other transportation projects were being surveyed and located, the Board purchased the Detroit and St. Joseph from its private owners. At the time of its purchase, \$116,902 had been expended for clearing and grubbing a hundred foot right-of-way to Ypsilanti, and partial grading and construction of the superstructure.² Together with payments for materials and machines being shipped to Detroit, \$139,802 were expended to acquire the road.³

When the Board reported in January 1838, the first thirty miles from Detroit to Ypsilanti were nearing completion, and bids were being taken on sections between Ypsilanti and Ann Arbor. In order to rush completion, a new method of construction was adopted, designed to shorten the time necessary for embankments to settle. Wooden blocks, two feet in diameter, were cut to length and placed upright in parallel lines five feet apart, at eight foot

¹Michigan, Senate Document No. 11, 1838, pp. 155, 156.

²Ibid., p. 161.

³Ibid., p. 204; Messages of the Governors of Michigan, I, 222.

intervals. With their bases footed on solid ground, the tops were cut parallel to the established grade of the road, and wooden mud sills squaring at least twelve inches and ranging from sixteen to forty feet in length were spiked to the upper surface of the blocks, forming a raised road bed of parallel beams along the established grade. Ties were then spiked to the top of the mud sills at intervals of three feet, and five by seven inch wooden rails keyed into them at a standard gauge of four feet, eight and one half inches. On top of the rails, on the inside edge, a bar of half inch strap iron two and one half inches wide formed the iron surface. The platform raised by this method was then used to haul fill for embankments, which were then raised and allowed to settle around the piling and sills. Although original estimates set the cost of construction by this method between \$6000 and \$8000 per mile, experience proved the estimates to be conservative. In later portions of the road, and in deep cuts, supporting blocks were abandoned and the mud sills laid directly on the ground or embankments.

The Board reported that the road would be ready for traffic by the first of February, 1838, with the bridge over the River Rouge forming the only major portion uncompleted. The bridge, which was to plague the state throughout the program, was a particularly difficult engineering problem. Crossing the river in a flood plain,

it was necessary to raise the bed of the road on piling several feet above ground level for some distance on either bank, to avoid the river's vicious flash floods. The resulting structure, with its uncertain footing often undermined by freshets and flood wood piling around its supports, was frequently weakened and often in need of expensive repairs, forming a weak link in the Central's carrying capacity.

Although Jarvis Hurd had originally been employed to act as chief engineer on the Central, the Board found it necessary to retain John M. Berrien Jr., already under contract by the Detroit and St. Joseph. Berrien, who had been persuaded to join the company after his supervision of the federal survey in 1834, remained as chief engineer throughout the state's ownership. Under Berrien, the entire route between Ypsilanti and St. Joseph was surveyed again, and alterations made in the original route. Two major departures were adopted. West of Ann Arbor, at Honey Creek, the road was rerouted north through Dexter to Jackson, ostensibly because of difficulties in obtaining right-of-way, timber, and saw mills on the route plotted in 1834. As an added inducement, the village of Dexter offered twenty town lots to compensate the state for the expense of the road's additional length. West of Jackson, the road followed the Kalamazoo Valley to Kalamazoo before swinging south to St. Joseph, instead of leaving the valley

at Albion, as previously planned. The result of these changes was to confine the road extensively to river valleys, reducing the cost of construction and tapping natural commercial and agricultural centers. Although the new route was three or four miles longer, the Board felt the additional length was justified because the river route avoided deep cuts and embankments, reducing costs sufficiently to compensate for the additional length. Estimates placed the cost of the remainder of the road, 153 miles long, at \$1,381,040.90, with an average cost of \$9,025.41 per mile. The increase in cost estimates was founded on experience in construction to Ypsilanti, and due mainly to underestimation of the cost of embankments. The board's decision to adopt the new route was reportedly unanimous.⁴

The first section of the road was completed by target dates, and on Saturday, February 3, the inaugural train ran between Detroit and Ypsilanti. After suitable ceremonies, the first train, loaded with the Governor, state officials, and appropriate dignitaries, departed for Ypsilanti, to begin a career of operation that has continued for nearly a century and a half.

When the state purchased the Detroit and St. Joseph, the road was partially completed, and the state

⁴Michigan, Senate Document No. 11, 1838, pp. 165, 166.

took over construction under direct management to finish work already in progress. New sections, however, were placed under contract to private builders at low bid, to avoid the expensive system of direct control by the state. Shortly after its annual report in 1838, the Board let the eight mile segment between Ypsilanti and Ann Arbor in a single contract to Col. David C. McKinstry, who had resigned as commissioner for the Central. Apparently, McKinstry took the contract as a speculative venture, submitting the low bid in hope of being able to subcontract at even lower rates. Unable to relet the contract, McKinstry allowed it to expire. When the Board reported in the winter of 1838, McKinstry's section of the road, due to be completed the previous October, was still unfinished. Meanwhile, the Board had signed contracts for completing the road from Ann Arbor to Jackson. In April, 1839, the Legislature authorized the Board to charge damages to McKinstry, and sue for his security. Shortly afterward, William Thompson, the new commissioner in charge of the Central, undertook construction under direct supervision by the state. Thompson hired workmen and animals, and was able to open the road to traffic by October, 1839, although the road was not completely finished. McKinstry's speculation, however, had cost the state a year.

Thompson was handicapped in pressing for completion of the road to Ann Arbor by the failure of the Michigan

State Bank. When the bank collapsed in February, 1839, with over half a million dollars in state deposits, including payments from the five million loan, the state was transferred from a condition of financial solvency to near bankruptcy. Through the Board, Thompson was able to draw warrants from the Bank of Michigan against the July and October installments of the state's loan, until the bank refused to extend further credit against it. At his request, they arranged to pay for construction in current state money and post notes payable at twelve months. Faced with the alternatives of paying in depreciated notes or suspending operations, the state chose to accept the loss and continue building. Failure of the state deposit bank, which halted construction on several other state projects, was the first financial difficulty encountered by the state, and the most costly. The Board felt certain, however, that they would be able to continue to Dexter during 1840, if the legislature would appropriate sufficient funds, and it reported location of the road between Kalamazoo and Jackson.

A second heavy loss was suffered by the Central when it was discovered that the bridge over the River Rouge would not be able to carry heavy freight. Teams had to be maintained at the bridge, to haul passengers and freight around it, and traffic on the road was slowed to

the pace of its weakest link. The Board estimated the loss of revenues between five and ten thousand dollars per year.⁵ Late in 1839, the bridge was destroyed by deliberate arson, and a temporary structure erected in its place. The temporary bridge proved unsafe, becoming unsteady when currents from flood wood around the pilings undercut its foundations. The wood was removed and supports repaired, but the superintendent reported that any freshet would sweep it away, and recommended reconstruction of a permanent bridge. Through 1841, traffic was still limited by the bridge's carrying capacity.⁶

Late in 1838 or early in 1839, the road had been placed under contract between Ann Arbor and Jackson. By December 1839, grubbing and grading had been nearly

⁵Michigan, Legislative Acts, 1839, Joint Resolution No. 30. Michigan, Legislature, Annual Report of the Board of Internal Improvement of the State of Michigan, January 15, 1839, (House Documents, 1839, H. D. No. 17), pp. 276, 285-286. Cited hereafter as House Document No. 17, 1839 Michigan, Legislature, Annual Report of the Board of Internal Improvement, December 20, 1839 (House Documents, 1840, H. D. No. 3), pp. 14, 24. Cited hereafter as House Document No. 3, 1840. Michigan, Legislature, Report of the Special Committee Appointed by the House of Representatives, to Investigate the Proceedings, & c., of the Several Boards of Internal Improvement (Detroit: Dawson and Bates, 1840), p. 391.

⁶Messages of the Governors of Michigan, I, 305; Michigan, Legislature, Annual Report of the Board of Internal Improvement, December 4, 1840 (House Documents, 1841, I, H. D. No. 3), p. 63. Cited hereafter as House Document No. 3, 1841.

completed to Dexter, and progress was being made between Dexter and Jackson. West of Dexter, where the road crossed the peninsular watershed between the Huron and Grand Rivers, the heaviest grading and cutting on the road were encountered. Henry B. Lathrop, writing to Governor-elect Woodbridge, urged the Governor to press for completion of the road into Jackson, because the road would then serve not only Jackson, but two counties to the west. Lathrop complained that:

Our flour from this country this year will not fall much if any short of 80,000 barrels of which not over 6 or 7,000 will be sent by way of Detroit for the reason that the road from Toledo is now extended to Clinton within 28 miles of this place and add to this the fact that South of the center of the county there are four out of five of our flouring mills which makes it quite easy to go with a load and back every two days which will make a difference to the miller of about 18 cts per bbl. from what it would take it to Ann Arbor and Detroit.

Lathrop, a powerful Whig from Jackson county, urged the Governor to lease the road if other sections objected to its construction while their roads were being suspended.⁷

In his inaugural address, the new Governor recommended suspension of all disbursements and further prosecution of public works until a federal grant could be obtained, or private enterprise could be induced to take

⁷Letter from Henry B. Lathrop to William Woodbridge, December 12, 1839, in Woodbridge Papers (BHC).

over the state's projects.⁸ The Whig Legislature, however, was unwilling to go so far as to suspend all efforts, and responded with a suspension of all new contracts on public works.⁹ Since the Central was under contract as far as Jackson, suspension had little effect until construction was completed.

When the new Whig Board entered its duties, it found its hands tied on the Central. Contracts had been entered for grading, bridging, and timber for superstructure, and a verbal agreement entered into for laying iron from Ann Arbor to Dexter. Contracts for grading and timber had also been signed from Dexter to Jackson. Cancellation of these contracts would have subjected the state to heavy damage suits, and failure to renew contracts abandoned by contractors would have led to deterioration of works already completed. Although the Legislature failed to appropriate funds, and the Central exceeded its appropriations on May 15, work pressed forward.¹⁰ By July, the road was completed to Dexter, lacking only the strap iron necessary for completing the superstructure.

In August, the Board was informed of an iron shortage by the chief engineer, and attempted to obtain

⁸Messages of the Governors of Michigan, I, 314-315.

⁹Michigan, Legislative Acts, 1849, Joint Resolution No. 5.

¹⁰Michigan, House Document No. 3, 1841, pp. 5, 6.

iron being held at Buffalo for transportation charges. The charges stemmed from a protested draft paid to the shippers by Levi S. Humphry, the former commissioner on the Southern, drawn on the Bank of the River Raisin, of Monroe. Although the Board protested it had already paid once, a draft was finally drawn on the Bank of Michigan, and the iron delivered in October. For reasons unknown to the Board, except that Humphry had negotiated the contract through Governor Mason, forty miles of iron was delivered at Monroe, and only sixteen miles at Detroit. Since only thirty-six miles were needed to complete the Southern to Adrian, and the quantity received at Detroit was two and one half miles short of amounts necessary to complete the road to Dexter, the Board decided to ship the necessary iron from Monroe to Detroit, to put the western segment of the road into operation.

Orders were issued to suspend further use of the iron at Monroe, and the idea spread that the Whig-dominated Board intended to strip the Southern of its iron to complete the Central. R. Morrison, in charge of the Southern at Monroe, reported to the Board that:

Our folks are up in arms at the idea of your taking the iron of[f] from this road to the Centre: They insist upon my laying it down immediately to prevent your taking it: Some of biggest folks say that they will help to mob any one who comes for it, that they will throw it in the dock to keep it of[f] C[entral.]

Really, you can have no idea of the excitement about it.¹¹

Although instructed to ship the iron, Morrison refused to comply. In spite of his warning, the Board decided to continue, and in November sent a Mr. B. Briscoe to Monroe to obtain two or three miles of iron. Briscoe reported that when he had arrived and informed Morrison of his mission, he was told that the local citizens were highly excited and would resist any such attempt. About an hour after his arrival, Morrison confronted Briscoe again, telling him that the citizens knew his intentions and would throw him in the river, or use tar and feathers if he attempted to remove the iron. Briscoe blamed Morrison for the uproar because he felt that the iron could have been removed quietly if Morrison had not spread the word of his coming. Since no one in town would rent a team or help to load the iron, Briscoe was forced to retreat from Monroe defeated.

The Board then sent David French to Monroe with four men and a team. When French arrived, a large crowd gathered, "encouraged and incited by the mayor and the principal citizens of that place." A citizen's meeting

¹¹Letter from R. M. Morrison to Gen. Van Fossen, October 28, 1840, in Records of the Executive Office, 1810-1910: Reports; Board of Internal Improvements (Michigan, Department of State, Historical Commission Archives).

followed, presided over by the Mayor and Austin Wing, drafting a proclamation restating the principles of sectional equality and declaring that "the interests of no one section of the state, should be sacrificed to the interests of a great Central Monopoly, or any other. And under which understanding alone, the loan aforesaid have been tolerated."¹² From their declaration, it was clear that they would resort to any means to prevent removal of the iron. In the face of such hostile and united opposition, French's determination weakened. While he was attending the meeting, other residents of Monroe took the iron out of town secretly. Unable to recover it, and afraid that attempts to remove it would result in violence, French was forced to retreat to Detroit. The matter was then turned over to Woodbridge for Executive action, but no record of his decision seems to exist.¹³

Even as late as the winter of 1840, sectional rivalry was so strong that the southern section thought of

¹²"[Minutes and Resolutions of] the Meeting of Citizens of the City of Monroe, Saturday, December 12, 1840," Ibid.

¹³Letters from John Van Fossen and Thomas Rowland Commissioners of Internal Improvement, to His Excellency William Woodbridge, December 24, 1840; John Van Fossen, Thomas Rowland, and Robert Stuart, Acting Commissioners of Internal Improvement, to His Excellency William Woodbridge, January 12, 1841; Robert Stuart to His Excellency, William Woodbridge, August 11, 1840, Ibid. Letter from William Woodbridge to the Board of Internal Improvements, ca. 1840, in the Woodbridge Papers (BHC). House Document No. 3, 1841, pp. 7, 8. Talcott E. Wing, History of Monroe County (New York: Munsell & Co., 1890), p. 222.

itself as a distinct entity, rather than a part of the state, and of the state government as an object to be exploited for its own ends. The people of Monroe were determined to keep every advantage that could be gained for themselves, even if it meant denying productive extension of the state's only profitable public work. In the heart of one of the two most severe depressions of the nineteenth century, they were unable to cooperate to produce the solvency essential to completion of their own projects.

During 1840, the depression made further inroads into the Central's operations. In the face of declining revenues, fares were reduced twenty-five per cent in the hope of adding to producer's profits and building long term traffic. The reduction held traffic at previous levels, but diminished revenues by nearly a quarter; the board hoped that increasing the length of the road would allow proportional expenses to fall, eventually restoring absolute losses. On August 1, 1840, service was cut in half by the removal of one train from each run, leaving the road operating with only one train daily each way. Reductions of fares and services served to further diminish receipts on the Central.

In July, 1841, the Central was opened to Dexter, fifty-four miles west of Detroit. The Board reported that the road was no more than paying costs, due primarily to stage line competition. They were able to report progress

on building toward Jackson, but had to report delay due to lack of funds. In December, the Board was able to report that the road would be completed to Jackson by the first of the year. During the year, the road had been resurveyed by way of the "Rice Creek route," and contracts let for clearing, grubbing, grading, and timber. Most of the contracts were taken by contractors at low bid rates, which the Board cited as evidence of the "extreme anxiety of the people of that section of the state, for successful prosecution of the work, . . . "

The four locomotives currently in use on the Central had proven inadequate to handle the press of business in the fall of 1842. As the close of navigation approached, the pile-up of goods was so great that shippers were forced to use teams to haul produce to Detroit, and the Board authorized trains to run at night, although the practice was considered unsafe. When the road was completed to Jackson, they felt that four more locomotives, at a total cost of \$28,000 would be necessary, and they requested that the engines be ordered immediately.

In the meantime, the road having crossed the peninsular watershed, the Board entered negotiations to secure daily steamboat sailings from Chicago to St. Joseph. When construction was completed to Jackson, travelers would be able to go from Detroit to Jackson in five and one half

hours, then travel from Jackson to St. Joseph in twenty-four hours, and complete the trip across the lake to Chicago in another five hours. Total travel time from Detroit to Chicago was reduced from three to five days to thirty-six or forty hours for a distance of two hundred fifty miles. The Board had hopes that this reduction would enable the state to capture more of the passenger trade on the Lakes between Buffalo and Chicago.¹⁴ During the year, under legislative pressure, the bridge over the River Rouge was rebuilt.¹⁵

From the failure of the Michigan State Bank in 1839, the state's programs had been financed by the issue of anticipations through the Bank of Michigan, secured by future installments from the five million loan. When the Bank of the United States failed to meet its October installment in 1841, and the Bank of Michigan, the state's last solvent financial institution of any importance, closed its doors, serious financial reverses were suffered. Not only was the state unable to meet payments on contracts, but it found itself heavily indebted for notes issued

¹⁴Michigan, House Document No. 3, 1841, pp. 3, 12-13.

¹⁵Michigan, Legislature, Annual Report of the Board of Internal Improvement, December 15, 1841 (House Documents, 1842, H. D. No. 3), pp. 17-20. Cited Hereafter as House Document No. 3, 1842. Michigan, House Journal, 1841, p. 659.

against installments both to contractors and to companies supplying iron. Fortunately, partial relief was in sight, for in September 1841, the long-awaited federal grant of 500,000 acres was awarded under the Preemption Act. Time was required, however, before the lands could be located and turned into funds to support the road.¹⁶

On January 1, 1842, the Central was opened to Jackson, eighty miles west of Detroit. During the year, gross revenues nearly doubled, and profits rose to almost three times the previous annual total. The Board estimated that profits the following year would rise to \$100,000. During the fall, pressure on the road was so heavy that night trains were again used. Eleven thousand dollars of the net profits were received in specie or bills of specie-paying banks, allowing the Board to purchase two new locomotives from Baldwin and Whitney at the end of October. The balance of the revenues were received in scrip. The Board was also able to add thirty new freight cars and a passenger car, and by the end of the year, ten more freight cars were in the process of construction.

The Central's success in 1842 led the Board to recommend concentration of the state's resources to complete the road. The Board asked that the lands granted by the

¹⁶Messages of the Governors of Michigan, I, 385; House Document No. 3, 1842.

federal government be used to redeem warrants in circulation, and construction of the Central. After those purposes were served, it recommended river improvement and preservation of other works. It was hoped that completion to Kalamazoo would allow the road to compete successfully for traffic to Chicago that was presently being channeled through the upper lakes. "The present and future interest of the state, depending so largely upon the revenue to be derived from this road," said the Board, "must be considered the apology of the commissioners for urging upon the Legislature the great importance of an early completion of this work."

All of the reports from the Central during 1842 were not encouraging however. John Berrien, the chief engineer, informed the Board that the half inch iron used on the road was not sufficient for future construction. Berrien estimated that almost a third of the money spent for track repairs and repairs on cars and machinery was due to the inferiority of light iron. The half inch bar, he said, "does not possess sufficient weight or strength to prevent its being settled into the rails, crushing, splitting, or breaking them, and rendering renewal of them twice as frequent as would be necessary from the ordinary decay of the timber; . . ." The rough surface resulting from this wear magnified the destructive effect of trains

on the timber, while the bouncing and jarring tore cars and engines apart, and diminished the motive power of engines.

Many of the expenses charged to repairs, Berrien reported, should not have been charged to expenses, but to construction. Much of the expense reported was for draining and ditching after the route was built, but had to be charged to repairs because construction funds were not available. To an extent, the capital creation charged to repairs probably offset depreciation, because with the exception of iron, depreciation was not a long term problem on the bed of a strap iron road. Berrien felt that depreciation was light, because on a road built of such light and perishable materials, repairs had to be made constantly when and where demanded. They could not be allowed to accumulate. Such a road, he argued, would never be "as good as new," but it was constantly being restored to running order, the highest state of efficiency that such a road could achieve.¹⁷

¹⁷Such accounting practices appear to have been common among nineteenth century railroads. Albert Fishlow reports that: "Until the ICC regulations of 1907 instituted depreciation accounting, the practice of replacement accounting is almost universal. With the latter, equipment replacements--that is, retirements--were charged to current operating expenses at the time the expenditures were made, and no entry ever appeared in the capital account. Albert Fishlow, "Productivity and Technological Change in the Railroad Sector, 1840-1910," Output, Employment, and Productivity in the United States after 1800 ("Conference on

During 1842, construction was concentrated on the segment between Jackson and Marshall, and the Board hoped it would be ready for superstructure by the spring of 1843.¹⁸ By the end of the year, the Governor was able to announce that most of the internal improvements land granted had been located, promising additional funds for completion of the road's next segment.¹⁹ But during 1843 construction progressed slowly. The Board reported in December that work had been retarded during the year by the depreciation of internal improvements warrants, and that only when they appreciated because of the opening of public lands, had the pace of work increased. By December, they were able to announce that the road would be completed to Marshall in the spring, and would be ready for superstructure as far as Kalamazoo by June. To complete the road to Kalamazoo, they asked the Legislature for \$75,000 for iron and spike.

Procurement of iron, which had been a problem since the exhaustion of initial purchases, became critical after

Research in Income and Wealth: Studies in Income and Wealth," Vol. 30; New York: National Bureau of Economic Research, 1966), p. 591.

¹⁸Messages of the Governors of Michigan, I, 471; Michigan, Legislature, Annual Report of the Board of Internal Improvement, December 16, 1842 (Senate Documents, 1843, S.D. No. 4), pp. 1-2, 5-6, 9-10. Cited Hereafter as Senate Document No. 4, 1843.

¹⁹Messages of the Governors of Michigan, I, 465.

1842. Prior to 1842, difficulties in supplying were primarily administrative and legal. Iron purchased by Levi Humphrey through Governor Mason in 1838 was tied up in Buffalo and New York because of disputed drafts and inability of the Board of Internal Improvements to tell from its records, which were completely disorganized, what had and had not been paid. As long as funds from the five million loan could be counted on to provide exchange in the East, it was possible to buy iron by sacrificing domestic construction. When the Bank failed, and refused drafts on the October installment in 1841, the problem became critical. Domestic construction could be and was financed by the issue of anticipations, treasury notes, warrants, and land scrip, but purchase of iron from either American manufacturers or foreign sources required ready cash. And cash meant specie or notes of specie paying banks. Most of the state's tax revenues and receipts from the public works were anticipations, treasury notes, and warrants issued for construction of the roads. The depression had destroyed most of the state's specie-paying banks. The tariff of 1842 further injured the state by adding appreciably to cash outlay required for iron. Under an act of 1843, the Board was authorized to pledge the receipts of the Central and Southern railroads to pay for iron, and it was able to procure iron on extended credit.

But the tariff required payment of twenty-five dollars a ton immediately on arrival of purchase. The price differential was substantial, because the Board reported being able to purchase iron imported previous to the duty at forty-eight dollars a ton, but was forced to pay sixty dollars a ton for iron imported later. At least part of the tariff differential, however, had fallen upon the supplier, because the price paid by the state did not reflect the full duty, and prices quoted for the post-tariff iron were in long tons, while earlier prices were quoted for short tons. What hurt the state was the necessity for immediate cash outlay. The loss of lower British iron prices was clearly secondary. The Board felt justified in asking the Legislature to take action to get the tariff modified to suspend duties on iron used on railroads begun prior to the tariff, and the Legislature responded by passing resolutions instructing state Congressmen to fight the tariff during every legislative session after 1842.²⁰

In August, 1844, the Central was opened to service to Marshall, one hundred ten miles west of Detroit. For the first time, gross revenues exceeded two hundred

²⁰Ibid., 494; Michigan, Legislature, Annual Report of the Board of Internal Improvement, December 2, 1843 (Joint Documents, 1844, J. D. No. 5), pp. 1-4. Cited Hereafter as Joint Document No. 5, 1844.

thousand dollars, and profits were over a hundred thousand. Grading from Marshall to Kalamazoo, put under contract in October 1843, was reported nearly finished in December, 1844, and the Board saw no reason why the road could not be completed to Kalamazoo by August, 1845. The bed was reported good, and the soil under it solid. Materials were easy to obtain. The Board advised against attempting further extension unless new resources could be accumulated. Previous appropriations, it reported, were already sufficient to consume the federal grant, when interest bonds were counted against the lands. And, unless a further grant could be obtained, the Board saw no use in attempting further construction.

The Board was enthusiastic over a new locomotive it had purchased, which had thirty per cent greater capacity and could draw heavy trains. Its heavier capacity allowed the running of longer trains, allowed speeds to be reduced to ten miles per hour, and did much less damage to superstructure than smaller trains. Small engines were forced to haul small trains at high speeds to make the number of trips necessary to fill demands for business, and the concussion of heavy cars at high speed broke the strap iron and crushed the rails. It was hoped that in the future, the use of heavier engines would enable the road

to reduce its heavy repair bills.²¹

Procurement of iron remained a major problem. The substantial profits during 1844 enabled the Board to reduce its iron debts contracted under the authorization of 1843 by \$57,000, but \$69,000 remained due on iron purchased under the act. Nonetheless, the Board believed that it could obtain iron without further appropriations. Since 1844 had been a year of crop failure, and revenues soared, the Board believed that revenues in 1845 would exceed \$275,000.²² The Board's optimism, however, was soon to be crushed.

Although the road had been reported nearly complete to Kalamazoo, iron shortages prevented its completion past Battle Creek, thirteen miles west of Marshall. In April 1845, Governor Barry instructed the Auditor General to call on Charles Butler in New York, to collect on a promise to intercede with New York bondholders and persuade them to postpone interest falling due the first of January,

²¹Michigan, Legislature, Annual Report of the Board of Internal Improvement, December 2, 1844 (Joint Documents, 1845, J. D. No. 4), pp. 1-4. Cited hereafter as Joint Document No. 5, 1845. Concussion or impact is the product of mass times velocity. Heavier engines at half speed reduce concussion by half, while the increased weight is multiplied only by the reduced speed.

²²Ibid., pp. 7-8; Messages of the Governors of Michigan, I, 509.

1846, in order to get iron to finish the Central. Barry was apparently willing to raise the interest on the bonds from six to seven per cent in order to get the iron.²³

Unable to gain a stay of execution, the Governor made himself personally responsible for the state's iron debt, and more iron was obtained.²⁴ By the end of January, 1846, the road was completed to Kalamazoo.

On August 23, 1845, the West Lowell bridge collapsed, causing over a thousand dollars loss in flour and cars. For twenty-six days, only passenger trains could be run, while freight piled up or was shipped by wagon. Although the Board worked feverishly to restore the bridge, its collapse cast doubt on the soundness of the rest of the route's bridging, and substantial rebuilding seemed to be called for. As a temporary measure, the bridges at the rivers Rouge and Huron were reinforced. To complicate matters, the car house at Ann Arbor burned down.²⁵ Compared

²³Draft of a letter from John Barry to Ch. G. Hammond, April 28, 1845, in Records of the Executive Office, 1810-1910: Reports; Board of Internal Improvements (Michigan, Department of State, Historical Commission Archives).

²⁴Felch, Semi-Centennial Addresses, p. 181.

²⁵Michigan, Legislature, Annual Report of the Board of Internal Improvement, December 2, 1845 (Joint Documents, 1846, J. D. No. 4), pp. 2-3. Cited hereafter as Joint Document No. 4, 1846.

to the problems confronting the Board, however, these were only minor aggravations.

Instead of the \$275,000 predicted by the Board as gross revenue, receipts declined by \$6,000, and profits by over \$20,000. Although the bridge collapse decreased revenues, the Board discovered that it was not the major cause of decline. Prior to 1845, shipments of flour and wheat, the road's heaviest bulk freight commodity, had been a major source of revenue to the Central. In examining its accounts, the Board discovered that in the first nine months of fiscal 1845, before the collapse of the Lowell bridge, income from shipments of wheat and flour had declined from \$47,000 in the same nine months of the previous year, to \$11,500. Since 1844 had been a year of light harvests, the resulting decrease was not surprising.²⁶ Failure of the fiscal year to coincide with the agricultural year, produced the apparent inconsistency of declining revenues in a prosperous period; wheat was harvested in June and July, and the fiscal year began the first of December. Shipments of flour ground from domestic wheat always increased from summer harvests in November, so that the major impact of harvests fell on the following

²⁶Ibid., pp. 12-13.

fiscal year's performance. But the apparent enigma of receipts falling in a good year led the Board and some legislators to believe that the road was rapidly becoming a losing proposition.

As the new crop poured in during the fall of 1845, the Board found the road inadequate to handle demands for transportation. In part, this was the result of a shortage of rolling stock, but more striking was the basic inadequacy of the road itself to handle the increased demand for low cost heavy freighting capacity. The Board of Internal Improvement reported:

In a vain attempt to bring forward all the produce which has been brought to the Central Railroad, since the late abundant harvest, 7 locomotive engines and 96 cars and racks have been running night and day, for 3 months. The disaster at Lowell, no doubt occasioned some accumulation of flour and grain at the western stations early in Sept. Nevertheless, the character of the road, and the limited number of our engines and cars must have prevented the prompt removal of freight, had there been no such impediment. The board are fully convinced, that a Railroad through the central tier of counties to be used for freight, and the stock of which should be good to its owners, and achieve the object of its construction must be built in the most substantial manner, and laid with a heavy T or H rail. The best of flat bar roads are of too slight a structure for a heavy freighting business, (such as must ever be done upon the Central road,) as they soon get out of repair and become so uneven, that trains passing rapidly over them, are liable to be, and often are, thrown off the track. The repairs of machinery and cars consequent upon a rough road, even where they are so fortunate as to keep the track, is at least four times greater than the like repairs of machinery and cars running upon the smooth and solid surface of a T rail.²⁷

²⁷Ibid., p. 6.

The Board cited the results of using T rails on the Lancaster and Harrisburgh Railroad, where repairs were four hundred and twenty-five dollars per mile on the plate portion of the road, and seventy-five dollars per mile on the T rail segments. The Reading, which cost ten million dollars to build, could haul coal at a cost of less than forty cents per long ton over ninety-four miles, even though hauling trains of over three hundred eighty tons and returning empty. Average cost to the company in car repairs per ton hauled was reported at 5.9 cents per ton, while on the Central, repair of engines and cars averaged over 92 cents per ton. Citing reports of the Fitchburgh Railroad, the Board compared its cost of 28.8 cents in repair cost per mile run by locomotive to the Central's cost of 61.8 cents. Even with allowances for age, the Board found the Central's performance markedly inefficient when compared to the new roads employing solid T or H rails. A fully loaded engine, it said, could run at twice the speed with three times the load, at two-thirds of the cost of a similar train on a plate road, exclusive of repairs.

Critics of the state's public works have often pointed triumphantly to the Board's recognition of the need for rebuilding the road in justification of charges of inefficiency and incompetence in state enterprise. Indeed, this sentiment was reflected in the statements of some legislators, when they learned with horror that the

road for which they had sacrificed the state's resources for nine years would have to be rebuilt to satisfy demands from the interior for improved transportation. The Board's recommendations were not an admission of defeat, but a triumphant recognition of the road's success and potential. They were asking simply that advances in technology be adopted that would bring the road to its highest state of efficiency.

The new technology, said the Board, would give cheap and rapid transportation to freight shipments, and overcome almost completely the handicap of living in the interior:

Whether rail-roads are fit only for the purpose of pleasant or rapid travel, or are indeed valuable for the transportation of all articles of commerce, is a question no longer doubtful or unsettled; even the history of our own imperfect roads is a development to the wealth and resources of our country, which, but for their existence, would at this moment be unfelt and unknown. It has afforded the settler far distant in the interior, the means of rapid intercommunication with his remote fellow citizens, . . . It has largely increased the value of property, by diminishing the cost of transportation of the productions of the mill, the farm and the manufactory; it has made valuable the otherwise nearly valueless water-power of the interior; it has given a healthy stimulus to trade in crude and ponderous mineral and agricultural productions, and has led to the purchase and settlement of our public lands, and the increase of our population and taxable property. To the central counties of this state, blest as they are with a highly productive soil, an extensive water power, great mineral wealth, and a salubrious climate, a first class rail-road is of vital importance.

The Board was far from considering the road a failure. Its strongest concern was with bringing it to its fullest potential. It argued that flour would always be one of the great commercial staples of the central counties, and that a road with solid rails would cut the cost of its transportation in half. Unable to determine exactly the quantity of surplus wheat produced within the central counties, the Board arbitrarily estimated that the increment to producer's incomes from a new road would be \$125,000 annually. With a strap iron road, they argued, transportation costs often ate up all of the producer's income.

The Board asked that the road be repaired immediately between Detroit and Dexter, and the balance rebuilt in thirty mile segments annually. Any new building should utilize heavy rails. Aware that the income of the road was mortgaged to payment of interest on the acknowledged public debt, the Board did not hesitate to make the recommendation, anyway:

The Central railroad of this state may not be inaptly compared to the Erie Canal of the state of New York. It is and must forever be the great channel of business for the central tier of counties, and one of the indispensable and most important links in the great chain of communication between the Atlantic cities and the Valley of the Mississippi.

Completion of the projected roads on the northern and southern shores of Lake Erie were supposed to bring the

road profitable freighting business within two years, and the Board cited these roads as another reason why rebuilding of the railroads must be immediate.

Since the constitution had been amended to forbid the Legislature to borrow money for any purpose without popular consent, the Board considered it doubtful that a majority could be persuaded to consent to increasing the debt to rebuild either the Central, the Southern, or both; the Board therefore recommended selling the road to a private corporation capable of renewing the superstructure. Sale, it said, would not only mean that the road would be rebuilt, but that over three million dollars of the public debt could be extinguished.²⁸

The inaugural message of the new Governor, Alpheus Felch, echoed the Board's recommendations. Although Felch listed two major reasons for the sale, removal of government from enterprise and liquidation of internal improvements debts, rebuilding the road to carry freight profitable at lower rates played an important role in his suggestions. At the very least, he pointed out, the road would have to be rebuilt between Detroit and Dexter, and this would cost two hundred thousand dollars. If the state made the repairs, there would be no funds available to pay the interest on the public debt, and if the interest were

²⁸Ibid., pp. 6-11.

paid, there would be no money for repairs; interest due annually on the public debt amounted to two hundred twenty thousand dollars. But repairing the road with strap iron would only restore it to do ordinary business: "We have been accustomed to look to these roads as the means of transporting the rich productions of the wheat growing country in the interior, to the waters upon which they are to be floated to a distant market. Experience has proven, however, that the transportation has been at charges, little, if any less than the cost of carriage by teams." Primary importance should be given to the transportation of freight, and strap iron roads had proven incapable of hauling freight at reasonable prices. Felch said it would cost half a million dollars to reconstruct the road with heavy rails from Detroit to Dexter, and the state lacked the resources to accomplish it. There was not enough left of the land grant to finance it, a new loan would be impracticable, the road's revenues would be inadequate, and taxation could not even be attempted. Felch recommended selling the road to a private group which had become interested, and incorporating into the charter safeguards and restrictions designed to protect the people from the natural monopoly of a private railroad. These consisted of maximum tolls, completion dates and standards, and the

right of repurchase by the state after a stipulated period of time.²⁹

When the select committee appointed by the House to draft a bill for the road's sale reported, it stressed the need for rebuilding to provide transportation for heavy freight. Sale was expected not only to give relief from taxation and reduce the public debt, but to open channels of communication with markets and create outlets for the state's products.

The failure of the road to meet the expectations of its sanguine friends, arises not from the lack of business to be done, but from the utter incapacity of a road of the light superstructure and rail found upon this road, to transact the business offering upon the line of it. A heavy rail is indispensable, and the state has not the ability to provide such a rail. Doubtless, when the road shall be opened to Lake Michigan, with a proper rail thereon, it will be proven that the great natural advantages of this route, and the vast amount of business to be done upon it, have not been overrated. In preparing a bill for the sale of the road, the price to be obtained, the ability of those to whom it is offered to pay the same, and to complete and rebuild the road with a heavy rail, the time when the road shall be so completed and relaid, the protection to be provided for the people, and especially the agricultural interests, against exorbitant tolls, and the manner in which the state, at a future day, in case the transfer of this road to private hands, would be attended with serious or unforeseen evils, could re-possess herself of the road without injustice to those individuals who shall invest their fortunes therein, have claimed particular attention.

Although other committees reported, stressing other aspects of the sale, the committee that drafted the bill was

²⁹Messages of the Governors of Michigan II, 44-47.

primarily concerned with having the road constructed with heavy iron rails and protecting the rights of domestic shippers. To ensure this construction, the company was required to lay rails weighing sixty pounds to the yard, heavier than any currently installed in the United States.³⁰

The act which was passed and signed into law on March 28, 1846, was designed to protect the people and insure low rates of transportation. The company was required to pay six per cent interest on installments after large down payments. Differences in long-haul and short-haul rates were regulated, and upper limits were set on basic agricultural products and necessities. Rates on grain and flour were limited to three quarters of the rate charged by the state, and all rates were tied to the rates of three Massachusetts roads in the fall of 1845, subject to revision every ten years. Rate discrimination was prohibited under penalty of a hundred dollar fine for each occurrence. The Company was required to complete the road to Lake Michigan within three years with a penalty of \$25,000 for each year that it failed to meet the deadline. Replacement of rails on the first fifty miles within two years was required at a penalty of \$50,000 per year, with the rest of the road to be replaced as required. Deadlines could be

³⁰Michigan, House Document No. 2, 1846, pp. 1-6.

suspended only in case of war with a European power. Three hundred thousand dollars of the company's stock were required to be sold in Michigan, with no person taking more than a thousand dollars. A half per cent tax was placed on the company's capital until 1851, when it was to be increased to three-quarters per cent, and the state was allowed to purchase the road after January 1867 at market value plus ten per cent. If a price could not be determined, the state supreme court was to decide the road's value.

To balance these safeguards, the company was given rights designed to attract private capita. In addition to the usual corporate privileges, a monopoly was granted excluding parallel routes for five miles on either side of the road. The route west of Kalamazoo could be altered to the state line instead of Lake Michigan, which meant allowing the new company to tap the trade of the St. Joseph Valley, and eventually building to Chicago. The company could own or hire vessels for lake navigation, to compete with the shipper's combinations that had plagued the road with bonds and warrants issued by the state.³¹ The terms were advantageous to both the state and the corporation, because the state was able to realize all but a few

³¹Michigan, Legislative Acts, 1846, No. 42.

thousand dollars of its investment in the Central including expenditures in land and reinvested profits, while the company was able to use state bonds and warrants circulating at a twenty-five per cent discount to purchase the road.³²

At the end of January, 1846, the Central was completed to Kalamazoo, where state construction ended. On September 23, the state treasurer received the half million dollars required for the first installment, and the following day the road passed into the hands of its private owners, the Michigan Central Railroad Corporation. During the year, revenues and profits reached new heights. In the first ten months of the fiscal year, under state ownership, the road drew in gross revenues of over \$239,000, while profits exceeded \$104,000. For the total year, gross revenues exceeded \$339,000, and profits were over \$175,000. Under state management, the rate of profit was 7.7% for the year, while profits for the total year rose to 10.8%, as the proceeds of a bumper harvest swelled the volume of business. As the Board observed:

It will be thus perceived that this road has earned an amount equal to the expectations and predictions of its warmest supporters and friends.

³²Irene D. Neu, Erastus Corning: Merchant and Financier, 1794-1872 (Ithaca, N. Y.; Cornell University Press, 1960), p. 76.

The Central Rail Road has passed into the hands of the corporators, and although the state has disposed of one of the most important thoroughfares in our country, still, we are induced to believe that in the hands of the company, known for their high respectability and enterprise, Michigan will receive lasting benefits by the continuation and completion of the Central Rail Road to Lake Michigan, thereby securing the travel and business of the Great West, which hitherto has gone by and around our Peninsula.³³

Rebuilding the Central with heavier rails was not the only motive prompting the state to sell, but it occupied an equal first place with liquidation of the public debt. And to this extent, the desire for low cost transportation and the economic development it would bring was as strong an operational motive as it had been in 1837 when the state decided to build. Accounts of the internal improvements program have too long focused on the debt as a single causal motive for the road's sale, have too long assumed that the road was broken down by mismanagement and state incompetence. Too many writers have followed the lead of Henry Greenleaf Pearson, who in his biography of John Murray Forbes, spoke of the road as a "shabby piece of property," and of the state "placing its dilapidated property on the bargain-counter," and waiting for customers, forgetting the aggressive energy with which private

³³Michigan, Legislature, Annual Report of the Commissioners of Internal Improvement, December 7, 1846 (Joint Documents, 1847, J. D. No. 4) pp. 4-5. Cited hereafter as Joint Document No. 4, 1847.

interests sought to wrest control of the Central from the state.³⁴ By 1846, at the price set by the state, the Central was a bargain, but it was neither a shabby piece of property nor dilapidated. It was a profitable economic unit demanding further investment to increase its usefulness to the community.

J. W. Brooks, the engineer appointed by interested eastern financiers to inspect the Central essentially substantiates this view. Pearson, who cited Brook's report as evidence of the dilapidated condition of the road, chose to focus his attention on Brook's criticisms, rather than on the fact that he was writing a Report upon the Merits of the Michigan Central Railroad, As an Investment for Eastern Capitalists. According to Brooks, the first thirty miles of the road, built under the pressure of demand for immediate opening in 1838, was badly deteriorated. In part, the failure of engineers to select timber resistant to decay was responsible for the road's condition, and in part the weakness of the half-inch iron used between Detroit and Jackson. From Ypsilanti to Jackson, he thought the road would last two or three more years without extensive repairs. The rest of the road was constructed with three-quarter inch iron, and "The track between Jackson and

³⁴Henry R. Pearson, An American Railroad Builder: John Murray Forbes (Boston: Houghton Mifflin, 1911), pp. 24,30.

Kalamazoo (sixty-seven miles) being for a plate railroad, a very superior track." Brooks was critical of the use of bridging in many places, where embankments and culverts would have been more expensive but more permanent, and he found that many more depots would be necessary. More warehouses were needed, and a connection was lacking between Detroit and the river. But in general, he was not highly critical. He estimated the total length of bad road bed between Detroit and Kalamazoo at twenty-one miles. With the exception of the embankments in the Huron Valley, he felt the width of cuts and embankments would compare well with any road of good construction. "Excepting in the valley of the Huron River, the line of the road is unusually straight, having a large amount of straight line, with most of the curves quite gentle."³⁵

Brooks had no doubts that with new rails and more rolling stock, the road would be highly profitable:

This view of the matter is presented to show that a large amount of wheat is grown upon the western as well as upon the eastern portion of that line, and also to show what is quite plain to the most cursory observer of the operations of that road, which is that it does not draw produce in but a very small degree from the country west of its western terminous. The evident reason for this is, that more surplus is grown upon the line, than the motive power, cars or track of the road are equal to the task of bringing to market.

Large amounts of flour are brought by teams 40 miles to Detroit, from mills within sight of the

³⁵(Detroit: Charles Willcox, 1847), pp. 1-6.

railroad, so unequal is the road and its present equipment to the business upon its line.

He estimated the current domestic business potential of the Central, if completed to Lake Michigan and furnished with adequate rails and rolling stock, at a minimum of half a million dollars.³⁶

To an extent, of course, Brook's report should be discounted because he was trying to persuade stockholders to invest in the Central. But Brooks was a competent railroad engineer, and his judgment was essentially sound. Indeed, there was no reason to doubt the basic profitability of the road, for under state management, it had never failed to show a profit. During the last four years of state ownership, the Central's profits had been the primary source of funds used by the state to purchase iron and locomotives for extension of both the Central and Southern.

Table 2 summarizes the receipts, expenditures, net income, and profits of the Central under ten years of state ownership. Because of the system of accounting adopted by the Board in presenting reports to the Legislature, the data prohibits exact statements of the Central's profit and loss. But, the data are sufficient to give an approximate picture of the road's earnings and to indicate the order of magnitude of returns. A more precise statement

³⁶Ibid., pp. 16-19.

TABLE 2.--Profits of the Central Railroad, 1838-1846.^a (Thousands of dollars)

	Receipts	Expenditures	Net Income	Reported annual investment	Total	Rate of profit (%) ^b	Miles in use	Capital in use ^c	Profit on capital in use (%)
1837				367	367				
1838	83	46	37	210	577	10.2	30	420	8.9
1839	61	44	17	179	757	2.9	38	532	3.1
1840	62	41	21	111	868	2.7	38	532	3.9
1841	71	46	26	195	1,063	2.9	49	686	3.7
1842	137	74	63	111	1,174	6.2	77	1,078	5.9
1843	150	75	75	130	1,303	6.4	77	1,078	7.0
1844	211	89	122	241	1,544	9.3	109	1,526	8.0
1845	206	105	101	99	1,643	6.5	122	1,708	5.9

TABLE 2.--Continued

	Receipts	Expenditures	Net Income	Reported annual Investment	Total	Rate of profit (%) ^f	Miles in use	Capital in use ^g	Profit on capital in use (%)
1846 ^b	240	--- ^d	105			7.6	145	2,050	6.2
1846 ^c	399	--- ^d	176			10.7	145	2,050	8.7

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^aMichigan, Legislature, Annual Reports of the Board of Internal Improvement (Joint Documents, J. D. No. 4), pp. (1844) 11-12; (1845) 12-15; (1846) 4-7. Sums presented will not balance because all numbers are rounded to the nearest thousand, or tenth of one per cent.

^bTen months, profit adjusted to twelve month basis.

^cTwelve months, last two months under private management.

^dNot stated in the Annual Report of 1846.

^eNot including iron or locomotives after 1842.

^fCalculated from reported capital investment at the beginning of the fiscal year.

^gEstimated from value stated by Auditor General, Michigan, Legislature, Annual Report of the Auditor General, 1845 (Joint Documents, 1846, J. D. No. 2), p. 2. Includes profits invested in iron and rolling stock.

of earnings would require possession of the original books of the Board and vouchers presented for payment, few of which are extant. The few still available indicate that even with this data, statements would still be tentative, because itemization of expenditures in vouchers was vague enough to leave many doubts about their final classification.

The account of receipts is more certain than any other item in the table. Receipts were reported annually, and the only difficulty presented by them lies in the quality of money accepted by the road. During 1838, large amounts of "wild cat" were accepted by the Board, becoming valueless unless expended immediately. During later years, warrants and scrip issued by the state to finance construction of the Central and Southern were also accepted, but since they represent units expended in the creation of the road, accepted at par by their issuer, they present no problems in being charged against capitalization to determine the rate of return.

Expenditures present more difficult problems. Disaggregation of expenditures is not consistent from report to report, and the headings under which expenditures are reported are sufficiently inclusive to prevent exact accounting. A major difficulty is presented by the charging of expenditures that were capital-creating to

operating costs. Unlike private roads, which frequently tapped their capital accounts to pay dividends to stockholders to maintain their capital markets, the state often tapped its income to add to its capital in the absence of funds for such expenditures. Frequently, repair and building of new cars were entered as a single expense, without stating whether the new cars were replacements or additions to rolling stock. When challenged by the Legislature to produce an accounting of expenditures on rolling stock in 1846, the Commissioner of Internal Improvement was unable to answer because both construction and repair of cars, racks, engines, and tender frames had been charged to "repairs of machinery and cars," until fiscal 1846.³⁷ Similarly, expenditures charged to "repair of road" fail to separate maintenance expenditures from moneys spent for improvement of the road. Widening of embankments and easing the slope of cuts after segments of the road were completed was frequently charged to repair accounts, as well as additional ditching to provide more adequate drainage. Over a decade, substantial sums charged to repairs were actually expended in improvement of the road.

³⁷Michigan, Legislature, "Communication from the Acting Commissioner of Internal Improvement" (House Documents, 1846, H. D. No. 3).

At the same time, no account was kept to balance depreciation. In one sense, long term depreciation was slight on a strap iron road, because the very nature of the light superstructure demanded constant maintenance and replacement. Rolling stock also demanded constant maintenance, but its depreciation was continuously financed by replacement and repair paid out of current revenues. Long-term depreciation items consisted principally of locomotives and strap iron. During the ten year history of state ownership, none of the locomotives was worn out through use, although units purchased at the program's beginning became inadequate for the heavy hauling required in later years and were superseded by technologically superior engines. Obsolescence was more of a factor in depreciation than wear. At an original cost of seven thousand dollars, a price which seems to have been fairly constant throughout the period of state ownership, unit depreciation on locomotives could not have been more than seven hundred dollars per year. For the seven locomotives owned by the Central, maximum depreciation would have been only thirty-five hundred dollars annually.

Iron presents a more serious problem. Maximum duration of half inch strap iron appears to have been nine or ten years under the volume of traffic handled by the Central. As Brooks testified, the segment of road from

Detroit to Ypsilanti was in need of immediate replacement in 1846. The road had been in use since 1838, and being the first section of the road, received the heaviest traffic. The segment from Ypsilanti to Jackson, Brooks thought, could stand traffic for two or three more years. The Board's estimate of two hundred thousand dollars for immediate rebuilding from Detroit to Jackson called for replacing the iron with three-quarter inch strap, which was supposed to have greater strength and durability. At this rate, assuming replacement between Ypsilanti and Jackson could have been postponed for the time estimated by Brooks, depreciation was two hundred sixty dollars per mile per year over a ten year period, or approximately two per cent per year of the value of the road. Depreciation of locomotives was undoubtedly offset by expenditures for new construction, along with part of the depreciation on the road, leaving two per cent as an adequate figure for depreciation on iron.

The account of net income is, of course, residual, and suffers from the same limitations in inverse proportions to expenditures. Heavy investment, disguised as expenses will lower net income and the apparent rate of profit as a per cent of total investment, while failure to cover depreciation will give net income an upward bias and distort the same rate of profit in the opposite direction.

Data listed under "Reported annual investment" are adequate for determination of capitalization through 1842, when the Legislature began authorizing purchases of iron and locomotives for the Central and Southern with the net proceeds of the roads. Reported expenditures, in terms of appropriations, then fall short of the road's cost. For this reason, a second column was derived from the Auditor General's report of the Central's cost in 1846, which was given as cost plus ten per cent. This figure was deflated to derive total cost less interest and divided by total mileage, resulting in an average cost of fourteen thousand dollars per mile. Multiplied by the number of miles of road in use, it provides a useful figure for capital in use. It has the advantage of including expenditures for iron and rolling stock, which is particularly important in the last four years of state ownership. In deriving the rate of profit on reported investment, capitalization for the previous year is used as a base, on the assumption that a period of gestation of at least one year exists, and that rates so derived reflect profit on capital in use.

During the ten years of state ownership, the Central never achieved the optimistic predictions of the House Internal Improvements Committee in 1837, but its performance was well above average for investments undertaken by states during the second internal improvements cycle. Indeed, few

of these projects were able to show a profit during their existence. Even when profit estimates are discounted two per cent for depreciation, they were sufficient to pay interest on the cost of construction in 1844 and 1846 at the rate the money was borrowed. Failure to meet this rate in 1845 grew out of crop failure, always a hazard in an agricultural economy. Returns prior to 1842 fail to give full credit to the road's potential. When the road was extended to Jackson, west of the peninsular watershed, income on the Central grew rapidly, and each extension into the wheat producing counties of the west produced further increases in the rate of return. During these four years, income was limited primarily by the inadequacy of rolling stock and motive power. Had the state been able to provide these, the rate of profit might have doubled.

Income from the Central was sufficient to attract private enterprise. After the high profits of 1838, a resolution passed the legislature in the closing minutes of the session of 1839 authorizing the leasing of the road, only to be vetoed by Governor Mason. The following year, Mason's veto was supported by the Whig legislature.³⁸

³⁸Messages of the Governors of the State of Michigan, I, 273-274; Michigan, House Journal, 1840, p. 31, 87, 629; Michigan, Senate Journal, 1839, pp. 511, 513. Michigan, Legislature, "Report of the Committee of Internal Improvement on the Propriety of Leasing the Central Railroad" (House Documents, 1840, II, H. D. No. 17), p. 124.

Another offer was made during 1842, but the bill was defeated in the House by a large majority.³⁹ Three separate offers were submitted by prominent local business groups during 1843.⁴⁰ Finally, the state was approached by two separate groups in 1846, both of which attempted in their proposals to meet objections offered by the Legislature in rejecting the propositions of 1842. One of the offers, made by local businessmen, offered to complete the road, refurnish it with heavy rails, reduce freight rates fifty per cent, and pay six per cent interest, if the state would relinquish the remainder of the lands granted by the federal government. Both offers were rejected.⁴¹ Current and potential profits, however, were sufficient to attract the interest of private enterprise, and the decision of the eastern capitalists to purchase the Central's charter was far from a pioneering venture.

³⁹Michigan, House Journal, 1841, pp. 508, 586, 627, 644, 659.

⁴⁰Michigan, Legislature, "Report of the Committee on Internal Improvement, in Regard to Leasing the Central Railroad" (Senate Documents, 1842, S. D. No. 6), pp. 30-35; Michigan, Senate Journal, 1842, pp. 179, 251, 253, 264, 275; Michigan, House Journal, 1842, pp. 366-367.

⁴¹Michigan, Legislature, "Report of Committee on Internal Improvement" (Senate Documents, 1846, S. D. No. 20); Michigan, Legislature, "Proposition of J. H. Titus to Lease from the State the Central Railroad" (Senate Documents, 1846, S. D. No. 1); Michigan, Legislature, "To the Honorable, the Legislature of the State of Michigan" (Senate Documents, 1846, S. D. No. 21).

TABLE 3.--Profits of the Michigan Central Railroad Company, 1847-1855.^a
(Thousands of dollars)

	1847 ^b	1848 ^c	1849	1850	1851	1852	1853	1854	1855
Receipts	209	401	427	698	967	1,075	1,149	1,588	2,215
Expenditures	86	288	239	301	400	470	566	903	1,335
Net Income	123	113	188	397	566	604	582	674	879
Capitalization ^d	2,000	3,857	5,584	5,968	6,709	8,156	8,859	9,951	12,163
Profit rate (%)	10.6	5.2	4.9	7.1	9.5	9.1	7.2	7.6	8.8
Dividend paid (%)	---	8	8	8	9	14	8	8	6

^aMichigan Central Railroad Company, Annual Reports, 1-19, 1847-1865. (Bound volume in the possession of the University of Michigan Transportation Library.) 289

^bThrough April, 1847. Seven months converted to a twelve month rate.

^cThirteen months, May through May inclusive, converted to a twelve month rate.

^dFigures for capitalization are taken from data given by the company for its net worth, including stocks, bonds, income accounts, bills payable, and unpaid dividends. In the company's accounting, these items are balanced by construction expenditures and cash on hand. The rate of profit is derived as a percentage of capitalization at the beginning of the fiscal year in which the income was earned, on the assumption that increases in capitalization during the fiscal year would require a year or more to become incorporated into the physical capital of the road. The procedure has the added advantage of making the rates of return comparable to those derived for the period of state ownership.

Table 3 summarizes the income of the Central in its first decade under private management, based on data taken from the company's annual reports. The profit rate is derived from the ratio of net income to capitalization reported at the beginning of the fiscal year, making it roughly comparable to similar rates derived for the Central under state ownership. It has frequently been asserted that private ownership worked vast changes in the Central, transforming it from an inefficient, dilapidated structure into an efficient and highly profitable road, but the company's reports do not seem to bear this out. Both the quantities of receipts, expenditures, net income, and capitalization rose dramatically, as the road was pushed west to the state border and into Chicago. But rates of return on investment failed to grow accordingly. After an initial high rate experienced during the bumper wheat crop of 1846, returns did not rise dramatically above levels realized in 1846 and 1847. Like the state, the corporation seems to have failed to keep a depreciation account, and the same deflation of returns is applicable. This becomes particularly significant in light of the higher cost of investment paid by the corporation. While the state had been able to borrow at six per cent in 1838, the corporation was forced to pay seven, eight, and even nine per cent for capital expended in construction,

according to rates reported in annual statements. A consistent dividend of eight per cent was maintained by the company on stocks and bonds throughout the period. Dividends appear to have been paid out of current income, without impairing or watering the company's capital. The difference between the dividend rate and the actual profit rate is accounted for by the large amount of capital created on credit; in the company's accounting, construction and cash on hand were balanced by the stock and bond accounts, income account, bills payable, and unpaid dividends. Substantial amounts of construction appear, therefore, to have been financed through long term loans by suppliers, balanced later by increased stock issues in a market maintained by a constant rate of return. The data seem to indicate that the superiority of private enterprise lay not in its ability to employ capital profitably, but in its ability to mobilize capital for construction after state credit had been destroyed by depression and repudiation.

Table 4 illustrates the problem facing the state in 1846. In nine years, passenger traffic, a major source of revenue, fell short of doubling, while receipts slightly more than doubled. The quantity of merchandise remained fairly constant. During the same period, shipments of flour increased twelve hundred per cent. Most of the wheat

TABLE 4.--Shipments on the Central Railroad, 1838-1846.^a

Receipts by Commodity (Thousands of Dollars)	1838	1839	1840	1841	1842	1843	1844	1845	1846 ^b
Passengers	39	36	32	33	59	52	83	89	89
Merchandise	20	15	11	14	19	26	33	32	31
Wheat					5	6	15	11	6
Flour	3	6	10	14	37	46	57	47	77
Quantity (thousands of units)									292
Passengers	29	26	25	25	30	30	52	51	46
Merchandise (tons)	9	8	5	8	6	8	10	9	9
Wheat (bu.)					45	61	127	91	59
Flour (bbls.)	15	25	43	63	107	137	144	124	180

^aMichigan, Legislature, Annual Reports of the Board of Internal Improvements (Joint Documents, J. D. No. 4), pp. (1844) 11-12; (1845) 12; (1846) 10, 11, 12.

^bTen months, from December 1 to September 23.

appears to have been shipped to milling centers along the route, to be reshipped as flour.⁴² Proportionally, passenger revenues declined from slightly less than two-thirds to less than half of gross receipts. Growth of shipments of wheat and flour accounted for its relative decline. The new traffic required facilities capable of handling high-bulk, low-value freight at low rates. Between 1839 and 1842, wheat producers had been able to compete with less efficient lands in the east, but when wheat prices fell even further in 1843 and 1844, most of their profit margins began to be consumed by transportation costs. Partial recovery in 1845 and 1846 only slightly relieved the squeeze of transportation costs. Michigan's millers and farmers expected the road to respond to declining prices by lowering the cost of transportation, blaming their problems on the railroad, rather than the market.⁴³ Having driven rates for team hauling to competitive levels, the roads appeared inefficient and inadequate when they could not haul at lower rates. Only the adoption of technological innovations leading to decreased costs would satisfy the demands of farmers and millers in the central tier.

⁴²Michigan, Joint Document No. 4, 1847, pp. 2, 4, 14.

⁴³Historical Statistics of the United States, p. 124.

After ten years of state ownership, the Central was returned to private control. Every effort and every resource the state possessed short of taxation had been mobilized for its completion. Although depression stopped increases in the rate of track construction, an average rate of fifteen miles of new road bed per year was added with remarkable regularity. In at least two years when the state failed to meet this average, failure is traceable to speculation and sectional rivalry, rather than financial difficulty. For a strap iron road, the Central was well engineered and well constructed. The most obvious failure of the state was provision of sufficient motive power and rolling stock to handle the press of business, a failure traceable directly to the depression and exhaustion of resources on multiple projects created by sectional rivalry. Deterioration of the road grew out of conscious decisions to sacrifice the superstructure to offset shortages of motive power and rolling stock. During the last four years, the pounding and tearing of freight trains operated at double speed to compensate for inadequate carrying capacity took a serious toll on the road bed and rolling stock, and increased running costs out of proportion with receipts. But, the course of action was dictated by economic and political necessity, rather than technological incompetence on the part of the road's

management. In the end, the Central's success proved a powerful attraction to eastern capital.

Had the state been timid and conservative in 1837, the main lines of continental transportation might well have bypassed the peninsula, with trade channeled through northern Ohio and Indiana into Chicago. By aggressive action, the Democracy had forced a major route of east-west communication through the state's borders. Unlike the canals of Ohio, Indiana, Illinois, and Pennsylvania, the Central was never abandoned, but has continued for over a century to service local transportation requirements, as well as becoming a major national traffic artery.

THE DEMOCRACY'S RAILROADS:
INTERNAL IMPROVEMENTS IN MICHIGAN,
1925 - 1946

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CHAPTER VII
CONSTRUCTING THE PUBLIC WORKS: THE SOUTHERN,
NORTHERN, AND MISCELLANEOUS OTHER PROJECTS

While construction began quickly on the Central, efforts to start work on the Southern moved more slowly. Crews were hired to survey projects in the southern tier, but in June 1837, a sickness, probably malaria, swept through the crews, delaying work for the balance of the summer. By the end of September, surveying was completed, and the Board met at Jonesville on October 9, to give public hearings to route petitions. Subsequent to the hearings, three more surveys were ordered through the counties west of Lenawee. After the additional surveys, the Board again held hearings at the end of November in Monroe, and adopted a route running through Adrian, Hillsdale, Coldwater, Mason, Branch, Centerville, and several smaller villages to New Buffalo. As far as Centerville, the route followed the line of county centers closely, but to the west it curved south to the St. Joseph River and continued a short distance from the Indiana border.

The Board used several reasons to justify its decision. It was compelled by law to select "the most direct and eligible route," and its justification was framed in

these terms. To have run the road on a more northern route in the east, through Tecumseh and Jonesville, would have injured the charter rights of the River Raisin and Grand River Railroad, which had expended four thousand dollars on surveys. More important, in the Board's thinking, was the damage it would do to the Erie and Kalamazoo Railroad. By cutting across its route at Adrian, the Board hoped to divert to Monroe trade currently being channeled into Toledo, and to destroy the inducement of the road to extend to Marshall, where it could tap the central tier as well as the southern. At the same time, they hoped that the Palmyra and Jacksonburgh, which was in "rapid progress" between Tecumseh and Palmyra, could be induced to connect with the Southern instead of the Erie and Kalamazoo. It was argued that water power for manufacturing was more abundant than along other locations, and that the route was three miles shorter. The smaller number of farms along the route was supposed to decrease the cost of right-of-way between twenty and forty thousand dollars, and alternate routes would require heavy grading and curving. West of Centerville, the Board hoped that by swinging the road south along the border they could destroy the threat of a road from Toledo to Michigan City, and tap shipments of grain and merchandise bound for South Bend and the interior of Illinois by way of the Kankakee River and a planned canal at South Bend. As the Board put it, "The inhabitants

of our state will not complain of a measure which enables them to become the merchants and millers and factors of the people of Indiana, as well as their common carriers." It was felt to be unwise to base the system of internal improvements on "the doctrine of non-intercourse with our neighbors," if the state could benefit from it. In short, the Board was planning to do to Indiana and Illinois what it was objecting to by way of the Erie and Kalamazoo into Toledo. Finally, the availability of water power in the St. Joseph Valley was supposed to allow cheaper shipping of flour and wheat.

At the end of the year, the Board reported that the Havre branch railroad had deeded its charter to the state, and that contracts had been let for construction of the Southern thirty miles west of Monroe.¹ Construction did not begin, however, without prolonged struggles over alternative routes.

The Board's decision was not popular with residents of towns by-passed by the charted route. When the Legislature adjourned in January 1838, it was deluged by petitions from towns on rival routes not selected by the Board. So heavy was the pressure, and so serious the implications, that on January 29, construction was suspended for thirty

¹Michigan, Senate Document No. 11, 1838, pp. 156-170, 175-189, 204-212.

days by joint resolution in order for the Legislature to review intermediate points on the Southern's route.²

Legislative interference was bitterly opposed by most of the Senate Internal Improvements Committee. In a report submitted prior to passage of the suspension resolution, the Committee formally protested the Legislature's intentions, arguing that it set a precedent in making the works subject to suspension every time an interested group sought to gain advantage by petitioning the Legislature. A minority of the Committee, however, argued that more than five thousand people had petitioned the Legislature on the subject, and complained of serious abuses. If the works were not suspended, construction would begin and the abuses could not be corrected.³ Apparently a majority of the Legislature supported the minority Committee's position, because on January 24, formal hearings began by a joint legislative committee, followed a few days later by a suspension resolution. The hearings lasted over a month.

²Michigan, Legislative Acts, 1838, Joint Resolution No. 2.

³Michigan, Legislature, Report of the Committee on Internal Improvement Relative to the Suspension of Operations on the Southern Railroad (Senate Documents, 1838, S. D. No. 9); Michigan, Legislature, Reports of the Majority and Minority Committees on Internal Improvements, in Relation to the Suspension of Proceedings on the Northern and Southern Railroads (Senate Documents, 1838, S. D. No. 13), pp. 294-ff.

The members of the joint committee were split almost from the beginning. House members were appointed from representatives of the Central tier and Allegan county, areas not interested directly in the questions confronting the Legislature. With the addition of Senator Bradford of Niles, they formed a majority of the joint committee, consisting of two Democrats, one Whig, and three whose political affiliation is unknown. The minority, consisting of three Democratic senators, represented districts in the southern and northern tiers that were directly interested in route locations.

Neither faction of the committee sought to censure the Board for its conduct. The majority, however, was of the opinion that contracts awarded by the Board were illegal because thirty days notice had not been published in the newspapers before the contracts were let, and therefore not binding. The minority contended that contracts were published in three papers, even if they were not state papers, and that the contracts were legal and binding. Since the contracts were let at bids thirty per cent below engineering estimates, they argued against cancellation, and supported Commissioner Humphrey's refusal to suspend construction on legislative orders.⁴

⁴Michigan, Legislature, Report of the Majority of the Joint Committee Appointed to Review the Location of the Northern and Southern Railroad Routes, (Senate Documents, 1838, S. D. No. 30), pp. 401-416.

On the Southern, two routes were under consideration, a northern and a southern. The northern route ran generally above the route established by the Board, through the more developed townships of the tier. In the eastern half of the tier it ran north through Dundee and Tecumseh, while west of Hillsdale, it was to be moved north of the established line through Lockport, Cassopolis, and Niles to New Buffalo. The majority of the joint committee favored the northern route, while the minority supported the line established by the Board.

Arguments advanced by the majority were generally exploitative, while the minority's were developmental. The majority argued that the northern route had the greatest population, and was equipped to provide the largest business. The northern route was supposed to have the greatest applied water power, the most fertile land, and to permit the most active exploitation of resources. In short, it argued that the northern route would produce the greatest income for the road for years to come. Further, the majority doubted the wisdom of competing with projects from other states. Toledo had formed important connections with Buffalo, and as the terminus of the Wabash and Erie canal would offer superior commercial services, drawing off the business of the southern tiers of townships on the principle "that the nearest largest market is generally the

best market." It doubted the wisdom of construction through Adrian, because on this principle, trade from the west would be drawn over the Erie and Kalamazoo at Adrian, even though transported there from the west on the Southern. Avoiding competition with Ohio and Indiana was considered desirable. In sum, they argued that the northern route would be safer from external competition and likely to produce the greatest revenue. In taking issue with the opinions voiced by the Board of Internal Improvements for selecting the route, they brought forth arguments to prove that the cost of construction would be no greater on the northern route, and that right-of-way costs could be reduced by crossing the backs instead of the fronts of the numerous farms that the Board had found it desirable to avoid. Similar reasoning was used to support building the road closer to the center of the tier in its western half.⁵

The minority responded with a series of statements designed to refute the majority opinion. Using what debaters have labeled a "straight negative, shotgun attack," they sought to counter the majority arguments point by point in a random order. Making it clear that they considered not running the road through the line of county seats "extraordinary," (at least in the east), they asserted

⁵Michigan, Legislature, Report of the Majority of the Joint Committee on the Northern and Southern Railroad Routes (Senate Documents, 1838, S. D. No. 42)., pp. 473-487.

that the southern route would be shorter, cheaper, and was already under contract. They attempted to prove that the number of people served by a southern location would be greater than the northern route, and that these areas produced more wheat. Finally, and most important, they argued that the road should not be built according to the current best chances of profit, but in order to serve the needs of the future and develop the potential resources of the area.⁶

Little was done by the Legislature to change the route of the Southern east of Hillsdale. In April, a joint resolution was passed directing the Board to curve the road between Petersburg and Monroe to run through Dundee, or to construct a branch if the latter should prove less expensive, but the final decision was placed in the hands of the Board.⁷ West of Hillsdale, substantial changes were made. In March, the Board was directed to alter the route between Edwardsburg and Bertrand to pass through Niles, and finally, a year later, the main route was altered to run through Lockport or Three Rivers, and Cassopolis.⁸

⁶Michigan, Legislature, Report of the Majority of the Committee of the Senate, Appointed to Consider the Propriety of the Location of the Northern and Southern Railroad Routes (Senate Documents, 1838, S. D. No. 31), pp.416-430.

⁷Michigan, Legislative Acts, 1838, Joint Resolution No. 20.

⁸Ibid., No. 54, and Joint Resolution No. 20; Michigan, Legislative Acts, 1839, Nos. 81, 161.

Within the southern tier, sectional rivalry proved as powerful a force in route location as it had earlier in deciding on routes across the peninsula. In this case, rivalry was expressed in terms of tiers of townships, rather than counties, but the motivation was the same. In a new and developing state, towns and farmers were fighting for a future and determined to have immediate access to routes of east-west transportation. Had the southern tier been an individual state, it would have witnessed a struggle similar to that in Detroit in 1837, and this in an area that was solidly Democratic. Unlike the Central, which was built through the most developed portions of the second tier, the Southern was built as a developmental road, designed to open new lands, exploit potential resources, and compete with an operating road connecting the southern tier to Toledo.

With the hearings over, activity resumed on the Southern. In April, a second series of contracts was awarded for construction between Monroe and Adrian, with the stipulation that they be finished by the first of the following year. The Havre branch was surveyed, located, and advertised, but contracts had not been let by December. In addition, the Southern was located between Adrian and Hillsdale. Following the Legislature's directives, surveys were made in the west for railroad routes from Centerville to Lockport, Geneva, Cassopolis and Niles, and a second on the route to Dundee. At Dundee, when right-of-way land was

granted by area residents, the board decided that it would be cheaper to construct a branch than to curve the entire road through the village.⁹

During 1838, Humphrey's high-handed, independent, and often questionable management of construction on the Southern created a growing hostility to the Board and Internal Improvements. Initial contracts, awarded late in December 1837, had been advertised in papers outside the area of construction, and were awarded almost completely to a single company. When the Legislature ordered suspension of operations for thirty days in January 1838, Humphrey refused to comply. When contracts were let again in the spring of 1838, public announcements offered to take bids for grubbing and grading, but not for superstructure, and contractors offered bids in terms of the work stipulated. Most of the road was subsequently awarded to the partnership of Cole and Clark, who submitted bids for both grading and superstructure. Other bids were rejected because they did not encompass construction necessary for completion of the road. The fact that Cole and Clark, and other firms awarded small contracts were owned by Humphrey's business partners contributed to the bitterness of contractors along the route.

Investigation by a Whig committee in 1840 uncovered even deeper involvement on the part of Humphrey and his

⁹Michigan, Senate Document No. 17, 1839.

associates. Materials supplied by his friends commanded three and four times the established local prices paid to contractors and suppliers not within the select circle. Vouchers were padded, and contractors forced to sign to receive payment, with Humphrey receiving the difference. Finally, contractors were forced to accept payment in wild-cat currency, while exchange on the east drawn from payments on the five million loan was deposited in favored banks in Monroe. To quiet complaints during the investigation, the partnership offered contracts and financial rewards to contractors whose testimony might prove damaging.¹⁰ As long as the Democrats were in power, however, Humphrey's political popularity and his affiliation with the powerful Monroe faction of the Democracy made his removal impossible.

Although contracts let in the spring of 1838 stipulated completion by the first of the year, the Board was unable to report completion in December. In his annual message in January, Governor Mason reported that the road would be ready for iron in the spring, and that contracts had been awarded between Adrian and Hillsdale. Final locations on the third division, between Hillsdale and Branch

¹⁰Michigan, Legislature, Report of the Special Committee Appointed by the House of Representatives, to Investigate the Proceedings, & c., of the Several Boards of Internal Improvement (Detroit, Dawson and Bates, 1840), pp. 400, 421, 423ff.

were also announced.¹¹ At the end of 1839, however, the road was still unfinished between Monroe and Adrian.

Several reasons accounted for the failure of the Southern to reach Adrian in 1839. The shortage of funds encountered by the state following the failure of the Michigan State Bank delayed construction and kept the state from paying monthly estimates to contractors. At the same time, another epidemic swept the state, felling workmen and incapacitating whole segments of the population. By the end of the year, only eighteen miles of the road were reported completed, and the balance to Adrian was reported as half finished. Even in the face of delayed payments, contractors continued to slowly push work forward. As Humphrey stated,

The principal reason . . . why the southern railroad has progressed, and is still progressing, notwithstanding the embarrassments of the times, is to be found in the strong desire entertained not only by the contractors, but by the public generally, and that the work should proceed, and their disposition to render every aid in their power to have a road in which the whole southern portion of the state is so vitally interested, completed in order that its immense surplus of produce may find an avenue to market.¹²

In Humphrey's opinion, however, it would not be profitable to place cars on the Southern until it had reached Hillsdale and the wheat land of Hillsdale county.

¹¹Messages of the Governors of Michigan, I, 245.

¹²Michigan, Legislature, House Document No. 3, 1840.

Failure of the state deposit bank curtailed other activities connected with the Southern, too. The Board reported that it had been unable to change the location of western sections between Centerville and Niles because of the lack of funds in the treasury and a shortage of trained engineers. Contracts on the Havre branch, to have been awarded in 1839, were similarly suspended and never revived. The latter was particularly important, because it deprived the Southern of the port which was to carry freight from the first tier of counties into Lake Erie for shipment to Buffalo.¹³

During 1840, under the new Whig legislature and Board of Internal Improvements, efforts were redoubled to complete the Southern to Adrian and put it in operation. In the desperate search for revenues by the new state government, the decision of the previous Board was reversed and the Southern opened before it reached Hillsdale. Expenditures on the Southern were nearly fifty per cent greater than those on the Central during the same period.¹⁴

¹³Ibid., pp. 5, 51-60.

¹⁴Michigan, Legislature, House Document No. 3, 1841, pp. 21-27. The Board of Internal Improvements reported expending \$120,793 from December, 1839 to March, 1841, and \$56,981 from April 1 to November 30, 1840. Yet in the same report it stated expenditures at \$122,735. The Governor, in his annual message, stated that expenditures were \$210,274, including purchase of the River Raisin and Lake Erie. The difference, some \$60,000 was paid for

In order to provide access to Lake Erie, the River Raisin and Lake Erie Railroad was purchased between Monroe and the Lake, and attempts made to put it into operation. On November 23, trains began running on the Southern between Monroe and Adrian, but problems of transshipment at the eastern terminus diminished receipts for the few days of operation before the fiscal year ended.¹⁵

The state's purchase of the River Raisin and Lake Erie, sometimes called the La Plaisance bay road, was a drastic departure from previous attitudes. At the Governor's request in 1837, a select committee of the Legislature had investigated the company to determine whether it was seriously involved in railroad construction, or chartered to cover the issue of bank notes. According to the company's charter, it was allowed to "grant such evidence of debt which may be incurred by said company," and the managers construed the article to grant them banking privileges without restraint. By an oversight, the Legislature had neglected to insert the usual clause prohibiting banking. After its organization, in which \$1,800 of its capital was collected from stockholders, the company spent \$250 for

in warrant and floating estimates, apparently to escape limits set by appropriations. Since warrants and estimates were absorbed in subsequent years, I have used the figure of \$155,000 to avoid double counting. Falsification of accounts by the Whigs makes accuracy difficult.

¹⁵Ibid., pp. 4-6.

a route survey from Lake Erie to the River Raisin, and purchased from its president two city lots in Monroe on credit for \$30,000. Against this debt, they issued \$28,000 in notes as evidence of debt. At the time of the investigation, the legislative committee could see no harm in these activities, because, in its eyes, "If the real estate of said corporation is always held subject to the payments of its debts, it is evidently solvent." But the Committee found that the charter itself was conceived in fraud, and fearing the precedent set, recommended that action be taken to revoke it. The Legislature agreed, and by joint resolution instructed the Attorney General to begin proceedings against the company.¹⁶ The company retaliated by beginning construction, and petitioning the state for damages done to its charter rights by competition from the Southern along its route.

Democratic legislatures and Boards had responded to the claims of the company by ignoring them. During the Southern route battles in 1838, the subject had arisen, but both sides took the position that the route selected did no damage to the company's charter privileges. When the Whigs came into power in 1840, however, new interest arose in the claims of the River Raisin and Lake Erie.

¹⁶Michigan, Legislative Acts, 1837, Joint Resolution No. LXXIII; Michigan, House Journal, 1837, pp. 42, 18-85.

Acting on the advice of Joseph S. Dutton, chief engineer on the Southern, a House committee examined the petition of over a hundred Monroe citizens that the road be purchased as a terminus for the Southern, along with damage claims submitted by the company, and recommended its purchase. After a glowing account of the company's efforts, the committee concluded that the Southern violated the company's charter rights, and, citing the Dartmouth College Case, submitted a bill allowing the state to purchase the road. In due course, the bill was passed, empowering the Commissioners of Internal Improvement to pay the company from installments due in 1843 on the five million loan.¹⁷

After the close of the Legislative session, the Auditor General, Secretary of the Treasury, and Secretary of State went to Monroe to settle claims and inspect the railroad. Authorized by the Legislature to spend up to \$32,500 to purchase the charter, they were confronted with books and vouchers accounting for the expenditure of over \$52,000 by the company, which took the position that the Legislature had authorized the Commissioners to allow full

¹⁷Michigan, Legislature, Report of the Committee to Whom was [sic] Referred the Petition of the River Raisin and Lake Erie Railroad Company (House Documents, 1840, II, H. D. No. 24, 118ff; Michigan, Legislature, Report of the Committee on Internal Improvement, Relative to the Purchase of the River Raisin and Lake Erie Railroad (Senate Documents, 1840, II, S. D. No. 53), p. 490; Michigan, Legislative Acts, 1840, No. 100.

costs in awarding damages. The Commission, however, refused to pay more than the value of the road at current prices, and the company accepted an offer of \$32,500 with the right to claim interest until paid from the 1843 installments. The Commission, in turn, accepted the road subject to legislative approval.

In addition to the road, the Commission took action to obtain use of wharf and storage facilities at its eastern terminus. "At the eastern termination of said road, there is a ware-house (approached by a long bridge) the property of a distinct incorporate company, called "La Plaisance bay harbor company," intercepting the road from the water:

. . ." Although the act did not authorize them to treat with this company, they assumed that the terms of the act stemmed from a lack of familiarity with the location, and attempted to secure free access to the water. Terms were negotiated without further cost, to gain use of the bridge "for the purpose of running cars thereon, and through said store-house, and also the right to lay down and construct as many railroad tracks, through the land and premises of the last mentioned company, as might be for the interest and convenience of the state, reserving, however, to the company the right to demand and receive the customary rates for storage and wharfage of all property brought on the said railroad track, such charges of wharfage and storage,

not to exceed the charge for similar services in the cities of Detroit and Buffalo."¹⁸

The following year, the Legislature endorsed the Commission's purchase by incorporating the River Raisin and Lake Erie into the Southern railroad. It refused, however, the contract with the La Plaisance bay harbor company, expressing the opinion that the negotiations were "highly exceptionable." The Committee concluded that even if the Legislature were in error, the commission had no further authority beyond recommending the matter to the Legislature for consideration.¹⁹ By refusing to accept the terms negotiated by the Commission, the state lost an opportunity to gain access to Lake Erie, and in effect destroyed the opportunity created by purchase of the road.

Further claims were submitted by the company to gain the balance of sums expended on the road, as well as interest accruing since their investment. In October 1840, the company was sold to private owners, who, after their charter had been relinquished, attempted to revive the corporation as a bank. In retaliation, however, the state

¹⁸Michigan, Legislature, Report of the Commissioners appointed to settle with the River Raisin and Lake Erie Railroad Company (House Documents, 1841, II, H. D. No. 56), pp. 196-198.

¹⁹Michigan, Legislative Acts, 1841, No. 24; Michigan, Legislature, Report of the Committee on Claims. . . . (House Documents, 1841, II, H. D. No. 70), p. 218.

the state pressed suit in the state supreme court to stop its activities, and no further claims were pressed by the company.²⁰

During 1841, construction continued on the Southern. By the end of the year, the road was still in operation only as far as Adrian, but the thirty-two miles of road between Adrian and Hillsdale was reported nearly ready for iron. Difficulties in pushing the road bed through a tamarack swamp near Hillsdale was reported as the principal reason why construction was not completed during the year. According to engineering estimates, only fifteen thousand dollars would be necessary to complete the road to Hillsdale, exclusive of iron.²¹

By the end of 1841, iron was becoming a serious problem on the Southern. Arrangements had been made with the Corning works to provide three-quarter inch iron and spike, to be paid for from the October installment of the Bank of the United States, but when the Bank failed, the Board was unable to provide funds. Iron furnished under contracts negotiated by Governor Mason from Hicks and Company of New York, over which Monroe had fought the Board

²⁰Michigan, Legislature, Report of the Committee on Banks and Incorporations (House Documents, 1841, II, H. D. No. 59) pp. 205-208; Michigan, Legislature, Report of the Committee on Banks and Incorporations (House Documents, 1841, II, No. 44), pp. 155-160.

²¹Michigan, House Document No. 3, pp. 11-16; Mes-
sages of the Governors of Michigan, I, 442.

the previous year, was only half-inch stock, considered too hard, coarse and brittle to use. The Board thought it bad policy to place such iron on the superstructure, and decided to wait for shipments of heavier stock.

Other reports from the Southern were not as encouraging. Although the road has been opened the previous year to Adrian, and reported in excellent condition, it was not fully spiked. According to the Board, spikes purchased had been of poor quality, and only enough good stock was available to put spikes in alternate holes. As a result, iron on the western half of the second division was expected to deteriorate rapidly. Subsequently, it proved impossible to respike the road for several years. Although the Board blamed the quality of the spike, there is evidence that pilfering of iron and spike by contractors was behind most of the shortage.²²

Reports from the River Raisin and Lake Erie were even more discouraging. No more than nominal repairs had been undertaken because the Board had doubts about the location of the road's eastern terminus. Advantages were offered by the present location, the dock at Brest, and the mouth of the Monroe ship canal, but the shallow water

²²Letter from J. B. Bloren to Gen. Van Fossen, February 20, 1841, in Records of the Executive Office, 1810-1910: Reports: Board of Internal Improvements, 1838-1841 (Correspondence in the Michigan Department of State, Historical Commission Archives).

in La Plaisance Bay led the commissioners to the conclusion that a better terminus than that provided by the newly purchased road should be sought. At the end of 1841, the Board was considering extension of the piers at the mouth of the ship canal three hundred feet, which would open the road to navigable waters of a constant depth of eleven feet. Completion of the ship canal at Monroe was estimated at a cost of ninety thousand dollars. In order to use the pier at the end of the River Raisin and Lake Erie, the Board would be forced to engage in extensive dredging for the benefit of a private company. Meanwhile, the road itself had proven almost worthless. The bed was found to be unstable, the curve too sharp for use of locomotives, and the superstructure too rotten to bear the weight of heavy cars or engines. Throughout the year, freight hauled from the bay to Monroe had to be drawn by teams.

Receipts on the Southern during 1841 were not encouraging. As of April, there were no locomotives on the road because Humphrey, who had been issued warrants for their purchase in 1839, refused to return the warrants when the Board had replaced him. Finally, the Legislature was forced to order the warrant's return by joint resolution, and the locomotives were purchased.²³ The Board,

²³Michigan, Legislative Acts, 1841, Joint Resolution No. 15.

however, blamed competition from the Erie and Kalamazoo for the low rate of earnings, and expressed hope that the construction of lines from Monroe to Ohio would draw traffic away from the E & K and onto the Southern.²⁴

Hope of increasing revenues on the Southern led to efforts to extend the road three miles to Jonesville, which had been on the northern route during the 1838 route battles instead of Hillsdale. During 1840, a charter had been granted to an interested group of local residents to build a branch road from the Southern, but the company was apparently unable to raise funds for the project. Early in 1841, a railroad convention was held at Jonesville for the purpose of encouraging the state to continue the road through the village. Restating the principles of sectional equality, the convention produced statistics to prove that carriage in local produce would pay interest on the cost of construction. The convention's position was supported in the Legislature by the Senate Internal Improvements committee, which recommended continuation of the road to Jonesville, and during the session of 1841, extension was authorized by the Legislature on the condition that it proved to be the most economical and could be constructed out of existing funds.²⁵

²⁴Ibid., Joint Resolution No. 13; Michigan, House Document No. 3, 1842.

²⁵Michigan, Legislative Acts, 1840, No. 103; Ibid., 1841, Joint Resolution No. 17; Michigan, Legislature,

The same Senate committee expressed satisfaction at the failure of the Palmyra and Jacksonburg to meet interest due on loans from the state of money and iron. Angered by the competition of the Erie and Kalamazoo, with which the Palmyra and Jacksonburg was to connect, the Committee was hopeful that the failure would enable the state to take control of the road and divert it to use by the Southern. Several years were to elapse, however, before the Palmyra and Jacksonburg would be acquired.

During 1842 and 1843, construction dragged from lack of iron to surface the superstructure. Late in 1841, the last segments of road bed and superstructure had been completed to Hillsdale, but the refusal of iron merchants to accept pledges of net receipts of the Southern in payment for iron forced the road to confine operations between Monroe and Adrian. Ten miles of iron were discovered in the possession of the Board during 1842, and the road was completed between Adrian and Hudson, fifty miles west of Monroe. But until iron was purchased under a joint pledging of the net receipts of the Central and Southern in 1843, the road could not be completed. Finally, in October 1843, iron was laid to Hillsdale, and the road opened to its western terminus. Construction to Jonesville was never

Report of the Committee on Internal Improvement (Senate Documents, 1841, II, S. D. No. 22). Extra of the Hillsdale County Gazette, Feb. 15, 1841, in the Henry Waldron Papers (Michigan State University Historical Collections).

undertaken under state management, and concentration on completing the Central precluded further extension of the road.²⁶

During the same two years, receipts were discouragingly low. Problems at the eastern terminus forced shippers to seek alternative routes, while competition from the Erie and Kalamazoo drained away business important to the Southern's success. Attempts by both public and private interests in Monroe failed to lead to completion of the ship canal, and the Lake Erie and River Raisin proved both inefficient and expensive to maintain. Freight had to be hauled to the bay by horses, and in 1842, this four miles of road consumed nearly a third of the money charged to the expenses for operating trains. During 1843, receipts were held down by deliberate boycotting of Lake Erie shippers who delivered goods consigned to Monroe to other ports in violation of contracts in an attempt to undermine the state's railroads. Inadequate rolling stock added to the road's inability to achieve a desirable level of profits.²⁷

During the last three years of state ownership, little further construction was attempted. With

²⁶Michigan, Senate Document No. 4, 1843, p. 2; Michigan, Joint Document No. 5, 1844, pp. 1, 9.

²⁷Michigan, Senate Document No. 4, 1843, pp. 2-4, 32; Michigan, Joint Document No. 5, 1844, pp. 9, 19.

appropriations exhausted, it was forced to stop short of connection with the fertile and productive St. Joseph Valley. In June, 1844, the state purchased the Palmyra and Jacksonburgh for twenty-two thousand dollars, and annexed it to the Southern as a feeder line. The road, which had been "gratuitously fitted for the iron" by citizens of Tecumseh earlier under agreement with the Erie and Kalamazoo to iron and stock it, had fallen into the hands of the state as collateral to a loan granted in 1838. The road was reported as badly deteriorated, but estimates of potential business ran as high as forty thousand dollars, over half of which had been carried by the Erie and Kalamazoo. During 1845, the road was rebuilt between Tecumseh and the Southern by local citizens, whose voluntary labor made it possible to complete the road a year sooner than appropriations would have allowed, and much of the road was put under iron. At the end of the year, the Board asked the legislature to appropriate funds to repair the road as far north as Clinton. The request was accompanied by estimates of flour output at Clinton and probable revenues over the seven per cent required to pay interest on the cost of construction. After a decade, the Board, for the first time in its history, began to use estimated revenues based on area output as a justification for construction. The appropriation was never made, however, because in 1846 the Southern was sold to private interests.²⁸

²⁸Michigan, Joint Document No. 4, 1846, pp. 3-5; Michigan, Joint Document No. 4, 1845.

The road's last three years were no more encouraging than its first three. The low level of receipts and high costs, accompanied by seemingly insurmountable problems, added to the state's discouragement with internal improvements. At the end of 1844, the problem of the eastern terminus was still as pressing as it had been in 1840. Public and private attempts to complete the ship canal at Monroe had failed, and the bay proved too shallow for efficient navigation. By the end of 1844, the Board recommended that the Lake Erie and River Raisin be abandoned because it afforded no facilities to shipment, and transfer of its iron to the Palmyra and Jacksonburgh. Adoption of the solution to the terminus problem undertaken by the later private owners, that is, purchase of the Erie and Kalamazoo and shipment to the port at Toledo, was anathema to the Board, and politically impracticable. At the same time, the road itself was in poor condition. Part of it was still only half spiked, and the portion between Monroe and Adrian badly decayed. West of Adrian, sections of the road which had lain for as long as four years without iron were in little better shape, and the heavy rains of 1844 added to decomposition.²⁹

Gross revenues of the road fell far short of the hundred thousand dollars predicted upon completion to

²⁹Ibid., pp. 5, 29, 31.

Hillsdale, and were consumed year after year by repairs, purchase of rolling stock and engines. Unlike the Central, which was at least retiring scrip from circulation, the Southern had produced nothing for the state in six years of operation.

Table 5 presents a statement of revenue, expenditure, and investment for the Southern under ten years of state ownership. The data are subject to the same limitations as those presented for the Central, with a few additional ones of its own. Receipts, of course, are an exact statement of moneys received by the road during the fiscal year, but expenditures do not reflect costs of operation. As with the Central, substantial sums were expended on rolling stock, locomotives, and new construction that were reported as operating expenses. The three figures available for net income indicate that actual expenses of operation ranged between two-thirds and three-quarters of reported receipts. At no time during the period, however, was income sufficient to pay interest on the cost of construction, or even depreciation. Financially, the Southern was a complete failure through 1846.

Accuracy in determining reported investment presents significant problems because of conflicting statements by the Board. The major difficulty is encountered in 1840, when the Board reported two different statements of expenditure in its annual report, and did not include the purchase

TABLE 5.---Receipts, expenditures, and investment on the Southern Railroad, 1837-1846.²

	1837	1838	1839	1840	1841	1842	1843	1844	1845	1846
Receipts					7	16	24	60	68	88
Expenditures					5	16	24 ^b	60	68	67
Net Income					2					22
Reported Investment	12	236	227	155 ^c	148	53	20	22 ^d	14 ^d	
Cumulative Totale			576	731	879	932	954	976	990	

^aMichigan, Legislature, Annual Reports of the Board of Internal Improvements (Joint Documents, J. D. No. 4), pp. (1839) 9-12; (1840) 30-32; (1841) 15, 27; (1842) 12, 14; (1843) 7-8, 11; (1844) 9, 19; (1845) 16, 18-19.

^b\$8,000 of this sum reported expended on rolling stock.

^cThis sum includes purchase of the River Raisin and Lake Erie, but understates expenditure. See note c, table 8, chapter IX.

^dExpended on the Tecumseh Branch.

^eData presented in this line is totaled from reported investment of the Board of Internal Improvement in the line immediately above. Sums will not agree because figures are rounded to the nearest thousand. The figures represent gross approximations, rather than exact statements because of reinvestment of net income which is disguised as an operating expense, and deliberate disguising of investment by the Board in 1840 and 1841 to remain within limits created by appropriations. Reports of the Board are used because they are the only body consistently reporting investment. Annual figures presented by various investigating committees often present striking contrasts. However, the total in 1846 is close enough to the Auditor General's estimate presented in 1846 of \$961,973, or \$1,016,973 including locomotives and rolling stock, to justify its use. The loose accounting procedures of the Board, particularly in relation to the Southern, seem to preclude a more exact statement. Michigan, Legislature, Annual Report of the Auditor General, 1845 (Joint Documents, 1846, J. D. No. 2), p. 2.

price of the River Raisin and Lake Erie. Apparently, the Board had spent funds in excess of appropriations, and covered by false reporting; the excess over appropriations was paid in 1841 when new appropriations were passed by the Legislature. The Board's shifting of these sums from 1840 to 1841 does not affect total investment, however, and serves only to give a false sense of timing to the data. During the last four years, reported investment does not include iron and rolling stock because expenditures for these items were financed out of net income on both the Central and Southern. However, the sum of reported investment in 1845 falls between values set by the Auditor General for the road with and without locomotives and rolling stock at the end of that year, and therefore seems to present a reasonable approximation.

Sale of the Southern came as an afterthought to sale of the Central, rather than as an element of independent policy. Unlike the case of the Central, there was no substantial support for its sale prior to 1845, and the decision to sell appears to have been a composite decision, based on several factors. In part, it came from a desire to liquidate as much as possible of the public debt and, because of mounting debts, the need for repairs, and difficulty in borrowing, to jettison the system of internal improvements; in part from the realization that the system was being discarded, and that continuation of the road was

therefore unlikely under state enterprise. Residents of the southern section were determined that their road would have the same advantages as the central: corporate charter, heavy rails, and continued construction. Once the Central was sold, the Southern had to follow suit in order to maintain its advantages and competitive position. To that degree, the same sectional rivalry was operative which had led to the construction of multiple roads at the program's inception.

Two bids were offered to the state for purchase of the Southern in addition to the bid of the purchasing corporation. The first, submitted apparently by a group connected with the Erie and Kalamazoo, offered to purchase the Southern for \$550,000 payable in five equal annual installments at interest. In return, the group asked for the privilege of connecting the Southern with the Erie and Kalamazoo, and the right to complete the Palmyra and Jacksonburg to Clinton and connect it with the Erie and Kalamazoo again. They promised to complete the road to Coldwater, if the company could select the route, and asked for all the privileges granted to the Central.³⁰ The second group, composed of New York residents, offered to purchase the road for \$600,000 if the state would grant a charter similar

³⁰Michigan, Legislature, Proposition for the Purchase of the Southern Railroad (House Documents, 1846, H. D. No. 10).

to the Central's, not subject to further legislation. They asked in return the right to extend the road to the Indiana line, and the privilege of connecting the Erie and Kalamazoo with the Tecumseh Branch at Palmyra.³¹

There is no record of legislative response to the first proposition, but the second received detailed criticism from the House select committee on the sale of the public works. The Committee made it abundantly clear that price was not the most important objective in selling the Southern. It stated a belief that railroads were important to economic development in the southern tier, and that development was more important than the absolute sale price. It objected to the apparent intention of the company to incorporate the road in a system of roads projected from Toledo to Adrian to Chicago because it would deprive all of the citizens of the southern tier except the residents of Lenawee and Hillsdale counties of the benefits of a railroad through the tier. "Even the gilded bait of \$100,000 would scarcely be sufficient to induce our people to forget their self-respect, their interest and their true policy." The Committee placed priority on keeping the road within the state and as close to its original line as possible. Profits of the road were supposed to build villages in

³¹Michigan, Legislature, [No Title] (House Documents, 1846, H. D. No. 11.

Michigan, and not in other states.³² Had debt reduction been the primary motivation, price would have been the major consideration, but the Legislature was determined to retain the road's original route under local ownership regardless of cost.

In May 1846, the bill authorizing sale of the Southern was signed into law. Most of the individuals named in the corporate charter were residents of Michigan, particularly the southern tier. Sale price was set at half a million dollars, one hundred thousand less than the best offer received by the state. Privileges and restrictions granted in the charter were essentially identical with those granted the Central, with exceptions tailored to suit local circumstance. Nine years were granted to pay the balance of the purchase price, with interest on the unpaid balance, and the company was required to purchase twenty thousand dollars worth of locomotive and rolling stock within six months of the initial purchase. The road was required to complete construction to Coldwater, through Jonesville, in four years, and to reach the St. Joseph River and Niles in a further four. Three years were allotted to complete construction on the Tecumseh Branch to Jackson. If construction deadlines were not met, other companies

³²Michigan, House Journal, 1846, p. 436.

would be allowed to undertake construction and take a share of the road's profits. Maximum tolls were limited by rates set for the Central, and the company was required to furnish the road with heavy T rails. As with the Central, the state retained the right of purchase after January 1, 1867.³³

With the sale of the Southern, the state gave up its last important work of internal improvement. Undertaken in a conflict of local interests, poorly constructed and poorly managed, often without competent engineering supervision, the road seemed destined to fail. Yet, in spite of its limitations, other factors were as important in determining its ultimate failure. The Southern suffered heavily from competition by the Erie and Kalamazoo, which offered superior mercantile and financial facilities at its terminus. The problem of the eastern terminus was never solved under state management, and proved detrimental to the growth of traffic on the road. Unlike the Central, the Southern was not pushed far enough west of the peninsular watershed to develop substantial traffic either in freight or through passengers. Its performance compares more favorably with that of the Central when its sister road was completed as far as Jackson. Finally, in common with the Central, the Southern lacked the motive power and rolling stock which would have enabled it to do business even had demand been

³³Michigan, Legislative Acts, 1846, No. 113.

present. The Southern's failure was more than a simple failure of state enterprise to manage and develop the road efficiently. The Southern paid the price of priority when the state found it necessary to concentrate resources in its most productive enterprise. Had it received the same amount of resources and been extended as far, it might well have proven profitable, if not as profitable as the Central. After sale to private interests, the Southern's performance improved markedly. Whether the Southern was built "ahead of demand" remains a moot point, because under state ownership, its abstract potential was never fairly tested.

Construction on other state projects was much less involved, and even more unsuccessful. The Northern railroad, authorized to run from the St. Clair River to Lake Michigan through the fourth tier of counties, was surveyed in the summer and fall of 1837. Several routes were projected, and surveys encompassed the equivalent of three separate routes across the state in length. In October, the Board met at Flint to determine its location. The only point of controversy was on the point of commencement, and the commissioners finally decided on the mouth of the Black River because the route would intersect the Fort Gratiot road, and the rapids of the St. Clair at that point kept the river ice free year round. From the mouth of the Black, the road ran west through Lapeer, Flint, and Corunna or Owosso, to the mouth of the Maple River. At this point, it

crossed the Grand River, and continued west to Grand Rapids on the south side, and finally followed the Grand to its mouth. After determining the route, the Board directed the Commissioner in charge to let contracts.³⁴

Unlike the Southern and Central, the Northern was truly a frontier railroad, constructed ahead of demand. Population along the route was minimal west of the eastern terminus. The Board and the Engineer who took the survey made its developmental nature abundantly clear in reports submitted in 1837, and construction was undertaken with no hope of immediate revenues. Success was dependent on the completion of main lines of communication west through New York and Ontario, and an influx of population drawn by the construction of a railroad through unpopulated territory. Advantages cited for construction of the Northern were the facts that it was one hundred twenty-seven miles shorter than the Lake Erie route, and that it would be open year round. The mineral resources of the region, coal, salt, iron, gypsum, and limestone, were expected to attract both capital and population for regional development.³⁵

Construction on the Northern was delayed by battles similar to those which delayed the Southern, and hearings

³⁴Michigan, Senate Document No. 11, 1838, pp. 166, 170.

³⁵Ibid., pp. 217, 226.

were conducted by the same committee. In March 1838, the Committee met and cleared the commissioners of charges of guilt or personal interest which had been brought by petitioners. In supporting the Board, the majority of the Committee expressed the opinions that the road must be constructed to serve long term interests, rather than short term profits, and that every county should have its share in the proceeds of internal improvement. A minority report signed by Stephen Vickery, summarized the opposition view. Vickery apparently spoke for the interests of the St. Clair and Romeo railroad, "whose avowed object and intention, it appears, was to extend their road across the state to the navigable waters of the Grand river or Lake Michigan." The company had expended several thousand dollars before it appeared that the state would become a competitor, and wanted the road constructed from Palmer to Flint and west, with the company having the right to connect with the Northern at Flint and to carry traffic from Flint to Detroit. Vickery argued that "The state has no right to construct works which will interfere with or injure the vested right and interest of a previously incorporated company, without an adequate compensation in damages; and not even then without the consent of the incorporators." The most interesting point in Vickery's dissent, however, lay in the inconsistency he discovered in the Board's arguments between its recommendations for the Southern and the Northern.

On the Southern, the majority of the Board had argued in favor of an exploitative road, while on the Northern, it argued the advantages of constructing the road through the least developed sections of the region in order to utilize its developmental impact. Citing sixteen different factors, Vickery argued in favor of locating the road through the most developed and populous sections of the tier. No reason was given by the Committee for its change in criteria, and the data are too sparse to allow speculation. It seems likely, however, that the population was so scattered in the fourth tier that any criteria that was not developmental would have been ludicrous.³⁶

Only one change was made in route locations by the Legislature, and it was minor, directing that the road run through both Owosso and Corunna, instead of only one of the villages, and the road was relocated on the south side of the Black River. During 1838, the acting commissioner was instructed to let contracts for clearing and grubbing between the mouth of the Black River in St. Clair county, and Lyons in Ionia county. Contracts were authorized for fourteen miles of grading between Flint and Ionia. Unlike the Central and Southern, which were undertaken and completed in segments, the Northern was undertaken one step at a time for the entire length, which accounts for its failure to

³⁶Michigan, Senate Document No. 47, 1838.

have completed a single section when operations were suspended. At the end of 1838, the Commissioner on the Northern reported that contracts had been awarded for clearing and grading from Port Huron to Lyons, a distance of one hundred thirty miles, and that grading had been undertaken on a ten mile segment at Lyons, and four miles west of Flint. No explanation was ever offered for the widely separated grading, or undertaking grading at the western end of the route.³⁷

During 1839, one hundred ten miles of the road were cleared and grubbed, with only twenty miles uncompleted. But during the year, when the state proved unable to meet its monthly estimates after failure of the Michigan State Bank, contractors abandoned the works. Through November 1839, sixty thousand dollars had been expended, and another ten thousand dollars was used in 1840, but for all practical purposes, the road was abandoned when new contracts were forbidden by the Whig Legislature in 1840.³⁸

Attempts were made to salvage work undertaken before the financial collapse. Through 1839, appropriations for the Northern had reached a total of one hundred fifty

³⁷Michigan, House Document No. 17, pp. 275, 321.

³⁸Michigan, House Document No. 3, 1840, pp. 9-12, 38-40; Michigan, House Document No. 3, 1841, pp. 30-32.

thousand dollars, and in April 1841, thirty thousand dollars of balance was earmarked for conversion of the cleared route into a wagon road. Five thousand dollars was diverted to the Grand River road, to be expended under the direction of the Board of Internal Improvement. Failure of the Bank of the United States to meet its October installment, however, choked off the state's source of funds, and the Board was unable to place the road under contract. In 1843, an alternative approach was attempted by placing the road under the highways acts and appropriating resident highway taxes on lands for three miles each side of the road for its construction and maintenance. Subsequent attempts to appropriate money for the road failed. Finally, in 1846, the act of 1843 was repealed, and the road abandoned.³⁹

The Clinton and Kalamazoo, the third tier's project, began under authorization to construct a canal or canal and railroad combination from Mt. Clemens, on the Clinton River, to the mouth of the Kalamazoo River. Under the terms of the internal improvements act, surveys were to be made by the Board of Internal Improvements, and after completion the Board was to determine whether such a route would be practicable, and the most desirable form of construction.

³⁹Michigan, Legislative Acts, 1841, No. 42; Michigan, Legislative Acts, 1843, No. 83; Michigan, Legislative Acts, 1846, No. 55; Michigan, House Document No. 3, 1842, pp. 6-7.

No real doubt ever seems to have existed that residents of the fourth tier wanted a canal and not a railroad through their section. On April 13, 1837, less than a month after passage of the act, a large meeting was held at Auburn to discuss popular feeling on the third tier's project, and sentiment was overwhelmingly in favor of a canal. Preference for canals was based on the fact that they were proved as a safe and profitable method of moving goods, and that water power provided for mills along the route.⁴⁰

No decision was made on either the mode of construction or route determination during 1837. At the end of the year the Board stated that the engineer had not submitted his full report, but that preliminary indications favored the construction of a canal across the peninsula. The engineer reported that a canal across the state would be 216 miles long, requiring 349 feet of lockage on the eastern side, and 341 feet on the western slopes. Available summit water was estimated at twice the quantity necessary to compensate for evaporation and one hundred lockages per day. Should needs exceed these requirements in time, the engineer thought the Cedar and Shiawassee Rivers could be diverted to supply the needed water. The most serious obstacles to construction on the route were thought to be the summit

⁴⁰ Semi-Weekly Free Press (Detroit), April 25, 1837, p. 3.

ridge and the Grand River. In the west, Allegan was chosen as the terminus.⁴¹

When the engineer submitted his complete report, the Board met in Mount Clemens for public hearings on the proposed project in February, 1838. After the route and deviations from the line of county centers had been thoroughly discussed, it was deemed suitable for a canal. Although the decision to build a canal satisfied public opinion, the Board had other reasons for deciding against a railroad through the third tier. Three railroads had already been authorized, and railroads were subject to limitations for which a canal would compensate. Light strap iron railroads, although suitable for fast hauling of passengers and merchandise, were not considered practical for hauling heavy bulk freight. In the Board's words, "At this day there is no doubt in the public mind as to the superior advantages of canals over railroads to the country on the immediate line, or when heavy and bulky articles are to be transported." In the overall plan of internal improvement, the Clinton and Kalamazoo was to provide complementary services of heavy hauling, rather than competitive transportation of passengers and

⁴¹Michigan, Senate Documents No. 11, 1838, pp. 169, 237-238.

merchandise.⁴² Prior to the meeting, exact location of the canal had not been made.

During 1838, locations were made between Mount Clemens and Crooked Lake in Livingston county, and work began on eastern sections. Cost estimates on the eastern watershed indicated that the canal would be substantially more expensive than a railroad, and most expensive in the initial sections. Alternate routes surveyed in the first division could be built from thirteen to fifteen thousand dollars per mile, while in the second division, costs rose to between twenty-eight and thirty-three thousand dollars per mile. In both cases, the Board chose the low cost route. During the year, clearing and grubbing were nearly completed, and contracts let for excavation. The Board was forced to report, however, that the sections under contract would be the most expensive and the least useful. The eastern terminus of the canal was twenty miles from Detroit, at a point where only small vessels could navigate the crooked, shallow, narrow Clinton River. And, when the canal was completed to Pontiac, a distance of twenty-seven miles, it would be only twenty-five miles from Detroit, the state's major market, on the Detroit and Pontiac Railroad. As the Board suggested, it was hardly reasonable that anyone

⁴²Michigan, Legislature, Report of the Commissioners of Internal Improvement on the Survey of a Canal from Mt. Clemens to Lake Michigan (Senate Documents, 1838, S. D. No. 23), pp. 323-327.

would chose the circuitous route to Detroit when they could ship or travel by rail from Pontiac. The Board suggested that the Legislature either allow improvement of the whole Clinton River, or work on less expensive sections west of Pontiac which would channel goods into the Detroit and Pontiac for trans-shipment. Even though the eastern counties were more populous, with both the Detroit and Pontiac, and the Detroit and Shelby Railroads extending into the region, they had more direct routes to Detroit than by way of the Clinton and St. Clair Rivers. Essentially, the Board's recommendations were sound, but politically impracticable, and the Legislature failed to take actions to develop the canal to its fullest potential.⁴³

Early in 1839, under the Board's direction, the chief engineer reported on a survey of a branch of the Clinton and Kalamazoo. As surveyed, the branch actually constituted a second canal across the state. Beginning two miles west of Howell, the route surveyed by Hurd ran through the valley of the Cedar River to the Looking Glass River, down the Looking Glass to Waterloo, then to the head of steamboat navigation on the Grand River at Lyons, the mouth of the Maple River. Crossing the Grand at Lyons, the

⁴³Michigan, Legislature, Report of the Commissioners of Internal Improvement (House Documents, 1838, H. D. No. 57), pp. 515-516; Michigan, Legislature, House Document No. 17, 1839, pp. 275, 291-296.

route continued west to Ionia. Based on a canal fifty feet wide and five feet deep, Hurd estimated cost of the branch at \$1,300,000 or \$16,750 per mile, and reported favorably on its potential. He estimated that it would pay for itself in a very few years.⁴⁴ Shortly after the survey was submitted, failure of the Michigan State Bank stopped the addition of new projects. As late as 1844, however, efforts made in Congress to obtain a federal land grant for the Clinton and Kalamazoo contained provisions for the Grand River branch.⁴⁵

During 1839, work was slowed by failure of the state deposit bank. Grubbing was nearly completed between Frederick and Rochester, and most of the lock materials furnished. At the suggestion of the chief engineer, the engineers of the several projects under construction inspected the route and recommended elimination of the section between Mount Clemens and Frederick. Between these two points, it was decided to utilize the bed of the Clinton River, to save nearly forty thousand dollars on the two miles by eliminating two long aquaducts and quicksand on the located route. In March, the river was surveyed for

⁴⁴Michigan, Legislature, Report on the Cedar and Grand River Branch of the Clinton and Kalamazoo Canal (House Documents, 1839, H. D. No. 50) pp. 834-867.

⁴⁵Letter from Lucius Lyon to William Woodbridge, January 20, 1844, in Lyon Papers, MP&HC, XXVII, 566.

construction of a tow path from Mount Clemens to its mouth, and estimates for construction of the path placed at thirty-eight thousand dollars. The Board recommended to the Legislature that the river be made into a barge, rather than a ship canal.⁴⁶ In the Legislature, however, a resolution authorizing construction was tabled and never revived.⁴⁷

Although the state contracted its internal improvements program sharply in 1840 by prohibiting new contracts, work on the Clinton and Kalamazoo was not substantially affected until the end of 1841, when existing contracts were completed, appropriations exceeded, and the failure of the Bank of the United States had cut off funds. Through early 1840, payments were sustained by drafts on John Ward & Co., and Auditor General's warrants. Payments were a month or two late, but funds were usually found. During 1840, the Board reported the heaviest expenditures to date. By the end of 1840, the Board was able to report that it could complete the canal from Rochester to Frederick with an additional appropriation of twenty thousand dollars. During the year, the Board reversed its decision to eliminate the section between Frederick and Mount Clemens, and

⁴⁶Michigan, House Document No. 3, pp. 6, 13-30, 71-83; Michigan, Legislature, Report of the Commissioners of Internal Improvement, in Relation to the Improvement of the Clinton River (House Documents, 1839, No. 40), pp. 664-667; Michigan, Legislative Acts, 1839, Joint Resolution No. 3.

⁴⁷Michigan, House Journal, 1840, p. 522; Michigan, Senate Journal, 1840, pp. 516, 598.

decided to build the expensive section with its aqueducts. No construction was undertaken, however, because the Board lacked the necessary funds.⁴⁸

During 1841, lack of funds curtailed operations, although the Board exceeded appropriations by two thousand dollars. Between Frederick and Rochester, the canal was essentially complete, lacking only a feeder at the western end and a lock at Frederick to open it for operation. Since filling the canal was essential to its preservation, keeping the banks and lock walls from caving in, the Board recommended completion. The estimated cost was seventeen thousand dollars.⁴⁹ Although twenty-five thousand dollars had been appropriated, most of it was apparently consumed for completion of existing contracts.

No further construction was undertaken in 1842. The Legislature attempted to solve its financial difficulties by authorizing the Board to lease the canal for twenty years, under the stipulation that persons taking over the canal would construct a feeder at Paint Creek, the western terminus, and an apron and water weirs at the eastern end

⁴⁸Michigan, House Document No. 3, 1840, pp. 9-10; Michigan, Legislature, Report of the Committee on Internal Improvement (House Documents, 1840, II, No. 56), p. 513.

⁴⁹Michigan, House Document No. 3, 1842, pp. 1, 4, 5, 25; Michigan, House Journal, 1841, 294, 394, 434, 451, 557; Michigan, Legislative Acts, 1841, No. 50.

to allow water to escape. No offers were received, however, and at the end of the year, the Board again asked for funds to complete the canal.⁵⁰

Early in 1843, Berrien inspected the canal bed and reported on it in detail. Damage and decay caused by leaving the canal empty were relatively light, although substantial repair would be necessary. Most of the locks were reported in condition, except for warping in their plank lining, and one bank had caved in. One lock was ruptured because a contractor had let in water with the lower level empty, springing the gates. Berrien estimated that repairs would cost a maximum of three thousand dollars. Following Berrien's assessment, the House Internal Improvements committee recommended appropriation of sufficient funds to complete the canal. The problem faced by the committee, and the state, was that the value of the Clinton and Kalamazoo was unknown. The state had invested heavily to bring the eastern section to completion, and had no idea whether it could produce substantial revenues. To justify further expenditure, at least six per cent, or twelve hundred dollars would have to be realized on the additional investment, and the committee hoped it could be realized. Filling the canal would provide water power, as well as facilities for

⁵⁰Michigan, Senate Document No. 4, 1843, pp. 1, 4, 5, 25; Michigan, Legislative Acts, 1842, Joint Resolution No. 36; Michigan, House Journal, 1842, p. 347.

shipment, and the committee recommended appropriation essentially as an experiment to finish the canal and determine its worth. Sixteen thousand acres of land were appropriated for completion, but bids submitted exceeded the engineer's estimates, and the Board was forced to reject them.⁵¹

In 1844, the Legislature repealed provisions making warrants appropriated the previous year payable in land, and contracts were awarded. In the meantime, it was discovered that additional damage and decay was so heavy that the canal could not be completed under existing appropriations. At its next session, the Legislature appropriated sufficient funds, and in August, 1845, most of the levels were filled. The same year, the lock connecting Frederick to the Clinton River was completed, and in November, a small boat began running from Frederick to Utica. Total receipts for the year were \$46.90. The following year, the canal earned \$43.42, and the Legislature authorized repairs which were "absolutely necessary."⁵² No bids, however, had been received for leasing it, and no one had responded by leasing water power.

⁵¹Michigan, Joint Document No. 5, 1844, pp. 1-2; Michigan, Legislature, Report, (House Documents, 1843, H. D. No. 9), pp. 42-47.

⁵²Messages of the Governors of Michigan, I, 511; Michigan, Joint Document No. 4, 1846, p. 37; Ibid., 1847, pp. 20-22; Michigan, Legislative Acts, 1844, No. 27; Michigan, Legislative Acts, 1845, No. 27; Michigan, Legislative Acts, 1846, No. 139.

After 1846, the Clinton and Kalamazoo faded into oblivion, leaving no traces behind in official records. The Board of Internal Improvements failed to mention it in subsequent reports, and the Board itself was discontinued in 1849. No further laws were passed affecting it, and it was apparently allowed to decay; parts of the bed are still in the possession of the state. After an expenditure of over three hundred fifty thousand dollars, the canal was the state's greatest financial loss suffered from abandonment or discontinuation. Its failure deprived the state of facilities for heavy freight transportation, and contributed to the need for converting the railroads from light strap iron to solid iron rails to handle loads they were not initially designed to haul.

The Act of 1837 authorized the Board to construct a canal linking the Saginaw River with the Grand River, or its tributary the Maple. Although the area was undeveloped and sparsely populated, in terms of utilizing natural terrain features to facilitate transportation across the peninsula, the project was probably the most intelligent choice for developing the region north of the central tier. The Saginaw and Grand Rivers, two of the largest in the state, form a natural canal route. Maximum elevation above lake level attained in the depression stretching across the Peninsula from Saginaw Bay, up the valley of the Saginaw and Bad Rivers, and down the valley of the Maple and Grand

Rivers to Lake Michigan does not exceed seventy-two feet at the summit.⁵³ When surveys were completed in 1837, the engineer assigned to the Northern canal reported that the two rivers could be linked by only fourteen miles of canal. The rest of the route could be put into operation by inexpensive river improvement.

The route was so promising, that the engineer submitted plans for both barge and ship canals. The former was a typical barge canal, forty-five feet wide and five feet deep, but the ship canal was a novel innovation. Sixty feet wide and six feet deep, it was designed without a tow path for use by steamboats. The canal itself was to be below ground level to avoid embankments. By placing the banks below water level, the engineer hoped to allow boat's wakes to dissipate themselves harmlessly in flooded land adjacent to the canal, and overcome the problem of bank erosion which usually prohibited construction of ship canals in ante-bellum America. In recommending construction of a ship canal, he hoped to provide an alternate route to the long and often dangerous Mackinac passage.⁵⁴

Extant records do not indicate which proposal was finally adopted by the Board. During 1838, construction was delayed when the contractor refused to fulfill his

⁵³Alexander Winchell, Tackabury's Atlas of the State of Michigan (Detroit: George N. Tackabury, 1884), p. 10.

⁵⁴Michigan, Senate Document No. 11, 1838, pp. 240ff.

obligation. The following year, five miles were under contract and one mile completed, when contractors abandoned construction after the failure of the Michigan State Bank. Materials purchased for locks and construction were left out in the open to rot. When accounts were finally settled at the end of 1841, a total of forty-seven thousand dollars had been expended for construction, clearing, and grubbing along the route. Another five thousand dollars was diverted from appropriations for construction on the Saginaw Turnpike. Materials provided either rotted or were expropriated by local residents.⁵⁵

Failure to complete the Northern or Saginaw canal was one of the most significant in the internal improvements program. Although the financial loss was minor, compared to the loss suffered on the Clinton and Kalamazoo, if completed, the canal would have provided a trans-peninsular route serving the northern counties at reasonably low cost. Such a route would not only have serviced the growing needs of a developing region, but might have quieted demands for sectional equality which played a crucial role in forcing the state to abandon its projects in the mid-1840's.

⁵⁵Messages of the Governors of Michigan, I, 281; Michigan, House Document No. 17, 1839, pp. 321-322; Michigan, Joint Document No. 4, 1845, pp. 9-10; Michigan, Legislative Acts, 1841, No. 37; Michigan, Legislature, Report of the Committee on Finance, Relative to the Saginaw Canal (Senate Documents, 1840, II, No. 52), p. 52.

Construction of an all water connection between Lake Superior and Lake Huron had been a vision in the Old Northwest for half a century before the state authorized construction. During the eighteenth century, while Britain controlled both banks of the St. Mary's River, possession of solid ground on the south bank had allowed easy portage of the great birchbarks ferrying freight from the St. Lawrence Valley to the lands beyond Lake Superior. When Britain was evicted from the south bank under Jay's Treaty, Canadian companies were forced to portage through low marshy ground. In 1797 or 1798, the Northwest Fur Company completed construction on a canal designed to carry freight canoes around the rapids. Although no monumental feat of engineering, the canal was capable of carrying the dominant form of lake shipping around the rapids, and seems to have been one of the first functioning canals in North America. The canal was destroyed by American troops in 1814.⁵⁶

Spurred by a desire to exploit the copper and fisheries of the Superior country, as well as the Indian trade of the Canadian Northwest, the Legislature authorized construction of a ship canal around the falls of the St. Mary's River during the session of 1837. Under the terms

⁵⁶Otto Fowle, Sault Ste. Marie and its Great Waterway, (New York: Putnam's, 1925), pp. 31, 237-252; Roger Pilkington, "Canals: Inland Waterways Outside Great Britain," History of Technology, IV, 552.

of the act, the Governor was instructed to appoint surveyors responsible to his office to examine the route, constructing maps and profiles. Completed proposals were to be submitted to the Board, which was to determine practicability, and twenty-five thousand dollars was appropriated for construction. Surveys were taken during the summer and fall, and in December, reports were submitted. Plans called for construction of a canal with a minimum width of seventy-five feet and ten feet deep, with a length of slightly less than one mile. Three locks were to be constructed, thirty-two feet wide, each lifting vessels for six feet. According to John Almy, the surveyor, the rock ledge under the rapids would not require blasting, "owing to its peculiar quality and position." Almy estimated the cost of construction at one hundred twelve thousand dollars. Errors in the estimate, he insisted, would be found only in miscalculation of labor costs, and not because of the terrain.⁵⁷

The following spring, the Legislature approved plans for construction and appropriated an additional twenty-five thousand dollars. The additional money was provided to build the canal in one season, to avoid the expense of shipping men and materials to the Soo more than once. In September, contracts were awarded to the firm of Smith and Driggs of Buffalo, and the following spring five thousand

⁵⁷Michigan, Senate Document No. 11, 1838, pp. 257-258.

dollars were advanced to finance shipment of men and tools. Crews were recruited, and the contractor and his men set off for the Upper Peninsula.⁵⁸

Meanwhile, events were building toward a head-on collision with the federal government. During 1822 and 1823, the federal government had constructed Fort Brady as a permanent structure to guard the river frontier with Canada. In the course of construction, a saw mill had been erected, drawing water from a race connected to the river. During the summer of 1826, the mill burned to the ground, and only the race remained. In 1838, the race was cleared and deepened in anticipation of rebuilding the mill.⁵⁹

In January 1839, Lieutenant Root, the quartermaster at Fort Brady informed Henry Stanton, the Quartermaster General, of the state's plans for building a canal around the rapids, warning him that:

According to the engineer's plans, the said canal would cross the public mill race or feeder belonging to the United States' saw-mill, in charge of the Quartermaster's department at this post, which of course would make the mill useless until some other work should be executed in place of the present feeder. As

⁵⁸Ibid., pp. 315-320; Michigan, Legislative Acts, 1838, No. 91; Michigan, Legislature, Report of the Select Committee, Relative to the Construction of a Ship Canal around the Falls of Ste. Marie (House Documents, 1838, H. D. No. 64); Michigan, Legislative Acts, 1839, Joint Resolution No. 31; Michigan, Legislature, Communication from the Office of Internal Improvement, Feb. 4, 1840 (Senate Documents, 1840, II, S. D. No. 33, pp. 295-296.

⁵⁹Fowle, p. 375.

the latter would necessarily subject the United States to expense, I very respectfully request your orders in the case, and whether the contractors shall be allowed to proceed with the work agreeably to their present plan.

Stanton replied in March that the Legislature of Michigan could not possibly be thinking of interfering with the improvement made by the United States at Fort Brady, and that, "You will, therefore, apprise the contractor that he cannot be allowed, in the execution of his contract, to interfere in any way with that work." At the same time, he instructed Root to allow the canal to be constructed through the military reservation, as long as it did not seriously injure the interests of the United States.

On May 12, after landing men and provisions, Weeks was presented with copies of the correspondence by Root, with notification that he would not be allowed to cut the mill race. Weeks replied that he was bound by the state of Michigan to excavate the canal on lines laid out by the chief engineer, and that it would be impossible to proceed without having exclusive control of the race:

Therefore, we shall proceed to work on said line of canal, and cannot allow water to flow through said race, where the line of the canal crosses the same, as it will entirely frustrate the object that the State of Michigan has in constructing a ship canal around the rapids of the Sault de Ste. Marie; and the contractors will be obliged to abandon said work at a very great loss to themselves, and we believe to the State of Michigan.

Weeks demanded immediate reply to his letter, and Root took the letter to his superior, Captain Johnson. Johnson replied

the same day that Root had his orders, the work could not be carried out peacefully if Weeks insisted on cutting the race, and that he would carry out the instructions to their full extent.

Weeks then decided to begin construction and continue until stopped by the Army. After cutting down a few trees, ostensibly to provide timber for the canal, he took his crew to the mill race, and began digging ditches to drain it. At that point, he was confronted by Captain Johnson and a company of armed regulars. When Weeks refused to obey, Johnson drew his sabre, and wrestled the foreman's shovel away from him. Advancing with fixed bayonets, troops drove the crews from the reservation.⁶⁰ Weeks and his men continued to stay at the Soo through the summer, apparently fishing in the rapids. At the end of May, orders were issued by the Quartermaster's Department, authorizing construction across the mill race if the race was restored to its original condition when the canal was completed, and in July the Board of Internal Improvements promised to restore the race. Formal agreements were signed in August

⁶⁰Letters from Lt. Wm. Root to the Hon. J. R. Poinsett, Jan. 14, 1839; Henry Stanton to Lt. W. Root, March 6, 1839; Smith, Driggs, & Weeks to Lt. Wm. Root, May 13, 1839 in Michigan, House Document No. 3, 1840, pp. 83-97. In addition to these and other letters in H. D. No. 3, see "Affidavit of J. B. Van Rensselaar," Senate Documents, 1840, II, p. 553. Originals or certified copies of this correspondence are in the William Woodbridge Papers (BHC) filed under June, 1839.

1839, but Weeks refused to resume construction, submitting claims instead to the state for damages.⁶¹

Responsibility for the incident at the Soo rested heavily upon the state. In failing to coordinate its plans with the federal government, it was guilty of poor planning and bad judgment. Federal authorities were eager to cooperate, even when confronted with unauthorized construction of the canal across a military reservation. With proper preparation, the agreement signed in August 1839, might have been worked out prior to construction.

Officers at Fort Brady were carrying out their military responsibility, but the contractor's belligerence is surprising. Stories persist, supported only by folklore, that the whole affair was arranged between Weeks and Captain Johnson when Weeks became disillusioned with the possibility of making profits on his contract, but no substantiation exists, and the story is contradicted by the correspondence between the Fort and the War Department.⁶² It seems more probable that Weeks, in common with contractors who were abandoning jobs along the Northern Railroad and the Saginaw-Maple Canal, doubted the ability of the state to pay its obligations after the failure of the

⁶¹Michigan, House Document No. 3, 1840, pp. 6, 31-32, 48, 83-97.

⁶²Fowle, p. 379.

Michigan State Bank, and provoked the incident in order to submit damage claims instead of being charged damages for failure to fulfill his contracts. Evidence, however, does not permit any conclusion more solid than speculation.

The state took the view that the federal government was responsible for the failure of construction. After being notified that construction had been halted, Mason sent an energetic protest to the President, charging that the sovereignty of the state had been violated. The following January, he repeated his charges in his annual message to the Legislature. Arguing that jurisdiction resided with the state, whoever owned the soil, Mason made it clear that he considered the federal government no more than another property owner:

Under the federal constitution, the exclusive jurisdiction of the general government within the limits of the states, is confined to places purchased by the consent of the Legislatures of the states in which the same shall be, for erection of forts, magazines, arsenals, dock-yards and other needful buildings. In the present case, there has been neither consent given or purchase made; and if the "mill race" of the United States had been affected by the construction of this great public improvement, a work so important to the commerce of the country, the federal government could only have had an equitable claim to indemnity by the State of Michigan to be adjusted under her own constitution and laws. The reservation of lands by the United States, for military or other purposes, vests in the federal government no authority to interfere with an important and needful exercise of jurisdiction by our own Legislature.⁶³

⁶³Messages of the Governors of Michigan, I, 282-
316. Mason's Message was never accepted by the Legislature.

Mason's excessive concern with legal right gives insight into the refusal of the state to establish a working understanding with the federal government before crossing the military reservation. Had water power been the basic issue, a pragmatic solution might have been achieved; at the only outlet to the world's largest body of fresh water, the raw material was practically inexhaustible. The question was one of jurisdiction and constitutional right, and insistence on its rights postponed construction of the canal for almost two decades.

Whigs, as well as Democrats, sustained the state's rights position. In his inaugural message to the Legislature, Woodbridge supported Mason's actions, stating that he had been entirely correct in his relations with the federal government.⁶⁴ During the session of 1840, the Whig Legislature declared by joint resolution that the federal government's actions were unconstitutional, and the United States was liable for damages suffered by the state. Since the federal government had chosen to stop construction, legislators became convinced that national authorities would have to be responsible for future attempts, and instructions were issued annually to Michigan's Congressmen to work for federal appropriations.

⁶⁴Michigan, Legislative Acts, 1840, Joint Resolution No. 13.

In some respects it was fortunate that the state was forced to abandon the canal before it became heavily committed to construction. The state was relieved of the necessity of supporting another project on the meager funds available after failure of the state deposit bank and the Bank of the United States. Provided with a convenient excuse for abandonment, the political humiliation of having to admit defeat was avoided. If the canal could have been constructed within the engineer's estimates, scarce funds would not have presented serious problems. Subsequent examinations of the route, however, revealed that Almy had been guilty of serious errors, underestimating the necessary amount of rock excavation and omitting a guard lock at the canal's upper end.⁶⁵ When the canal was finally constructed, cost fell just short of a million dollars.⁶⁶

In addition to the six major projects undertaken by the state through the Board of Internal Improvements, a host of minor projects were sponsored. River improvement formed an important part of the state's program. Under the act of 1837, crews were authorized to survey the Kalamazoo,

⁶⁵Letter from J. J. Abert, Bureau of Topographical Engineers, to the Hon. A. S. Porter, U. S. Senate, Jan. 11, 1841, in the Alpheus Felch Papers (Burton Historical Collections, Detroit). Cited hereafter as Felch Papers (BHC).

⁶⁶Dunbar, p. 373.

Grand, and St. Joseph Rivers to determine their suitability for slack water navigation.⁶⁷ Appropriations for rivers in 1838 included thirty thousand dollars for the Grand and Maple, and eight thousand for the Kalamazoo. The following year, twenty-five thousand dollars were appropriated for the St. Joseph River.⁶⁸

Between 1838 and 1849, funds were applied when availability of funds and water conditions permitted. In 1838 and 1839, efforts centered on improving rivers forming a part of the state's projected canal system. Substantial sums were expended on the Grand and Maple Rivers, and the Kalamazoo River below Allegan. Because contracts for river work were let annually, suspension of new contracts by the Legislature in 1840 slowed work that year and stopped it altogether in 1841. Late in the legislative session of 1841, when the Democrats regained control, suspension of river improvement was lifted.⁶⁹ Between 1842 and 1849, efforts centered on developing the St. Joseph as a navigable waterway to compensate for the legislative decision to suspend construction on the Southern west of Hillsdale. By 1849, the St. Joseph was navigable below Three Rivers, the Kalamazoo below

⁶⁷Michigan, Legislative Acts, 1838, No. 56; Michigan, Legislative Acts, 1839, No. 116.

⁶⁸Michigan, Legislative Acts, 1838, No. 56.

⁶⁹Ibid., 1841, No. 150.

Allegan, and Grand and Maple as far west as Grand Rapids. Total cost of the program, which concentrated on removing snags and constructing wing dams, was over fifty-five thousand dollars.⁷⁰

The effect of river improvement on economic development is difficult to evaluate. Since travel was free, receipts cannot be compared to investment to derive a rate of return, and economic benefits fall entirely into the category of non-taxable social gain. Since traffic was free, no record was kept of quantities of merchandise shipped over the rivers. A survey taken by the Board of Internal Improvements of exports and imports at the port of St. Joseph, at the mouth of the St. Joseph River, however, gives a fair indication of the volume of trade on the river. Even if only half of the volume shipped represented goods traveling down the river, results were substantial. Between September 1, 1845, and September 1, 1846, 263,645 bushels of wheat and 129,338 barrels of flour were exported, while 3,489,604 pounds of merchandise were imported. Shipments over the Central Railroad from November 30, 1845 to September 23, 1846, totaled 59,914 bushels of wheat and 180,423 barrels of flour. Merchandise shipments to the west totaled 8,241,867 pounds. At that point, only ten thousand

⁷⁰See Table 6.

dollars had been expended in improving the St. Joseph River.⁷¹ If only ten per cent of the trade of St. Joseph resulted from river improvement, the money was well spent.

Full use of the Grand River was frustrated by the state's failure to build a canal around the rapids. A canal begun by Lucius Lyon in 1835, engineered by John Almy who had designed the canal at the Soo, was not completed because of the depression. In 1839, the Legislature included twenty-five thousand dollars in the internal improvements appropriation for construction of a canal. Estimates submitted by the Board in 1839 and 1841 indicated that purchase of the Kent Company's rights and construction, and completion of the canal would require at least forty-six thousand dollars. Attempts to purchase the work in 1841 deadlocked when the state refused to meet the company's price unless rights to the water-power from the canal were included, and the Board recommended construction on the far side of the river, on land owned by the state. Lyon charged that the state had no intention of purchasing or prosecuting the canal, because it lacked the funds to pay even if the company met the price. According to Lyon, the Board's insistence on inclusion of rights to water power was designed to

⁷¹Michigan, Joint Document No. 4, 1847, pp. 10-12, 25.

TABLE 6.--Expenditures reported by the Board of Internal Improvement, 1837-1845.^a

	1837	1838	1839 ^b	1840 ^b	1841	1842	1843	1844	1845
Kalamazoo River		3,023	2,063		1,154				811 ^c
Grand and Maple Rivers		13,996	7,007	1,474	104	870	737		
St. Joseph River				2,268	1,706			1,041	5,733
Clinton Canal ^b		16,429	93,221	167,512	56,794	538	8,234		17,320
Saginaw Canal ^b		6,271	15,985	14,387	5,172				
Soo Canal	1,152	794	1,006	88					
Grand Rapids Canal			130		88		6		
Havre Branch	61	235	613	211					
Salt Springs		3,000	15,000	5,000 ^d		15,000 ^d			
River Raisin and Lake Erie RR				32,500					
Northern RR ^b	8,226	12,772	39,122	10,773	7,022	2,013			300
Grand River Road					487	2,714	575		28

TABLE 6.---Continued.

	1837	1838	1839 ^b	1840 ^b	1841	1842	1843	1844	1845
Saginaw Turnpike									
Surveying	31,639	5,832			3,876				
Total	41,078	62,352	174,141	234,213	76,403	21,135	9,522	1,041	24,192

^aMichigan, Legislature, Annual Reports of the Board of Internal Improvement (Joint Documents, J. D. No. 4), pp. (1839) 9-12; (1840) 21-27; (1841) 26-27; (1842) 167; (1843) 11; (1844) 39; (1845) 16-17.

^bReported expenditures on the Clinton Canal, Saginaw Canal, and Northern Railroad do not balance with total investment reported by the Board at the end of 1840, when added to totals reported at the end of 1839. The conflict of data is the result of the Board's false reporting in order to keep reported expenditures within limits set by specific appropriations. Without original vouchers, adjustment is impossible. Statements of total expenditure on these three projects in the text of the chapter will not balance the annual expenditures reported above. In these cases, statements published by the Democratic Board in 1842 have been used because they seem to adjust for the previous Board's faulty accounting.

^cExpended on the Kalamazoo, Grand and Maple Rivers.

^dAppropriations are used because there is no data available on the rate of expenditure. The salt works were usually able to exhaust their appropriations in a single year.

place the blame for failure of the project on the company.⁷² In either case, no further attempts were made to facilitate transportation around the rapids of the Grand, and full realization of benefits from large expenditures on the Grand and Maple Rivers was frustrated.

Large sums of money were also spent in attempts to manufacture salt. Between 1838, when drilling on lands awarded by the federal government on admission to the Union, and 1846, when the program was discontinued, thirty-eight thousand dollars were appropriated from the internal improvements fund to pay for shafts and equipment.⁷³ Presumably, all appropriations were expended. Drilling took place on lands near Midland and Grand Rapids, and the state hoped to be able to lease both the saline waters raised, and the lands surrounding the wells. After six years of drilling without raising water suitable for processing, the state began to consider selling. Restrictions in the terms of the federal grant, however, forced them to seek permission from Congress to sell the land.

⁷²Michigan, Legislative Acts, 1839, No. 234. Letters from Lucius Lyon to C. H. Taylor, Sept. 8, 1841; Lucius Lyon to Arthur Bronson, Oct. 12, 1835, in Lyon Papers, MP&HC, XXVII (1896), 459-460. Michigan, House Document No. 3, 1840, p. 42; Michigan, House Document No. 3, 1842, pp. 2-5, 33.

⁷³Michigan, Legislative Acts, 1838, No. 55; Michigan, Legislative Acts, 1837, No. 1; Michigan, Legislative Acts, 1840, No. 92; Michigan, Legislative Acts, 1842, No. 10.

In 1846, when the drilling machinery was offered for sale, permission had not been obtained.⁷⁴

In addition to projects administered by the Board of Internal Improvements, the state sought to improve transportation by extending credit to railroads supplementing major routes across the peninsula. During the special session of 1837 and the legislative session of 1838, three hundred twenty thousand dollars credit was extended to four private railroad companies. Bills were brought forward for aid to several companies, but since only the titles were preserved, it is impossible to tell from them whether aid meant only extension of deadlines, or loans of the state's credit.

The Allegan and Marshall Railroad was chartered in 1836 to serve the Kalamazoo Valley by extending the Detroit and St. Joseph from Marshall after the road turned south of the river toward St. Joseph. Although construction had not been attempted, in 1838 the Legislature was approached by Andrew G. Hammond who petitioned for an appropriation. The House Committee on Internal Improvement reported favorably on Hammond's petition, expressing the hope that it would increase the shipment of pine lumber from Allegan and add to revenues on the Central.

⁷⁴Michigan, Legislative Acts, 1842, No. 47; Michigan, Legislative Acts, 1845, No. 90, Joint Resolution No. 3; Michigan, Legislative Acts, No. 97.

Citing the granting of state credit in other states, the Committee stated, "It will not be doubted but that individual or corporate companies when able to command the necessary means, possess a great advantage over a state in the construction of public works...." In the Senate, the bill passed by a one vote margin, with ballots cast on sectional lines. Under the terms of the act, one hundred thousand dollars was to be loaned to the company, when the company provided matching funds. Each payment of five thousand dollars was to be matched by an equal amount provided by the road's stockholders. In case of default, the state was authorized to sell the road at auction, or purchase at cost plus seven per cent.⁷⁵ Sixty thousand dollars in funds nominally advanced were on deposit in the Michigan State Bank at the time of its failure, and the state's claim had to be satisfied by assets received in settlement of the Bank's debts.⁷⁶

The Ypsilanti and Tecumseh was chartered in April 1838, to connect the Central with the Palmyra and Jacksonburg. Stockholders listed in the act of incorporation were residents of the area served by the road. Three days

⁷⁵Michigan, Legislature, Report of the Committee on Internal Improvement, Relative to the Construction of the Kalamazoo and Allegan Railroad (House Documents, 1838, H. D. No. 66), pp. 571-573; Michigan, Legislative Acts, 1838, No. 21; Michigan, Senate Journal, 1838, pp. 349, 350, 388, 397, 403, 421.

⁷⁶Michigan Legislature, Report of the Committee on Finance (Senate Documents, 1843, No. 4), p. 31.

later, one hundred thousand dollars was granted to finance construction. Under the terms of the act, the Governor was instructed to negotiate the sale of securities, and turn the funds over to the company. In case of default, the state had the right to sell the road at auction. Voting in the House revealed a pattern of local support, while in the Senate, the same Senators from the first and third tiers opposed the loan that had opposed a loan to the Allegan and Marshall.⁷⁷

When the company applied to the Governor for its funds, it was assured that the funds would be received in separate installments in August, September, and October. Impatient for the funds, they asked for a warrant for sixty thousand dollars and received it, drawn as a check on the Michigan State Bank. When the check was presented, however, the company was forced to take drafts on the Albany Canal Bank at 118 days, instead of the Morris Canal and Bank notes promised when their securities were sold as part of the five million loan. The funds were accepted reluctantly, and deposited in the Bank of Tecumseh. Construction began, but when monthly estimates fell due in February 1839, they were unable to pay their contractors because of the Albany Canal Bank had failed, as well as the Michigan State Bank. After petitioning the Legislature,

⁷⁷Michigan, Legislative Acts, 1838, No. 84, No. 174; Michigan, Senate Journal, 1838, pp. 376, 389, 404; Michigan, House Journal, 1838, p. 430.

a further fifteen thousand dollars was granted, which the company used to pay its contractors, but in the process the company was disrupted and discredited, and many of its contractors ruined. Of \$75,000 received by the company, \$42,761 was expended in construction, and the balance lost through bank failure. Right of way had been purchased, and grubbing and grading nearly completed. Timbers for piles, ribs, caps, and sills were on the ground. A contract with the Baldwin works for two locomotives, pile driving machines, and men to run them had been negotiated, but lapsed when the company ran out of negotiable funds. Failure of the Michigan State Bank and loss of the funds it had provided in lieu of drafts on the Morris Canal and Banking Company were responsible for the loss.⁷⁸

Two efforts were made to settle the state's account with the Ypsilanti and Tecumseh. In 1840, a commission was appointed by the Legislature to secure the money due the state under the loan, but their negotiations were limited by the provision that the road could not be accepted in settlement of claims. When the commission reported, it sided strongly with the claims of

⁷⁸Michigan, Legislature, Report of the Committee on Internal Improvement, Relative to the Ypsilanti and Tecumseh Railroad Company (Senate Documents, 1840, II, No. 42), pp. 412-414; Michigan, Legislature, Report of the Ypsilanti and Tecumseh Railroad Company (Senate Documents, 1839, No. 14), pp. 393-395; Michigan, Legislative Acts, 1839, Joint Resolution No. 12.

the company, arguing that the road was due damages from the state for non-fulfillment of contract and recommending that the state take over the road. In 1841, the same commissioners were authorized to reach a final settlement.⁷⁹ No settlement was reported, however, and subsequent attempts to induce the companies granted aid to pay their debts by allowing them to purchase and return state stock produced no results. As far as I am able to determine, no settlement was ever reached.

The Detroit and Pontiac Railroad, which was discussed in Chapter III, had been completed to Royal Oak prior to 1837. Under instructions from the Legislature in 1836, Governor Mason had approached the company for the purpose of purchasing their charter.⁸⁰ The company replied that they would be willing to sell on the condition that the state would complete the road on the located route within two years, and compensate the company by paying cost plus seven per cent interest; the bank must be allowed to continue. The company made it

⁷⁹Michigan, Legislature, Report of the Commissioners appointed...to provide for a settlement with the Ypsilanti and Tecumseh Railroad Company (Senate Documents, 1841, I, No. 12), pp. 607-609; Michigan, Legislative Acts, 1840, No. 113; Michigan, Legislative Acts, No. 27.

⁸⁰Michigan, House Journal, 1837, p. 276.

clear, however, that they would prefer a loan of \$50,000 to finance immediate completion.⁸¹

Purchase of the Detroit and Pontiac was authorized by the Legislature in the spring of 1837, at cost plus seven per cent. Under the terms of the act, construction was to be completed within two years, and \$75,000 was appropriated for purchase. A tax of one-half per cent was levied on the bank's stock, and consent of stockholders in both the company and the bank required before the road could be purchased.⁸² Apparently the company rejected the terms, because in 1838, the question of aiding the Detroit and Pontiac arose again.

In March 1838, the Legislature granted \$100,000 in state bonds to the Detroit and Pontiac. In return for bonds carrying the seal of the state, and a pledge of its faith, the road was required to post a bond consisting of personal obligations secured by unencumbered real estate to the state for twice the value of the securities issued, which would be forfeited if the road failed to meet payments of interest and principal on the bonds issued for its benefit. In addition, the road was mortgaged to the state, to be sold at auction in case of failure, and the

⁸¹Michigan, Legislature, Proposition of the Detroit and Pontiac (Senate Documents, 1837, No. 27), p. 176.

⁸²Michigan, Legislative Acts, 1837, No. CXX.

road would revert to the state automatically if the company failed to complete it by May 1839.⁸³

The aid offered by the Legislature was quickly accepted by the company, which posted bond for \$200,000 secured by mortgages on real estate valued at \$242,540. The bonds consisted of personal notes of area residents secured by real estate in their possession, mostly town lots in Pontiac and Royal Oak. Thus the state substituted more negotiable public credit for that of a private company and individuals. In return, \$100,000 in state bonds due in 1858 were turned over to the corporation.⁸⁴ During 1839, another attempt was made to purchase the railroad, but failed in the House. In December, the Legislature was notified that the Detroit and Pontiac had failed to pay interest on the loan.⁸⁵

Although the Legislature moved to the brink of foreclosure several times in the next six years, it was never able to bring itself to take over the road or collect the bonds of the defaulters. In 1840, the House Committee on Internal Improvement reported favorably on

⁸³Michigan, Legislative Acts, 1838, No. 20.

⁸⁴Michigan, Legislature, Robert Abbott, AJ, SM, to the President of the Senate, 14 Jan., 1839 (Senate Document, 1839, No. 4), pp. 86-87; Michigan, Legislature, Report of the Auditor General... (Senate Documents, 1840, II, S. D. No. 56).

⁸⁵Michigan, House Document No. 14, 1840, II, 2.

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petitions from the managers, Stevens and Williams, asking the state to foreclose and lease the road to the company for ten or fifteen years. The committee reported that the road had been pulled into bankruptcy by the failure of the bank, and not by failure of the earning power of the road. About \$90,000 in bank notes were outstanding, and the road was liable for their redemption. Revenues from the road had been used to pay laborers instead of interest. When the Auditor and Treasurer advertised the road and its security for sale, Williams and Stevens petitioned the Legislature for state purchase to avoid disaster to local citizens who had posted bond.⁸⁶ Efforts to pass a bill allowing a settlement, however, failed passage in both houses.⁸⁷

In 1841, the Legislature again turned to the problem of the Detroit and Pontiac. In response to legislative inquiry, the Attorney General reported that under the terms of the mortgage, the road had already become the property of the state, and could be absorbed into the internal improvements system by simple legislative act. He recommended this action, rather than public sale, if the Legislature was determined to regain

⁸⁶Michigan, Legislature, Report of the Committee On Internal Improvement, Concerning Petitions of the Pontiac and Detroit Railroad Company (House Documents, 1840, II, No. 39), pp. 316-ff.

⁸⁷Michigan, House Journal, 1840, pp. 124, 128, 137, 169, 222, 715, 726, 732.

its funds. Refusing to comment directly on policy, he recommended that the Legislature take the course of action which would do minimum injury to those who had posted security for the road. The Legislature responded by restoring full corporate rights to the Detroit and Pontiac, regardless of forfeitures provisions in previous charters, but retained all rights given the state.⁸⁸

After 1841, the Detroit and Pontiac continued in operation, with the state mortgage hanging over its head. At least part of the state's refusal to take control stemmed from reluctance to become involved in the road's complicated corporate structure and obligations, which included notes outstanding and a debt of \$100,000 to the state of Indiana. Foreclosing on securities posted for the road would have ruined half the important people in Royal Oak and Pontiac, and was politically impracticable. In 1842, four years were granted the company to overcome its financial difficulties. In May 1846, a bill passed by the Senate attempted to force payment of debts by August, under penalty of state seizure and absorption into the system of internal improvements, but it was

⁸⁸Michigan, Legislature, Report of the Attorney General in relation to the Detroit and Pontiac Railroad Company (Senate Documents, 1841, II, No. 19), p. 19; Michigan, Legislative Acts, 1841, No. 88.

rejected by the House, forty-three to one.⁸⁹ At the close of the internal improvements era in 1846, the problem of the Detroit and Pontiac's mortgage was still unsolved.

Aid was granted to the Palmyra and Jacksonburg during the June session of the Legislature in 1837. The road had been chartered the previous year to run from Palmyra to Tecumseh, Clinton, and Jackson as a branch of the Erie and Kalamazoo. Encountering difficulties, it appealed to the Legislature for aid. The House Committee on Internal Improvement, in recommending the bill which had originated in the Senate, declared that "It ought not to operate as a precedent; but from the peculiar situation in which the company is now placed, it is proper to extend the desired relief." House voting on the issue revealed no apparent sectional or political alignment.⁹⁰ As passed, the grant provided for loaning \$20,000 at seven per cent, which was to be covered by double security. In October, the company accepted the provisions of the loan, and gave the state the desired security in tracts of land held by local residents, in addition to a mortgage for \$15,000

⁸⁹Michigan, Legislature, Report of the Committee On Finance (Senate Documents, 1843, S. D. No. 4); Michigan, House Journal, 1846, pp. 721, 727.

⁹⁰Michigan, House Journal, 1837, Extra Session, pp. 463, 466; Michigan, Legislative Acts, 1837, Special Session, No. XVI.

n expenditures already made in the road.⁹¹ Construction pushed forward, and the road was opened to horse drawn traffic on wooden rails. Between August 1838, and November 1839, a period of fifteen months, the company reported a net income of \$7,485 against an investment of \$70,000, or approximately nine per cent.⁹²

After two years of operation, the road ran into difficulties because of increasing business. The road bed was solid, but the heavy weight of freight cars transporting flour from the mills at Tecumseh was crushing its rails beyond repair, and by the end of 1840, new rails were required for the entire distance between Palmyra and Tecumseh. From Clinton to Tecumseh, the rails required only dressing. The engineer reported that the road needed iron and locomotives, and that horse locomotion was the road's greatest handicap. Without iron, it took four horses to do the work of one on an ironed road, and the expense of horse power was reported as double that of steam. Although the road transported 20,000 barrels of flour in 1840, more than half the quantity carried by either the Central or the Erie and Kalamazoo, profits

⁹¹Michigan, Legislature, Documents relative to the loan to the Palmyra and Jacksonburgh Railroad Company (Senate Documents, 1838, S. D. No. 27), p. 38.

⁹²Michigan, Legislature, Report of the Palmyra and Jacksonburg Railroad Company (House Documents, 1840, II, H. D. No. 32), p. 300.

fell to about \$2,000.⁹³ In 1840, the Legislature authorized the Board of Internal Improvement to lend iron to the road, provided it was not currently needed and the track was widened to correspond to the standard gauge of the Southern.⁹⁴

The following year, the House Committee on Internal Improvement reported in favor of purchasing the road. The Committee argued that the road could be purchased for \$24,000 by deducting sums due on loans, depreciation, iron, and two miles which would be worthless to the state, from the original cost of \$87,000. Even with the cost of placing iron on the road, it would be the least expensive route in state control, and would divert substantial traffic to the Southern.⁹⁵ The Legislature responded by repealing the iron loan, and offering to return the securities posted by the company if it would place iron on the road between the Southern and Clinton, and abandon the section between the Southern and the road's terminal at Palmyra. The offer expired in September 1842.⁹⁶ Finally, in 1844, the road was purchased by the state and incorporated into the Southern.

⁹³Michigan, Legislature, A Petition from the Stockholders of the Palmyra and Jacksonburg Railroad Company (House Documents, 1841, II, H. D. No. 26), pp. 58-64.

⁹⁴Michigan, Legislative Acts, 1840, No. 115.

⁹⁵Michigan, Legislature, Report of the Committee On Internal Improvement, Relative to the Palmyra and Jacksonburg Railroad (House Documents, 1841, II, H. D. No. 62), pp. 236-238.

⁹⁶Michigan, Legislative Acts, 1841, No. 81.

Unlike the case of the Central Railroad, other projects undertaken by the state resulted in substantial financial losses. After eight years of construction and repair, the Southern was sold for half a million dollars less than its original cost. The Northern consumed seventy thousand dollars before it was abandoned. On the Clinton and Kalamazoo, losses amounted to over \$350,000, and \$47,000 was lost on the Saginaw-Maple Canal. Loss on the canal at the Soo was nominal. Large sums were expended on rivers, but their usefulness and impact cannot be determined. Seventy-five thousand dollars disappeared into the Ypsilanti and Tecumseh Railroad. In sum, at least a million dollars was lost in these projects, money which would have completed the Central to St. Joseph and provided it with a heavy superstructure. Without the multiple projects forced on it by sectional rivalry, the state would have had one complete trans-peninsular route in operation. Multiple projects, along with bank failures, were responsible for most of the losses suffered by the state under its internal improvements program.

CHAPTER VIII

PARTY AND SECTION

Passage of a package program of internal improvements by the Legislature in the spring of 1837 failed to heal the sectional struggle which had dogged the state for a decade. Indeed, if anything, adoption of the program brought sectional jealousy to a new peak. Between 1837 and 1846, the state was split by battle after battle to appropriate funds and assign priorities to the works undertaken. For a short period in the initial phases of the depression, sectional rivalry was manifested in the form of party alignment, but geographic location predominated over political ideology in determining party strength and platforms for internal improvement. When the Democrats regained control in 1842, and each passing election added to their strength, sectional struggle continued unabated. At times, sectional alignments shifted with the locus of local self interest; west could be pitted against east in legislative battles when the stake was continuation of the works across the peninsular watershed. Finally, when the needs of the southern and central sections were being serviced, the voice of the third and

northern tiers began to cry loudly for the establishment of sectional equality.

Sectional rivalry pervaded all aspects of legislative behavior, particularly those involving the expenditure of money or providing services by the state government. For this reason, sectional alignments are most clearly illustrated by the annual struggle over appropriations. Rivalry entered other aspects of political life, of course, even to the extent of exerting powerful influences on voter behavior and political affiliation, but nowhere is the intensity of struggle as clearly illustrated as in appropriations bills.

Dust from the internal improvements battle of the spring of 1837 had scarcely settled, when sectional forces locked again in combat. In the summer and fall, gubernatorial elections kept the state in turmoil, while bank suspension and the panic of 1837 occupied the Legislature. The campaign of 1837 was spirited, but based on personal politics. Internal improvements failed to become an issue, with the exception of Whig charges that Mason would be unable to negotiate the pending loan. Supported by Whig money, Edward D. Ellis, Monroe Democrat, attempted to split the Democracy by running against Mason for Democratic Governor, but the attempt failed. In the end, Mason was able to pull through with a narrow margin of 768 votes, the smallest of any candidate in the nineteenth century.

Apparently, popular support of the young Governor had cooled since the excited days of 1835 when he was the symbol of Michigan's defiance of the federal government. Whig support in the gubernatorial contest was strongest in the second tier, the western counties of the first and third tier, and the Saginaw Bay-Thumb area. Democratic strength centered in the southern tier, two counties in the second tier, three counties in the third, and the politically insignificant northern two-thirds of the state.¹ In the Senate, William Woodbridge was the only Whig returned, with the possible exception of Vincent L. Bradford, whose political affiliation is not identified.² House returns, although not completely identifiable, exhibited marked inconsistency with votes cast in the gubernatorial contest. Washtenaw county, which had supported the Whig candidate, returned four Democrats among its seven representatives, and the remaining three are not politically identifiable. Hillsdale county, which had supported Mason, returned a Whig representative, while politically powerful Wayne county returned three Democrats and five Whigs, proving the fallacy of basing an analysis of legislative voting patterns on county returns in

¹Hemans, 297-312; Streeter, p. 10; Michigan Manual, 1911, p. 464.

²The method used for determining political affiliation is described in Chapter V.

gubernatorial contests. In the intensely personal world of local politics, split tickets were apparently not uncommon.

When the Governor addressed the new Legislature in January 1838, he urged caution in appropriating moneys for the coming year. Delay or neglect by county officers in collecting taxes had put the state in debt, expenditures for internal improvements had been heavy, and Mason, who had seen the condition of the New York money market on his two trips east to negotiate the five million loan, warned against the state's undertaking any new projects. The loan itself, would require the strictest government economy, and revenues from the projects would be slender for "some time to come." Since he considered direct taxation out of the question, he suggested that the Legislature create a sinking fund based on the projects' revenues, and any other funds available. As an alternative, he proposed state investment in bank stock, or the chartering of a state bank to gain revenues for the sinking fund. Finally, he urged the Legislature to petition Congress for a grant of half a million acres of land for internal improvements, and one section for each mile of roads begun by the federal government.³

³Messages of the Governors of Michigan, I, 219-236.

The Legislature, however, had other plans in mind. Even before the session of 1838 officially opened, rumors were in the wind of a second-tier conspiracy to concentrate on the Central at the expense of the state's other projects. In December, Alpheus Felch was forced to write his new wife that he would be detained in Detroit for some time to stop an attempt in the making to prevent the Southern from succeeding, and that he could not leave while "our Southern interests" were in danger.⁴ On March 21, Gantt, of Oakland county, rose on the floor of the House and hurled charges of conspiracy at the central tier. In the preamble to his resolution, Gantt insisted that the system of internal improvements was a Democratic program, and a compromise between "the north, south, & Center interests of the people," supported by the Governor and his party. That program was in danger from a few "professed democrats," and most of the Whig members, who were accused of meeting in secret caucus in Detroit and resolving to "defeat the proper and rightful interests of the people of the northern, southern and western divisions of Michigan." According to Gantt, the conspiracy was attempting to choke off appropriations for all projects except the Central, on order to enrich the second tier and expand the fortunes of the Whig party in Michigan. Gantt

⁴Letter from Alpheus Felch to Lucretia Felch, December 14, 1837, in Felch Papers (MHC).

characterized the conspiracy as "a dark and injurious stab at the principals [sic.] of the executive, the democracy of Michigan," and offered a resolution pledging to support only a bill appropriating money according to the ratio of population in counties benefited by the expenditure.⁵ Although Gantt's resolution was tabled, it was allowed to remain in the public record, in spite of attempts to have it removed.

A week later, debate on the House appropriations bill opened in earnest. During the first day of debate, repeated attempts to gain appropriations for the Northern Railroad stalled the bill's progress, and a Senate version was rejected. When the House returned to its own bill, the original version was rejected in favor of a substitute drafted by Robert McClelland, a powerful Monroe Democrat. Finally, after fighting out appropriations for several projects on the floor of the House, the bill was adopted on March 29, by a vote of 31 to 19. The following day, the Senate accepted the House bill by a vote of 10 to 5.⁶ As passed, the bill provided \$350,000 for the Central, an equal amount for the Southern, \$205,000 for the Clinton and Kalamazoo, and substantial appropriations for the Northern, canals, and rivers.⁷

⁵Michigan, House Journal, 1838, pp. 200, 320, 328.

⁶Ibid., 368-385; Michigan, Senate Journal, 1838, pp. 327, 329, 330.

⁷Michigan, Legislative Acts, 1838, No. 56.

Voting on the appropriations bill in both the House and Senate revealed a distinct pattern of sectional rivalry. Opposition to the bill came most strongly from the central tier, with only one county's representative voting in favor. The western end of the third tier joined the central in opposition, while delegates from two counties in the southern tier divided their votes. Support came most strongly from the southern tier of counties, and the eastern portion of the third tier. Although voting followed roughly the pattern exhibited in the gubernatorial election of 1837, section, rather than party exerted the dominant force on voting. Two out of three of Wayne County's Democratic members voted with their Whig colleagues, while in Washtenaw county, three of the four identified Democrats voted with the central section. In the south, Hillsdale's lone Whig delegate voted with the southern section. Although a few representatives in each tier voted against their section and supported the dominant elements in their party, it is apparent that sectional considerations exerted the decisive influence. In the upper house, while all four votes against both the Senate and House appropriations bills came from representatives of the second tier, three of the four votes were cast by Democrats.⁸

⁸Michigan Senate Journal, 1838, pp. 296, 315.

Attempts were made in both houses to place financial responsibility for public works on the sections benefited by their construction. In the House, delegates from the central tier attempted to amend the bill to read:

And in case the revenue arising from either of said railroads or canals, should prove insufficient to pay the interest on appropriations expended on the same, the tier of counties through which such railroads or canals shall be located, shall alone be liable for the payment of the interest on all appropriations heretofore, now, or hereafter to be made on such railroads or canals.⁹

The amendment was rejected 19 to 29, supported by the same group of delegates who later voted against the appropriations bill. A similar amendment was successfully attached to a Senate bill appropriating money for river improvement, but the bill failed to pass the House. Senate voting on the amendment revealed no clear-cut sectional alignment.¹⁰

Efforts were made during the same session to gain a federal land grant to finance state projects. The Senate Committee on State Affairs, chaired by William Woodbridge, examined the question in detail, and came to the conclusion that the state was entitled to grants at least equal to those granted to other states, and that in reality all the public domain within its boundaries belonged to Michigan. Recognizing that application should never be based

⁹Michigan, House Journal, 1838, p. 380.

¹⁰Michigan, Senate Journal, 1838, p. 344; Michigan, Legislative Acts, 1840, Joint Resolution No. 5.

on claims to right alone, however, the committee offered economic justification for federal appropriation.¹¹ At about the same time, Woodbridge, Michigan's leading Whig, put pressure on Senator Norvell to press for appropriations, expressing fears that the state would have to suspend its program unless federal lands were granted:

By casting your eye over the map you will discover this material fact--that almost all the appropriations this state has made, are principally confined to the Southern part of our state--and such is, & doubtless will be the relative strength of local interests here for some time to come, that they will probably be confined to that portion of our State--very greatly to the injury of Detroit."

Woodbridge suggested that Norvell work for a grant to finance construction of a canal from Detroit to the mouth of the Grand River.¹² By itself, Woodbridge's appeal is simply another letter from a local politician to his federal Senator, but in the context of the internal improvements struggle it illustrates the ease with which the powerful Wayne county Whig could cross political barriers and appeal to Detroit's leading Democrat for aid in projects which would mutually benefit their constituencies.

At the end of the session the state was reapportioned, but sectional balance was not disturbed. Representation in the House shifted slightly in favor of western

¹¹Michigan, Legislature, Report of the Committee on State Affairs, . . . (Senate Documents, 1838, S. D. No. 32), pp. 431-450.

¹²Letter from William Woodbridge to Hon. John Norvell, March 9, 1838, Woodbridge Papers (BHC).

counties, but neither the southern nor the central tier suffered changes in the number of ballots cast by their sections.¹³

Elections in the fall of 1838 weakened the Democrats' hold on the Legislature. Whig campaign efforts focused attention on national issues, the governor's negotiation of the five million loan, and money found missing from the parcel carried back by the Governor from New York when negotiations had been completed. Whig candidates demanded a full investigation; Democratic candidates concentrated on the sub-treasury and a proposed project for a state bank. When elections were over, the Whigs had managed to increase their foothold in the Senate to six of its seventeen members, and captured twenty-one of fifty seats in the House.¹⁴

The Governor's annual message, delivered in January 1839, was full of optimism and hope for the program. Both the Central and Southern were reported progressing satisfactorily, and the canals were either being built, or contracts being awarded. Receipts on the Central, opened the previous February, were so encouraging that Mason predicted the road would yield an income "beyond our most sanguine expectations." He warned the Legislature, however, to use caution in appropriating

¹³Michigan, Legislative Acts, 1838, No. 82.

¹⁴Hemans, pp. 449-450.

funds. The system already authorized encompassed 1109 miles of public works at an estimated cost of \$7,794,430, exclusive of cars, locomotives, and machinery, and estimates showed signs of being low. Finally, after presenting documents explaining his negotiation of the five million loan, he asked for a full investigation.¹⁵

The appropriations bill passed in 1839 without serious incident. Equal appropriations of \$100,000 were provided for the Central and Southern, and money was provided for improvement of the Grand River and the canal at Grand Rapids. Although Floyd Streeter in his study, Political Parties in Michigan, 1837-1860, has left the impression that sectional struggles similar to those in 1838 dogged attempts to appropriate funds, such struggles are not apparent in the records of the House and Senate.¹⁶ Neither considerations of party nor section raised serious obstacles to the bill, which passed by comfortable margins in both houses: 12 to 4 in the Senate, and 31 to 12 in the House. Less than half the House Whigs voted in the negative, and opposition was almost equally distributed between the eastern ends of the second, and third and fourth tiers. Senate opposition centered in Whigs from

¹⁵Messages of the Governors of Michigan, I, 245-247.

¹⁶Streeter, p. 13.

Wayne and Washtenaw counties, but again the bill passed by comfortable margins.¹⁷

The focus of legislative attention shifted in the session of 1839 from appropriations and sectional struggles to fratricidal battles within the Democracy. Investigations into the conduct of Mason and the Board of Internal Improvements cleared Mason of charges leveled by the Whigs in the elections of 1838, but attacks on the Board of Internal Improvement struck at the heart of the controlling faction of the Democratic party.¹⁸ Early in 1838, thirty "Friends of the State Administration" had petitioned the Governor to appoint an entirely new board whose "purity" had not been contested, but Mason had refused to heed their warning. A year later, a committee of investigation reported on the accounts of the Board, revealing misconduct prejudicial to the state administration. After a "very arduous and somewhat exciting investigation," the committee reported that accounts of commissioners constructing the Central failed to coincide

¹⁷Michigan, House Journal, 1839, pp. 634-663, 658; Michigan, Senate Journal, 1839, pp. 503-511; Michigan, Legislative Acts, 1839, No. 116.

¹⁸Michigan, Legislature, Report of the Joint Select Committee to Investigate the Negotiation of the Five Million Loan (House Documents, 1839, H. D. No. 44), pp. 705-708. Cited Hereafter as House Document No. 44, 1839. Petition of "Friends of the State Administration," April 2, 1838, in Records of the Executive Office, 1810-1910: Reports: Board of Internal Improvements, 1838-1841 (Michigan Department of State, Historical Commission Archives).

with reported expenditures. David McKinstry, former commissioner on the Central, was accused of falsely reporting \$35,000 of funds expended for construction, and giving \$3,000 in merchandise purchased with state funds to a store in which he was a partner. Then, in what the committee called "another very objectionable feature in the transactions," he purchased the same goods from the store and charged them to the state. McKinstry was also accused of purchasing large numbers of horses, cattle, and swine with state funds. As the committee phrased it, "A more outrageous transaction than this, if evidence can be relied upon, can scarcely be contemplated, and one which would draw down a severe rebuke upon a more humble individual." McKinstry's successor, James B. Hunt, was similarly found guilty of dishonest practices. Hunt was accused of paying for bridges over the Clinton and Kalamazoo before the canal was excavated, and purchasing blankets he knew to be smuggled in from Canada. Laborers were paid in depreciated notes. Levi Humphry, commissioner of the Southern, was accused of being \$23,000 in error in his vouchers. Although Humphry was cleared by a special Committee, and Hunt presented a case in his defense, the damage was already done.¹⁹ McKinstry, the former chairman

¹⁹Michigan, Legislature, Report of the Majority of the Committee of Investigation into the General Accounts and Proceedings of the Board of Internal Improvements, Made April 9, 1839 (House Documents, 1839, H. D. No. 47), pp. 747-817. Cited hereafter as House Document No. 17, 1839.

of the state Democratic committee, and Hunt, president of the state Democratic convention in 1837 and a strong candidate for Democratic Congressional nominee, were thoroughly discredited.²⁰ Hunt accused the committee of attacking him for political reasons, and was quite indignant. But, as he said, "Already the report has spread to other states, that another loco-foco sub-treasurer has taken his departure for Texas, that Judge Hunt, . . . has gone to the land of promise."²¹ The attacks, clearly motivated by the desire of out-state Democrats to unseat Mason and his Detroit administration, did their work. By the end of the session, Kingsley S. Bingham, Democratic Speaker of the House, was able to report to Alpheus Felch that the investigations which had been entered into to create political capital had turned in their favor.²²

During the session of 1839, the party was split into a third faction by attempts of Warner Wing to gain appointment to the United States Senate. Wing's failure to be nominated for Congress at the state convention in the fall of 1838 had threatened an open break the previous year, but difficulties had been smoothed over. Wing's faction, however, was determined to make him Lucius Lyon's

²⁰Hemans, pp. 297, 310.

²¹Michigan, House Document No. 1839, pp. 747-817.

²²Letter from Kingsley S. Bingham to Alpheus Felch, March 20, 1839, in Felch Papers (BHC).

successor in the Senate, and refused to compromise until the party was so badly divided that no successor was elected. Although another resident of Monroe was put forward as a candidate for the office, the party was unable to reach a compromise, and entered the fall elections badly divided.²³

In the central tier, secret opposition developed toward the Democratic candidate for governor, and influential members of the party worked against his election. The politically powerful Edwards family of Kalamazoo county, for example, was accused of working for Farnsworth's defeat, and throwing the election to the Whigs. Opposition within the party was thought to extend through the entire central tier from Washtenaw to Kalamazoo county.²⁴ After a campaign lacking in spirit, the Democracy was swept from control of the state for the first time since 1828. Carrying the central tier with the exception of Wayne and Van Buren counties, the third tier with the exception of Livingston county, the thumb, and three counties in the southern tier, the Whigs were swept into

²³Ibid.; Letters from Lucius Lyon to M. J. Bacon, Feb. 25, 1839; Lucius Lyon to S. Haight, Sergeant-at-Arms, U.S. Senate, April 3, 1839; and Lucius Lyon to Allen Hutchins, April 16, 1839, in Lucius Lyon Papers, MP&HC, XXVII (1896), 519-522.

²⁴Letters from Lucius Lyon to E. Phaphro, Ransom [sic.], July 13, 1839; Lucius Lyon to Elon Farnsworth, November 1, 1839, and November 8, 1839; Lucius Lyon to John P. Richardson, November 29, 1839, Ibid., pp. 424-528.

power. In addition to the governor's office, they had captured control of both branches of the Legislature.²⁵

Unlike the Democracy, the Whigs entered the campaign of 1839 at a peak of organizational efficiency. Shouting slogans of "Woodbridge, Gordon, and Reform," the Whigs effectively mastered the political techniques that were to topple Van Buren and the national administration a year later. Ruthlessly exploiting financial difficulties encountered by the Democrats, the Whigs proclaimed the state bankrupt and called loudly for reform. Charging the Democrats with plundering the treasury they claimed that over half a million dollars, five times the state's current revenues, would have to be raised to retain solvency. Criticizing the Democrats' appropriation of \$80,000 from the internal improvement fund, they pledged themselves to shift that debt to the general fund, leaving the former unimpaired. Democratic management of internal improvements was pictured as wasteful and ruinous. The Whigs criticized terms of negotiation of the five million loan, particularly the payment of interest on unpaid installments, and claimed that only one-fourth of the funds had been expended in ways that would bring returns for payment of interest. The situation was so bad

²⁵Streeter, p. 13.

that only a Whig administration could pull the state through the crisis.²⁶

With elections over, Whig leadership began to alter their position even before succeeding to power. Moderates within the party advised Woodbridge that complete reform was not acceptable to most of the electorate, and they would be content with partial changes. Abolishing a few offices and a slight reduction of government salaries would satisfy most of the people. Major policy differences between Whigs and Democrats centered on the question of salaries and offices. Franklin Sawyer, one of Woodbridge's lieutenants, advised the Governor-elect that although Whigs stood for construction of a judicious and economical system of internal improvements, and it was questionable if any system could be judicious and economical under current conditions, public opinion would not stand for a complete halt in the program. Sawyer favored stopping the Clinton and Kalamazoo, but urged continuation of the Southern to Hillsdale to make funds already expended productive. The Central should be pushed on to completion as rapidly as possible. Sawyer similarly advised Woodbridge against cancellation of the five million loan. The Democrats would attempt to force

²⁶ An Appeal to the People of Michigan (1839), political pamphlet in the possession of the Michigan Historical Commission, in a miscellaneous bound volume entitled Documents which is currently uncatalogued.

the Whigs to increase taxation, undermining their popular support. Since they had already avoided taxation by drawing on the general fund, the Whigs would be forced into the contradictory position of cutting expenditures and increasing taxes unless they held on to at least another year's installments to finance state spending. "It is easier to pay interest on the state expenses than the whole amount of these expenses."²⁷

By mid-December, Woodbridge had begun to adopt Sawyer's position. It was advisable, he wrote one correspondent, to always take the middle ground between the profligate office seeker and the oppressed tax payer. While reckless spending was to be avoided, so was heavy taxation, and "blighting & unprofitable parsimony!"²⁸ Woodbridge was perplexed, but privately against suspension of the public works:

There seems to me to be no subject connected with the administration of our state govt more perplexing than that which relates to our Internal Improvement system--Every view which can be taken of it seems obscured by difficulties.--One thing however seems certain,--and that is that "ways & means" cannot, and probably for many years, be obtained, to consummate the plan undertaken.--On the other hand, principles of just economy & prudence, would seem to condemn utterly the idea of a total loss of all the labour and materials hitherto at so immense expense applied to & obtained for the purpose of completing these great works!

²⁷Letter from F. Sawyer to Wm. Woodbridge, November 28, 1839, Woodbridge Papers (BHC).

²⁸Letter from William Woodbridge to Oliver Johnson, December 5, 1839, Woodbridge Papers (BHC).

A moderate course, of completing the work most likely to produce, meaning the Central between Ann Arbor and Jackson, would be defeated by local interests in the north and south:

What charges of gross injustice will be urged against those who for the exclusive benefit of the central region, would subject the people of the north and south to the consequences of so heavy Disbursements! --This world must be taken as it is--and it is not wise to contend for that which we know is beyond our reach.

Instead, Woodbridge favored appropriations for completing the Central to Jackson, the Southern to Adrian, and turning the Northern into a good wagon road. Although the present system would have to be abandoned, he hoped a new, less expensive one could be salvaged from its wreckage.²⁹

Woodbridge's annual message to the Legislature was less moderate than his private correspondence. The new Governor cast serious doubts on the wisdom of constructing public works at all, when goods could be shipped by the Great Lakes, and made it clear that he thought the federal government, and not the state, should be responsible for the program's completion. In time, works promising to bring a good return should be completed, but in the interim, the Governor advised ceasing all disbursements and suspending further construction. All laws relating to internal improvements should be repealed,

²⁹Draft of a letter from William Woodbridge to "Dear Sir," December 12, 1839, Woodbridge Papers (BHC).

except those relating to railroads already running cars. Installments on the five million loan, however, should continue to be received.

Woodbridge estimated that the state had a surplus wheat production of three million bushels rotting because there was not enough money in circulation to buy and transport it. The new State Bank, chartered in 1839, was unable to open because of specie shortages, and when the United States Bank of Pennsylvania suspended, most Michigan banks followed its example. The Governor proposed that installments on the five million loan be mortgaged to sound banks to expand currency in the state and move its wheat to market.

Taxation to finance the works and stabilize finances was to be avoided at all costs. In addition to the fact that Woodbridge regarded direct taxation as a national resource, taxes were already regarded as burdensome in the extreme. The burden, however, was not in state taxation, but on the township and county level. While state and county taxes on a section of land were only \$6.40, township taxes might be as high as \$40.00. Woodbridge made it clear that before the state could resort heavily to direct taxation, local tax structures would have to be reformed.³⁰

³⁰Messages of the Governors of Michigan, I, 275-286, 308-316.

If Woodbridge's public pronouncements in January 1840, were more strongly in favor of retrenchment and reform than his private views, they were not substantially different from those put forward by Mason at the same time. In a farewell address, which the Legislature refused to allow him to deliver, the former governor admitted that the state had extended itself beyond its capacity, and in common with other states, would be forced to undertake corrective measures. He deplored the fact that party politics had been focused on internal improvements, and asked the Legislature to seek a non-partisan solution to the state's difficulties. In common with Woodbridge, however, he doubted the wisdom of direct taxation, called for reform in local taxes, and asserted the state's right to a federal grant. His only major divergence from Woodbridge's announced policy was a recommendation that if works were suspended or abandoned, a proportionate part of the installments due on the five million loan should also be cancelled.³¹ Even in this, Mason was in line with Woodbridge's election campaign policy, and his attempts to cancel the loan in the fall and winter of 1839, for which he was pilloried by a Whig committee of investigation, was in line with announced Whig policy prior to their assumption of power.³²

³¹Ibid., 275-286.

³²See Chapter IX.

Immediately after its organization was completed, the new Whig Legislature began vigorously to pursue the question of suspension. Records of the House and Senate are badly scrambled, apparently due to the inability of the new Whig clerks to discover an adequate system of keeping minutes. They are sufficiently clear, however, to reveal the fact that Streeter was seriously in error in his judgment of events leading to the act of suspension. According to Streeter, political patterns in the vote to suspend followed patterns previously apparent, reflecting voter behavior in the gubernatorial election of 1839. His citation, however, is to the wrong bill, for neither house recorded voting on the joint resolution suspending internal improvements. Moreover, Streeter has referred to the bill as a "Resolution to discontinue work on internal improvements," while the bill he analyzed was designed to discontinue new contracts, as was the bill actually passed.³³

Neither Woodbridge nor the Whig Legislature had any intention of discontinuing works of internal improvement. On January 15, a week after his address, Woodbridge sent a special message to the Legislature, asking them to launch a full investigation of the program, and suspend the Board's authority to enter into new contracts

³³Streeter, pp. 13-15; Michigan, House Journal, 1840, p. 73; Michigan, Senate Journal, 1840, p. 96.

until ways and means could be provided. The Legislature responded with a Joint Resolution suspending proceedings by the Board, and authority to enter new contracts or re-award contracts which had expired.³⁴ Under the Federal Constitution, the state was unable to pass laws impairing contracts, and as a party to the contracts was liable for damages if they were broken. What Woodbridge and the Legislature were attempting to discontinue was the awarding of further contracts by the Democratic Board of Internal Improvements. Under a revision of the law in 1839, members of the Board were appointed for three year periods, and faced with Whig control and possible suspension, the Board had pushed to commit the state as far as possible into contractual obligations. In April, regulations controlling the structure and functioning of the Board were altered, and a new Whig Board appointed. After an initial skirmish with the former commissioners, who filed protests against the legality of their removal, the new Board continued construction in much the same manner as the former body, even reawarding expired contracts in order to complete sections remaining unfinished. When appropriations were expended, the Board decided to continue construction, leaving the Legislature the problem of providing funds,

³⁴Michigan, Legislature, Governor William Woodbridge to the Senate and House of Representatives, January 15, 1840 (House Documents, 1840, II, H. D. No. 16), pp. 122-123; Michigan, Legislative Acts, 1840, Joint Resolution No. 15.

and its authority was never seriously questioned.³⁵

Attempts to repeal the Internal Improvements Act were tabled in the Senate, and never given serious consideration.³⁶ When funds were exhausted in July, Woodbridge chose to suspend final judgment on damage claims stemming from construction in preference to stopping the works, and promised merchants to intercede with the Legislature for iron appropriations in order to get shipments ahead of payment.³⁷

When the Legislature attempted to pass an appropriations bill in 1840, it was blocked by conflicting sectional and local claims. Reports delivered in the Senate and House revealed a remarkable willingness on the part of legislators to contract the program and push forward a single work to completion. The sole area of disagreement was whose projects were to fall under the axe of public economy; representatives of each area submitted bids for the completion of their constituents special

³⁵Michigan, Legislative Acts, 1839, No. 103; Michigan, Legislative Acts, 1840, No. 63; Michigan, House Document No. 3, 1841, pp. 154-156.

³⁶Michigan, Senate Journal, 1840, pp. 105, 107, 121, 131.

³⁷Letter from William Woodbridge of Mess. Hicks & Co., August 17, 1840, in Records of the Executive Office, 1810-1910: Correspondence (Michigan Department of State, Historical Commission Archives). Letter from William Woodbridge to Mead, Williams and Hart, July 20, 1840, in Woodbridge Papers (BHC).

project.³⁸ When the appropriations bill was submitted to the Senate, attempts were made to attach provisions for every project undertaken or discussed in the state since 1834, but all were defeated by a large margin, and the bill finally passed 10 to 6. With the exception of one vote, all opposition came from the first and third tiers of counties.³⁹ Contents of the bill were never fully revealed, but it is apparent from committee reports and house debates that it allocated funds primarily to the Central.⁴⁰ In the House, repeated attempts were made to add to and change appropriations in the bill. Roll call votes followed one after another as the House groped for a viable formula to satisfy local demands, and alignments changed continuously in kaleidoscopic fashion as local interest groups attempted to muster support for their projects. Finally, an agreement of sorts was reached on the last day of the session, when \$100,000 was appropriated for the Southern, and \$300,000 for the Central.

³⁸Michigan, Legislature, Report of the Select Committee on the Five Million Loan . . . (Senate Documents, 1840, II, S. D. No. 63), p. 553; Michigan, Legislature, Report of the Select Committee on Public Improvement, & c. (Senate Documents, 1840, II, S. D. No. 61), p. 554; Michigan, Legislature, Report (Senate Documents, 1840, II, S. D. No. 64), pp. 558-559; Michigan, Legislature, Report (House Documents, 1840, II, H. D. No. 64), p. 565; Michigan, Legislature, Report of the Committee on Ways and Means (House Documents, 1840, II, H. D. No. 69), pp. 594-596.

³⁹Michigan, Senate Journal, 1840, pp. 562-567.

⁴⁰Michigan, House Document No. 69, pp. 594-596.

The bill was killed, however, when the House refused by a vote of 27 to 18 to suspend its rules in order to allow both third reading and final passage on the last day of the session. Analysis of voting reveals no pattern of party-line voting. Instead, Whigs and Democrats voted together according to the sections they represented. Support for the bill came from the central tier and the western counties of the first and second tier, while opposition was concentrated mainly in the eastern half of the northern and southern counties.⁴¹ Even in a Legislature dominated by Whigs, the purportedly Whig Central Railroad was unable to muster enough votes to continue construction because local interest proved stronger than party affiliation in determining legislative policy.

Local interest and disappointment in the central tier led to petition drives and public meetings to encourage the Governor to recall the Legislature to make appropriations for internal improvements. Most leading Whigs, however, counseled Woodbridge against the move. Townsend Gidley, Whig Senator from Jackson county, the next point on the Central's route, was strongly against recalling the Legislature. Warning the Governor that once the road was completed to Jackson, most of his supporters there would desert him, Gidley thought it best to wait a year and allow events to develop. Groups

⁴¹Michigan, House Journal, 1840, pp. 693-722.

supporting extension of the Central, he warned the Governor, were seeking their own advancement, and not the good of the party.⁴²

Attempts were made to reform the state's tax structure, but through 1840, the Whigs proved unable to construct a workable system. At Woodbridge's request, a tabular statement of state, county, and township taxes was drawn up, and the Senate conducted a full investigation.⁴³ The committee expressed the belief that a limit had been reached in the weight of local taxes, and a bill was passed limiting road assessments to one day at \$.625 per hundred dollars assessed valuation for roads. The act, however, failed to deal with basic problems of tax allocation.⁴⁴

In the fall of 1841, Whig forces swept the state for Harrison, in a victory so decisive that leading Democrats expressed fears that Michigan had permanently gone Whig.⁴⁵ Elections to the Legislature were not as decisive, however, with Whig control hanging on a narrow margin capable of being upset by factional differences within the party. Even before the national standard

⁴²Letters from A. S. Porter to Wm. Woodbridge, May 23, 1840; Townsend Gidley to William Woodbridge, May 15, 1840, in Woodbridge Papers (BHC).

⁴³Michigan, Legislature, Report of the Committee on Roads and Bridges (Senate Documents, 1840, II, S. D. No. 30), pp. 292-293; Michigan, Legislative Acts, 1839, Appendix 9, p. 262.

⁴⁴Michigan, Legislative Acts, 1840, No. 59.

bearer was inaugurated, control of the state had slipped through the fingers of the Whigs.

Early in 1841, the question of electing a United States Senator came before the Legislature. Woodbridge had been actively campaigning within the party since the fall elections, and his supporters, convinced that the Detroit faction of the Whig party would not elect him, began turning to the Democrats for support. Richard Butler, Woodbridge's chief lieutenant in Oakland county, advised him in December that he could bring about a coalition with Oakland County Loco focos, if Woodbridge would refuse to take decisive action on the public works and let the Legislature take the blame for whatever developed.⁴⁶ In February, Woodbridge was elected by Democratic legislators supported by a few conservative Whigs.⁴⁷ His election, however, angered other Whig factions and tore party unity apart.⁴⁸ By a brilliant stroke of policy, the Democrats had split the majority party and exiled their chief opponent in Washington.

In his annual message to the Legislature, Woodbridge took a stronger line than Butler advised toward internal improvements. Woodbridge was privately convinced,

⁴⁶Letter from Richard Butler to Wm. Woodbridge, December 26, 1840, in Woodbridge Papers (BHC).

⁴⁷Streeter, p. 40.

⁴⁸Letter from S. V. R. Trowbridge to Wm. Woodbridge, February 26, 1841, in Woodbridge Papers (BHC).

and stated his conviction, that the state was obligated to finish the Central under the terms of its purchase from the Detroit and St. Joseph and that the Central would be the most profitable work among the state's projects. Expressing the belief that when completed, the road could pay interest on the entire internal improvements debt, he recommended concentration of the state's resources to extend the road to its western terminus. In addition, he asked the Legislature to consider completing improvements on the St. Joseph River and constructing a canal across the loop cast by the river where it ran briefly through Indiana, if the state of Indiana refused to cooperate in its improvements.⁴⁹

Appropriations were passed in 1841 with little difficulty. Early in the Session, the Senate Internal Improvements Committee submitted a report recommending concentration of resources in the Central. Emphasizing the crisis faced by the state and increasing the estimated cost of the whole system to twenty million dollars, the committee argued that the "idly cherished hope of carrying a railroad to every man's door, . . ." would have to be abandoned forever, "or the last hope of Michigan will have been taken from her: our farmers will be driven from their farms, and our lands sold for taxes."

⁴⁹Draft, William Woodbridge to "Dear Sir," December 8, 1840, in Woodbridge Papers (BHC).

TABLE 7.--Internal improvements appropriations, 1837-1845.a (Thousands of units)

	1837 ^b	1838 ^b	1839 ^b	1840 ^b	1841 ^b	1842 ^b	1843 ^c	1844 ^c	1845 ^c
Central RR	400	350	100		450		150	64	20
Southern RR	100	350	100		200				
Northern RR	50	60	40						
Soo Canal	25	25							
Clinton Canal	40	205	60		25		16	16	5
Saginaw Canal	15	47							
Grand & Maple Rivers		30							
Kalamazoo River		8							
St. Joseph River			25				5	10	
Grand Rapids Bridge								6	
Tecumseh Branch RR									10
River Raisin & Lake Erie RR				32.5					
Havre Branch RR	20								
Surveys	20								
Salt Springs		3	15	5		15			
Detroit & Pontiac RR	75	100							
Allegan & Marshall RR		100							
Ypsilanti & Tecumseh RR		100							
Palmyra & Jacksonburg RR	20								
Total	765	1,378	340	37.5	675	15	171	96	35

^aMichigan, Legislature, Acts, Nos. (1837), LXVII, LXXV, CXX; (1837, Special Session), XVI; (1838) 20, 55, 56, 91, 121, 174; (1839) 116; (1840) 92, 100; (1841) 13; (1842) 10; (1843) 24; (1844) 50; (1845) 15.

^bDollar appropriations.

^cAppropriations in acres of land.

By expending all resources on the Central, the committee argued, the road could be brought to a condition capable of paying the entire interest on the five million loan. Although the committee, under the chairmanship of Townsend Gidley, repeated Woodbridge's sentiments exactly, the bill submitted met a quiet death in the Senate.⁵⁰

In the House, the Committee on Internal Improvements submitted an appropriations bill which passed by a margin of 32 to 12 after the usual attempts to add appropriations for local interests by political logrolling; no serious threats developed to the bill's passage. Opposition centered in the four eastern counties of the third tier, with three votes added from Monroe and Branch counties in the southern tier. At least 11 of the 12 opposition votes were cast by Democrats. Oakland county, normally a Whig stronghold, had returned a solid block of Democrats in the fall elections who voted against a bill failing to appropriate funds for the Clinton and Kalamazoo Canal. In the upper house, a small group of Whig and Democratic Senators attempted to block the bill's passage and add appropriations for several local projects. They failed, however, and the bill was approved by a

⁵⁰Michigan, Legislature, Report of the Committee on Internal Improvement (Senate Documents, 1841, II, S. D. No. 17), pp. 14-16; Michigan, Senate Journal, 1841, pp. 115, 166, 168, 172, 180.

margin of 12 to 5.⁵¹ As passed, the bill provided \$450,000 for extension of the Central to Jackson and Kalamazoo, and \$200,000 for completion of the Southern to Hillsdale.⁵²

Passage of the appropriations bill of 1841 marked a major turning point in legislative policy toward its public works. For the first time since 1837, a bill awarding unequal appropriations to the Central and Southern had been able to pass the House, and the opposition had been able to summon only three votes from the southern section. Moreover, the language of the bill was specific in awarding funds to the Central for continuation and the Southern for completion to Hillsdale. As written, the bill implied authority for the Board to award contracts for continuing the Central west of Jackson. It is apparent that for the present, at least, the south had accepted the fact that only one road could be completed, and that it would be the Central, not the Southern.

Attempts to link the Central and Southern to railroads projected west along the southern shore of Lake Erie were soundly defeated in the Legislature. In March, the Board of Internal Improvement forwarded a request from agents of the Ohio and Maumee Branch railroad for a loan

⁵¹Michigan, House Journal, 1841, pp. 267-276, 315, 332, 335; Michigan, Senate Journal, 1841, pp. 206, 215, 216-217, 228, 240-241.

⁵²Michigan, Legislative Acts, 1841, No. 13.

of \$25,000 to purchase iron, accompanied by the Board's strong recommendation for its passage. Promising to bypass Toledo and draw business over the Southern and Central to Ohio, the company asked the Legislature to risk its funds for iron only after the superstructure was completed, securing the loan by a mortgage on the entire road bed. The Board was enthusiastic because the line would connect the state's roads with major routes of east-west communication, and give the state an advantage over its powerful rivals.⁵³ The House Committee on Internal Improvements was equally enthusiastic, and reported the request favorably. When a bill was submitted, however, the Ways and Means Committee reported itself firmly opposed, characterizing the request as an attempt of private enterprise to participate in the spoils of the state. The bill was tabled and allowed to die, but its failure marks a second significant turning point in the state's public policy.⁵⁴ Unlike petitions for aid presented the state in 1837 and 1838, passage of the grant would have involved little risk to the state. The company

⁵³Michigan, Legislature, Communication from the Commissioners of Internal Improvement (Senate Documents, 1841, II, S. D. No. 33), pp. 65-57.

⁵⁴Michigan, House Journal, 1841, p. 494. Michigan, Legislature, Report of the Committee on Internal Improvement (House Documents, 1841, II, H. D. No. 71), pp. 269-270; Michigan, Legislature, Report of the Committee on Ways and Means (House Documents, 1841, II, H. D. No. 80), pp. 284-285.

was asking for aid only after the road was completed and ready for operation. State risk was minimized by a mortgage on an investment ten times as great as funds requested, and the road would have bypassed the Erie and Kalamazoo, a major source of loss to the Southern. Its summary rejection by the Committee of Ways and Means marked the end of state participation in joint enterprise.

The act of suspension passed by the Legislature in 1840 continued in effect through 1841. Late in April, a bill passed the Senate authorizing the Board of Internal Improvement to award new contracts for construction. The bill was defeated in the House by a narrow margin.⁵⁵

After Woodbridge's elevation to the Senate, significant political changes developed. The last shreds of Mason's influence outside Detroit were torn away by a legislative report examining "the question of corruption in governor Mason," which found him guilty of blatant misconduct in the negotiation of the five million loan.⁵⁶ Leadership of the liberal wing of the Democratic party passed from the hands of its Detroit leaders Norvell and Mason, to be taken over by out-state forces led by Kinsley S.

⁵⁵Michigan, House Journal, 1841, pp. 668, 669, 696.

⁵⁶Michigan, Legislature, Report of the Committee on Finance (Senate Documents, 1841, II, S. D. No. 37), pp. 86-146. Cited hereafter as Senate Document No. 37, 1841.

Bingham.⁵⁷ At the same time, Whig forces were wasting themselves with factional infighting. After the close of the legislative session, Detroit Whigs, known as the "Canandaigua Clique" joined forces with Democrats led by the Monroe faction of Humphrey, Miller, and Smith to control federal patronage. John Van Fossen, Woodbridge's Commissioner of Internal Improvement, complained to his chief that:

The Canandaigua clique as it is termed, is but a branch of the Monro faction & with professions of oposition [sic.] in politicks, is at all times ready to serve their Monro Allies--They are all powerful in the P. Office dept--But it sickens me to look at the condition in which we are placed: A Whig administration & a Whig board of Internal Improvement, actually and absolutely ruled & directed by Levi S. Humphry, without a whimper of insubordination or even a show of dissatisfaction--

Nothing, he complained, was being done to prepare the party for the fall elections, and he would not lift a finger to help them in any case.⁵⁸ Both groups were punished severely by their parties, and with the exception of Humphrey, who continued to lead the Monroe faction, none of them was returned to the Legislature.

When the Democrats met in Marshall in September, the scent of victory was in the air. Efforts concentrated on healing party rifts, and the head of the conservative

⁵⁷Streeter, p. 31.

⁵⁸Letter from John Van Fossen to William Woodbridge, August 12, 1841, in Woodbridge Papers (BHC).

out-state Democrats was nominated for Governor. Mason summarized the situation within the party when he stated that:

Had it not been for the folly of our party, in nominating a conservative of 1838, we should have had no difficulty in carrying the state . . . Barry was nominated on the simple ground, that the western part of the state was entitled to the candidate this year. Thus, far, my name has been left out of the question, and I think the policy of the Whigs will be to let me alone. If we can elect Barry, I shall leave the state contented. I am here long enough, to see the Whigs cutting each others throats, and to feel that every personal enemy I have is politically as dead as a "door nail." De Garmo Jones, and all the Legislative clique who assailed me last winter, have been dropt by their own friends, and in their stead men have been nominated of as decent a character as the Whig ranks could afford.⁵⁹

Between the two parties, the most serious bone of contention was the national question of Bank and sub-treasury. Although convinced that the Bank was the only answer to the state's problems, Democrats were too deeply committed to the sub-treasury plan to risk party schism by revision of their stand on the question. When Tyler vetoed the charter of the Bank of the United States in the summer of 1841, he sealed the fate of Michigan's Whig party by destroying their credibility and removing a major issue dividing factions within the Democracy at a single stroke.⁶⁰ In the fall elections, the Whigs were

⁵⁹Letter from Stevens T. Mason to Charles [Anderson], September 28, 1841, in S. T. Mason Papers (BHC).

⁶⁰Letter from Stevens T. Mason to Charles [Anderson], August 17, 1841, in S. T. Mason Papers (BHC); Letter from John Van Fossen to William Woodbridge, August 30, 1841, in Woodbridge Papers, (BHC).

soundly defeated, with the Democrats capturing both houses of the Legislature and the Governor's office. For the next dozen years, the Democrats won every state election, and retained exclusive control of the state government.

Michigan's new governor owed his popularity to his financial conservatism, his supposed independence from faction, and his out-state residence. Apparently devoted to the precept that that state governed best which spent the least, Barry was a most strict advocate of government economy. According to one story, he went so far as to sell clippings from grass on the capitol lawn, depositing the funds in the state treasury. His inaugural message to the Legislature contained few deviations from policies implemented by his Whig predecessor. The man who had campaigned so furiously for sectional equality in 1837, and led Senate opposition to limited appropriations in 1841, now took the position that:

The conception of the plan on a scale so magnificent, is to be attributed to the erroneous opinions of wealth, produced by the influence of a too redundant paper currency. The system was altogether too extended for our wants, and required expenditures beyond our means. It was projected at a time when things were too often viewed through a distorted vision.

In line with the Whigs, Barry recommended that expenditures be concentrated in making productive finished portions of the works, and finishing portions likely to be productive.⁶¹ Failure of the Bank of the United States

⁶¹Messages of the Governors of Michigan, I, 443.

in October, 1841, had cut off the major source of funds available for construction of internal improvements, and made the state prematurely liable for interest on outstanding bonds. Barry suggested attempting to exchange the half million acres of land granted the state under the Pre-emption Act for bonds outstanding on the state's internal improvements loan.

His only major deviation from Whig policy lay in methods of financing the program. Instead of scrip, or treasury notes, Barry preferred the use of Auditor's Warrants because they were not legally forms of currency. He considered the use of Treasury notes unconstitutional, because they were forms of coining money, while Auditor's Warrants were promissory notes. The distinction, however, was so narrow that for practical purposes, methods of finance remained the same. He recommended, in addition, that only internal improvements funds, and not the general fund, be liable for the redemption of notes.⁶² Finally, he recommended that the state constitution be amended to require popular consent for loans contracted for internal improvement.

The Legislature acted quickly to implement Barry's policy recommendations. Early in the session, further issue of scrip was prohibited, and the internal improvements

⁶²Ibid., 447-448.

fund made liable for its redemption.⁶³ The Board of Internal Improvements was forbidden to enter new contracts for construction, with the exception of necessary repairs.⁶⁴ Although a Senate committee reported favorably on extending the Central and Southern, and engaging in extensive river improvement programs, appropriations bills were killed in both houses before reaching votes on final passage.⁶⁵

Within the Democracy, attention focused on gaining factional supremacy. The Monroe faction, now led by Humphrey, Felch, William Hale, and C. A. Jackson, was attempting to gain control of the party's patronage and access to the Governor's ear. Factional struggle centered around attempts to take the public printing contracts from John Bagg, and place them in the hands of printers favorable to the Monroe faction. Within the Executive Office, efforts centered on winning over Andrew Hammond, Barry's chief advisor, who was one of the few persons having access to the remote and secluded governor. By the end of the year, Jackson was able to inform Felch that Hammond was contributing money to the faction's paper, that he was

⁶³Michigan, Legislative Acts, 1842, No. 20.

⁶⁴Ibid., Joint Resolution No. 3.

⁶⁵Michigan, House Journal, 1842, pp. 32-34; Michigan, Senate Journal, 1842, pp. 244, 255-258, 274; Michigan, Legislature, Report of the Committee on Internal Improvement (Senate Documents, 1842, S. D. No. 5), pp. 24 ff.

on good terms with Barry, and that transfer of the printing contracts could be handled quietly. In 1843, for the first time under a Democratic administration, the journals and official papers of the Legislature were printed by someone other than John Bagg.⁶⁶

In his annual message, Barry added nothing to his previous policies on internal improvement. He was able to announce that most of the federal internal improvements grant had been located and was available for appropriation, and he urged concentration of the state's resources on those projects bringing the most revenue to the treasury and service to the state's citizens. At the first opportunity, the Southern should be completed to Hillsdale, and the Central to the west of Marshall. Half of the scrip outstanding had been returned, and Barry warned the Legislature that he would veto any bill authorizing its issue. Most of the Governor's message in 1843 was preoccupied with problems connected with the five million loan.⁶⁷

Even in the face of serious financial problems posed by the necessity of providing for interest on the public debt and settlement with foreign bondholders of claims stemming from part-paid securities, a new optimism

⁶⁶Letters from William Hale to Alpheus Felch, January 23, 1842; C. A. Jackson to Alpheus (Felch), October 26, 1842, in Felch Papers (MHC).

⁶⁷Messages of the Governor's of Michigan, I, p. 472. Barry's fiscal policies are discussed in Chapter IX.

gripped the Legislature in 1843. New resources had been made available by location of lands from the Federal grant, the Central had shown large profits the previous year, and state finances were nearly liquid. The Senate Committee on Finance was able to report that had it not been for liabilities to the general fund from internal improvements, the state would actually have been solvent for the first time in its existence. Although the same committee included in their recommendations to the Senate a proposal for selling the Central to foreign bondholders in exchange for their securities, they made it clear that they preferred alternate courses of action which would allow the State to continue building the road to its western terminus. The House Committee on Internal Improvement was even more enthusiastic, recommending extension of the road west of Marshall as a means of paying the interest on the entire state debt, perhaps providing enough revenue to build a sinking fund to reclaim the principal. The feelings of the Legislature were effectively summarized by Goodwin of Calhoun county, when he told them that a year before the state was exhausted, faced with a foreign debt, a broken treasury, half a million in outstanding scrip, and a whole series of domestic debts. "One short year since, darkness hung over us like the pall of the grave . . . [Now,] our railroad shows the whole world

what it can accomplish."⁶⁸

At the same time, important and disturbing changes began to develop in the doctrine of equality. Prior to 1841, when the state had been a source of foreign credit through its ability to market bonds, and interest had been paid from installments of principal, equality had been used by sections of the state outside the central tier to justify their right to a share in the spoils of state enterprise. The central tier had attempted to fix responsibility for interest on sums expended on tiers of counties receiving aid to their projects. Failure of the Bank of the United States, however, had prematurely thrust the burden of interest payments on the state, and created a growing realization that the whole state was liable for paying interest on non-productive investments made in sections other than a representative's home district. As a result of a movement beginning in 1841, the State's constitution was amended in 1843 by joint resolution to limit proposals for bond issue to a single project, and forbid the borrowing of money for internal improvement without approval by voters at a general election.⁶⁹

⁶⁸Michigan, Legislature, Report of the Committee on Finance (Senate Documents, 1843, S. D. No. 4), pp. 28, 34; Michigan, Legislature, Report of the Committee on Internal Improvement (House Documents, H. D. No. 6, 1843), p. 31; "Speech of William Goodwin," Democratic Free Press (Detroit), March 7, 1843, p. 2.

⁶⁹Michigan, House Journal, 1841, pp. 615, 648, 661; Michigan, Senate Journal, 1843, pp. 412, 419; Michigan,

During 1843, the doctrine of equality was mobilized to justify the state's continued refusal to finance unproductive projects and concentrate resources in works returning a profit. The House Committee on Internal Improvement summed up the changing application of the doctrine of equality by stating that:

The expenditure of money in one part of the state for the immediate benefit of the people of that section, when no corresponding return can be made to the people of the whole state, and especially when it would become necessary to levy a tax on the people at large to meet such an expenditure would be unjust and directly tend to create sectional jealousies, which of all things is mostly to be deplored in a commonwealth.⁷⁰

Gradually, however, the realization developed that all works of internal improvement were by their nature local in benefits, and the state found itself saddled with the same doctrinal problems of application as the federal government; any grant of aid gave special privilege, and was therefore a violation of equality. Limiting proposals for investment to a single project effectively prohibited compromise, and made it virtually impossible for the state to borrow further funds for the prosecution of its public works.

Legislative Acts, 1842, No. 10; Michigan, Legislature, Report of the Committee on the Judiciary of the Senate (Senate Documents, 1845, S. D. No. 10).

⁷⁰Michigan, Legislature, Report of the Committee on Internal Improvement (House Documents, 1843, H. D. No. 6), p. 26.

Sectional rivalry blazed up again when the appropriations bill was introduced in the House. Northern interests attempted to annex appropriations for completing the Clinton and Kalamazoo and turning the Northern into a wagon road by delaying, amending, and threatening to block the bill's passage. For a time, an apparent coalition developed between the central tier and western counties of the southern and third tiers, but after extensive debates, efforts broke down as counties and sections attempted log-rolling to incorporate their local projects into the bill. Finally, after a week of intensive debate, the bill was passed 30 to 22. A few votes cast in favor of the bill came from the eastern counties of the southern tier, but most originated in the central tier and the western counties of the southern and third. Eastern interests outside the central stood in almost solid opposition to the bill. In the Senate, the bill passed almost without opposition by a vote of 15 to 3. The dissenting Senators, representing eastern counties of the first, third, and fourth tiers, filed formal protest against the bill, charging that it violated constitutional provisions for equal application of internal improvements funds.⁷¹

⁷¹Michigan, Senate Journal, 1843, pp. 217, 223, 226, 238, 278, 349. Michigan, House Journal, 1843, pp. 26, 266, 269, 277-282, 287-289, 295-301.

The bill passed provided for extension of the Central and purchase of iron for both the Central and Southern. Pledging the net proceeds of both works, the Legislature appropriated \$119,000 to purchase iron and spike to complete the Central to Marshall and the Southern to Hillsdale. One hundred and fifty thousand acres of internal improvement land were granted for the Central under provisions that payment would be made in warrants redeemable when cash from land sales had accrued to the internal improvements fund. Suspension of new contracts on the Central was repealed, but all contracts awarded were required to be at a minimum of twelve per cent less than 1841 estimates. Finally, \$5,770 was appropriated to pay floating debts on the Clinton and Kalamazoo Canal. Earlier in the session, \$10,000 had been appropriated for bridging between Marshall and Jackson.⁷²

Barry's annual message in 1844 offered little that was new in policy recommendations; it was confined largely to describing changes in the roads and progress during the previous year. Prospects of manufacturing salt in the immediate future were described as "by no means flattering," and the Governor suggested that the state abandon the works.⁷³

⁷²Michigan, Legislative Acts, 1843, No. 24; Michigan, House Journal, 1843, pp. 104-105, 119.

⁷³Messages of the Governors of Michigan, I, p. 488.

Revival of the state's basic financial stability strengthened demands for renewing efforts to construct a multiple program of public works. Although both the House Committee on Internal Improvements and the Committee on Ways and Means reported strongly in favor of construction on the Central, representatives outside areas served by the railroad insisted on aid to their local projects.⁷⁴ Bills making appropriations for both the Central and the Clinton and Kalamazoo were introduced simultaneously into the House in January, 1844, but forces in the House managed to separate the two during debates in the Committee of the Whole. When the Committee reported, all except the enacting clause of the original bill was stricken, as southern interests attempted to gain additional appropriations for their railroad. After a month of running battles and delaying tactics, the bill was allowed to pass by a margin of 30 to 21, although southern forces had clearly demonstrated their ability to defeat the bill during debates. On several occasions, southern interests had been able to defeat portions of the bill, or the bill itself, but not enough to amend their own appropriations. Whenever the bill was defeated, they allowed it or a substitute to be introduced again, and finally allowed passage.

⁷⁴Michigan, Legislature, Report of the Committee on Ways and Means (House Documents, 1844, H. D. No. 11); Michigan, Legislature, Report of Committee on Internal Improvement (House Documents, 1844, H. D. No. 2).

Opposition to the bill centered in the southern tier and Oakland county, while support concentrated in the central and northern tiers. In the Senate the bill passed 12 to 5, opposed by two southern, two northern, and one Wayne county senator. As passed, the bill provided appropriations of 64,000 acres of land and pledged \$75,000 for iron to complete the Central to Kalamazoo.⁷⁵

Local forces seeking to annex appropriations to the bill attempted to win grants of state aid by introducing separate bills when their bids had failed. Bills were introduced for improvement of the Shiawassee River, the Grand River, the Paw Paw River, and the Grand River Road, but all failed passage. Appropriations for the Clinton and Kalamazoo Canal passed, supported by the same basic group which had passed on the Central.⁷⁶ In lieu of appropriations, the Legislature attempted to satisfy local demands by appealing to the federal government for aid. Joint resolutions were passed asking for grants to complete the Grand River Road, the Detroit-Saginaw-Straits-Sault Ste. Marie Road, and for 100,000 acres of land to improve the Grand River. A bill actually

⁷⁵Michigan, Senate Journal, 1844, pp. 296, 299, 372, 374; Michigan, House Journal, 1844, pp. 172, 172-190, 247-257, 302, 373, 381-389, 392-393; Michigan, Legislative Acts, 1844, No. 50.

⁷⁶Michigan, Senate Journal, 1844, pp. 319, 343-345, 391; Michigan, House Journal, 1844, pp. 103, 159, 163, 168-169, 204, 205, 399, 402.

passed the United States Senate granting alternate sections along the Central and the Clinton and Kalamazoo, but failed in the House.⁷⁷

During the session of 1844, the Legislature first began seriously to consider selling its public works. After details of the public debt had been worked out at the previous session, and the total amount of recognized debt became known, attention turned to the problem of its liquidation. During 1843, sale had been suggested as one alternative in a long list of possible solutions to the debt problem, but the committee reporting had favored other measures. In 1844, however, the Committee on Ways and Means reported favorably on the sale of the railroads, and brought forth a bill to implement its policy.

After assessing the worth of the roads and the size of the debt, the committee reported that if the roads could be sold at cost, all but \$355,607 of the state's debt would be liquidated. Cost estimates set the value of the roads at \$2,776,296, and the value of the debt less ten per cent damages on the unpaid balance at \$3,131,903. If such a sale could be accomplished, the committee believed that the natural advance of property values over time would allow the state to liquidate the

⁷⁷Michigan, Legislative Acts, 1844, Joint Resolutions Nos. 5, 8, 10. Letter from Lucius Lyon to Charles Butler, June 5, 1844, Lyon Papers, MP&HC, XXVII (1896), 583.

balance of the debt with the existing two mill tax.

In justifying the proposed sale, the committee put forth the first strong statement favoring private enterprise expressed by the Legislature. Earlier statements of the superiority of private enterprise can be found in the records, but they are most often contained in statements of remorse during the depths of the depression. The committee, however, submitted its statement as part of a concrete proposition in the midst of growing prosperity.

Expressing the belief that a private corporation would be able to complete the Central to Lake Michigan and add twenty miles to the Southern before the state would be able to begin construction, the committee argued that:

One other important consideration, which suggested itself to your committee, is the fact that the management and control of railroads, by a state, by thus converting the state government into a great competitor in the business of a common carrier, is at war with the grand fundamental principle that governments ought never to come into conflict or competition with the legitimate pursuits of individual or private enterprise.

The only legitimate object of any departure is to protect citizens from foreign aggression and enforcement of property laws. The only serious objection the committee could see to sale was the possibility that the works would be able to pay more than they could sell for, and they viewed the possibility as problematical, while sale was certain.

Moreover, if a state could make six per cent, the committee regarded it as axiomatic that a private company could make much more, even at reduced rates:

. . . and even granting the certainty of our public works being always managed with such economy and good judgement as to secure a sufficient revenue to meet the interest on their cost, or even upon the entire internal improvement debt, it may be questioned whether the time always occupied by legislation in regard to them, and the adverse local and sectional feeling thereby aroused,--the constant liability of attempts being made to divert the resources of the state to the construction of works which would yield little or no revenue, and which would be increased in proportion to the profitableness of those previously constructed, as well as the great danger of such works becoming, eventually, in some hands, the engines of political corruption and favoritism, and many other considerations, would not more than counterbalance all the possible or supposable changes of an excess of revenue.⁷⁸

The committee's last statement spoke for one of the most powerful and least often voiced reasons for removing the state from enterprise: the disillusionment suffered when public works failed to bring the non-economic progress envisioned at their conception. In the beginning, advocates of internal improvement had cited the political unity created by better means of communication as a justification for their construction. After eight years of building, public opinion was convinced that the works served as a powerful force to divide the people into rival camps. Public opinion was discouraged

⁷⁸Michigan, Legislature, Report of the Committee on Ways and Means (House Documents, 1844, H. D. No. 3).

by the annual battles developing in the Legislature for the benefits of special interest groups, and angered by paying seventy legislators a per diem to solve conflicting claims. In a period when biennial sessions were being advocated to reduce the largest single cost of state government--legislative expenses--the cost reduction of removing the state's most vexing problem from legislative consideration was a strong argument in favor of sale. Finally, the continuous scandals uncovered in the administration of public works, and their powerful patronage potential had convinced the public that high standards of political behavior were impossible as long as the state was involved in business. In sum, the public had discovered that public enterprise had non-economic costs which they were unwilling to meet.

With this report, the committee submitted a bill encompassing its recommendations. As drafted, the bill provided for the chartering of corporations and allowed purchase in stipulated amounts of state securities. The State Treasurer was authorized to deed the road in fee simple to any company meeting the Legislature's terms within 18 months of January 1, 1844, for a price of \$2,588,796 plus any sums expended after that date. Both roads were included in the bill, and seem to have been tied together in a package purchase.⁷⁹

⁷⁹Ibid., pp. 5-6.

Debate on the bill was not vigorous. After due consideration, the first section, usually reserved for major stockholders, was willed with the names of nine state Democratic businessmen and politicians. On the final vote, it received a majority of 26 to 23, but failed to gain the necessary two-thirds for passage of a corporate charter. In the solidly Democratic House, no pattern of party voting is apparent, but voting followed the usual sectional lines. Only three votes in favor of sale originated in the central tier; the balance were distributed heavily in the southern, and the eastern half of the third and fourth tiers, which voted almost as a solid block. Of those members voting in favor of sale, seventeen voted against appropriations to extend the Central to Kalamazoo. Members favoring both bills were concentrated in Macomb, Saginaw, and Lapeer counties.⁸⁰ In sum, it is evident that a majority of the House favored sale of the railroads, a majority favored continuation, and that the two groups did not coincide; statements that continuation and sale were Whig measures supported by the central tier are grossly in error. In the Senate a similar bill was indefinitely postponed after the House failed to muster the two-thirds vote necessary for passage.⁸¹

⁸⁰Michigan, House Journal, 1844, pp. 343, 344.

⁸¹Michigan, Senate Journal, 1844, pp. 160-161, 189, 203, 267, 285.

The balance of power among factions in the Democracy shifted slightly during 1844. John Baggs was again awarded the state's printing contracts, after losing them for a year to the southern tier's Detroit printer, and the central tier was able to elect a Speaker of the House from their section. Control of federal patronage, however, remained in the hands of the Monroe faction.⁸² Neither faction seemed able to control a consistent majority in either branch of the Legislature.

In his message to the Legislature in 1845, Governor Barry gave cautious support to forces opposing sale of the railroads. After holding out hopes of increased revenues, he asked them to postpone decisions until they could apply sober and considerate judgment and avoid serious errors due to haste. Several alternatives were open, and each needed time to develop to its fullest potential. If the works were not to be sold, then completion would have to be considered: "True policy requires the completion of the Central Railroad to St. Joseph, and the Southern, at least, to the navigable waters of the St. Joseph river; . . ." While this would require means the state did not possess, bills were reported pending before Congress granting additional aid to Michigan's programs, and it would be unwise for the Legislature to

⁸²Messages of the Governors of Michigan, I, 505-520; Letter from William Hale to Alpheus Felch, October 14, 1844, in Felch Papers (MHC).

base its actions on the assumption that the grants would not be made. If the state were then proven unable to complete its programs, Barry recommended that the Legislature consider allowing private associations to complete the roads to their western terminus. If they decided on such a joint enterprise, he cautioned them to "guard the rights of the state and secure its citizens from imposition and oppression."

During the legislative session of 1845, growing sectional demands prevented the Governor's recommendations from being enacted. Early in the session, the House Committee on Internal Improvement reported that twenty thousand acres of land were needed to complete the Central to Kalamazoo, and appropriations were passed without controversy.⁸³ When the question of extending the roads came before the Legislature, supporters of previous policies limiting expenditures to productive projects were met with violent protests from delegates representing counties north of the central tier.

When the House Committee on Internal Improvement was called on to report, it was unable to present a unanimous recommendation. A majority of the committee reported in favor of extending the Central to Lake Michigan and the Southern to Coldwater. Arguing that these extensions

⁸³Michigan, House Journal, 1845, pp. 64, 88, 116, 121, 218; Michigan, Legislative Acts, 1845, No. 15.

would allow the Central to produce net revenues sufficient to meet interest payments on the entire state debt, and the Southern to tap traffic being shipped through Fort Wayne, the committee attempted to prove that the state was capable of financing construction. Although the 245,000 unappropriated acres of internal improvement land were liable for payment of warrants and interest after July 1, 1845, the committee believed most of the warrants and bonds were held by eastern capitalists who generally avoided investment in land. The state, however, could earn at least seven per cent if it appropriated the lands to internal improvement instead of allowing them to remain unproductive while interest accumulated on warrants and bonds outstanding. With few public works being constructed in the United States, the committee believed the roads could be extended at prices comparable to those realized during the depression. Finally, they favored completion of the Clinton and Kalamazoo to its current terminus, but reported against constructing a wagon road on the Northern route because it would not return an income to the state.

Recognizing the problem of local interest and sectional rivalry, the committee admitted the appropriations would be unequal:

Local interests will, undoubtedly, in some portions of our state, cause some to feel that justice and equality has not been meted out with an impartial

hand; for past experience admonishes us, that all parts of the State cannot be satisfied. . . .

Expenditures for one part of the State for the immediate benefit of that portion of it where no corresponding return can be made to the people of the whole state--when it must become necessary to levy a direct tax on the people at large, for the ultimate payment of such an expenditure, would seem to be unwise, and tend to the most deplorable consequences.⁸⁴

The minority of the committee, however, was not to be persuaded by such arguments. In a report signed by Horace Steevens of Oakland county, it attempted to prove that the Central was running at a loss of nearly fifty thousand dollars a year. Although Steevens' statement has been cited in studies of the Central, it was created of whole cloth to support his sectional views; his figures were derived by increasing the rate of interest and including construction costs in operational accounts. The most important feature of the minority report, however, lay in its strong restatement of the doctrine of sectional equality. Taking the position that the Central and Southern were local improvements, the minority argued that they were entitled to no more aid than any other project. If resources were to be devoted to these two works, taxes resulting from the expenditures would have to be paid by everyone. The south and the center had already received three million dollars from

⁸⁴Michigan, Legislature, Report of the Committee on Internal Improvement (House Documents, 1845, H. D. No. 9).

the state, while the north, with one-third of the population paying one-third of the taxes, had received only four hundred thousand dollars. Future appropriations would have to be spent in the north until sectional equality was restored, or the roads would have to be sold to liquidate the state's indebtedness.⁸⁵ A second report submitted by a select committee on improvement of the Grand River reinforced Steevens' statement of the northern section's demands for sectional equality.⁸⁶

Faced with united opposition in the north, which held the balance of power in sectional struggles between the central and southern tiers, the House was forced to resort to multiple projects to gain appropriations for its major works. Passage of the bills of internal improvement provides a classic example of logrolling in state legislatures. On February 7, three bills were introduced into the Legislature by the House Committee on Internal Improvement, appropriating funds for the Central, the Southern, and the Clinton and Kalamazoo Canal. For over two weeks the bills were intermittently debated by the Committee of the Whole, always taken up and reported simultaneously. On February 25, previously

⁸⁵Michigan, Legislature, 1845, Minority Report of the Committee on Internal Improvement (House Documents, 1845, H. D. No. 11).

⁸⁶Michigan, Legislature, Report to the Select Committee (House Documents, 1845, H. D. No. 13).

introduced bills appropriating funds for the Grand Rapids Canal and the Flint River were added to the package. The following day an appropriation for the Northern Railroad was included in the group of bills receiving simultaneous consideration, and all six bills were engrossed for third reading. On February 27, the bills were passed in rapid succession: the Central, 46 to 6; the Southern, 35 to 17; the Grand Rapids Canal, 34 to 18; the Northern, 32 to 20; and the Flint River, 26 to 24. No vote was recorded on the Clinton and Kalamazoo Canal. In the Senate, the bills were passed without amendment, with one exception; the Flint River appropriation was transferred to the Shiawassee.⁸⁷ The order and precision with which the bills were marshalled through the House leaves the impression that their passage was the result of an understanding reached between sectional forces, but no clue has been found in the records of the state to indicate who led and organized their passage. If voices were raised in dissent, there is no indication in the records of the House. It is clear, however, from reports cited earlier that multiple appropriations were necessary if either the Southern or the Central were to be extended.

⁸⁷Michigan, House Journal, 1845, pp. 162, 172, 180, 182, 195, 200, 251, 268-273, 321, 405, 423-425, 231, 253, 233-235. Note: Titles given the bills by Barry in his veto message, and those reported in the Legislature do not agree.

In the same orderly manner in which the Legislature had passed the bills, Governor Barry applied his veto; only the Clinton and Kalamazoo bill was signed into law. As passed, the bills appropriated 243,000 acres, including 45,000 for the Southern and 140,000 for the Central--7,000 more acres than the state possessed. Exhausting the state's resources would, in effect, repudiate warrants granted under the act of February 21, 1843, which were payable in lands or other resources coming into the treasury. Warrants outstanding immobilized at least 150,000 acres of internal improvements lands. In addition, Barry objected to the bills because they made no provisions for engineering salaries and superstructure. Because warrants for lands could only be marketed slowly, to avoid depreciation, it was difficult to use them to pay for iron and salaries. Finally, the first tier's Governor was skeptical of continuing work on the Central. Extension of the Southern, while not making it a paying proposition, would at least raise the ratio of revenues to cost. "In regard to the revenue upon the Central Road, I have no hesitation in expressing my belief that finished to Kalamazoo or St. Joseph, it will never yield a net annual profit exceeding six percent upon the cost of its construction." Although barely three months earlier he had favored its extension westward, he now expressed the

belief that the road could never earn enough to pay both interest and depreciation.⁸⁸

Attempts to pass the bills over the Governor's veto failed to muster even a majority, and a Senate bill appropriating funds for the Central and Southern was later indefinitely postponed by the House.⁸⁹ Partisans of the railroads, however, managed to gain authorization for survey and location of the Central to St. Joseph and the Southern to Coldwater before the end of the session.⁹⁰

Following the Governor's veto, efforts to authorize sale of the railroad were renewed. A bill chartering the Michigan Railroad Company, authorizing the sale of the Central and Southern Railroads was introduced on February 25 and reported favorably by the Committee on Banks and Incorporations. Voting was delayed, however, until the appropriations bills had been presented to the Executive. On March 28, the bill failed passage by 22 to 19. Support for the bill was concentrated heavily in the northern tiers and Wayne county. Convinced that they would be taxed for funds not spent in their districts, representatives of the northern tiers began pressing for sale of the railroads.⁹¹

⁸⁸Messages of the Governors, I, 521-527.

⁸⁹Michigan, House Journal, 1845, pp. 498, 503.

⁹⁰Michigan, Legislative Acts, 1845, Joint Resolution No. 20.

⁹¹Michigan, House Journal, 1845, pp. 248, 276, 514.

At the same time, forces outside the Legislature became interested in purchasing the Central. During the spring of 1845, articles began appearing in Detroit newspapers favoring sale of the railroads to liquidate the public debt, and defending the position that the roads could be run more profitably under private control. By June, papers outside Detroit began echoing their sentiments, and a group of Boston financiers began to develop interest in purchasing the railroad. John Brooks, superintendent of the Syracuse and Rochester Railroad, was sent west to inspect the road and its worth. In Detroit, James Joy was engaged by Brooks to engineer the sale. Joy, who later became one of America's great railroad barons, began a campaign to maneuver public opinion and the Legislature into selling the roads by writing letters to the editor of the Detroit Free Press under the pseudonym of "Taxpayer." In a series of articles, Joy defended the position that private management was always superior to public, and set forth the proposition that if the roads were not sold, farmers in the state would have to give up one-fifth of their lands to liquidate the debt. As the year ended, efforts to popularize the sale grew more intense.⁹²

⁹²Berndt, pp. 95-96; Reagan, p. 67. These theses explore the private negotiations in greater depth than is necessary for this study.

In the fall campaign for Governor, the Monroe faction managed to nominate its candidate to the party's highest state office. At the invitation of Robert McClelland, Alpheus Felch, a Monroe lawyer and Associate Justice in the State Supreme Court, accepted the nomination. Although a secret member of the faction, he was chosen because his absence from the Legislature during his term on the bench had freed him from the bitterness associated with recent sectional struggles.⁹³ In campaigning for office, Felch assured western sections that he favored completion of the railroads to Lake Michigan. As one political leader in the west wrote:

In this country the only question is whether you are in favor of the immediate extension of the Central Rail Road to St. Joseph and notwithstanding my assertion to the contrary some few even of the Democrats contend that you are strenuously opposed to it--that all your interests are in the South and many other Cock & Bull Stories Connected with this only question of importance to you--I think when I saw you at Kalamazoo you remarked that you were in favor of its extension--will you have the goodness to write me a line stating your views with regard to this measure. Not for the purpose of publishing, unless you desire, but to satisfy a few Sterling Democrats in this respect.⁹⁴

Felch and the Monroe Democrats were able to carry the election with a large margin over the Whig candidate.

⁹³Letter from R. McClelland to A. Felch, May 19, 1845, in Felch Papers (BHC).

⁹⁴Letter from J. B. Baker to Alpheus Felch, September 16, 1845, in Felch Papers (MHC).

In his inaugural message to the Legislature, the Governor stressed the need for selling the Central. Although the Act of March 8, 1843 had pledged the revenues of the railroads to payment of interest on the State's bonds, when interest fell due none was available because pledges for iron took priority. Under the law, deficiencies had to be paid by taxation, and the Auditor General had sent a circular to the county boards of supervisors informing them of the necessity of increasing the state's rates. Against the state's assessed valuation, a tax of nearly two mills was necessary, and a similar amount would have to be levied to meet the July installment. Stressing the excited state of public opinion, Felch cited two major reasons for selling the works: removal of government from business normally conducted by private enterprise, and liquidation of the public debt. Of the two, Felch thought the debt the more important problem, and suggested selling only if the works could be sold for sums sufficient to retire it. Depending heavily on Berrien's report that the road would have to be rebuilt with heavy iron rails, the Governor pointed out that the receipts of the Central were inadequate to cover both the interest on the debt and the cost of rebuilding. If the state chose to retain control, interest would have to be paid by taxation until the roads could be brought into full production. It would be impossible, Felch thought,

to raise the money for rebuilding by a new loan. Since there was a group waiting to negotiate terms of the purchase, Felch recommended selling.⁹⁵

Reasons advanced by Legislative Committees for accepting the Governor's recommendations are as diverse as the members of the committees themselves. With one exception, there was general agreement that the debt would have to be reduced and the roads modernized, but within these boundaries, a wide range of emphasis was exhibited. The Senate Committee on Finance, unable to submit a united opinion, was forced to allow its three members to report separately. Flavius T. Littlejohn, Whig Senator from Allegan County, filed the sole dissenting opinion. After reviewing the factors leading to popular pressure for sale, Littlejohn argued that representatives of the people were not bound to follow constituents' instructions when they were founded in error. Unless advocates of sale could demonstrate "pressing exigency" for liquidation of the debt, Littlejohn refused to support any action granting exclusive privileges to a group of private individuals.⁹⁶ William Hale, the Monroe faction's Detroit leader, stressed financial criteria. After reviewing the financial history of the public works in

⁹⁵Messages of the Governors of Michigan, I, 35-48.

⁹⁶Michigan, Legislature, Report from the Finance Committee: Sale of Railroads (Senate Documents, 1846, S. D. No. 9).

detail, Hale called on the example of more developed eastern states to prove that Michigan could no longer support her program of internal improvement. Arguing that the works were unnecessary in the first place, Hale stressed the state's losses and minimized its gains.

That they have not as yet yielded a cent of profit, the committee are confident could easily be demonstrated. By referring to the reports of the board of internal improvement, it will be perceived, that of the profits so called, large sums have annually been expended for the construction of new cars and the purchase of locomotives.

Hale's equation of profits to income free for government expenditure outside internal improvements, while grossly in error, has been the source of frequent statements that the roads never earned a cent of profits while in the state's possession.⁹⁷

Finally, William Fenton of Genesee County stressed the theoretical benefits of removing the state from enterprise. Defending the proposition that operation of a business was not within the legitimate scope of republican government, Fenton was forced to acknowledge that the Legislature had acted under a constitutional imperative in undertaking a program, but answered that concentration of resources in the state's productive works violated the stipulation of equal application. "This would not be

⁹⁷Michigan, Legislature, Report of the Committee on Finance (Senate Documents, 1846, S. D. No. 9).

carrying out the spirit of the constitution," which designed, that its blessings, "like the dews of heaven, should descend upon all." In removing government from enterprise, Fenton was more interested in saving the state than benefitting business; internal improvements concentrated the government's attention on conflicting local and sectional ambitions and elevated the questions of route location and road management above even the security of the state.

Principles will be sacrificed upon the altar of gain--the integrity of the people will be destroyed in an indiscriminate worship at the shrine of mammon. The wheels of government which should roll quietly on in an unimpeded track in their onward course towards civil, social and political improvement--will be clogged by the crash of locomotives, and the strife of aspirants for the loaves and fishes which fall from the tables of those in power.⁹⁸

The statements presented to the Senate by the Committee on Finance were polemics designed to convince colleagues and impress constituents. Reports presented to the House contained a more dispassionate and accurate statement of conditions. The report of the Select Committee on the Sale of Works of Internal Improvement, discussed previously in connection with the Central, stressed the need for rebuilding the road with heavy

⁹⁸Michigan, Legislature, Report of the Committee on Finance (Senate Documents, 1846, S. D. No. 8), pp. 12-24.

rails to bring it to peak efficiency.⁹⁹ The Committee on Ways and Means presented a comprehensive statement of state finances and expenditures, justifying sale to liquidate the outstanding internal improvements debt.¹⁰⁰

Outside the Legislature, pressure mounted for sale of the public works. While the bills were being debated, Joy and Brooks were meeting with select committees of the Senate and House, helping to persuade recalcitrants and suggesting tactics to those favoring sale. In order to increase popular pressure, Joy engaged in massive petition drives sending sample petitions to groups outside Detroit and encouraging them to gain signatures. Gathering the petitions together, a few were submitted to the Legislature daily, to create the impression that public opinion was strongly and continuously in favor of sale. By the time the bill was passed, Joy's public relations efforts had managed to raise popular feeling to a high pitch.¹⁰¹

The charter of the Michigan Central Railroad Company was introduced into the House on February 16, and

⁹⁹Michigan, Legislature, Report of the Select Committee on the Sale of Works of Internal Improvement (House Documents, 1846, H. D. No. 2).

¹⁰⁰Michigan, Legislature, Report of Committee of Ways and Means (House Documents, 1846, H. D. No. 1).

¹⁰¹Berndt, pp. 95-106.

passed after two weeks of debate by a margin of 41 to 9. Opposition votes were scattered throughout the state.¹⁰² In the Senate, opponents of the bill were primarily concerned with details of the charter, rather than the principle of sale. Attempts to solve a long-standing popular grievance by prohibiting trains from running on Sunday were voted down by substantial majorities, but amendments designed to protect the state's economic interest received serious consideration. Several of the more important charter limitations were added during debate in the Senate. When Senators favoring the charter prematurely attempted to force passage, the bill failed to receive the necessary two-thirds majority.

Failure of the bill created a high level of excitement in the capital. Governor Felch wrote his wife that:

The bill for the sale of the Central Railroad received a vote to-day in the Senate--The Senate refusing to pass the bill. I think they will have it up again and take another vote on it. There is a good deal of excitement here on account of the loss of the bill--and both the house and senate adjourned very soon after coming in this afternoon. My opinion is, notwithstanding the present very dark prospect, that the bill will yet pass and the road will be sold. There is very great anxiety about it in the public mind.¹⁰³

The following day, the bill was returned to committee and reported back with an amendment limiting charges

¹⁰²Michigan, House Journal, 1846, pp. 178, 189, 203-222, 240-243, 245, 333, 336; Michigan, Senate Journal, 1846, pp. 149, 219-252, 254, 257-268, 274-277.

¹⁰³Letter from Alpheus Felch to Lucretia Felch, March 18, 1846, in Felch Papers (MHC).

for carrying flour and wheat to three-fourths of the price charged by the state on January 1, 1846. When the amendment was accepted, the bill passed 16 to 2. Although the House protested several Senate amendments, they were finally accepted, and the bill was signed into law before the end of March.¹⁰⁴

As debate drew to a close on the Michigan Central charter, a bill was introduced for sale of the Southern. Opposition centered in delegates from Washtenaw County, who wanted the Tecumseh Branch completed. Final passage in the House was achieved with a comfortable margin of 28 to 17. In the Senate, after four days of debate, the bill was passed 14 to 2.¹⁰⁵

Sale of the Central and Southern ended an era of state entrepreneurial activity. After 1846, internal improvements continued on a reduced scale until 1850, when they were forbidden by the state's new constitution. In that four years, however, the balance of the internal improvement lands donated by the federal government was expended on widely distributed road and river projects. After 1850, the new constitution prohibited state involvement in works of internal improvement, and was generally

¹⁰⁴Michigan, Senate Journal, 1846, pp. 281-283, 292-294.

¹⁰⁵Michigan, House Journal, 1846, pp. 355, 395, 401-423, 434-442, 446-448, 523-524; Michigan, Senate Journal, 1846, pp. 403, 408-414, 420-422, 433, 454-457, 566, 575.

construed to include road construction in its prohibition. Written in fine print between the lines, however, was the understanding that the constitution applied only to projects which would involve the expenditure of state funds. Grants were accepted from the federal government for construction of the Soo Canal, which, although constructed by a private firm for the land grant, was operated by the state for twenty-six years.¹⁰⁶ In addition, Michigan received 3,133,231 acres of land from the national government for railroads between 1850 and 1923, and 5,655,816 acres of swamp land grants.¹⁰⁷ In the last half of the century, the state administered and awarded resources far in excess of those applied between 1835 and 1850.¹⁰⁸

Between 1837 and 1846, the terminal dates of the formal program of internal improvement, Michigan was subjected to the dual strife of party and section. Sectional rivalry was responsible for the adoption of a program of

¹⁰⁶Dunbar, p. 373.

¹⁰⁷Benjamin Horace Hibbard, History of the Public Land Policies (Madison, Wisconsin: University of Wisconsin Press, 1965), pp. 264, 275.

¹⁰⁸The use of public land grants for purposes of internal improvement in the period after 1850 is an untouched subject demanding scholarly attention. The resources applied suggest that the state did more through use of federal resources after 1846 than before. New patterns and forces must have developed which would give insight into Michigan's subsequent development.

multiple works in 1837, and continued throughout the decade to be the most potent force in creating legislative struggles and determining the allocation of state funds. For a short period between 1839 and 1841, when the central tier turned from the Democracy to the Whig party in hopes of gaining legislative strength sufficient to enforce its claims, party politics threatened to replace sectional rivalry as the major force assigning priorities to internal improvements expenditures. In power, however, the Whig party was unable to suppress factional struggles and enforce party discipline. When put to the acid test of voting for appropriations, Whig legislators acted more frequently with their section than their party. By the middle of 1841, even before the fall elections, party machinery and the state government had fallen under Democratic control. Although the Democracy retained firm control of the state government after 1842, few significant changes were made in Michigan's internal improvement policy. Necessity forced concentration of the state's resources on its single profitable project, at the expense of works in areas more strongly held by the Democracy. As the depression waned, the state finances recovered, sectional rivalry revived in a Legislature controlled by a comfortable Democratic majority. In 1845, sectional claims became so powerful that multiple bills--in essence omnibus bill--were used to gain appropriations for the state's railroads.

By 1846, the state had painted itself into a corner. Borrowing was impossible because loans could be obtained only for a single project, subject to popular approval at a general election, and no section was willing to risk possible taxation for a loan's redemption when funds would be spent in another tier or area. Heavy settlement in the third and fourth tiers had created a strong new sectional interest, chafing under the supposed inequality of expenditures for which it was now to be taxed. Even if a compromise between the central and southern sections had been possible, the north would have insisted on the restoration of sectional equality. Faced at the beginning of 1846 with the dual problem of rebuilding the roads and resuming deferred interest payments on its bonds, the state had to choose between repudiating its debts and selling its public works. Repudiation of its "just debts" was not even considered. Michigan's hands were tied; sectional rivalry, which had created the program, now forced the state to sell.

CHAPTER IX

FINANCING THE PUBLIC WORKS

Financial problems encountered by the states involved in internal improvements programs during the second construction cycle have been lumped together by recent literature under the convenient phrase of "poor cyclical timing." The phrase is useful because it covers a multitude of problems: sharp deflations in property values, deterioration of tax bases, deranged currencies, contraction in financial markets, and a sharp decrease in the quantity of funds available through borrowing. In Michigan, financing the public works became the most serious and difficult problem growing out of the decision to construct a multiple program of public works. "Poor cyclical timing" helps to explain the state's difficulties, and the depression suffered by the Atlantic economy between 1839 and 1844 is a convenient backdrop, giving depth to the actions of those playing leading roles in the state's financial tragedy; in itself, however, the phrase is entirely too mechanistic to explain what was essentially a human failure.

The story of Michigan's financial difficulties is an intricate one, far too complex to be developed

adequately through generalization, and at the same time most meaningful in its details. Fortunately, the topic has been dealt with before. With good reason, writers interested in the state's internal improvements program have focused attention on the "five million loan," producing at least three detailed studies of the problem within the last half century, all good, but all subject to serious limitations.¹ Through these studies, a standard version of the loan and subsequent financial measures has developed, based on reports of the negotiations, correspondence, and committee reports printed in the documents of the state legislature. Within the limits posed by these data, with one exception, the accounts are accurate and perceptive. The exception, an investigation

¹The oldest of these, Lawton T. Hemans, Life and Times of Stevens Thompson Mason, the Boy Governor of Michigan (Lansing: Michigan Historical Commission, 1920), deals extensively with Mason's role as the state's chief financial agent for the loan between 1837 and 1840. Unfortunately, Hemans was not above suppression of evidence, and fell prey to the biographer's natural sympathy for his subject. A second study, produced by William L. Jenks, "Michigan's Five Million Dollar Loan," Michigan History, XV (1931), pp. 575-634, has been considered a standard source by state and local historians for over thirty years. Although scholarly and exact, the strenghts of Jenks' article are also its weakness; excessive preoccupation with legal details submerged the larger story and allowed him to avoid the evidence suppressed by Hemans. Unfortunately for Jenks, his work was published in a journal which prohibited documentation, and consigned it to the rank of folklore. Finally, a better known article, if less scholarly than Jenks', is chapter VIII of Reginald McGrane's Foreign Bondholders and American State Debts (New York: MacMillan, 1935).

by a Whig committee in 1841, when combined with materials uncovered in personal papers and archives, adds new dimensions to the state's financial disaster and the difficulties encountered in its program of public works. For many purposes, the standard version is adequate; this study, however, will stress the role played by personal interest and attempts at central banking in undermining the state's program.

The act passed by the Legislature in the spring of 1837 gave the Governor broad discretionary authority to negotiate the state's loan. Up to five million dollars in bonds were to be issued, with a minimum face value of one thousand dollars, payable twenty-five years after January 1, 1838; interest was limited to five and one-half per cent, payable semi-annually. Proceeds of the bonds were to be deposited in the State Treasury, subject to appropriation for internal improvements by the Legislature. Although the loan could be negotiated in the United States or Europe, interest was payable only in New York City or elsewhere in the United States. Except for a provision forbidding sale of the stock at less than par value, the Governor's authority was almost unlimited. To secure the loan, the state's faith was pledged for payment of principal and interest, and the proceeds of the state's

railroads, canals, and bank stock dividends pledged to a sinking fund.²

By a single act, the Legislature had committed itself to honoring the negotiations of one man for a sum equal to twelve per cent of the state's assessed property valuation. In its haste to acquire money for the multiple program, the Legislature failed to reserve powers of review and ratification. From the moment the act was signed into law, the Governor was essentially a free agent; success or failure depended on his good faith and judgement. After the passage of a century, the course of events between March 1837 and November 1838 is not entirely clear. Originals of printed documents have been destroyed or lost, along with the private papers of individuals who were deeply involved, and some transactions appear to have rested on verbal agreements alone. Mason's reports to the Legislature on his negotiations were never entirely candid, often omitting evidence which would have reflected badly on his actions. Subsequent committees of investigation stretched the truth both to justify and condemn the Governor's actions, and witnesses, including Governor Mason, perjured themselves to avoid more serious incrimination. In the mass of conflicting testimony and documents, however, the weight of evidence and logic is heavily

²Michigan, Legislative Acts, 1837, No. LXXVII.

against Mason and his conduct of the state's financial negotiations; interpretations explaining provisions of the loan contracts in terms of the Governor's financial inexperience have seriously underestimated his understanding of banking and bargaining ability.³

When the Legislature adjourned in the spring of 1837, Mason went to New York to market the loan. Arriving in the midst of the Panic of 1837, he soon became convinced that there was no hope of marketing the securities. After interviewing several bankers and stock brokers, he placed a copy of the loan act with John Delafield of the Phoenix Bank, who had previously marketed a bond issue to support the state in 1836, asking him to correspond with American and foreign bankers about placing the new bonds.⁴

Returning home, the Governor found that the full impact of the panic had not reached Michigan. Calling a special session of the Legislature, he asked them to follow New York into suspension to prevent specie drainage by outside sources. According to Mason, the panic was the result of over-banking and over-extension of credit, and

³I am aware that in adopting this point of view that the evidence can support cases both for and against Mason's guilt. After thoroughly reviewing the evidence, which is cited in subsequent footnotes, I am convinced of the validity of the Whig case. If anything, the Whigs neglected to discover the full story of Mason's illegal use of state funds.

⁴Michigan, House Document No. 44, 1839, p. 721.

if the economy was allowed to adjust, would run its course in a short period of time. In the meantime, however, the state had to have a circulating medium, and its banks needed protection. In order to save the specie and charters of banks which had already stopped payment, or would be forced to, he asked the Legislature to authorize suspension until payments were resumed by New York. The Legislature responded with an act embodying Mason's suggestions, and in addition, made bank notes receivable by the state at par for taxes.⁵

During the summer and fall of 1837, it became apparent that the state's loan could not be placed in Europe unless substantial changes were made in the form of the bonds. Although Mason repeatedly reported that he had not been informed of the need for raising the interest rate to six per cent and making the bonds payable in Europe until his trip to New York in the autumn of 1837, he had been aware of the need early in the summer. Writing to John Delafield in July, he expressed regrets that the need for alteration had not been discovered while the Legislature was in session. Clearly exceeding his authority, the Governor authorized Delafield to raise the interest rate to six per cent, guaranteeing that the necessary

⁵Messages of the Governors of Michigan, I, pp. 208-213; Michigan, Legislative Acts, 1837, Special Session, No. LX.

amendment would be passed without question.⁶ When Mason visited New York in the Fall of 1837, arrangements were made for advances from Delafield, and marketing the loan. Assured by Delafield that if the loan act was amended it would be placed in the London market by James King, of Prime, Ward & King, Mason returned to Detroit to have the amendment passed.⁷ By placing the loan in the hands of Prime, Ward & King, New York correspondents of Baring Brothers, the Governor had an important opportunity to market the state's bonds with one of Europe's leading financial houses.

Arriving in Detroit, he immediately dispatched his law partner and Secretary of State, Kintzing Pritchette, to New York with half a million dollars in bonds and promises that the amended law would be forwarded as soon as it had been passed.⁸ On November 11, a special message was sent to the Legislature, which had met in adjourned session, asking for changes in the original loan

⁶Letter from Stevens T. Mason to John Delafield, May 29, 1837, in Records of the Office of Secretary of State, Great Seal and Archives: Claims submitted to the Legislature, 1837-1839 (Michigan Department of State, Historical Commission Archives); Michigan, House Documents No. 44, 1839, p. 721.

⁷Ibid., p. 722.

⁸Letter from Stevens T. Mason to John Delafield, November 6, 1837, in Records of the Office of Secretary of State, Great Seal and Archives: Claims submitted to the Legislature, 1837-1839 (Michigan Department of State, Historical Commission Archives).

act. In line with Delafield's suggestions, Mason asked that the interest rate be raised to six per cent, and the bonds be made payable outside the United States. Apparently on his own initiative, the Governor asked that if the bonds were made payable in Europe, they should be redeemable at the rate of \$4.44 per pound sterling, or \$.40 per guilder, both on principal and interest. Since the gold par rate of exchange had been increased to \$4.87 by Congress in 1834, the terms stipulated amounted to a ten per cent premium in favor of the state at the time of redemption. The Legislature responded by raising the interest rate and making it payable in Europe, with no explicit provision for repayment of principal abroad. In addition, it required any differences in exchange rates to accrue to the benefit of the state, while redemption was restricted to the rate suggested by Governor Mason.⁹ In essence, the amended bill required that the state receive the benefits of any difference in exchange when selling, and allowed it to redeem principal and interest at the par value of the dollar prior to 1834, a ten per cent discount. This provision became a major reason for its being rejected in Europe.

⁹Michigan, House Journal, Adjourned Session, 1837, pp. 5-6; Michigan, Legislative Acts, Adjourned Session, 1837, No. 1.

When Mason forwarded copies of the amendment to Delafield, he made it clear that the provision was added to avoid differences in exchange costing the state money: "I have assured them you will avoid entering into any contract in Europe by which the interest and difference of exchange could by possibility exceed the six per centum per annum, the limit of the annexed law." If it could be arranged, he would prefer that the loan be marketed in the United States, with the balance financed at the original interest rate. At the same time, however, the Governor made it clear that he did not want to interfere: "The negotiation is in your hands."¹⁰

Within days of awarding Delafield the state's agency, Governor Mason began to use loan funds to give support to Michigan's suspended banks. On November 21, writing Delafield to remind him of his pledge to take \$150,000 of the bonds if the funds were needed by the state, he mentioned in passing that "I can dispose of a half million of six per cents to our banks here at a small premium, taking their own paper. Is it your opinion that I should make such arrangements."¹¹ Without waiting for

¹⁰Letter from Stevens T. Mason to John Delafield, Nov. 15, 1837, in Records of the Office of Secretary of State, Great Seal and Archives: Claims submitted to the Legislature, 1837-1839 (Michigan Department of State, Historical Commission Archives).

¹¹Ibid.

Delafield's reply, however, he sold the bonds to Oliver Newberry of Detroit, a prominent stockholder in several of the city banks, and reported to the Legislature the existence of arrangements to have other funds advanced from New York.¹² To Mason's surprise, his New York agent was firmly opposed to marketing part of the loan through a third party. Early in January, writing to Delafield to notify him of drafts on him for \$150,000, he informed his agent that he had assigned the bonds to Newberry, and that they would pass through Delafield's hands in order not to interfere with his negotiations: "This arrangement was made before your last letter was received. No other bonds have or will be issued, as the state is now enabled to await the result of Mr. King's negotiation in Europe."¹³

Mason's sale of securities to Newberry destroyed any possibility of succeeding through his New York agents. Attempts to have the bonds pass through Delafield's hands failed when Newberry deposited them with John Ward & Co., of New York, and refused to turn them over. Prime, Ward, & King, reacted angrily to the discredit reflected on

¹²Messages of the Governors of Michigan, I, 219-236.

¹³Letter from Stevens T. Mason to John Delafield, Jan. 6, 1837, Records of the Office of Secretary of State, Great Seal and Archives: Claims submitted to the Legislature, 1837-1839 (Michigan Department of State, Historical Commission Archives).

their agents, who were claiming sole agency, and defeated a sale then being negotiated for two million dollars of Michigan's bonds. Under these conditions, the company temporarily refused to honor any advances on the bonds they were attempting to market in Europe, but later allowed the state to draw \$150,000 until King could report on his foreign negotiations.¹⁴

At first, Mason was apologetic, offering to increase the state's loan to five and one half million, in order to absorb Newberry's bonds while giving Delafield full control over five million dollars in bonds.¹⁵ Two weeks later, however, he became more belligerent. Sending John Norton, cashier of the Michigan State Bank to New York to explain the situation and negotiate with Delafield for payment of the \$150,000 in drafts, he wrote he had originally been afraid that he had interfered with the European sale,

But my apprehensions of interference with Mr. King in Europe, are relieved by the fact disclosed in a copy of the letter of Prime, Ward, & King dated Jany 27, 1838, which informs me, that my sale of bonds to Newberry defeated the sale on their part of two millions of bonds. Of course this sale of two millions, was in the American Market, as the information of my transfer to Newberry could not at that

¹⁴Letters from John Delafield to Oliver Newberry, Jan. 26, 1838; John Delafield to Stevens T. Mason [copy], Jan. 23, 1838; Prime, Ward, & King to John Delafield, Jan. 27, 1838, Ibid.

¹⁵Letter from Stevens T. Mason to John Delafield, Feb. 6, 1838, Ibid.

date have reached the European Market. I am thus relieved from the apprehension, that Mr. King might by possibility be making arrangements for the whole five million in Europe, and thus involve you in difficulty by obligations in Europe beyond the remaining four and a half. . . .

I have no disposition to take the loan from your hands, but should you desire otherwise, Mr. Norton is authorized to receive the remaining bonds in your possession, to be disposed of according to my instructions.¹⁶

Although expressing hopes that the contract would not be broken, and asking that their agreement be reduced to writing when he visited New York in April, Mason's tone had changed noticeably.

Frustrated in his attempts to market bonds for support of the state's banks, Mason was nevertheless not without alternatives. When he transmitted a proposition from a Detroit banking convention requesting that they be allowed to sell state bonds to gain exchange on the East, he recommended aiding the banks by chartering a state bank for the same purpose; the banks of the state needed aid, because losses always fell on the people, who were the holders of their paper.¹⁷ For the short term, however, the Governor planned to use Eastern funds to support local notes without authorization. On February 19, as part of a message explaining negotiations on the

¹⁶Letter from Stevens T. Mason to John Delafield, Feb. 19, 1838, Ibid.

¹⁷Messages of the Governors of Michigan, I, 239.

state's loan, he told the Legislature not to worry about the rejection of drafts on Delafield, because they were not drawn against the loan: "The drafts drawn on him were for a voluntary advance on his part, and drawn to relieve the exchanges between Detroit and New York."¹⁸ To implement his plan, Mason sent the following letter to Delafield with Norton on his mission to New York:

In a conversation with Mr. Norton, the evening before his departure, he suggested that he would like, in addition to his \$90,000 due on my draft, to be enabled to command some additional funds, to purchase and redeem Michigan notes in your market. Mr. Norton is a particular personal friend of mine, and is the fiscal agent of the state, and cashier of the state deposit bank. You may, therefore, if you have received funds on the bonds in your possession, transfer to Mr. Norton, \$50,000 or \$100,000, taking his certificate of deposit from "John Norton, Jr., cashier of the state bank," which will be cashed at the state deposit bank. This letter is inclosed to Mr. Norton, who will deliver it to you.¹⁹

Whether the draft was to be used for the benefit of the bank, Mason, or Norton, it is apparent that the Governor approved and authorized the use of state funds gained through the loan for exchange stabilization operations between New York and Detroit. Credits gained in New York would have returned a profit to someone through the purchase of depreciated state notes in the eastern market for redemption in Michigan. Even if the Governor was not

¹⁸Ibid.

¹⁹Letter from Stevens T. Mason to John Delafield, Feb. 24, 1838, in Senate Document No. 37, 1841, p. 97.

attempting to speculate in notes with state funds for his own profit or the profit of his friends, he had no legal authority to engage in either central banking or exchange stabilization measures.²⁰ Through Norton's negotiations with Delafield, he was able to gain the advance of \$150,000 from Prime, Ward, & King in the form of drafts on London.

Ultimately, Mason's attempts to support the notes of Michigan's banks cost the state its chance to market the loan in Europe, along with substantial brokerage fees. Shortly after Prime, Ward, & King reopened their joint exchange account with Barings on December 16, 1837, Michigan's securities were consigned for sale. According to Ralph Hidy, "An attempt to buy a Michigan loan failed in competition with higher bids from the Bank of the United States, a result very pleasing to the Barings, who were concerned about the proximity of that 'backwoods' state to the seat of the Canadian Rebellion."²¹ No word of the bid of the Bank of the United States ever reached the American negotiators, but when Mason arrived in New York in the spring of 1838, he found that Prime, Ward, &

²⁰Stevens T. Mason, To the People of Michigan (Detroit, May 11, 1841), p. 17. Mason admitted the draft and letter, but defended himself by a statement from Norton that the money was for use by the bank, not for himself or personal friends. The fact that the funds were not granted does not constitute a valid excuse.

²¹Hidy, p. 261.

King had returned the bonds from Europe and were demanding repayment for the advances drawn in drafts on London. Prior to James King's return to the United States, authority had been granted to draw on London, and Mason had redeemed the bonds deposited earlier with John Ward & Co. by Oliver Newberry, which had caused the rift with Prime, Ward, & King. Ironically, none of the bonds were sold; although deposits from Newberry were reported by the Treasurer from February through September, early in April Mason retrieved the whole lot from John Ward & Co., by paying \$200,000 into Newberry's account. The bonds were then turned over to Delafield.²² Shortly thereafter, the Governor attempted to prove to Delafield that the rates of exchange stipulated by the amended act would not apply to payment of interest and principal, but it was too late.²³ The next day, James King, who had just returned from Europe had formally notified Delafield that Prime, Ward, & King would no longer handle Michigan's account.

²²Letters from Prime, Ward, & King to John Delafield, April 10, 1838; Oliver Newberry to Messrs. John Ward & Co., April 16, 1838, in Records of the Office of Secretary of State, Great Seal and Archives: Claims submitted to the Legislature, 1837-1839 (Michigan Department of State, Historical Commission Archives). See also, Michigan, House Document No. 44, 1839, pp. 717-718.

²³Letter from Stevens T. Mason to John Delafield, April 26, 1838, Records of the Office of Secretary of State, Great Seal and Archives: Claims submitted to the Legislature, 1837-1839 (Michigan Department of State, Historical Commission Archives).

Notifying Delafield of his refusal to handle Michigan's securities, King made it clear that two factors were responsible for his rejection of the contract: the stipulations regulating the rate of exchange, and Mason's violation of the agency agreement by marketing bonds through Newberry. Although the exchange rate provisions made it impossible to sell the securities in Europe, King had planned to market them in America on his return. On arrival, however, he discovered that Mason's violation had spoiled the American market, and King made it clear that Newberry's agency was the primary reason for his returning the bonds to Delafield.²⁴ As a result of Mason's dealings, the state had lost the opportunity to sell three million dollars of its bonds with solvent brokers in London, together with \$11,755 in interest on Delafield's advances and 916 in commissions and expenses.²⁵

In reporting his negotiations to the Legislature in the spring of 1839, Mason was not entirely candid.

²⁴Letter from J. G. King to John Delafield, April 28, 1838, in Michigan, Senate Document No. 37, 1841, pp. 98-99. The incomplete document presented by Mason is in Michigan, House Document No. 44, 1839, pp. 720-721. Mason's defense is published in To the People of Michigan, p. 17. The certified copy of the original is in Records of the Office of Secretary of State, Great Seal and Archives: Claims submitted to the Legislature, 1837-1839.

²⁵Letter from J. D. Beers to John Delafield, May 30, 1838, Ibid.; Michigan, Senate Document No. 37, 1841, p. 99; Michigan, House Document No. 44, 1839, p. 718.

With one exception, none of the correspondence with Delafield was presented, although the letters given to the Legislature were supposed to include all the material relating to the loan. In the one letter presented, that of James King revoking his agency on April 28, 1837, the portion emphasizing the role of Mason's agency to Newberry was removed before publication. The Governor similarly failed to report the details of his negotiations with Newberry, and the fees paid to Delafield for his advances were explained away as charges for purchasing the exchange to realize drafts on London. His single mistake in covering his tracks was his refusal to pay Delafield an additional commission on the bonds which would have been sold if Mason had not interfered. Delafield, angry at Mason's refusal to adjust the commission, submitted the entire file of correspondence to the Legislature in 1841, much to the delight of the Whig commission of investigation.²⁶

²⁶Letters from Stevens T. Mason to John Delafield, June 4, 1838, and June 5, 1838; Letter and Affidavit of John Delafield, Jan. 28, 1841, in Records of the Office of Secretary of State, Great Seal and Archives: Claims submitted to the Legislature, 1837-1839. Because of Mason's omissions and commissions, the story of the first year's negotiations has never been fully told. Hemans consistently refused to consider evidence unfavorable to Mason, and Jenk's rarely ventured from the printed documents. In citing the documents presented by the Whigs from Delafield's folder, I have used only those which Mason later acknowledged, and citations include the construction placed on the evidence by all parties.

Rejected by Delafield and Prime, Ward, & King, Mason turned to other financiers, under heavy pressure from his former agents to repay their advances.²⁷ On May 8, 1838, a contract was negotiated with E. R. Biddle in behalf of himself and friends in Philadelphia for the entire loan at par. Eighty thousand dollars was accepted as a down payment, but after waiting nearly a month, Mason returned the contract when Biddle was unable to complete arrangements with his friends.²⁸ Finally, on June 1, 1838, a new contract was signed awarding an agency to the Morris Canal and Banking Company.

The contract signed by Mason and Biddle awarded the Morris Canal and Banking Company an agency to sell five million dollars of Michigan's bonds, for a commission of two and one-half per cent. To compensate for the loss of bonds sold in the name of Oliver Newberry, bonds granted by the state to the Allegan and Marshall Railroad and the Ypsilanti and Tecumseh were included in the contract. Funds realized through the sale of securities, along with any exchange benefits from foreign sale, were to be deposited in a New York bank, instead of Detroit. In case

²⁷ Letters from Prime, Ward & King to Jno. Delafield, May 11, 1838, and May 31, 1838; S. T. Mason to J. Delafield, May 19, 1838, and May 26, 1838, Ibid.

²⁸ Michigan, House Document No. 44, 1839, p. 722.

the bonds were sold below par, the agents were pledged to make up the difference, after subtracting their commission. If the bonds could be sold above par, benefits up to five per cent were to be divided between the state and its agent: Proceeds of sales above five per cent over par would accrue to the company. In return, the company was pledged to advance \$250,000 during the following year. After July 1, 1838, the balance was due in quarterly installments of \$250,000, even if the company had failed to sell the loan. The state was required to supply the company with bonds for \$1,000,000 ahead of installments. In addition, the company reserved the right to call in and sell any part of the unsold balance at any time on thirty days notice, deducting their commission at the time of sale and depositing the proceeds to the account of the State of Michigan. Finally, the agency of the Morris Canal and Banking Company was made irrevocable.²⁹

Neither the legality nor the wisdom of this contract was ever seriously challenged by the Legislature. Indeed, all the advantages accrued to the state. Although the bonds were not really sold at par, the granting of a commission was not prohibited by law, and the Legislature seemed to accept Mason's explanation that it had been added to shield the company from loss if the bonds

²⁹Ibid., pp. 709-711.

were not sold at their face value. In compensation, the state was guaranteed regular quarterly payments with which to pay for their program of internal improvements, and payments were to be continued even if the company was unable to sell the bonds. In effect, the company was offering to guarantee payment if the market collapsed. If the entire issue were sold, the proceeds were to be paid over to the state on receipt of the balance of its bonds. Serious opposition developed, however, to Mason's continued and unauthorized alterations in the terms of the contract.

On June 4, three days after the original contract had been signed, Mason consented to its first alteration. According to the arrangement, the Governor agreed to receive the first \$1,300,000 of the company's obligation in Morris Canal notes, disbursing them at specified periods: \$250,000 on August 1, and \$100,000 on the first of each following month. The same day, Theodore Romeyne, who acted as Mason's advisor and partner during the transactions, was sent to Delafield with \$150,000 to exchange for the \$1,200,000 in bonds held by the state's former agent against his advances.³⁰ After signing the supplementary agreement, Mason and Romeyne watched as \$110,397 was counted, marked, and packed in a trunk provided for

³⁰Ibid., pp. 711-712.

its return to Michigan. No objection was raised to the alteration by the investigating committee in 1839, perhaps because it was never put into operation.

During the return trip to Michigan with Romeyne and the money, \$4630 mysteriously disappeared from the middle of the trunk in which it was carried. Seizing the opportunity to break the contract of June 4, Mason suggested another alteration in the contract, substituting ninety day sight drafts for the notes stipulated. At the end of June, John Norton was sent to New York to negotiate a second alteration. On July 14, a new agreement was signed, authorizing Norton to draw on the company on the due date of installments and making the drafts payable at ninety days sight. No interest was to be charged the company for the additional ninety days it held the state's funds.³¹ By Mason's two alterations, the company was awarded an average of 180 days free use of funds credited to the state, although the original contract had awarded \$1,300,000 payable on demand.

The new contract raised howls of protest in Michigan. Even the legislative committee investigating the arrangements in 1839 momentarily turned from dealing with the fascinating mystery of the abstracted funds to

³¹Ibid., pp. 712-713; Stevens T. Mason to John Delafield, June 4, 1838, in Records of the Office of Secretary of State, Great Seal and Archives: Claims submitted to the Legislature, 1837-1838.

grumble that it could not discover "the necessity or the authority by which drafts were substituted for the notes of the Morris Canal and Banking Company, . . . "32 In answer to the committee's questions, however, Mason offered two reasons for his change in the contract:

this modification was made in consequence of the risk in transporting the bills of the company, and from a sincere desire to relieve our commercial interest at home by throwing exchange into the hands of our banks. These drafts were offered to the banks of the city of Detroit, on the conditions that they would pay out their own paper, or such other paper as they would make equal to cash at their own counters, and the proposition was rejected by all but the Michigan State Bank.33

Although the Governor explained that the ninety days free use was granted to the company to compensate for its losses of interest on the notes the state had contracted to circulate, no explanation was offered for the contract to disburse notes, or why he had signed such a contract when the original agreement had allowed the state to draw on the bank at sight.

No explanation was found for the Governor's alterations until 1840, when the Whig Treasurer, Robert Stuart, gained access to the books of the Morris Canal and Banking Company. The documents uncovered supplied the answers to questions raised by the Whigs from the beginning of Mason's involvement with the Morris Bank. On June 4, 1838, a

³²Michigan, House Document No. 44, 1838, p. 707.

³³Ibid., p. 723. Italics mine.

second contract had been signed between the company and Theodore Romeyne acting as a supplemental agreement to the first alteration, which it will be recalled, was also signed on that date. In return for the State's agreement to take the bank's notes on a delayed schedule, Romeyne was entitled to retain one half of the interest charged on the bonds between May 1, 1838 and the date the funds were disbursed, and two and one-half per cent interest on the time the bills were in circulation. Ostensibly, the contract was awarded to release the company from Romeyne's claims to title, right and interest in the loan, as well as for agencies, commissions, and professional services.³⁴

Faced with the evidence before a formal Senate investigation, Romeyne told the whole story in detail. Prior to their trip east in April, 1838, he and Mason had worked out a plan to buy two of Michigan's wildcat banks to finance the state's internal improvements program. Local bank notes were to be paid to contractors, and the proceeds of the loan used to redeem their issues and speculate on domestic exchange in New York. To purchase the banks, the partners consented to the modification of June 4, for which they received advances of \$10,000. The balance was to be paid at completion of the contract

³⁴Michigan, Senate Document No. 37, 1841, pp.111-114.

on June 1, 1839. From the contract, the pair expected to realize half of the \$35,000 charged the state in interest on deferred payments, and two and one-half per cent on the circulation of Morris Bank and Canal notes. To trace the bills of the Morris Bank and identify them on their return to the company, the bills were marked with special stamps which, for the partner's convenience, were imprinted inside the crown of Romeyne's hat.

Even before Mason and Romeyne left New York, the Governor became increasingly dissatisfied with the arrangement. When the marked money disappeared from a locked trunk in Mason's custody, he used the incident as an opportunity to terminate the contract. Convinced that there would be little profit in circulation of the Morris notes, and afraid that his currency support and speculation programs would be endangered, the Governor proposed to compensate the Morris Bank and Canal Company by offering to substitute ninety day sight drafts for the circulation of their notes. To avoid loss in interest to the state of the \$15,000 in interest charged on these drafts, Mason arranged for the Michigan State Bank to advance installments when they were due, compensating the bank with the exchange benefits to be derived from holding funds in the East. F. H. Steevens, President of the Michigan State Bank, testified that the Governor was rewarded for placing the exchange with the bank by being allowed substantial

overdrafts that were to be covered by the profits from exchange sales.

Aside from the \$35,000 lost by the state through interest on deferred payments, Mason's negotiations with the Morris Bank and Canal Company in June and July 1838 were not of major importance to the state's financial affairs. They serve, however, to point up the fact that the Governor was capable of putting the state's funds to unauthorized uses. Mason naturally denied all the charges leveled by the legislative committee of investigation, in 1840, but in attempting to refute their accusation he presented evidence that substantiated their position. After considering the evidence offered by all sides, in addition to examining the extant documents and some evidence not cited by any of the parties, I am convinced that the evidence weighs heavily against Mason, and that most of the Whig charges were essentially correct.³⁵ Compared, however, to the damage done the state's program by the Governor's third modification in the loan contract

³⁵Ibid.; Michigan, House Document No. 44, 1839; Mason, To the People of Michigan; Theodore Romeyne, To the People of the State of Michigan (Detroit, June 7, 1841); Draft of a letter from S. T. Mason to Edw. R. Biddle, July 15, 1838, in Records of the Office of Secretary of State, Great Seal and Archives: Five Million Dollar Loan (Michigan Department of State, Historical Commission Archives. Michigan, Senate Journal, 1841, p. 358, the Senate deadlocked 7 to 7 on a resolution to censure Mason. The votes do not follow party lines absolutely.

and his currency speculations, the results of his actions in the early summer of 1838 are relatively unimportant.

The third modification of the contract by Governor Mason occurred in November 1838. Late in the summer, the bank began to put pressure on Mason to deposit the balance of the securities in a safe bank in New York, subject to transmission on his authorization. While complaining that the release of bonds by the University of Michigan, and the Detroit and Pontiac Railroad had depressed the price of bonds from Michigan, they held out hopes of a sale to Rothschild in London.³⁶ During the Governor's visit to New York in November the bank offered a new contract, and Mason accepted it. After a meeting on November 7, letters were exchanged confirming the details of the new understanding. On November 10, E. R. Biddle offered to credit the balance of the loan to Michigan's account if the state would allow the company to deduct its two and one-half per cent commission and accept the obligations of the Bank of the United States for three-quarters and the Morris Canal and Banking Company for one-quarter of the sums due, to be paid at the

³⁶Letter from James B. Murray to Stevens T. Mason, August 1, 1838, in Records of the Executive Office, 1810-1910: Correspondence (Michigan Department of State, Historical Commission Archives); Letter from George Griswold to Stevens T. Mason, July 31, 1838, in Records of the Office of Secretary of State, Great Seal and Archives: Five Million Dollar Loan, 1835-1853 (Michigan Department of State, Historical Commission Archives).

dates specified in the original contract. An account was to be kept to credit the state with interest on unpaid installments, which could be drawn against at thirty days sight.

The new arrangement suggested by E. R. Biddle added nothing to the advantages realized by the state in the original contract, except the powerful backing of the Bank of the United States. Under the terms of the contract of June 1, the company had been required to pay over the balance of the loan before collecting its commission and gaining possession of the state's bonds; the new arrangement allowed it to collect its commission immediately, while retaining control of both the state's bonds and funds. In spite of this, Mason replied to Biddle's letter that negotiation of the loan had been a thankless task, and he would give to the bank the responsibility for determining the state's best interests. Assured by E. R. Biddle that the contract was to the state's advantage, Governor Mason authorized his New York banker on November 19, 1838, to release to the Morris Canal and Banking Company the bonds held on deposit.³⁷ After Mason

³⁷Letters from S. T. Mason to E. R. Biddle, Nov. 3, 1838, Nov. 11, 1838; E. R. Biddle to S. T. Mason, Nov. 10, and Nov. 11, 1838, and in Michigan, House Document No. 44, 1839, pp. 712-717. Letter from S. T. Mason to Ruben Withers, Nov. 19, 1838, in Records of the Office of Secretary of State, Great Seal and Archives: Five Million Dollar Loan, 1835-1853 (Michigan Department of State, Historical Commission Archives); Letter from B. Murray to S. T. Mason, Nov. 7, [1838], in the S. T. Mason Papers (BHC).

returned to Detroit, a copy of the new contract was forwarded from New York, and after his approval, was signed on January 29 by Nicholas Biddle in Philadelphia. The new contract obligated the Bank of the United States of Pennsylvania to assume three quarters of the balance due the state under the original agreement, and the entire balance if the Morris Bank defaulted. In return for the remaining \$3,700,000 in bonds, the two banks promised to pay a total of \$4,194,250, which figure included interest on the unpaid installments. At the same time, the state was required to pay interest on the entire \$5,000,000.³⁸

Almost from the beginning, the new arrangement caused difficulties for the state. Previous historians have focused too much attention on the sale as the source of Michigan's later difficulties after the Bank failed and left the state liable for redemption of negotiable bonds for which it had received no payment. This result was as unforeseeable as it was unfortunate; in the immediate future, more serious difficulties were encountered. In February, the state deposit bank failed, carrying with it almost every penny of the state's resources. Because the new contract had allowed the Morris Bank to collect its commission from the March and April installments, the

³⁸Michigan, Legislature, Report of the Auditor General (Senate Documents, 1840, II, S. D. No. 3), pp. 274-276.

state was deprived of means to carry on its internal improvements for over three months. To continue the program, the state was forced to borrow money in anticipation of the June installment at six per cent. In June, it was discovered that under the terms of the contract, which credited interest on unpaid installments due the state against interest due the bondholders on the entire loan, the interest on unpaid installments was deposited in the state's interest account only when the installment fell due. Instead of receiving interest on the entire unpaid balance each period, the state received interest on each installment for the entire period it had been in the bank's possession when that installment fell due. Thus, instead of receiving three months interest at six per cent on \$3,700,000 in bonds held by the banks the first quarter, the state received three months interest at six per cent on \$250,000, which was the quarterly installment. At the last payment, instead of receiving nothing because the unpaid balance was zero, the state would receive forty-five months interest at six per cent on that installment. Because interest due on unpaid installments grew instead of diminishing over time, the charges for interest on its entire bond issue were heaviest the first year, instead of the last, and the state was forced to meet almost all of the \$150,000 due semi-annually on the loan from its own resources.

Believing, however, that it was only liable for interest on the payments it had received, the state had issued anticipations for all but a small portion of the June installment, and was consequently forced to borrow \$102,110 to meet its obligations to the bondholders. Finally, the state discovered that it was being charged half a per cent interest for using funds from the interest account to pay interest due the bondholders because the state could only draw on the interest account at thirty days sight. As a result, the new contract that the Governor had agreed to in November cost the state \$55,508 more than its previous financial arrangement under the contract of June 1, 1838. Although the state threatened legal action, it was finally forced to consent to the Bank's terms.³⁹ During 1839, the state was plagued by serious financial difficulties, even though it had sold its bonds to the nation's strongest banking institution and gained assurance that installments would be promptly paid. Through Governor Mason's three contract modifications, the state lost a total of \$121,881 in its

³⁹Ibid., pp. 8-9, 272-273; Messages of the Governors of Michigan, I, 270; Michigan, Legislature, Communication from the Auditor General (House Documents, 1840, H. D. No. 49), pp. 831-833; Letter from S. T. Mason to C. C. Trowbridge, May 7, 1839, in Records of the Executive Office, 1810-1910: Correspondence (Michigan Department of State, Historical Commission Archives).

negotiation of the five million loan, exclusive of the Governor's expenses.⁴⁰

The state's losses through contract modifications, however, were small compared to the money lost through currency support and speculation. Governor Mason's willingness to use receipts from the state loan to support the notes of Michigan's banks was clearly illustrated in his previously cited letter to Delafield and statements to the Legislature. The Governor was willing to use exchange deposited in the East to redeem the notes of local banks at substantial discounts and to sell exchange on the east in Detroit. At the same time, control of the state bank of deposit fell under the control of its cashier, John R. Norton, the Governor's staunch political ally. The president of the Bank later testified that:

Mr. Norton assumed the exclusive control of the bank as representing the majority of the stock held in the east, and to have the power to turn out of the bank such officers as he pleased. When the board of directors ought, laterly, to have met, either they or Mr. Norton did not attend, and no important business could be done, nor control exercised over the operations of the bank. In May 1838, witness told Mr. Webb how matters were going on, and unless proxies from the eastern stockholders were sent on to some other person than Mr. Norton, matters would result badly; told him of the connection between governor Mason and Mr. Norton, which was of a very intimate and confidential nature. . . . For several months previous to this [the Bank's failure in February,

⁴⁰Michigan, Senate Document No. 37, 1841, pp. 112-114.

1839] probably nearly a year, witness had not been in Mr. Notron's confidence. When a certain set of persons was in Mr. Norton's room, and witness came in, they all went out. The set consisted partly of Mr. Pritchette, governor Mason and Henry Howard.⁴¹

From January 1, 1838, after the Governor had arranged for sale of the securities to Oliver Newberry for exchange speculation, and just prior to his first draft on John Delafield at the Phoenix Bank for the same purpose, the Michigan State Bank began to receive wildcat notes among its general deposits, a practice which continued until the first week in November. In October, while Norton was absent, the assistant cashier and the president decided to stop receiving the notes, which included most of the funds deposited from the receipts of the Central Railroad. When Norton returned to Detroit, he ordered the bank to continue receiving the notes, explaining that refusing to accept them was causing disturbances in the country. On November 1, 1838, the assistant cashier asked how long the bank would continue to honor wildcat notes, and was told by Norton that the practice would be stopped in two or three days.

⁴¹Ibid., p. 137. It is important to note that the Michigan State Bank was a private institution chartered by the Legislature, in which the state had chosen to deposit its funds. The state did not own stock or appoint directors. The State Bank, chartered later, was a separate institution.

Immediately after the fall elections, Norton ordered the bank to refuse these notes.⁴²

In attempting to back the issues of Michigan's country banks, Norton was acting with the support and encouragement of the Governor. Although Mason faltered for a few days in June, when he considered setting up his own bank, his support of Norton's currency operations increased after he finally marketed the state's bonds. Early in August 1838, the Governor attempted to include all of Detroit's special charter banks in his efforts. On August 2, in a circular letter sent through John Norton, stating his long standing concern about the condition of the banks, the Governor offered to back the city banks with all the eastern credit at his command to sustain them in a run for specie, if they would expand their issues. In addition to furnishing a greater supply of money for marketing crops, the measure was designed to give credit in the city to the paper of all solvent country banks. In an attached Memorandum, he offered to give the banks' drafts for \$25,000 in August, and \$15,000 on the first of each month, if they would be parties to the agreement: "If the city banks can throw into the

⁴²Michigan, Legislature, Report of the Special Committee appointed by the House of Representatives, to Investigate the Proceedings, &c., of the Several Boards of Internal Improvement (Detroit: Dawson and Bates, 1840), pp. 388, 396.

interior of the State a circulating medium of their own paper, the country banks will be enabled to settle their balances at their own counter satisfactorily to the banks of the city." A note on the back of the memorandum in Mason's distinctive hand recorded the proposition's fate: "Rejected by all but Michigan State Bank, S. T. M."⁴³ On August 6, the Governor was forced to write to E. R. Biddle, Asking him to cancel the authorization to accept drafts from the various city banks. "The banks above named having failed to comply with an arrangement proposed for the relief of the country these drafts have been withdrawn & cancelled, and a draft for the whole amount \$75,000 substituted in favor of John Norton Jr. Cashier of the Michigan State Bank."⁴⁴

On February 29, 1839, the Michigan State Bank went to the wall, carrying with it \$514,540 in state deposits. Most of the state funds were credited to accounts of the state's internal improvement program. Overdrafts allowed by the bank to members of the Board of

⁴³Copy of a letter sent to John Norton by Stevens T. Mason, August 2, 1838, in Records of the Office of Secretary of State, Great Seal and Archives: Five Million Dollar Loan, 1835-1853 (Michigan Department of State, Historical Commission Archives). Another copy can be found in the John R. Norton Papers, Burton Historical Collections, under the date of August 4, 1838.

⁴⁴Draft in Mason's hand to E. R. Biddle, August 6, 1838, in Records of the Office of Secretary of State, Great Seal and Archives: Five Million Dollar Loan, 1835 to 1853 (Michigan Department of State, Historical Commission Archives).

Internal Improvements, many of them unauthorized, reduced the state's claims to \$349,296. Senate committees investigating the bank's affairs blamed the suspension on the practices of enlarging its discount of paper on state funds, allowing unlimited overdrafts to individuals and public contractors, extending illegal advances to public officials to help them evade the law, and receiving the notes of wildcat banks. In addition, it accused the cashier of substituting wildcat notes for good money in bundles of state funds placed in the bank's vault for storage (i.e., not deposited). After several investigations, the state reached a settlement on May 15, 1840. Assets with a nominal value of \$797,000 were assigned to the state in satisfaction of its claims, but only a small portion of the settlement was ever realized. Indeed, the state never pressed its claims with vigor; lists of the assets accepted reveal substantial claims against most of the prominent and powerful people in the state.⁴⁵ No

⁴⁵Michigan, Legislature, Report of the Committee appointed to settle the Claims of the State against the Michigan state bank (Senate Documents, 1839, S. D. No 36); Michigan, Legislature, Report of the Committee on Incorporations (Senate Documents, 1839, S. D. No. 37); Michigan, Legislature, Report of the Select Committee appointed to investigate the conduct of the commissioners appointed to settle with the Michigan state bank (Senate Documents, 1841, II, S. D. No. 42); Michigan, Legislature, Report of the Commissioners Appointed by the Legislature to settle with the Michigan state bank (House Documents, 1841, II, H. D. No. 37); Michigan, Legislature, Report of the Select Committee Relative to the real value of the assets of the Michigan state bank (Senate Documents, 1842, S. D. No. 17).

administration could have survived that attempted to realize the state's claims.⁴⁶

After the bank's failure, the Legislature accepted the Governor's recommendations and created a state bank on the model of the Bank of the United States. Hoping to prevent depreciation by controlling note issues, the Democratic Legislature discovered the principle that "The common system of banking is unequal, and constitutes a moneyed monopoly when conducted by chartered companies, and is calculated to combine individual wealth into powerful, and too often fraudulent compacts." A state bank, receiving state deposits, would be capable of controlling the issues of any chartered bank. By combining the capital of the people with the capital of the state, they hoped to divert the profits of banking to the state government, and reduce the burden of taxation. The act passed designed a system joining public and private credit equally in the capital of the bank, while reserving control to the government. Several branches were chartered in order to

⁴⁶In addition to his abstract interest in central banking, it appears that Mason held an unspecified amount of stock in the Michigan state bank, and was receiving fees for negotiating the exchange of the bank's notes from outstate banks and banks outside the state. To support this conclusion, see an undated receipt signed by Hiram Norton to Mason and Pritchette paying \$48 for negotiating the receipt of Illinois Canal scrip by the Michigan state bank at par, in Stevens T. Mason Papers (BHC), and the assignment of power of attorney for sale of Mason's Michigan state bank stock to William Hale, Feb. 3, 1842, in the Stevens T. Mason Papers (MHC).

allow the bank to disburse local benefits and harness local capital. The state was forced to drop the plan, however, when it found itself unable to borrow enough specie to put the bank into operation.⁴⁷

In November 1839, Governor Mason attempted a fourth and final modification of the loan contract by sending his law partner, Kintzing Pritchette, to New York to negotiate its cancellation. Prior to the fall elections, the Whigs had campaigned on a platform of repealing the Internal Improvements Act and canceling the loan, and around January 1, 1840, Governor-elect William Woodbridge had called on Mason to inquire into the possibility of terminating the contract.⁴⁸ Between elections and assuming power, however, the Whigs had changed their minds. In negotiations between December 20 and February 1, Pritchette managed to gain an agreement from both banks to return the unpaid balance of the state's bonds.

⁴⁷Messages of the Governors of Michigan, I, 253; Michigan, Legislature, Report of the Committee on Banks, &c. (House Documents, 1839, H. D. No. 29), pp. 574-578; Michigan, Legislature, Report of the Board of Fund Commissioners (Senate Documents, 1840, II, S. D. No. 11), pp. 174-178; Michigan, Legislature, Report of a Select Committee Relative to a State Bank and Branches (Senate Documents, 1840, II, No. 49), pp. 466-474; Michigan, Legislative Acts, 1839, Nos. 37, 59, 112.

⁴⁸Drafts of letters from William Woodbridge to "Dear Sir," Feb. 1, 1840, and Feb. 3, 1840, in Woodbridge Papers (BHC). The letters were apparently to be sent to Mason. Typed copies of the drafts can be found in the Woodbridge Papers, Jan. 1 - Jan. 15, 1840.

During the negotiations, however, T. Dunlap, new president of the Bank of the United States, had informed Pritchette that all of the Michigan stock had been transmitted to Europe, "and either sold or disposed of for a period of time." Finally, however, Pritchette was able to bring the bank to terms through its New York branch, and returned to Michigan with agreements for the state's ratification.⁴⁹ The new Whig Legislature, ostensibly angered by the Governor's assumed authority to act in their stead, refused to have anything to do with the contract, and accused Mason of being involved in a secret plot to defraud the state. The former Governor was accused of attempting to discredit the Whig party by depriving the new administration of its only financial resources, and bankrupting the state for his own political advantage.⁵⁰ Consequently, the agreement negotiated by Pritchette was never put into effect.

⁴⁹The Whig committees were in error when they accused Pritchette of fraud by carrying out his negotiations with the BUS through "The Bank of the United States in New York." Contrary to the Whig opinion, it was an agency of the BUS of P, although not a legal branch. Hammond, pp. 484, 600.

⁵⁰Michigan, Legislature, Report of the Majority of the Committee on Finance (Senate Documents, 1840, II, S. D. No. 58), pp. 496-525; Michigan, Legislature, Report of the Committee on Finance (Senate Documents, 1840, II, S. D. No. 67), pp. 571-586; Michigan, Legislature, Report of the Minority of the Committee on Finance (Senate Documents, 1840, II, S. D. No. 59), pp. 525-536.

The Whig position on Pritchette's negotiations, although presented in the form of a political diatribe, was predicated on the essentially sound assumption that cancellation of the loan would bankrupt the state. Taxes due from the counties were heavily in arrears, in some cases almost three years, and warrants issued for internal improvements, along with iron contracts, appropriations for state expenses, and outstanding claims threatened to consume all the installments due on the loan through April 1841. To have canceled the loan would have meant bankruptcy, with a suspended debt equal to ten times the annual state assessments, and the counties were almost unanimously refusing to meet current taxes.⁵¹ The Legislature did take advantage, however, of the offer extended by E. R. Biddle during the negotiations to grant security for the state's future installments from the Morris Bank. At the end of March 1840, the State Treasurer, Robert Stuart, was required to secure the balance due the state.⁵²

While Stuart was traveling to New York, the Morris Bank and Canal Company failed, rejecting drafts on the April installment. Finding it would take at least eight weeks to effect a settlement, Stuart turned to the Bank

⁵¹Michigan, Legislature, Report of the Majority of the Committee on the Five Million Loan (House Documents, 1840, II, H. D. No. 50), pp. 531-550.

⁵²Michigan, Legislative Acts, 1840, No. 93.

of the United States for aid, only to find that it refused to honor its obligations. Attempts to reach a settlement with the Morris Bank were extended through December, due primarily to the protracted absences of E. R. Biddle, who had recently discovered the delights of touring isolated areas in the mountains of western Pennsylvania. It was during one of these absences that Stuart gained access to the files and contracts of the company, which he incorporated into a chancery bill asking for damages and custody of documents outlining the agreements between Mason, Romeyne, and the bank. At first, Biddle attempted to convince him that the state's best interests would be served by taking a second mortgage on the Morris Canal and advancing money for its enlargement; the Indiana loan commissioner was being persuaded to make such a settlement. Stuart, however, was not impressed: "They made me the offer, alone, or jointly with him: but as the Clinton Canal may be enough for our purposes, I declined, greatly to their astonishment, as they said." Failing to reach an adequate settlement, Stuart filed his chancery bill and began attaching the company's property. On November 30, he was able to report that "The Chancery Bill has tamed them like lambs, & I think they have offered us now, all the security they can give: . . . " If the bank would supply security for half of the sum outstanding,

Stuart reported, he would consider the state fortunate.⁵³

On January 14, 1841, Stuart's report was submitted to the Legislature. When the Morris Bank failed, it owed the state \$737,500 in principal, or \$823,000 with interest on unpaid installments from January 1, 1839. In place of the unpaid bonds, the company had offered assets with a nominal value of \$621,000, in return for an agreement by the state to postpone collection until January 1, 1844. After that date, its obligations were to be paid with interest in annual installments of \$100,000. The property offered as security consisted mainly of farm and coal lands in Pennsylvania and New Jersey, obligations to deliver iron, railroad stock and a judgement against the Long Island Railroad, and title to the Morris Bank's New York office. Stuart had been impressed by the company's plans for widening their canal, and their connection with Pennsylvania's internal improvements, which held promise of allowing them to dominate the New York coal market. He had hopes of the state being paid if it waited patiently.

⁵³A series of unpublished letters from Stuart to Woodbridge adds depth and authenticity to the story of the state's negotiations with the Morris Bank and Canal Company. See: Robert Stuart to William Woodbridge, May 28, September 30, and November 30, 1840, and Robert Stuart to John C. Calhoun, July 31, 1841, in the Woodbridge Papers (BHC).

Impressed by Stuart's recommendations, the Legislature granted full authority to the Treasurer to effect a settlement.⁵⁴ Stuart's hopes that lenient treatment would allow the state to recoup its losses proved in vain, however, and as time passed the value of the pledged securities eroded; only a little over \$20,000 was ever collected on the collateral security.

Even before the Legislature authorized Stuart to ratify his agreement, the Bank of the United States closed its doors. Although the Bank failed in February, no action could be taken until two months later, when the state's drafts against the April installment were protested. The Bank immediately offered to pay the installment in its own notes, but the state refused because they were at a fifteen to twenty per cent discount. Under pressure from the state, drafts on the April and July installments were finally met by deposits of funds current in New York. In October, however, the state's drafts were again protested, and no further payments were received. With its failure to honor the Treasurer's drafts in October, the Bank defaulted on the six remaining payments for a total of \$1,306,312, including interest falling due

⁵⁴Michigan, Legislature, Special Message Concerning the Five Million Loan (Senate Documents, 1841, I, No. 8), pp. 266-312; Michigan, Legislative Acts, 1841, Joint Resolution No. 23.

on unpaid installments.⁵⁵ When the new Democratic Legislature met in January 1842, it was already in default on interest payments to its bondholders, since interest was to be met from installments through January 1843.

During the two years they controlled the state government, the Whigs continued the Democracy's policy of avoiding unpopular and impracticable tax increases. Faced with an empty treasury and large amounts of delinquent taxes, the Whigs continued the Democratic practice of raiding the internal improvement fund to support expenditures charged to the general fund. In 1838, the Democrats had begun the practice of financing the state government by shifting \$80,000 of the federal surplus revenue deposit to the general fund, but in 1839 these deposits were no longer available; the failure of the Michigan State Bank had wiped out the entire balance. The state continued to finance its operations by transferring money from the internal improvements fund under the guise of drawing against the federal surplus deposits. Since the only sums accruing to the internal improvements fund were payments on the five million loan, it is clear

⁵⁵Messages of the Governors of Michigan, I, p. 421; Michigan, Legislature, Communication from the State Treasurer (House Documents, 1841, II, H. D. No. 75) pp. 272-273; Michigan, Legislature, Special Message in Relation to the Protested Drafts Drawn Against the April Installment of the 5,000,000 Loan (Senate Documents, 1841 II, S. D. No. 41), pp. 159-161.

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that both parties were diverting the loan to the use of the state government. In an effort to offset the loss of revenues available to the public works program, the Whigs raided the sinking fund and credited the proceeds to internal improvement, a clear violation of faith to its bondholders.⁵⁶

Throughout 1840 and 1841, the Whigs continued the practice initiated by the Democrats in 1839 of financing the public works by anticipating installments of the five million loan, with some differences. After the failure of the Michigan State Bank, the Democrats had provided funds for construction by selling anticipations to the Bank of Michigan, which in turn issued its notes to the commissioners of internal improvement to pay contractors on the roads. In March 1840, the Whigs continued the practice by authorizing the Auditor General to sell drafts on the next five installments. By 1841, however, the Bank of Michigan was beginning to experience serious difficulties, and the state began issuing its own anticipations. Under an act of April 1841, the Treasurer was authorized to engrave and issue notes for one, two, five, and ten dollars against the next four installments of the

⁵⁶Michigan, Legislative Acts, 1838, No. 14; Michigan, Legislative Acts, 1839, No. 95; Michigan, Legislative Acts, 1840, No. 24.

loan.⁵⁷ Only two of the four installments were ever received by the state, and anticipations for remaining installments were not redeemed. The balance formed a floating debt, usually referred to as Treasury Notes or scrip in contemporary accounts, which the Democrats were forced to redeem after they regained control in 1842.

Partial relief was promised the state in the autumn of 1841, when Congress passed the Pre-emption Act. As passed, the act awarded Michigan ten per cent of the proceeds of all public land sales within her borders plus a proportional share of federal land revenues after ten per cent had been awarded to other states named in the act. In addition, 500,000 acres of public land within the state's boundaries were awarded for purposes of internal improvement, with the stipulation that the lands be sold at the minimum government price of \$1.25 per acre. The revenue promised by the act proved elusive, however, and in 1842 Congress repealed the award of ten per cent. The act's general distribution clause remained in operation for a few months before it was suspended, and although it was nominally in effect until 1862, Michigan realized very little revenue from the sale of her public

⁵⁷Michigan, Legislative Acts, 1840, No. 61; Michigan, Legislative Acts, 1841, No. 65; Harry N. Scheiber, "George Bancroft and the Bank of Michigan," Michigan History, XLIV (1960), pp. 82-89.

lands. Some doubt was expressed about the propriety of accepting the federal grant by Michigan's Democrats, who supported the theory that the state already possessed the lands. Constitutional scruples were laid aside, however, when Governor Barry assured the Legislature that accepting what was already theirs would not compromise the state's claim to the balance. Although the grant was accepted in January 1842, it could not be put to use for at least a year because the lands had to be located and machinery for marketing it created. Through 1842, the federal land grant in aid of internal improvements was of little help to Michigan.⁵⁸

When the Democracy returned to power in January 1842, most of its attention was consumed in staving off bankruptcy and waiting for the crisis to pass. Few major changes were incorporated into the state's system of finance, or methods of supporting the internal improvements program. Further appropriation awaited the location of lands granted by the federal government. During the year, funds were provided by the issue of auditor's warrants.

Governor Barry made it clear in his inaugural message that he considered the treasury notes issued by the Whigs unconstitutional, and preferred the substitution

⁵⁸U. S., Statutes at Large, V, c. 65; Hibbard, 174, 187; Messages of the Governors of Michigan, I, 438, 448; Michigan, Legislative Acts, 1842, No. 6.

of auditor's warrants because they had the same effect although legally different: Treasury notes constituted an issue of currency, while auditor's warrants were only promissory notes. Barry also warned the Legislature that failure of the Bank of the United States had made the general fund liable for redemption of the treasury notes, which would consume state revenues for over two years. If the system were allowed to continue in operation, the state would be without funds of any kind until 1844. Since the scrip had been issued to finance the public works, the Governor recommended that they be made to absorb the burden.⁵⁹

The Governor's suggestions were quickly enacted by the Legislature. Under an act of February 10, 1842, treasury notes received by the public works were ordered canceled and destroyed, and the internal improvements sinking fund was made liable for redemption of treasury notes received by other government agencies. State officers were forbidden to receive anything but gold, silver, Michigan treasury notes, or notes of specie paying banks in settlement of debts due the state. In effect, the Legislature again raided the sinking fund to finance further construction on the state's program of public works.⁶⁰

⁵⁹Michigan, Legislative Acts, 1842, No. 20.

⁶⁰Ibid.

The most pressing problem confronting the Legislature in 1842 was that of effecting a settlement for the unpaid balance of its bonds. The problem was not solved in 1842, or even by 1846, and for the next four years constituted the most perplexing issue before the state. It is clear from both the statements and actions of the Legislature between 1842 and 1846 that repudiation of its debts never received serious consideration by the Legislature. It should be equally clear, however, that they had no intention of honoring bonds for which payment had not been received. Efforts during the next four years centered on reaching an acceptable settlement within these limitations.

In his inaugural message, Governor Barry urged the Legislature to work out a settlement consistent with maintaining the state's faith and credit; every just debt should be acknowledged. At the same time, he cautioned them not to submit to any settlement which would make the people liable for unjust debts. Barry recommended the organization of a commission to work out a settlement with the banks, keeping in mind during negotiations that the state had suffered damages from their suspension. If no settlement could be reached, the committee should learn the names of the bond's current holders, and report their findings to the Legislature.⁶¹

⁶¹Messages of the Governors of Michigan, I, 446.

By giving unnecessary attention to the defeat of resolutions categorically rejecting the doctrine of repudiation in both the House and Senate, both Reginald McGrane, in his study of Foreign Bondholders and American State Debts, and W. L. Jenks, in his article, "Michigan's Five Million Dollar Loan," have implied that the state hung on the brink of repudiation in 1842. The strength of public support for repudiation is supposed to be indicated by the fact that these resolutions were rejected 8 to 5 in the Senate, and 40 to 6 in the House.⁶² The impression created by this evidence is distorted, however, and the distortion stems from failure to consider rejection of the resolutions within the context of the debate in which they were offered. Prior to the introduction of Senator Fuller's resolution, the Senate had been debating proposals to adopt statements reserving the state's right to contest the legality of bonds for which the state had received no payment. A substitute measure, detailing the damages suffered by the state through non-payment by the banks and warning potential investors against accepting the unpaid bonds, had already been accepted and was up for third reading when Fuller proposed that the resolution be amended to read:

⁶²Jenks, Michigan History, XV (1831), 600-601; McGrane, p. 155.

Resolved. That the doctrine that might makes right, and that therefore a state or nation may, by virtue of its sovereignty, repudiate an honest debt, is unworthy of the age and of a free people, and wherever else it may have found a response belongs not to the moral and political code of the people of Michigan.⁶³

Fuller's resolution was itself out of context with the object of the resolutions on the floor of the Senate, which was concerned with keeping the unpaid bonds out of the market and asserting the state's right to claim damages against the banks. In terms of the Legislature's consistent use of the term repudiation, Fuller's resolution would not have stopped the state from refusing to honor its unpaid bonds; it condemned only the repudiation of just debts, and the bonds for which Michigan had received no payment were never considered just debts. In terms of Legislative policy, neither rejection nor acceptance of Fuller's proposal would have had any real significance.

The resolution entered by Norman Little in the House did indeed cite the growing lack of faith in state securities and agitation for repudiation in Michigan's newspapers, and did put before the House a resolution denying that the doctrine of repudiation had any place in Michigan's public policy. But both McGrane and Jenks neglected to cite all of the resolution offered. In

⁶³Michigan, Senate Journal, 1842, pp. 64, 74, 99.

addition to its anti-repudiation clause, the bill also read:

Resolved. That the committee of ways and means be requested to report to this House, a bill for the payment of interest now due, and to become due the present year and the first of January next, on the bonds of this state.⁶⁴

Little's resolution would have required a state which had proven incapable of raising \$100,000 for its domestic expenses to increase taxes to supply \$450,000 within ten months for payment of interest not only on bonds for which the state had paid, but also those for which it had received no payment. Whether the House rejected the resolution for its anti-repudiation clause or its taxation clause cannot be determined, a circumstance that does not in itself constitute evidence of legislative consideration of repudiation of those debts for which it had received payment. That it would reject those bonds for which it had received no payment was well understood. In place of the several bills and resolutions offered during debate, a bill was passed outlining the state's plans for adjustment of the five million loan.⁶⁵

The adjustment proposed by the act of February 17, 1842, required the Attorney General and State Treasurer to make out a statement of money received by the state

⁶⁴Michigan, House Journal, 1842, pp. 73-74, 123, 146, 162-163, 260, 265.

⁶⁵Ibid., p. 266.

from the loan and the \$200,000 in securities issued for the benefit of railroads, plus interest accruing from July 1, 1841. Damages were to be assessed against the contracting parties for failure to pay installments, expressed as a per centage of the unpaid balance. After damages had been deducted from receipts, the estimate was to be submitted to the Governor, who was required to issue a proclamation in papers in Michigan, New York, and Philadelphia, requiring holders of the state's bonds to deliver them to the Treasurer. After the amount for which the state had received no value had been deducted, along with damages and interest, new bonds were to be issued for the balance. When all the bonds had been returned and canceled, the Secretary of State was authorized to enter negotiations with the holders of the new bonds for sale of the railroads and other public works at either first cost or present fair valuation, along with any lands received from the federal grant necessary to satisfy the state's obligations.⁶⁶

On the day the adjustment act became law, the Legislature set the rate of damages due the state. Apparently fearing that the settlement would not be adequate if left in the hands of the Treasurer and Auditor General, the rate was set at twenty-five per cent of the unpaid

⁶⁶Michigan, Legislative Acts, 1842, No. 60.

installments. Following this action, on April 7, the Governor issued the proclamation required by law. Holders of the state's bonds were given the option of returning the whole sum and having new bonds issued for a total of \$2,342,960, or returning \$2,857,039 for simple cancellation. When the bonds were returned, the Governor offered the state's public works for sale.⁶⁷

Both Jenks and McGrane have taken the position that the Legislature's actions in dictating the terms of settlement was a clear-cut case of repudiation, under the strict definition that repudiation constitutes refusal to acknowledge or pay a debt. When the state put its bonds in the hands of the Bank of the United States, the terms of the agreement constituted a clear sale of negotiable securities payable at face value. The state's legitimate quarrel was with the banks which held the balance of the proceeds of the sale, and under the laws of commerce, the third parties were not liable for either the non-fulfillment of contract or the damages chargeable to the bank's failure.⁶⁸

⁶⁷By His Excellency John S. Barry, Governor in and Over the State of Michigan: A Proclamation, April 7, 1842, in Records of the Office of Secretary of State, Great Seal and Archives: Executive Acts, 1842-1843; Michigan, Legislative Acts, 1842, No. 38.

⁶⁸Jenks, Michigan History, XV (1931), 602-603.

The state, however, never considered its actions to be repudiation, in the sense that the term means refusal to honor a just debt. Although it had been known from the time of Pritchette's negotiations in the winter of 1839 that the Bank of the United States had hypothecated the bonds abroad, the fate of the securities and the terms under which they had been held in custody by the Bank's foreign creditors were unknown in 1842.⁶⁹ Two years earlier, both parties to the contract had offered to return the balance of the unpaid bonds, and in allowing bondholders to return securities equal to the unpaid balance, the Legislature was clearly acting on the assumption that a single holder or holders, in the case of the contracting banks, still had possession of the securities and could return them without damaging their equity. The alternate course proposed, allowing the holders to submit their bonds for partial cancellation of the face value, seems similarly predicated on the assumption that the holders were a single group capable of acting in concert. In reports submitted in subsequent years, the Legislature claimed that the act had been meant to constitute a warning, to keep the banks from disposing of the bonds before the state had a chance to

⁶⁹Hidy, p. 277; Walter B. Smith, Economic Aspects of the Second Bank of the United States (Cambridge, Mass: Harvard University Press, 1953), p. 218.

cancel the unpaid balance. Throughout its negotiations with the bondholders, the state consistently took the position that the bonds placed in the hands of the Bank of the United States under the agreements of November 1838 and January 1839 were legally in the possession of the Bank when the state made known its refusal to honor the unpaid balance.⁷⁰

Neither interpretation is supported by conclusive evidence. The contract with the Bank of the United States by Governor Mason consists of an inconclusive letter and an obligation by the Bank to pay installments at stipulated periods. Mason's statements on whether the transaction was an agency or a sale are typically inconsistent, and cannot be cited as evidence for either side. Evidence presented by legislative committees in 1845 and 1847, supposedly taken from annual reports of the Bank's trustees, along with actions of the state's foreign bondholders, tends to support the contention that the Bank was still in legal control of the securities hypothecated abroad. A search of relevant archives has failed to

⁷⁰Michigan, Legislature, Report of the Committee of Ways and Means (House Documents, 1847, H. D. No. 1), p. 1ff.

uncover these reports, however, so the committees' assertions constitute only heresay evidence for the present.⁷¹

Response to the Governor's proclamation was nominal, and by 1843, none of the state's bondholders had submitted their bonds for adjustment. Under pressure from holders of securities who had paid full value, the state attempted to work out a new solution. In December 1842, the State Treasurer completed his tabulation of the holders of Michigan's bonds, enabling the Legislature to discriminate between those who had paid a full consideration and those holding bonds as security. In his annual message, the Governor reported that bonds with a face value of \$3,855,000 were still the property of the Bank of the United States, hypothecated to foreign banking houses, and added that: "The circumstances of the hypothecation warrant the belief that the equity existing between the state and the Bank has been in no way affected by that transaction." Both the message and the Treasurer's

⁷¹Ibid.; Michigan, Legislature, Report of Joint Committee on the Subject of Certain State Bonds (Joint Documents, 1845, J. D. No. 15). A search of the Library of Congress, the National Archives, and the Historical Society of Pennsylvania has proven fruitless. The liquidation of the assets of the BUS of P is still one of the untold stories of American history, and apparently no one has done the research which would give any guidance in a search for these papers. How reports relating to the liquidation of America's greatest nineteenth century financial institution could disappear without a trace is a source of bewilderment.

tabulation were submitted to the Legislature for consideration.⁷²

Late in January, B. F. Butler, former Attorney General of the United States under Jackson and Van Buren, arrived in Detroit to lobby for the interests of bondholders who had purchased their securities prior to November 1838. In documents presented to the Legislature, Butler claimed to represent \$1,362,000 worth of bonds held mainly by New York banks which had acquired them from a lot purchased by the Farmer's Loan and Trust Co., from the Morris Canal and Banking Company under its original agency. If Butler's account of subsequent proceedings is accepted, he alone was responsible for the act that followed. Butler, however was prone to exaggerate his accomplishments and his ability to call down celestial forces to work his will, and his account provides an interesting supplement, rather than a sound basis for description of the Legislature's attitude.⁷³

Prior to Butler's arrival, a bill embodying most of his recommendations had been introduced into the Senate. In a letter to the Senate, submitted February 1,

⁷²Messages of the Governors of Michigan, I, 473.

⁷³G. L. Prentice, The Union Theological Seminary in the City of New York: . . . with a Sketch of the Life and Public Services of Charles Butler, L. L. D. (Asbury Park, N. J. : M. W. & C. Pennypacker, 1899), pp. 435-452.

Butler stated the bondholder's case. Bonds purchased prior to the state's contract with the Bank of the United States were purchased in good faith and in no way affected by the subsequent transactions of that company and the state; these purchasers disassociated themselves completely. By January, 1843, the state was a year and a half in arrears in its interest payments, and the parties had a right to insist on payment in specie or its equivalent; if the state could not pay, then it would have to issue bonds for the interest and compensate the holders by a greater determination to pay at the end of the time negotiated. He further argued that the state had no right to divert the proceeds of the railroads to their continuation, since these funds had been pledged by the original issue. In either case, the holders of the bonds would have to be compensated by January 1, 1844. If the state's revenues were inadequate for redemption of interest, the state would have to resort to taxation to redeem its pledge of faith.⁷⁴

In its answer to Butler, the joint committee appointed to deal with the issue made it clear that the state had no intention of repudiating its just debts. A new formula had been arrived at, however, for

⁷⁴Michigan, Legislature, Report of the Joint Committee (Joint Documents, 1843, J. D. No. 11), pp. 426-435.

determining liability, based on the assumption that the state was a party to two separate contracts in marketing its bonds, one with the Morris Bank, and the other with the two banks together: "When the terms of that contract were broken and violated by the faithlessness and defaults of that party, the faith of the state was no longer pledged for the fulfillment on her part, under that contract."

In sum, the state would honor all bonds sold under its first contract, but had no intention of honoring either principal or interest on sums not received from the bonds which it regarded as still in the legal possession of the Bank of the United States. Although the committee took issue with Butler on almost every point presented, its only serious difference with the representative of the bondholders was in their right to demand taxation by the state to support the bonds. The only specific pledge given by the state in connection with the loan was its pledge of faith to apply the proceeds of its public works, loans, and bank stock to the redemption of principal and interest. "The pledge was undoubtedly given in good faith, and intended to mean just what it states." Both the state and the bondholders were the victims of bank failure, and both parties should realize that returns could not be realized on their investment until the programs were completed, and the committee warned that it would be advisable for the bondholders to exercise

restraint in its claims, instead of pushing the state into an act of desperation.⁷⁵

Despite official protests, however, a bill satisfactory to Butler, including a taxation clause, was passed in the Senate by a margin of 12 to 4.⁷⁶ In the House, the Committee on Ways and Means reported favorably on the bill, recommending however, that resumption of interest payments be postponed until at least July 1, 1845:

"notwithstanding the earnestness and urgency with which the agent of a large portion of the bond holders has insisted on earlier payment of interest money, yet the committee are of the unanimous opinion that earlier payment would be bad policy, and alike injurious to the state and to the bona fide bond holders." After appropriate thundering and storming, the bill was amended according to the committee's recommendations and passed by a vote of 28 to 20.⁷⁷ Although Butler claimed that long speeches were made favoring repudiation, and it is likely that there were, it is apparent from his descriptions that anyone who opposed his own favorite solution was in favor of repudiation. The amended version

⁷⁵Ibid., pp. 415-439.

⁷⁶Michigan, Senate Journal, pp. 253, 262, 353.

⁷⁷Michigan, Legislature, Report From the Committee of Ways and Means (House Documents, 1843, H. D. No. 15), pp. 71-ff.

was accepted by the house, and then sent to the Governor. For a moment there was widespread fear that Barry might exercise his veto power, but finally, after lengthy consultation, it was finally signed into law. According to Butler's account, the Governor's reluctance stemmed from a belief that the taxation would mean his defeat in the fall elections.⁷⁸

The act passed by the Legislature on March 8, 1843 provided a just and equitable settlement for holders of bonds purchased before November 10, 1838. Specifying the bonds eligible by number, the act reaffirmed the state's intentions of honoring both principal and interest, and authorized the Governor to issue interest bonds covering payments from July 1, 1841 to July 1, 1845, whenever the bondholders surrendered their coupons for interest due between those dates. The new bonds would be redeemed in 1850, and the state would resume payments of interest on both the original bonds and interest bonds on July 1, 1845. The total value of the securities honored under this arrangement was \$1,387,000, including \$1,187,000 reported sold before November 10, 1838, and \$200,000 reportedly sold by Oliver Newberry. The net proceeds of the state's public works were pledged to support its debts, but with certain exceptions; the state reserved the right to

⁷⁸Prentice, pp. 447-448

appropriate these funds for completion of the Central and Southern to Marshall and Hillsdale, for rolling stock and locomotives, or for redemption of scrip. Obviously, the state was reserving the proceeds of the roads to put them in a condition capable of earning sums sufficient to pay interest on the bonds when it fell due. Under the terms of the act, if these revenues were not sufficient, the Treasurer was authorized to pay out any funds in the treasury to make up the balance, and to levy taxes if these resources failed. In addition, interest bonds were to be accepted in payment for lands held by the state after July 1, 1845.⁷⁹

Granting full credit to the holders of the fully paid bonds did not increase the state's total liability; losses were recouped by shifting financial responsibility to the holders of the part-paid bonds. Bonds taken by the Morris Canal and Banking Company and the Bank of the United States after November 10, 1838, which were hypothecated abroad and only partially paid when the Bank failed, were credited with payments received after November 10, after twenty-five per cent damages charged against the unpaid balance had been deducted. According to the report of the House Committee on Ways and Means,

⁷⁹Michigan, Legislature, Report from the Committee on Ways and Means (House Documents, 1843, H. D. No. 15), p. 74; Jenks, Michigan History, XV (1931), 611.

the sum to be paid under this clause amounted to \$998,000 against bonds with a face value of \$3,813,000. The act ordered the two banks to deliver these bonds to have their face value canceled. Once canceled, interest bonds from July 1, 1841 to July 1, 1845, would be issued against the paid balance, and the bonds treated in the same manner as the fully paid securities.⁸⁰

The act of March 8, 1843, formulated the basic policy of the state toward its bonds and bondholders, and remained essentially unchanged. From time to time, the rate of damages was adjusted downward, but no change was made in the basic formula for repayment. Michigan's actions called down severe rebuke in public journals in both the United States and abroad. Contemporary writers classified Michigan as a repudiating state because she had violated the mercantile principle that: "if a purchaser gives a bill of exchange for goods he has a perfect right to sell, the vendor cannot cancel this right, and make the ultimate purchasers the sufferers, because the bill happens to be dishonored."⁸¹ The Legislature, however, remained unperturbed by the clamor,

⁸⁰Michigan, Legislative Acts, 1843, No. 73.

⁸¹Jenks, Michigan History, XV (1931), 613-616; McGrane, 162-163.

and holders of the fully paid bonds were quick to turn in their interest coupons for funding.⁸²

Having dealt with the problem of its outstanding debts, the state returned to the problem of financing its program of internal improvements. For the balance of the program, between 1843 and 1846, new patterns of supplying resources had to be adopted. By order of the Legislature, all scrip currently in the treasury and notes not issued were to be destroyed, along with the plates. At the same time, a land office was opened in Marshall, authorized to accept land warrants in payment. Following federal practice, all lands offered for sale had to be exposed to auction before being offered for private sale at the minimum price of \$1.25 per acre. Most of the lands offered under the federal grant had been located in the western end of the Grand River Valley and the area directly north.⁸³ With these resources and those realized by the terms of the bond settlement, the state adopted a pattern of appropriating public lands in payment of debts due local contractors, and pledging the receipts of its

⁸²Letter from John J. Adam to John S. Barry, May 31, 1843, in Records of the Office of Secretary of State, Great Seal and Archives: Five Million Dollar Loan, 1835-1853 (Michigan, Department of State, Historical Commission Archives).

⁸³Michigan, Legislative Acts, 1843, No. 1.

public works to purchase iron, locomotives, and rolling stock.

The system, however, was subject to serious limitations. Endless delays resulted because the purchase of iron was limited by the earning power of the railroads, and their net receipts were often in scrip, which had to be destroyed. The progress of grubbing, grading, and bridging was similarly slowed by the ability of the market to absorb land warrants. Even though construction was not limited by the ability of the land grant to produce cash, warrants depreciated when issued in excess of demand, raising the bid price of contractors above acceptable limits. When this situation developed, construction had to wait until settlement had absorbed enough lands to appreciate warrants and increase the demand for state lands. Although the system enabled the state to finance construction, extension of the roads was slowed by the need for ready cash.⁸⁴

In his annual message to the Legislature in 1845, Governor Barry again brought up the matter of the part-paid bonds. Although he refused to comment on the justice of the claims of certain of the bond holders, the Governor made it clear that the equity existing between the state and the Bank had in no way been affected by the transfer

⁸⁴Messages of the Governors of Michigan, I, 494.

of these securities by the bank to their present holders. He asked, however, that the Legislature reconsider the assessment of damages set by the acts of 1842 and 1843. Later in the session, he sent down three memorials received from the state's European bond holders.⁸⁵

The first of these memorials, presented by Morrison, Sons, & Co., stated that they had advanced money to the Bank of the United States, for which they had received \$262,000 in Michigan bonds as security. The bonds were deposited with them as the Bank's agents, and in this capacity they had loaned more money than could ever be liquidated by sale of the bonds. When they had settled with the Bank on June 9, 1843, there remained a sum outstanding equal to the amount originally loaned against the securities, "in satisfaction of which we were obliged to take the Michigan State bonds which we still hold."

The second and third memorials, signed respectively by the secretary and members of the Committee of Michigan Bond-holders, argued with the legal right of the state to discriminate between holders or pay anything other than the face value of the bonds, with interest. To support this contention, the bondholders argued that the bonds received in trust by the Bank's foreign creditors were accepted in a deed of trust which conveyed the

⁸⁵Ibid., 517.

absolute power of disposing of them without reference to the Bank in case of its default and deprived it of all right to interfere without repaying the loan made by the European creditors. The transfer of the stocks, when the Bank was unable to pay their advances, was absolute, and could not be disputed by the state. Moreover, Denison & Co., who had originally received the bonds held by the committee, had received no prior notice of the state's intention of disputing their right of possession. The laws of both England and America recognized the rights of the innocent holder of this kind of property, even though the party from whom it had been received had no right of transfer. The state had failed to warn the current holders not to accept before they were transferred, or when the Bank was still able to substitute other securities, and consequently the state was liable for payment. Since the Legislature made no objection to the contract at the time of its consumation on the basis of fraud, illegality, or impropriety, and accepted the installments, the contract was valid. Moreover, the memorialists contended that the Bank of the United States alone had paid the state a total of \$1,838,687.50, instead of the \$998,000 which the state recognized,

deducting damages.⁸⁶ Finally, they accused the state of deducting damages against the entire loan from the bonds sold after November 10, and asserted that the installment received by the state from the Morris Canal and Banking Company in 1843 proved that damages were assessed against the whole loan and not the disputed part. All bond holders would have to be treated equally, without discrimination against Europeans.⁸⁷

In its reply to the bondholders, the joint committee appointed to deal with the claims attempted to refute their assertions in detail. Much of its effort was spent in correcting erroneous impressions held by the memorials: damages were charged only against the unpaid balance, and the entry in the state's books credited to the Morris Canal and Banking Company was the result of liquidating collateral pledged by the company for the protection of the bondholders. Most of the committee's attention, however, was directed to establishing three basic points. According to the committee, the report of the stockholders of the late United State's Bank of Pennsylvania at the last annual meeting confirmed the fact

⁸⁶The difference between the Bank's figures and the state's can be accounted for by the interest paid against unpaid installments, which the state refused to acknowledge. Michigan, Legislature, D. V. Bell, Auditor General, to the President of the Senate, March 10, 1846 (Senate Documents, 1846, S. D. No. 18).

⁸⁷Michigan, Joint Document No. 15, 1845.

that the Bank had not yet consented to the sale of any of the Michigan bonds hypothecated in Europe, except the \$272,000 pledged to Morrison, Sons & Co., leaving a balance of \$3,583,000 on which the Bank had not permitted sale. By its very petition, Morrison's stated that they had not gained or accepted full control of the bonds until June 9, 1843, thereby admitting that the previous hypothecation did not vest the rights of a purchaser. Finally, they asserted that the Governor's proclamation of 1842 could not be used as evidence that the state admitted the necessity of warning potential purchasers not to accept transfer, because the proclamation had never forbidden transfer, but merely stipulated the rate at which transfer would be acceptable.

Legally, the committee denied that the bonds were subject to the same rules of transfer as commercial paper:

Stocks and bonds cannot be regarded as commercial paper, giving to the innocent holder before due, the right of recovery, without reference to the equities between the original parties; but that the holder of such stocks at the time of his purchase is bound to ascertain the right to issue the same--the due legal execution, and the equitable terms, conditions and considerations attending the transfer and delivery by the state authority. The rule as to commercial paper, results in part, from the established and well defined usages in commercial dealings and the necessity of credit in matters of business before paper is dishonored, and also, in part, from the existence of a fixed legal remedy for the enforcement of business engagements of that description.

But the bonds and stocks of a state are based upon an entirely different footing. Ordinary business transactions do not necessarily demand credit for them. Neither is there a legal remedy provided.--The judicial

tribunals of a state are but the creatures of its sovereignty, and cannot sit in judgement upon its acts and liabilities in that capacity.⁸⁸

At the same time, the Constitution did not allow the federal government to interfere with a state's rights in this capacity. The bonds could only be regarded as pledges of faith, and when a purchaser buys he accepts them on the basis of that faith, not on the legal remedies devised for commercial paper: "That faith will be kept inviolate when deliberately extended, and rightfully obtained, whilst inceptive fraud in procuring the pledge, will ever vitiate the engagement at maturity."⁸⁹

The committee was also of the opinion that the legal and equitable right of the holders of such bonds or stocks by absolute purchase were widely different from those of pledges of collateral security. In the latter case, the holders were obligated to exhaust the assets of the principal before resorting to the security. This, the memorialists had not done, since the stock of the Bank was still circulating at five and one half, and the assets still had some value. Moreover, while denying discrimination against Europeans, the state itself accused the memorialists of discrimination for selling the hypothecated bonds of Mississippi and Pennsylvania at market value while demanding that Michigan restore full value.

⁸⁸ Ibid., pp. 1-9.

⁸⁹ Ibid.

W. L. Jenks, an attorney by profession, compared the arguments of the committee to a brief presented "by a pettifogging lawyer in behalf of a client with a bad case, . . . " and stated that: "The legal doctrines thus propounded by the Committee find no support in any legal treatise or Court decision."⁹⁰ I must bow to Jenks' authority in his interpretation of the law of commercial transactions, but it seems to me that he errs in asserting that state securities were absolutely governed by commercial law. The Constitution of the United States, by the eleventh amendment, gave the several states immunity from prosecution by citizens of other or foreign states in federal courts, an immunity which had been in effect for forty years before the state marketed its bonds, and was clearly understood at the time the state arranged its agreement with the Bank. The state had every legal right to adjust its securities by any means it chose; to have done otherwise would have, in effect, violated the eleventh amendment. What the state was attempting to prove, and this Jenks overlooks entirely, was that it had legitimate grievances which commercial law would not recognize, and the state, under the Democratic Party, was by its actions and assertions, writing the law and not reading it.

⁹⁰Jenks, Michigan History, XV (1831), 617-618.

Although there is a strong probability that the Legislature would have refused to honor the unpaid balance if the bonds had simply been sold abroad prior to October, 1842, the state had a legitimate grievance. Several European financial houses had become deeply involved with the Bank of the United States in its attempt to control international exchange and frustrate the contractions of the Bank of England. When the Bank suspended in 1839, these houses had extended further credit to the Bank of the United States to avoid having their own assets destroyed by its failure. The terms of their acceptance of pledges of American state securities have never been fully revealed, but it is apparent that neither the Bank nor its creditors were entirely candid in revealing the terms of the agreement. In the case of Michigan, her securities had apparently remained under the control of the Bank until after the act of March 8, 1843, when the state had ordered their return for cancellation of unpaid portions. Morrison's accepted these securities from the trustees in full payment of its advances on June 9, 1843, by its own admission, when it could have legitimately asked for the assignment of uncontested assets in their place. The balance of the securities, some \$3,583,000 remained in the Bank's control until after January 1, 1846, when foreign creditors accepted them in satisfaction of their advances. Reports of the trustees, cited by the

Legislature, apparently revealed that although the bonds were hypothecated abroad, they "were still the property of that institution, and held by the trustees as part of its assets."⁹¹ Although these reports do not seem to be extant, the date at which the protests were presented seem to confirm the Legislature's assertions, and the Bank had already demonstrated their ability to compel the return of Michigan's bonds in its negotiations with Kintzing Pritchette in 1840. In its failure to return the unpaid securities and substitute undisputed assets to secure its debts, the Bank or its trustees were guilty of bad faith. By accepting disputed assets in settlement of their claims, in the hope of using commercial law to force the state to tax its citizens to recoup losses suffered in exchange and cotton support operations, the European houses were equally guilty. Within its legal rights, the state could have resorted to simple repudiation, following the example of eight other American states. With unusual financial integrity, however, it attempted from the beginning to return value for value received. Its resort to its sovereignty and its unwillingness to apply the laws of commercial transaction to its unpaid bonds was justified by the actions of both its agents and the houses receiving its bonds. By strict

⁹¹Michigan, House Document No. 1, 1847.

definition, its actions constituted partial repudiation, but the repudiation was mitigated.

Michigan's determination to return full value to its creditors and avoid repudiation of what it considered its just debts was nowhere more clearly demonstrated than in its actions between July 1, 1845 and December 1846. In July, 1845, the first interest payment fell due under the terms of the act of 1843, but funds were not available for its payment. Receipts of the Central and Southern, inadequate to pay interest on the entire loan in any case, were subject to redemption of scrip, interest on internal improvements warrants, and debts incurred for iron and locomotives before paying interest. Over \$200,000 in scrip had been redeemed, but only about \$20,000 of the redemption had been through the internal improvements fund; the balance was a debt of that account to the primary school fund, university fund, and general fund, which had received the notes. In addition to this inability, the Board of Internal Improvements had informed the Legislature that several year's net proceeds would be required to put heavy T or H rails on the roads to bring them to the peak level of performance necessary to return the interest on the entire loan, or at least a year's revenue to restore them to normal operating condition. Finally, the bondholders apparently refused to allow the state further extensions on its postponement of

interest payments. Without sufficient funds to meet its debts, the state was forced to resort to taxation. Fulfilling the terms of the act of 1843, the Auditor General informed the counties of the assessments required to meet interest payments on the adjusted debt.

When the Legislature met in 1846, its policy alternatives were severely restricted. Sectional rivalry and the constitutional amendment of 1843 seemingly prohibited further borrowing, and even had the domestic political situation permitted further bond issues, its refusal to accept potential lenders' interpretation of its responsibility made its credit worthless. Houses holding the state's disputed bonds in Europe included Hope's, Rothschilds', Morrison's, and Denison's; the state had managed to alienate the most powerful bankers and brokers in Europe's financial centers. Taxation was similarly prohibited by sectional rivalry. Three alternatives remained open: defaulting interest payments, repudiating its debts, or selling the public works to meet its obligations. To meet its honest debts, and to bring its railroads to the highest attainable level of technological efficiency, the Legislature decided to sell. Default and repudiation never received serious consideration.⁹²

⁹²Michigan, Legislature, Annual Report of the Auditor General, Dec. 1, 1845 (Joint Documents, 1846, J. D. No. 2), pp. 1-7; Michigan, House Document No. 1, 1846.

After the sale of the state's public works, final liquidation of the loan dragged on for half a century. Under the terms of the sale, the state received \$1,125,000 in bonds recognized as fully paid, and \$119,000 in part-paid bonds at the rate of \$403 per \$1000, which was equivalent to \$302 per \$1000 face value plus interest from July 1, 1841. Although subsequent acts allowed individual redemption at this rate, few of the bonds were returned. Hope & Co., and Rothschilds' forced the trustees of the Bank of the United States to settle their accounts without resorting to collateral by a suit in the Supreme Court of Pennsylvania. In 1850, the accepted rate of redemption was written into the state's new constitution. Finally, an act passed in 1855 required the disputed bonds to be returned for cancellation of the unpaid balance, on penalty of suspending interest after the stipulated time limit. This threat broke the bondholder's resistance, and all but \$215,000 were surrendered by the end of the year. Small quantities of the bonds continued to come in for years, and in 1899, with only \$21,000 outstanding, the Legislature canceled the balance on the presumption that they were either lost or destroyed.⁹³

⁹³The best detailed account of transactions after 1846 is Jenks, Michigan History, XV (1831), 625-633. A peculiar feature of Jenks analysis is that in his bitter condemnation of the state's policy, which was based on a failure to understand that a government has higher

Michigan's experience with its "five million loan" was a bitter one, which ultimately helped force the sale of its public works. "Poor cyclical timing" cannot begin to explain what was essentially a human failure. In the end I think it is safe to conclude that Michigan's financial failure was the result of the Jacksonian Democracy's assault on central banking, and one man's futile attempt to apply a local corrective to the financial chaos the Democracy had created.

obligations than the maintenance of commercial morality, he failed to see the victory scored by the state enforcing two of the major houses holding hypothecated securities to compel the trustees of the BUS of P to settle for the disputed bonds by action in the courts. Nor does he have a harsh word for other holders who failed to resort to the same measures, and he failed to realize that the European financial houses or the trustees, still refused to surrender the bonds for cancellation of the unpaid balance after the court decision. Whichever party ended up in final control, they were speculating with the bonds, in hopes of forcing the state to pay the entire balance.

CHAPTER X

THE MICHIGAN EXPERIENCE

The study of a single program of public works in a single state cannot presume to offer sweeping reinterpretations in the history of transportation or internal improvements. Studies of other states and other periods might prove Michigan's experience atypical, and without such studies, there is little basis for comparison. Nonetheless, elements of the program and its affects shed light on problems of current interest in the study of internal improvements and American economic development.

Carter Goodrich, the distinguished historian of American internal improvements, has suggested in his study of Government Promotion of American Canals and Railroads, that doctrinal strictures against government participation in economic activity excluded the sectors of transportation and communication in the 1830's and 1840's. Whenever a project could be accomplished by private means, it was usually taken for granted that it would be left to that sector; when a necessary project was too expensive for private means, government was expected to undertake its construction. When hostility to government enterprise was

expressed, it usually resulted from the fear that government would be corrupted by engaging in business enterprise: "On this point, Jacksonian opposition was based on a desire to keep business out of government--if the modern phrase can be applied--rather than a desire to keep government out of business."¹ Statements by Michigan's governors and legislators, as well as those found in newspapers, would tend to confirm this position as late as 1840, and between 1840 and 1846, the same desire plays an important part in determining legislative attitudes toward the state's railroads. After 1840, however, application of the doctrine of laissez faire to the state's railroads became more common; after 1843, the feeling that government could not run a railroad as efficiently as a private enterprise was frequently expressed in legislative documents. James Joy, the New York interests' Detroit propagandist played on this theme continuously for over two years while attempting to convince the Legislature to sell the Central. The decision to sell was based not only on the necessity of establishing financial stability, but also on the desire to rebuild the roads with T rails and incorporate the efficiencies of private management into their rate structure. As Goodrich himself has suggested in an earlier article,

¹Goodrich, Government Promotion, 42.

the feeling that government was less efficient was frequently expressed in the 1840's, particularly by the American Railroad Journal.² This qualification should have been stated more strongly in his later work on government promotion.

The structure of Michigan's finances and the failure of the Michigan State Bank help to explain the relationship of the state expenditures to the business cycle. A recent study of annual investment in canals by H. Jerome Cranmer suggests that expenditures on internal improvements reached a peak in 1840, declining substantially in 1841 and falling off precipitously in 1842. Harvey Segal, commenting on Cranmer's study, has suggested that investment peaked in 1841, and fell off more drastically in 1842 than Cranmer's data suggests. Data presented in Table VII suggests that Michigan's experience more nearly fits the curve plotted by Cranmer than that suggested by Segal.³ Through 1840, appropriations by the legislature were substantially in excess of expenditures by the Board of Internal Improvements, and the timing of expenditures depended heavily on the pace of construction

²Carter Goodrich, "Revulsion against Internal Improvement," Journal of Economic History, X (1950), 161.

³Cranmer, Trends in the American Economy in the Nineteenth Century, pp. 555-558.

and the availability of funds. When appropriations were exhausted, the Board acted autonomously, forcing the Legislature to honor its commitments. Consequently, appropriations are an inaccurate guide to actual expenditures, and data for 1840 and 1841 have to be adjusted to account for construction authorized by the Board in the former year which were financed by floating estimates and paid for out of funds appropriated the following year.

Because of construction in anticipation of state purchase on the Detroit and St. Joseph, initial levels of investment in Michigan were substantially above those of states delayed in beginning their programs by the necessity of surveys and technical preparations. Investment continued to climb to a peak in 1839, as other projects passed the planning stage and were added to those already under construction. Although failure of the Michigan State Bank in 1839 forced the abandonment of three projects in their initial phases, construction on the remaining public works continued as long as the state was able to issue anticipations against installments of its bond issues. After reaching a peak in 1839, actual expenditures dropped slightly in 1840, but continued at a pace above that of 1838. By certifying estimates in excess of appropriations and submitting them for payment the following year, the Board was able to continue construction despite the Legislature's ban on new contracts and its failure to authorize

needed funds during the session. In 1841, however, actual construction dropped dramatically when the Board was forced to meet previously certified estimates from new appropriations and anticipations reached their legal limits. After the failure of the Bank of the United States to meet its installment in October 1841, construction expenditures declined, and continued to drop until the autumn of 1843, when funds from the federal land grant began to be realized. In 1844 and 1845, the state experienced the "echo effect," as federal funds were applied to completion of its more profitable projects. When adjusted to reflect actual construction, Michigan's railroad investment more closely approximates the curve plotted by Cranmer for canal construction in the second internal improvements cycle than that projected by Segal, and to this extent tends to support Cranmer's conclusions.

Although exact estimates are difficult to derive, data presented by the Legislature suggest that federal, local, and private resources played a more important role in the state's program of transportation improvement than previous treatments have indicated. Local aid and assistance from private individuals defies quantification because it was most often given in the form of free right-of-way, grants of property and station sites, water privileges, reduced construction bids, and free labor to complete projects, often at critical junctures. West of

Wayne county, for instance, very little of the Central's right-of-way had to be purchased, and residents along the Tecumseh Branch worked for nothing to complete the road when state funds were exhausted. Voluntary local aid substantially reduced the cost of construction on both the Central and Southern Railroads. Data for private investment in works of joint enterprise are similarly unavailable because of the state's loose enforcement of charter provisions requiring annual reports. At least \$63,000 was provided by residents along the route of the Palmyra and Jacksonburg in paid-in capital subscriptions, and although no report of private investment was ever submitted, residents of Pontiac bonded themselves for over \$200,000 to secure the state's loan to the Detroit and Pontiac.⁴ Private investment in the Ypsilanti and Tecumseh was never reported, but \$60,000 was deposited to the account of the Allegan and Marshall, which was to be provided with funds strictly on a matching basis.⁵ Although private and local aid to Michigan's internal improvements program seems to defy quantification, there is justification for the belief that such aid was substantial.

In addition to private and local assistance, data published by the Legislature exhibit a surprising level of

⁴Michigan, Senate Document No. 27, 1838, p. 38; Michigan, Senate Document No. 4, 1839, pp. 86-87.

⁵Michigan, Senate Document No. 4, 1843, p. 31.

federal contribution to the state's financial resources.⁶ Between 1836 and 1845, the state expended \$4,024,633 of its own resources to finance its program of internal improvements. During the territorial period and the first ten years of statehood, federal disbursements for the construction of roads and improvement of rivers, in addition to direct grants to the state's treasury, totaled \$1,628,415. Even when the \$337,108 expended by the national government in construction of the Territorial Roads is eliminated, federal funds constituted twenty-five per cent of the resources committed to transportation improvement in Michigan between 1836 and 1845. Although a small part of these funds were diverted to support the expenses of state government, and the balance lost in the failure of the Michigan State Bank, their loss and misuse does not diminish the size of federal contributions.⁷

In spite of the fact that most of its bonds were hypothecated abroad to secure the debts of the Bank of the United States, most of the funds provided by the state government were generated within the domestic economy. Approximately sixty per cent of the resources mobilized by the state originated from the sale of its bonds, and a

⁶See Appendices V, VII.

⁷See Appendix VI.

further twenty-five per cent was created from the state's own resources. The balance was provided by milking other state accounts, such as the primary school and university funds, and from miscellaneous assets. Of the resources realized through bond sales, approximately half was provided through the fully paid bonds sold prior to November 15, 1838, nearly all of which were purchased within the United States. Forty per cent of the bonds designated as fully paid, or \$570,000, were held by the Farmer's Loan & Trust Company of New York. A further twenty-four per cent, amounting to \$334,000, was purchased by New York banks chartered under that state's free banking law and deposited with the Comptroller of Currency as security for their note issues. Most of the balance of the fully paid bonds, about thirty per cent with a par value of \$433,000, was purchased by New York banks, private individuals, and estates. The remaining half of the funds realized through bond sales was received from the Bank of the United States and the Morris Bank from their assets, while the securities were hypothecated abroad to guarantee advances made by foreign creditors to the Bank to liquidate obligations created through its cotton speculations.⁸

⁸See Appendix VII.

In addition to resources provided through bond issues, \$1,289,000, a sum equal to that realized from its fully paid securities, was raised through the use of short and intermediate term credit. After the failure of the Michigan State Bank, construction on the state's projects was financed by a variety of interest-bearing paper issues, including anticipations, scrip, and Auditor General's warrants. Iron was similarly purchased by pledging the receipts of the state's railroads. When the Bank of the United States failed, the state was accountable for anticipations issued in excess of installments received, and subsequent Legislatures resorted to the issue of Auditor General's warrants to continue construction. Receipts from the Central and Southern Railroads allowed the state to redeem \$504,000 of its obligations, and a further \$276,000 was redeemed by other funds. The balance, \$508,000, remained outstanding at the end of 1845. Since the warrants could be legally redeemed for internal improvements land at par value, it seems fair to infer that financiers who had purchased the state's interest-bearing paper from local contractors preferred it to the possession of land, and held it willingly.⁹ From the structure of state finances during the internal improvements program it seems fair to conclude that most of the capital invested

⁹See Appendix VI.

in Michigan's transportation program, perhaps as much as ninety per cent, was generated domestically within the United States. In this respect, Michigan's experience proved to be more nearly typical of the pattern described by Nathan Miller in New York during the opening phases of the first canal cycle (1816-1822), than that of states drawing heavily on foreign capital during the second cycle (1834-1840). It should be apparent at the same time, however, that this condition was neither desired by the state nor to its advantage; had a continued inflow of funds been available, Michigan's experience might have been more favorable.

The program undertaken by the state in 1837 and acts of subsequent years encompassed a wide range of projects, including three railroads, three major canals, loans to four private railroads, improvement of half a dozen rivers, and two salt works. Until 1839, when the state deposit bank failed, construction continued on a broad front. When the state was unable to meet the monthly estimates of its contractors, however, work stopped permanently on all projects except the Central and Southern Railroads, the Clinton and Kalamazoo Canal, the St. Joseph River, and the salt works. After 1840, further investment was guided by the need to create revenue; with the exception of the St. Joseph River, construction focused on extending profitable projects and putting works which

had been partially completed into condition to produce a return which would minimize losses. After appropriations were exhausted on the Clinton and Kalamazoo Canal, work was suspended until 1844, when contracts were awarded which allowed it to be completed from Frederick to Rochester in August 1845. In the next eighteen months of operation, the canal produced gross revenues of about ninety dollars, and having proven its inadequacy, was abandoned.

Original plans for the Southern Railroad called for its completion to Hillsdale before being opened to traffic because competition from the Erie and Kalamazoo at Adrian would make operation unprofitable. In its frantic quest for revenues, however, the Whig Board of Internal Improvements rushed the road to completion at Adrian and, under instructions from the Legislature, purchased the River Raisin and Lake Erie to provide the Southern with an eastern terminous. By rushing construction and using half the necessary number of spikes, the Board was able to open the railroad from Lake Erie to Adrian late in the summer of 1841, and to complete most of the road bed to Hillsdale by the end of the year. Completion of the entire road to Hillsdale was delayed until October 1843, because of the state's inability to purchase iron. After 1843, construction was confined to rebuilding sections rushed to completion in earlier haste to put the road into operation, and opening the Tecumseh Branch.

Although the Southern was rushed to completion to create revenues which would minimize losses on its cost of construction, receipts on the road remained disappointing, although the results should not have been unexpected. Original decisions on route location had been based on the desire to make the road developmental, and between Monroe and Hillsdale, major concentrations of population and industry had been deliberately avoided. Competition from the Erie and Kalamazoo, and failure to provide an adequate eastern terminus with shipping facilities, added to the road's inability to produce, along with inadequate rolling stock and motive power. Although the Southern produced net revenues, most of them were consumed in constructing new cars and financing new construction. In any case, net revenues were never sufficient to cover interest on its cost of construction, and the road failed to meet the test of profits.

From the beginning, the Central Railroad was the state's most successful project. After the federal route survey in 1834, its construction was taken as a certainty, and settlement poured into its potential route. In anticipation of a state program, construction was begun in 1836 by a private corporation, which willingly sold the road to the state in 1837. The road's first segment was opened between Detroit and Ypsilanti in February 1838, and during

the first year of operation, the Central earned substantial revenues. Because of its earning capacity, both the Board of Internal Improvements and the Legislature favored concentration of the state's resources in the Central in the hope that it would earn profits which would enable the state to pay the interest on its entire debt. Construction continued steadily through 1844, when most of the road was completed as far as Kalamazoo, 147 miles west of Detroit. Difficulties in raising money to purchase iron, however, delayed its completion to that village until early 1846. After crossing the peninsular divide in 1842, the Central earned consistently high profits. Even with allowances for depreciation, net income was sufficient to pay interest on the cost on construction in two of the last three years of state ownership. Success in the last five years of state control was not a temporary condition; profits continued high through the next decade and the balance of the century, as the Michigan Central became one of the most successful railroads in the United States.

Under state management, the Central's success helped to create the factors which led to its sale. With every available resource harnessed to extension of its grading and superstructure, the state lacked funds to purchase necessary cars and locomotives. From the moment it reached Jackson in 1842, every available resource was strained to meet the demand for heavy hauling. Trains were

operated through the night during seasons of peak demand, although the practice was regarded as dangerous, and during the daylight hours, locomotives were overloaded and run at twice the recommended safe speed. Under the strain of continuous operation, and the jarring impact of high speed on strap iron rails, locomotives and cars were shaken to pieces, and the cost of operation mounted dramatically. At the same time, rails were broken and timbers crushed under the heavy loads jouncing over their surface. Based on the assumption that marginal costs would decline with the road's extension, the Board of Internal Improvements enthusiastically endorsed extension of the Central between 1842 and 1844, raising hopes that the rate of profits might rise to fifteen per cent, paying interest on the state's entire debt. After three years of turning away business and watching increasing costs caused by operating the road's inadequate carrying capacity eat into profits, the Board concluded that rebuilding the Central to incorporate the latest technological advances was the only hope of bringing the road to its full potential.

In recommending the transition from strap iron to heavy rails, the Board recognized the basic inability of the state to provide the necessary resources for reconstruction, and asked that the road be sold to waiting private interests to guarantee prompt action. Although

liquidation of the state's debts was also a primary consideration in Michigan's decision to sell the Central, the need for providing the road with heavy rails played an important role. The committee preparing the bill authorizing its sale concentrated on this necessity, rather than finances, and the charter contained strict provisions requiring the Central's immediate reconstruction. To this extent, the basic motive of providing efficient, low cost transportation to the interior played as important a role in the state's decision to sell in 1846 as it had in 1837.

Of the six major projects undertaken by the state, only the Central Railroad managed to meet the classical criterion for allocation of resources: the ability to return profits greater than the cost of investment. Three other public works were abandoned before completion, and the fourth, after being placed in operation, failed to show even a net income. The fifth of the state's public works, the Southern, is difficult to evaluate because competition, poor route location, and inadequate terminal facilities combined to undermine any profits which might have accrued to a road through the southern tier. The profits of the Central, however, were sufficient to cast doubt on the validity of the assumption that Michigan's railroads were constructed ahead of demand.

In a recent study, American Railroads and the Transformation of the Ante-Bellum Economy, Albert Fishlow has challenged the traditional Schumpeterian model in which state or private capital played an heroic role by constructing railroads through the virgin wilderness, bringing settlement and profits in their wake. Fishlow argues that railroads in America were rarely built ahead of demand in the Schumpeterian sense because of the commercial nature of American agriculture and farmers. It is his contention that projects in the East, by breaching the Appalachian barrier and continuing west, created an anticipation of transportation improvement which induced settlement along potential routes well before construction, and reversed the sequential role of entrepreneurs described in traditional interpretations. At the same time, however, Fishlow assumes that this pattern was more prevalent in the 1850's than the 1830's, and conversely, that construction ahead of demand was more common in the earlier period. In examining the rates of return of the Michigan Central and Michigan Southern between 1852 and 1855, when profits ranged from 4.6 to 9.6 per cent, Fishlow concludes that these roads were not operating ahead of demand at this date, but that they had been in the late 1830's and early 1840's, and that this is indicated by the substantial

degree of state involvement.¹⁰ He lists Michigan among the states constructing railroads before the existence of sufficient demand, citing also the inefficiency of simultaneous construction of a series of projects, poor cyclical timing, and lack of technical know-how as reasons for failure.¹¹

I have no quarrel with Fishlow's inversion of the traditionally accepted roles of settlement and investment in the 1850's, and am not prepared to comment on the level of demand present during the construction of internal improvements by other states in the ante-bellum period. I do, however, take issue with his assumption, based on inadequate data and the preconception that government participation is an automatic indication of underdeveloped markets, that the Central and Southern railroads were necessarily constructed ahead of demand. The acid test of demand, of course, rests on the measurable relationship of profits to the interest rate, and this test was met by the Central Railroad under state management. Although the Southern was unable to meet this criterion, even Fishlow is willing to concede that a road which is abstractly profitable can be undermined by such exogenous factors as

¹⁰Fishlow, pp. 165-166.

¹¹Ibid., pp. 196-199, 178, 183, 190.

cyclical downturn, bad management, and wasteful competition. To resolve the problem posed by intrusion of exogenous variables in areas of intermediate population density (between 18 and 45 inhabitants per square mile), Fishlow offers a rule of thumb: "If some railroads in an area of given population density earn satisfactory returns it is evidence that such a region can support railroads even if the recorded profits of other enterprises indicate otherwise."¹² The Central, which ran through a tier immediately north of the Southern had similar densities, and managed to earn satisfactory profits throughout the period. And the Erie and Kalamazoo, which was in direct competition with the Southern, managed not only to show profits, but to complete construction and purchase iron with its revenues. The existence of such successful competition is certainly evidence of demand for railroads in the southern tier, and supports the argument that construction by the public sector is not an automatic indication of premature investment.

I would argue further that although state enterprise may be a necessary condition for promotion of railroads ahead of demand, state construction is not a sufficient basis for the assumption that such was the case, even when developmental expectations were expressed in original program justifications. In the case of Michigan,

¹²Ibid., p. 170.

the decision to undertake state enterprise involved political and social value judgments--political economics, in the archaic sense--as well as pure economic rationality, and these values continued to be important considerations even to the moment of sale. Moreover, although developmental expectations were expressed, the state never expected to operate its works at a loss, a consideration which construction ahead of demand in a frontier environment would suggest, even if only for a short period. It was expected that the Central would be profitable even from the beginning, and the possibility of loss never received serious consideration. Although developmental considerations played a more important role in locating the Southern, it too was expected to earn substantial profits when extended into the St. Joseph Valley. As Fishlow has pointed out, high expectations accompanied most railroad projects, and the production of profits, in combination with adequate population is the only real test of demand. Between 1837 and 1845, construction in Michigan concentrated precisely in those areas containing a population between 18 and 45 per square mile, which Fishlow admits may well indicate a highly successful agriculture. I would suggest that a wide range exists between a level of development sufficient for profitable demand and optimal economic development, given resources and the state of technology, in which a

political body may act on expectations of economic development without contemplating short-term loss or being ahead of demand, and that Michigan was acting somewhere within that range on her two southern works. The analytical distinction between exploitative and developmental transportation projects tends to distort the fact that both motives may be simultaneously operational. In Michigan's case, a federal survey and the widespread assumption that a road or roads would be built through the central and southern tiers brought in settlement prior to the actual decision to build and converted a developmental situation into a partially exploitative one. In this intermediate range, local capital was absorbed in widespread local opportunities, and the lack of entrepreneurial skills, finance, and organization, were sufficient to preclude local action. At the same time, risk, uncertainty, and the postponement of returns acted as a barrier to investment of private capital from the outside. The narrowness of the range in which purely developmental criteria can operate is illustrated by the ability of residents of Toledo, Adrian, and Pontiac to construct successful local railroads with their own resources. Given these conditions, accompanied by the hostility to corporate enterprise, control by foreign capital, and granting of natural monopolies which characterized Jacksonian democracy, a call for state enterprise can be

expected. And logically, therefore, it is clear that public enterprise and the expression of developmental expectations cannot be cited as prima facie evidence of construction ahead of demand.

Although Michigan's experience may not have been universal, it points to the need for further evidence before assuming that railroad and canal construction undertaken by states west of the Appalachian barrier was necessarily premature because the private sector failed to respond to demand. Michigan Democrats were firmly convinced that it was necessary for the state to gain control of main trunk lines to protect the people from exploitation, and it is clear that political and social value judgments were operative in the 1830's which obstructed the responsiveness of private capital in a way not true of the 1850's. The basic assumption behind Fishlow's evaluation of railroad construction in the 1830's and 1840's is tautological, and requires substantiation before it can be accepted at face value. Lumping projects together which were constructed by public enterprise and assuming that public participation necessarily indicates prematurity is an invalid and unacceptable analytical procedure.

In addition to evaluating the success or failure of projects by the classical profit criterion, modern studies of transportation improvement have attempted to

assess their developmental impact and measure external economies which add value to total community output without being returned to the works in the form of receipts. Attempts to quantify the value added to community output by reduced transportation costs, however, have generally been unable to surmount the obstacles posed by the developmental effects of reduced shipping costs. A study of the economic impact of American canals conducted by Harvey Segal, attempting to harness benefit cost analysis, has concluded that the benefits accruing to the community through reduced shipping rates were sufficient to cover the costs of the entire system, including interest on total canal investment. Based on the assumption of zero price elasticity of demand for canal transportation, Segal's results are acceptable only because his conclusions are so cautious and the margins between actual costs and maximum returns are so great that relaxed assumptions would not essentially damage his hypothesis. Faced with the problem of relaxing his assumptions and approaching reality by assessing the effect of an elastic demand curve, however, Segal understandably abandons the problem and concludes that actual savings cannot be accurately estimated because the elasticity of demand along the curve is unknown.¹³

¹³Segal, Canals and American Economic Development, p. 243.

Application of this procedure to Michigan would result in similar limitations, in addition to special problems imposed by special local conditions. Wheat prices for Detroit could be derived by deducting average transportation costs from Detroit to the east coast from New York prices and assuming that interior value was zero as consumption reached local limits. Similar problems are posed by merchandise shipments, which are reported only by gross weight without any indication of the value of the product mix. Even the unknown quantity of wheat and flour exports could be overcome by applying appropriate assumptions for local consumption to gross output data, because although only a small portion of total output was shipped by rail, the railroads drove rates of wagon haulage down to competitive levels, and wheat not consumed locally could be assumed to have been shipped at those rates. The net result of this labor, however, would only set an upper limit for returns which might have accrued had the railroads been completely exploitative, which in Michigan's case does not even remotely approach reality. If used only to prove that the Central really returned benefits equal to its cost, a fact which is already known, the effort would be to no effect. In the case of the Southern, it would be impossible to disaggregate the effects of competition by the Erie and Kalamazoo, which charged unknown rates and carried an unknown quantity of goods and passengers.

Two recent studies by Robert Fogel and Albert Fishlow have attempted to measure the impact of railroads on American economic growth.¹⁴ Although disagreeing on methodology and conclusions, both writers attempt to explore both the benefits of direct reduction of transportation costs, and external economies created by the development of railroads and canals. Although both studies are pregnant with implications for evaluating the effect of transportation development on the total economy of the United States, and for the structure of economic planning, very little is directly applicable to the development of a single state functioning as a small segment of a region or sector. Although backward linkages did develop, the effects were felt largely by areas outside the state. Locomotives were generally purchased from Baldwin in Philadelphia, and strap iron and spike from the Corning works of foreign suppliers. No local demand for coal developed because the engines burned wood, supplied by local farmers and cutters in the process of clearing their farms. Some impetus was given to the growth of wheel casting and car building facilities in Detroit, which the Michigan Central later developed into a major industry, but the statewide

¹⁴Robert William Fogel, Railroads and American Economic Growth; Albert Fishlow, American Railroads and the Transformation of the Ante-Bellum Economy.

effects of direct input demand during the period of public ownership appear to have been minimal. A majority of the funds expended in construction and maintenance were earned by local labor, and either invested in farm improvement or for immediate consumption. In either case, multiplier effects seem likely to have been small, because a persistent problem throughout the period was the imbalance of trade between Michigan and the East, which drained banks' specie resources and eventually destroyed the currency. Had the problem not been serious and persistent, the Governor's attempts to support local currency would have been meaningless.

Forward linkages, or the development of industries using transportation outputs as components of production appear with the exception of agriculture to have been minimal. Allowed to remain undisturbed, Michigan might have developed industries using transportation as an input during the two or three decades following the state program traceable to facilities constructed at public expense. Within three decades, however, railroad investment had risen so dramatically that initial public efforts had dwindled to such a small portion of the total that attempting to disaggregate the effects of early public and subsequent private investment would be absurd. In any case, Michigan remained basically a primary products producer throughout the nineteenth century, relying heavily on

agricultural products and their processing, lumbering, and mining for the majority of the state's income until the development of the automobile drastically altered the state's economic structure.

Although the effects of the state's internal improvement program were probably negligible, the Central and Southern seem to have exerted important influences on the development of Michigan's agriculture. Despite their inability to agree on analytical procedures, the importance of technical alternatives, and the impact of railroads on the American economy, both Fishlow and Fogel agree on the importance of low cost transportation to American agricultural development, regardless of the form which hauling facilities assumed.¹⁵ Because of its peninsular proximity to major lake shipping routes, Fogel's assumption that forty miles is a practical limit for hauling agricultural commodities to a point for shipment by water is useful for evaluating the impact of the Central and Southern Railroads on Michigan's agricultural development.¹⁶ Appendices VII through X are constructed on the assumption that in the absence of some kind of transportation improvement in addition to roads, the area of feasible commercial agriculture

¹⁵Fogel, p. 237; Fishlow, p. 303.

¹⁶Fogel, p. 77-78.

would have been limited to counties bordering on one of the Great Lakes and their connecting waters, or approximately thirty miles in most cases. The counties listed represent lands outside the area of feasible commercial agriculture, approximately seventy per cent of the land area in Michigan's southern four counties, and a major part of the land suitable for agriculture.¹⁷ Although a portion of the land within forty miles of lake transportation is included within these counties, the distortion is not severe enough to call for a more detailed breakdown. If the assumption that maximum hauling distance is allowed to apply equally to railroads, and the state's two railroads are assumed to run reasonably close to the line of county centers within the grid system on which Michigan was surveyed, then the effects of the Central Railroad or the railroad's competition with wagon rates must be extended equally to both the first and third tiers

¹⁷Fogel's map, p. 81, gives a distorted picture of the area of feasible agriculture in Michigan. Much of the area within forty miles of the coastline has no value for agricultural purposes, particularly in the northern half of the lower peninsula, and nearly all of the upper peninsula. With the exception of a narrow belt favorable to fruit growing on the western coast, and a small area extending north to Midland, much of the land north of the fifth tier is suitable to forestry, and little else. Even though Fogel's map is only a visual aid, it gives a false impression, and does not seem to have been carefully constructed. Michigan's upper peninsula, about a third of its total land area, is represented as part of Wisconsin.

of counties because the distance to the Central Railroad, from the northern border of the third tier and the southern border of the first is approximately forty-five miles. Similarly, the effects can be assumed to diminish with distance, with the strongest influence being felt in the center. The fourth tier, outside the area of feasible agriculture created by the railroads, can be seen to act as a control factor. The results of these tables do not represent a quantification of indirect benefits, but do act as indicators of a general tendency.

Wheat production in the interior counties of the four southern tiers appears to have responded in predictable patterns to the improvement of transportation. Output in the central tier grew from 500,000 bushels in 1837 to over 2,200,000 bushels in 1854. The first and third tiers exhibit a remarkable symmetry of response, growing to approximately 1,500,000 bushels in 1854. Heavy output in the eastern counties of the first and third tiers can be explained by their proximity to lake ports and possession of railroads external to the state's system. Output in the fourth tier, outside the area of feasible commercial agriculture created by the Central, exhibited a typically low response, producing only half the wheat output of the first and third tiers, even though possessing about two-thirds the number of farms in these tiers. Taken from east to west, output in the fourth tier shows a predictable

pattern of declining toward the center of the state and then increasing again as the western coast is approached. In other tiers, output declined from east to west, an effect which might be traced to increased freight costs over distance.¹⁸

Flour production and capital investment in milling exhibit similar patterns of behavior. Output of flour in the central tier grew from \$303,000 in 1837 to \$1,410,000 by 1854, while the output in the southern tier grew from \$173,000 to only \$517,000, and in the third tier from \$124,000 to \$601,000. While the central tier exhibited a fairly even distribution of investment and output, counties directly to the north and south tended to decline from east to west, and the fourth tier again demonstrated investment inversely proportional to the distance from the lakes. An interesting feature of the growing milling industry is the relative decline in the ratio of capital investment to gross output over time. Although the southern counties had the largest investment in milling facilities at the beginning of the period, capital expansion grew at a relatively slow pace as increasing production absorbed excess capacity. In the central counties, the expansion of investment more nearly followed increases

¹⁸See Appendix VIII.

in output, although it too experienced the savings of a declining ratio of capital to output. By allowing the conversion of units constructed for local milling to full time use and the introduction of new units at higher levels of demand for milling, substantial capital savings should have resulted.¹⁹

The effect of improved transportation was also reflected in patterns of land use and values at the end of the internal improvements era in Michigan. In spite of relative differences in total population, the number of farms in the southern three tiers was remarkably uniform, with a range of only 150 units between the highest and lowest; the northern tier lagged considerably, with approximately seventy per cent of the number of farms contained in southern counties. Within the tiers, however, the higher level of development in counties having railroads was reflected in land values and utilization. Farms within the central tier uniformly exhibited a higher ratio of improved to unimproved land, exceeding all save the most eastern counties in other tiers. New land in the central counties appears to have been brought into production at a much higher rate than any other portion of the state. This ratio is reflected by the substantially higher average number of improved acres per farm in the

¹⁹See Appendix IX.

central counties. Moreover, land development within the tier appears to have been opened at a much more uniform rate than land within other sections. The value of this development is clearly evident in the average value of farms in 1850. Farms in the central counties were reported as having an average value ranging from \$200 to \$500 above counties in other sections of the state, reflecting the level of land improvement and proximity to commercial shipping facilities. Had the railroads not been built, it is reasonable to assume that a pattern similar to that exhibited by the fourth tier would have developed.²⁰

The pattern of land use and values exhibited in the southern four tiers of Michigan in 1850 and 1854 reflects the structure of grain farming in the Old Northwest prior to widespread introduction of the reaper and thresher. Heavy percentages of improved land were devoted to wheat production only on those farms exhibiting extremely high and low ratios of land improvement, reflecting the tendency of farms in initial stages to plant an immediate crop both for cash and home consumption, followed by diversification until improved transportation made it profitable to open even more land for the purpose of

²⁰See Appendix X.

devoting more acreage to commercial agriculture. Investment in tools and machinery was so low and remarkably uniform among tiers that no significant pattern could be discerned, and the data were not included in the appendices. Specialization in wheat production was regional, and not reflected to a high degree within the units themselves. As long as wheat was harvested largely by farm families and occasional itinerant farm labor, unit specialization which would be reflected in large acreages devoted to a single crop with heavy investment in agricultural machinery was retarded. Although improved transportation appears to have stimulated regional concentration, unit specialization required still greater market expansions than those provided by domestic railroads and widespread adoption of innovations in agricultural technology, conditions which could only be developed in areas outside the state's control. The substantial growth of wheat production in counties outside the area of feasible commercial agriculture, however, appears to give ample evidence to support the conclusion that Michigan's program of internal improvements made significant contributions to the state's agricultural development.

Within the political and philosophic context in which Michigan operated in the late 1830's and early 1840's, few alternatives were presented other than the course of

action undertaken. Direct investment in productive facilities other than transportation projects was forbidden by the basic economic philosophy of the American people, who allowed government intervention in business only when it encompassed problems too complex to be solved by individuals or groups of individuals. Planning had not yet been invented, in the modern sense, and even the feeble attempts within the Legislature to allow the Board of Internal Improvements to assign priorities to investment met with failure in the face of local ambitions. Other than construction of a multiple program of public works, bringing transportation improvements to the doorstep of all of its residents, to the state few alternatives were open.

Even in the primitive state of railroad technology in 1837, canals represented a high cost alternative bringing minimal rewards. Cost estimates for construction of the Clinton and Kalamazoo were over twice that of either the Central or the Southern, and errors in railroad estimates resulted from faulty assumptions involving the cost of earthmoving. Since earthmoving was a greater part of the cost of canals than railroads, it is reasonable to assume that the expense of canals would have been much greater. For the original cost estimate of the Clinton and Kalamazoo, Michigan could have constructed a trans-peninsular railroad with heavy rails and an adequate rolling

stock, and the canal would not have solved its special problem; winter and ice would have closed the canal at precisely the time when its roads became solid enough to allow the shipment of its major agricultural product. Wheat harvested in the summer and milled in the fall would have had to await the solidification of roads the following summer before being shipped to market. The canal system suggested by Robert Fogel illustrates the limits of absurdity which can be reached by a high level of abstraction and minimal familiarity with the environment which is being discussed. To bring the area beyond feasible commercial agriculture 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 expenditure by Michigan during the internal improvements era, including suspended or abandoned projects and the money lost in bank failures. Although Fogel's system could have been built, it would have placed the state's most productive agricultural counties on the fringe of feasible commercial agriculture, and forced the state to ship into Lake Michigan and through the straits to reach Detroit and points east. As we have seen, the state improved and opened the Grand and Maple Rivers, without substantially stimulating output in the fourth tier. A small sum of additional investment in Fogel's system could have made it into a transpeninsular

TABLE 8.--Appropriations and Expenditures, 1837-1845.^a (Thousands of Dollars)

	1837	1838	1839	1840	1841	1842	1843	1844	1845
Appropriations	765	1,378	340	37.5	675	15	171 ^b	96 ^b	35 ^b
Reported Total Expenditures	420	508	580	467	418	184	158	264	137
Adjusted total ^c				523	362				

^aSummarizes tables 2, 5, 6, 7.

^bAcres of land.

^cAdjustment includes \$56,000 expended in 1840 in excess of appropriations on the Southern and financed by use of floating estimates and warrants not reported in official totals until 1841.

trunk line, instead of a local work draining into a lake which was closed by storms and ice in the Straits of Mackinac six months of the year.²¹ Investment in one or more transpeninsular railroads clearly represents a more productive investment than any system of canals.

The most productive use to which the state could have invested its funds would have been the construction of a single, well stocked railroad from Detroit to St. Joseph or Chicago, with feeder lines running to selected points in the first and third tiers. Such a system could have been economically constructed, profitably operated, and gradually extended, while the state would have been able to exist well within its means. Such a program would have clearly guaranteed profitable operation, and stimulated a high level of agricultural growth. This fact, it seems to me, was understood from the beginning by responsible members of the state government, and even by the legislators opposing construction of a single road. Local ambition, combined with the belief and desire to share equally in the results of economic growth, however, took priority over the rational allocation of investment.

A study of this scope, confined to a single state in a single decade, cannot hope to offer conclusions

²¹Fogel, pp. 81-97.

affecting the allocation of investment in currently underdeveloped countries. It suggests, however, that within some environments, various levels of economic growth and regional equality may be viewed as mutually exclusive. The growth affects of social overhead capital, which stem from its lumpiness and economies of scale, can easily be dissipated when the scale is reduced and investment spread to achieve regional equality. Finally, it points to the need for national planning, and the reduction of local influences in decision making. After building and selling the Democracy's railroads, Michigan turned to private enterprise to solve its transportation problems, but in other cultures, the choice may not be as simple.

BIBLIOGRAPHIC ESSAY

This study was drawn from a wide variety of sources, including printed and manuscript public records, private papers of public officials, travel accounts, and secondary works. A discussion of the most useful sources follows.

I. Printed Public Records

Printed public documents form the most abundant and accessible source of evidence relating to the internal improvements program. All such documents, however, must be used with care and treated as points of view, rather than absolute statements of fact. During the Territorial Period, the Journal of the Legislative Council of the Territory of Michigan (1824-1836) records the proceedings of the Territory's legislative body, although failing to record actual debates. Acts of the Territorial Council have been compiled in Laws of the Territory of Michigan (Lansing, 1894) from the original records by the State. Unfortunately, after the passage of half a century, many of the original acts were missing, and although a supplemental volume was published (Vol. IV), the acts

are incomplete, chronologically scrambled, and not numbered. Similarly, the last two volumes of the Journals, encompassing the Council's chartering of railroad-banks were deliberately removed from the original records and destroyed by an unknown person. Records of correspondence between the national government and the territory are printed in the Territorial Papers of the United States, compiled and edited by Clarence Edwin Carter for the Department of State (Washington, D. C.: Government Printing Office, 1942), volumes X-XII. These records are supplemented by the Territorial Papers of the United States Senate, 1789-1873, roll six of File Microcopies of Records in the National Archives: No. 200 (Washington, D. C.: National Archives and Records Service, General Services Administration, 1951).

The Michigan Constitution of 1835, as well as records of the transition from a territorial to a state government, can be most conveniently used in The Michigan Constitutional Conventions of 1835-1836: Debates and Proceedings, edited by Harold M. Dorr ("University of Michigan Publications: History and Political Science," Vol. XIII; Ann Arbor: University of Michigan Press, 1940). The debates, committee reports, and proceedings of the conventions were never officially printed, and Dorr's collection is a composite from newspapers, journals, reports, and supporting papers. The debates are fragmentary.

Executive messages are conveniently located in Messages of the Governors of Michigan, edited by George N. Fuller (4 vols.; Lansing: Michigan Historical Commission, 1925). Although the Fuller edition covers the messages of the Governors from 1824, it is in places fragmentary, and often omits important material. Governors frequently attached lengthy documents to their messages, or sent material to the Legislature, and for these, legislative documents must be consulted. The Annual Message of the Governor is usually Joint Document No. 1. Annual reports of other Executive Departments are published in a set order in the Joint Documents of the Legislature of the State of Michigan. Such reports are usually lengthy and informative.

Although the Journals of the House and Senate do not record actual debates, they are useful for determining the composition of forces working to establish various programs. Occasionally, documents are printed in the journals rather than in the published legislative documents collections, for reasons best known to the clerks of the respective houses. The most useful publications, however, are the House Documents and Senate Documents. Officially published as Documents accompanying the Journal of the Senate of the State of Michigan at the Annual Session in . . ., or of the House; the documents printed are miscellaneous in nature. Consisting of

committee reports, statements of policy, annual reports of corporations, petitions submitted to the Legislature, and in short, anything the Legislature decided to print, these volumes must be searched thoroughly to be of any use.

The most useful of the legislative documents is the Annual Report of the Board of Internal Improvements, printed as a House or Senate Document until 1840, when two members of the executive office were appointed to the Board. After that, it was printed among the Joint Documents. Reports of the Board encompass every aspect of the internal improvements program, including pricing policies, building techniques, engineering reports, and occasionally, political policy recommendations. Because the Board was forced to explain its actions and techniques to seventy legislators every year, most of whom were recently elected, its reports constitute an important source of material relating to early railroad techniques. Nowhere, to my knowledge, does there exist such a fertile source of basic information. Unfortunately, the Minutes and Proceedings of the Board of Internal Improvements could not be located for use in this study. That such a body of information did exist is certain, because there are excerpts in the documents of the Legislature. I was unable to uncover them in any of the state archives,

however, and there is always the possibility they were destroyed in the Cass Building fire. If they are extant, however, their use should add depth to the story of Michigan's internal improvement.

Two other sources deserve special mention. Michigan, Department of State, Manual Containing the Rules of the Senate & House of Representatives of the State of Michigan with the Joint Rules of the Two Houses and Other Matters, usually referred to as Michigan Manual, is useful because of the "other matters" published, including constitutions, legislative districts, and census data. Finally, the Report of the Special Committee Appointed by the House of Representatives, to Investigate the Proceedings, & c., of the Several Boards of Internal Improvement (Detroit: Dawson and Bates, 1840) should be mentioned because it contains a complete account of every penny expended by the Boards of Internal Improvement through April 1840, and because by a fluke, it was printed when the Legislature was not in session and received no document number. Consequently, one must know it exists to use it.

II. Manuscript Public Records

Unpublished government documents are stored in the Michigan Department of State, Historical Commission Archives (Lansing, Michigan). Collections pertaining to

the period are sparse, but extant papers fill many gaps. Because the collection is currently being reboxed, citations by box number would have been worthless. Correspondence of the Governors is contained in "Records of the Executive Office, 1810-1910: Correspondence." Documents supporting the standard account of the negotiation of the five million loan consist of one box entitled "Records of the Office of Secretary of State, Great Seal and Archives Section: Five Million Dollar Loan, 1835-1853." Documents relevant to Mason's negotiations with John Delafield consist of one folder in "Records of the Office of Secretary of State, Great Seal and Archives: Claims Submitted to the Legislature, 1837-1839."

III. Manuscript Collections

Private papers of public officials examined for this study can be found in two major depositories: the Burton Historical Collections (BHC) of the Detroit Public Library, and the Michigan Historical Collections (MHC), Ann Arbor.

Burton Historical Collections

The most important and useful body of documents in the Burton Collection is the William Woodbridge Papers, a massive collection consisting of some twenty-five boxes for the period between 1835 and 1846. The Stevens T.

Mason Papers, one box of letters, consists mainly of letters from Mason to his family. The John R. Norton Papers, of five boxes, are really the papers of the Michigan State Bank, of which Norton was cashier. For some reason, almost every paper relating to the bank's transactions with the state has been removed, but the collection would be useful in the study of commercial transactions. Letters in the Alpheus Felch Papers pertaining to the period 1837-1846 are confined to a single box, with few documents of value. Finally, the James Joy Papers, along with the Papers of Joy & Porter, are of little value for the period between 1842 and 1846.

Michigan Historical Collections

Manuscripts in the Michigan Historical Collections, Ann Arbor, are of little value in the study of Michigan's internal improvements. The Alpheus Felch Papers are the most important collection, consisting of two large boxes submitted by the Felch family. The Stevens T. Mason Papers give extensive coverage to the Toledo War, but have little else of value. The Jacob A. Barker Papers, contain photostats of five important letters relating to the Erie and Kalamazoo Railroad. Originals are currently in the hands of the Ohio Historical Society Library, Columbus, Ohio. Finally, the Papers of

the Erie and Kalamazoo Railroad, 1834-1952, are deposited in the Michigan Historical Collections, and consist of about ten feet of papers. The collection is badly disorganized, and all that could be discovered relating to the period from 1834-1847 was confined to three folders which contained few papers of value. A word of caution should be given in regard to one manuscript deposited in the Michigan Historical Collections: M. C. McConkey, James Joy Biography (5 manuscript volumes, undated and unpublished). The study is grossly inaccurate, and its use must be accompanied by such caution that it would be better to do the research without bothering to consult McConkey. Use of this manuscript has resulted in errors in the work of three nationally known historians. I have been unable to find any key to the identity of M. C. McConkey.

Published Manuscript Collections

The "Letters of Lucius Lyon," Michigan Pioneer and Historical Collections, XXVII (1896), pp. 412-605, are the single scholarly contribution of the Pioneer and Historical Society in the publication of nearly forty volumes of geriatric reminiscences. Lyon's papers are extremely useful in the study of economic conditions, speculation, and politics.

IV. Secondary Sources

Michigan's history is peculiarly distinguished by a lack of scholarly historical studies. In the century and a half since the Territory was established, not a single scholarly work covering the entire history of the region has been produced. For the period from 1825 to 1860, studies are even less abundant.

F. Clever Bald, Michigan in Four Centuries (New York: Harper & Brothers, 1954), is the best of the general studies, and the most disciplined. R. Carlyle Buley's The Old Northwest Pioneer Period (Bloomington: Indiana University Press, 1951), is the best known study of the Old Northwest, and has won prizes, but has the unfortunate quality of being based primarily on the Pioneer and Historical Collections, which are unreliable at best. Buley suffers also from a lack of discrimination in accepting sources. Willis Dunbar, Michigan: A History of the Wolverine State (Grand Rapids, Michigan: Eerdmans, 1965), is currently the most popular general history. James Henry Lanman, History of Michigan, (New York: 1839) is the oldest of the general histories, and useful as a primary source for the period of this study. Finally, the work of Henry M. Utley and Byron M. Cutcheon, Michigan as a Province, Territory and State, the Twenty-sixth Member of the Federal Union (4 vols; New York: Americana

Press, 1906), is perceptive, and useful because of its study of national laws affecting Michigan.

Special studies dealing with Michigan in the period from 1820-1860 are scarce. Floyd B. Streeter, Political Parties in Michigan, 1837-1860 (Lansing: Michigan Historical Commission, 1918), is useful for determining the membership in parties and factions, but its causal analysis is faulty and based largely on intuitive evidence. A fine old study by Hannah Emily Keith, "An Historical Sketch of Internal Improvements in Michigan, 1836 to 1846" Publications of the Michigan Political Science Association, IV (July 1900-July 1902), pp. 1-48, is useful, if somewhat dated. Appendices XIII and XIV have been partially taken from this study, and its analytical framework has served as a partial model. William L. Jenks, "Michigan's Five Million Dollar Loan," Michigan History, XV (1931), pp. 575-634, is a fine piece of scholarship, although unfortunately undocumented. Chapter VIII of Reginald McGrane's Foreign Bondholders and American State Debts (New York: Macmillan, 1935), is useful for the period, also.

Several volumes of travel accounts are useful. Mrs. C. M. Kirkland, Forest Life in Michigan (2 Vols; New York: C. S. Francis & Co., 1842), or any other of Mrs. Kirkland's many books is useful as a background

for settlement in Michigan. Thomas Cather, Voyage to America, The Journals of Thomas Cather, edited by Thomas Yoseloff (New York: by the Author, 1961), gives an interesting picture of conditions in outstate Michigan in 1836. Similarly, the letters of Alexis de Toqueville, in Toqueville and Beaumont in America, edited by George Wilson Pierson (New York: Oxford University Press, 1938), give an interesting account of life and travel in Michigan in 1831. The best of the studies, and one of the classics in frontier travel literature, is John M. Gordon, "Michigan Journal, 1836," edited by Douglas H. Gordon and George S. May, Michigan History, XLIII (1959).

Biographies of prominent Michiganians are even less abundant than scholarly studies. Michigan Historical Commission, Michigan Biographies (Lansing: Michigan Historical Commission, 1924), is useful for some purposes, although essentially a rehash of an antiquarian study done in the 1880's. Lawton T. Hemans, Life and Times of Stevens Thomson Mason, the Boy Governor of Michigan (Lansing: Michigan Historical Commission, 1924), is the most thorough study of Mason's career, but unfortunately blinded by prejudice in favor of the young governor. Although a miserable popular biography filled with inaccuracies, Kent Sagendorph's Stevens Thomson Mason: Misunderstood Patriot (New York: Dutton

& Co., 1947), is by far the most perceptive study of Mason. Sagendorph's portrait of Mason as a machine politician is remarkably close to the truth.

Studies bearing on the national experience and state internal improvement programs are legion. George Rogers Taylor's The Transportation Revolution, 1815-1860, Vol. IV: The Economic History of the United States (New York: Rinehart & Company, 1957), has served as a standard reference, supplemented by Frank Walker Stevens, The Beginnings of the New York Central Railroad: A History (New York: G. P. Putnam's Sons, 1926). Carter Goodrich's classic study of Government Promotion of American Canals and Railroads, 1800-1900 (New York: Columbia University Press, 1960), has supplied much of the analytical framework for this study, along with questions posed by Robert A. Lively, "The American System: A Review Article," Business History Review, XXIX (March, 1955), pp. 81-95. A second study of Canals and American Economic Development, edited by Carter Goodrich (New York: Columbia University Press, 1961), has raised interesting questions which I have attempted to answer. A recent, brilliant study of American Railroads and the Transformation of the Ante-bellum Economy, Vol. CXXVII: Harvard Economic Studies (Cambridge: Harvard University Press, 1965), has added depth to the analytical vehicle

and raised questions to be answered. Similarly, Robert William, Fogel's Railroads and American Economic Growth: Essays in Econometric History (Baltimore: Johns Hopkins Press, 1964), has raised questions which deserved answering. The political framework for analysis was provided by Richard P. McCormick, The Second American Party System: Party Formation in the Jacksonian Era (Chapel Hill, N. C.: University of North Carolina Press, 1961). Finally, Bray Hammond, Banks and Politics in America from the Revolution to the Civil War (Princeton, N. J.: Princeton University Press, 1957), has served as a standard reference on banking practices.

APPENDIX I

LAND SALES AND POPULATION*

Year	Public Land Sales (acres)	Population
1818	37,865	
1819	24,910	
1820	6,523	8,896
1821	7,444	
1822	17,359	
1823	34,017	
1824	78,246	
1825	106,752	
1826	59,361	
1827	42,410	
1828	26,895	
1829	67,860	
1830	147,061	31,639
1831	320,476	
1832	252,211	
1833	447,780	
1834	498,423	87,273
1835	1,817,247	
1836	4,189,823	
1837	773,522	175,000
1838	97,533	
1839	134,984	
1840	26,106	212,267
1841	18,167	
1845		302,552
1850		511,720
1854		758,292

* U. S., Congress, Senate, Report of the Secretary of the Treasury, 27th Congress, 3d Session, 1843, pp. 5-10; Historical Statistics of the United States, p. 13; Abstract of the Whole Number of Persons Residing in That Part of the Territory of Michigan, . . . as Ascertained in Conformity with the Provisions of an act of the Legislative Council of said Territory, Entitled "An Act to Provide for taking a census, and for other purposes,"

Approved September 6, 1834 (S. M'Knight, 1834). Cited hereafter as Michigan, Census of 1834. Michigan, Legislative Manual, 1838, pp. 70-75; Michigan, Legislative Manual, 1861, pp. 195-240.

APPENDIX II
POPULATION BY TIER AND COUNTY^a

Tier & County ^b	1834	1837	1840	1845	1850
First or Southern					
Monroe	8,542	10,646	9,922	12,287	14,698
Lenawee	7,911	14,540	17,889	22,923	26,372
Hillsdale	---	4,729	7,240	11,111	16,159
Branch	764	4,016	5,715	9,064	12,472
St. Joseph	3,168	6,337	7,068	10,097	12,725
Cass	3,280	5,296	5,710	8,078	10,907
Berrien	1,787	4,863	5,011	7,865	11,417
	<u>25,452</u>	<u>50,427</u>	<u>58,555</u>	<u>81,425</u>	<u>104,750</u>
Second or Central					
Wayne	16,638	23,400	24,173	31,737	42,756
Washtenaw	14,920	21,817	23,571	26,979	28,567
Jackson	1,865	8,702	13,130	16,825	19,431
Calhoun	1,714	7,960	10,599	15,594	19,162
Kalamazoo	3,124	6,367	7,380	10,163	13,179
Van Buren	---	1,262	1,910	3,743	5,800
	<u>38,261</u>	<u>69,508</u>	<u>80,763</u>	<u>105,041</u>	<u>128,895</u>
Third					
Macomb	6,055	8,892	9,716	13,491	15,530
Oakland	13,844	20,176	23,646	30,241	31,270
Livingston	---	5,029	7,430	10,787	13,485
Ingham	---	822	2,498	5,267	8,631
Eaton	---	913	2,379	4,613	7,058
Barry	---	512	1,078	2,602	5,072
Allegan	---	1,469	1,783	2,941	5,125
	<u>19,899</u>	<u>37,813</u>	<u>48,530</u>	<u>69,492</u>	<u>86,171</u>
Fourth					
St. Clair	2,244	3,673	4,606	6,621	10,420
Lapeer	---	2,602	4,265	5,314	7,029
Genesee	---	2,754	4,268	9,266	12,031
Shiawassee	---	1,184	2,103	7,419	5,230
Clinton	---	529	1,614	3,010	5,102
Ionia	---	1,028	1,923	5,101	5,597
Kent	---	2,022	2,587	6,153	12,016
Ottawa	---	628	208	1,200	4,835
	<u>2,244</u>	<u>14,420</u>	<u>21,574</u>	<u>44,084</u>	<u>62,260</u>

^aMichigan, Legislative Council, Census of 1834; Michigan, Legislative Manual, 1838, pp. 71-75; U.S., Census Office, Sixth Census of the United States: 1840; Michigan, Legislative Manual, 1861, pp. 195-240.

^bCounties listed from east to west by tier.

APPENDIX III
POPULATION DENSITY BY TIER AND COUNTY^a

Tier & County	1834	1837	1840	1845	1850	Area in ^b Sq. mi.
First						
Monroe	15.2	18.9	17.7	21.9	26.6	562
Lenawee	10.5	19.3	23.7	30.4	35.0	754
Hillsdale	----	7.9	12.0	18.5	26.9	601
Branch	1.5	7.9	11.3	17.9	24.6	506
St. Joseph	6.2	12.5	13.9	19.9	25.0	508
Cass	6.7	10.9	11.7	16.6	22.4	488
Berrien	3.1	8.4	8.6	13.6	19.7	580
Second						
Wayne	37.4	38.6	39.8	52.3	70.4	607
Washtenaw	20.8	30.5	32.9	37.7	39.9	716
Jackson	2.6	12.3	18.6	23.9	27.6	705
Calhoun	2.4	11.2	14.9	22.0	27.0	709
Kalamazoo	5.5	11.2	13.0	17.9	23.2	567
Van Buren	----	2.1	3.1	6.2	9.6	607
Third						
Macomb	12.6	18.5	20.2	28.0	32.3	481
Oakland	15.8	24.0	27.0	34.5	35.7	877
Livingston	----	8.8	13.0	18.9	23.6	571
Ingham	----	1.5	4.5	9.4	15.4	559
Eaton	----	1.6	4.2	8.1	12.4	567
Barry	----	.9	2.0	4.7	9.2	549
Allegan	----	1.8	2.2	3.5	6.2	829
Fourth						
St. Clair	3.0	5.0	6.2	8.9	14.1	740
Lapeer	----	3.9	6.5	8.1	10.7	657
Genesee	----	4.3	6.6	14.4	18.7	643
Shiawassee	----	2.2	3.9	13.7	9.7	540
Clinton	----	0.9	2.8	5.3	8.9	571
Ionia	----	1.8	3.3	8.9	9.7	575
Kent	----	2.3	3.0	7.1	13.9	862
Ottawa	----	1.1	0.4	2.1	8.6	564

^aDerived from data in Appendix II.

^bEconomic data sheets compiled by the Michigan Economic Development Department, October, 1961.

APPENDIX IV

RAILROAD CHARTERS GRANTED BY THE TERRITORY AND STATE OF MICHIGAN, 1830 to 1837

Date	Company	Route	Authorized Capital	Started
1830	Detroit & Pontiac (renewed, 1834; bank, 1835)	Detroit to Pontiac	100,000	X
1832	Detroit & St. Joseph (renewed, 1834; bank, 1835)	Detroit to St. Joseph	1,500,000	X
1833	Romeo & Mt. Clemens	Romeo to Mt. Clemens, within Macomb county	150,000	
1833	Erie & Kalamazoo (bank, 1835)	Toledo through Adrian to the Kalamazoo River	1,000,000	X
1834	Shelby & Detroit	Detroit to Shelby, Macomb county	100,000	X
1835	River Raisin & Grand River (bank & railroad)	Monroe through Tecumseh, Clinton & Marshall to Grand Rapids	1,500,000 for road 100,000 for bank	
1835	Macomb & Saginaw (bank & railroad)	Mt. Clemens to Lapeer to the Saginaw county seat	1,000,000 for road 100,000 for bank	
1835	Detroit & Maumee	Detroit to Monroe to Maumee Bay	500,000	?

APPENDIX IV.--Continued

Date	Company	Route	Authorized Capital	Started
1835	Maumee Branch (amended charter)	Maumee River to the Erie and Kalamazoo, then west to the mouth of the Galain River at Lake Michigan (New Buffalo)	1,500,000	X
1835	Shelby & Belle River	From the northern terminus of the Shelby & Detroit through Romeo to Belle River	100,000	
1836	Monroe & Ypsilanti	From the River Raisin & Lake Erie at Monroe to the Detroit & St. Joseph at Ypsilanti	400,000	
1836	Allegan & Marshall	Allegan to Bronson, Battle Creek Verona, & Marshall	400,000	?
1836	Clinton & Adrian	Clinton to Adrian	50,000	
1836	St. Clair & Romeo	Palmer to Romeo	100,000	
1836	Palmyra & Jacksonburgh	Palmyra to Clinton to Jackson	300,000	X
1836	Kalamazoo & Lake Michigan	Kalamazoo to the mouth of the Black River	400,000	

APPENDIX IV.--Continued

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Date	Company	Route	Authorized Capital	Started
1836	Havre Branch	From Havre in Monroe to either the Maumee Branch or the Erie and Kalamazoo	100,000	
1836	Monroe & Ann Arbor	Ann Arbor to the River Raisin & Lake Erie	300,000	
1836	River Raisin & Lake Erie	Lake Erie at or near La Plaisance Bay, through Monroe & Dundee to the Erie & Kalamazoo at Bliss-field	300,000	X
1836	Constantine & Niles (railroad and canal)	Railroad or canal from Constantine to Niles	250,000	
1837	Gibraltar & Clinton	Gibraltar, Wayne County, to Clinton in Lenawee County	400,000	
1837	Detroit & Shiawassee	Detroit to Farmington, Kensington, Byron, to Shiawassee, to Biddle City	500,000	
1837	Saginaw & Genesee	Saginaw River to the Northern Railroad		

APPENDIX IV.---Continued

Date	Company	Route	Authorized Capital	Started
1837	Port Sheldon & Grand Rapids	Port Sheldon to Grand Rapids	250,000	X

*Michigan, Territorial Laws, III, pp. 844ff, 960ff, 1125ff, 1287ff, 1300ff, 1387ff; Ibid., IV, pp. 112ff, 134ff, 142ff, 148ff, 153ff, 155, 156; Michigan, Legislative Acts, 1836, pp. 267ff, 277ff, 287ff, 297ff, 307ff, 318ff, 328ff, 338ff, 348ff, 358ff, 369ff; Michigan, Legislative Acts, 1837, pp. 217ff, 227ff, 269ff, [Adjourned Session] 16ff.

APPENDIX V

FEDERAL RESOURCES EXPENDED IN MICHIGAN FOR INTERNAL IMPROVEMENTS*

Territorial roads	\$ 337,108
La Plaisance Harbor	19,603
River Raisin	20,000
U. S. Surplus Deposit, 1837	286,751
Five per cent fund	174,224
River Raisin, 1836	15,000
River Raisin, 1837	30,000
River Raisin, 1838	15,000
River Raisin, 1844	20,000
St. Joseph River, 1836	20,000
St. Joseph River, 1837	15,000
St. Joseph River, 1838	21,000
St. Joseph River, 1844	20,000
Five hundred thousand acres of land at \$1.25 per acre	625,000
U. S. land revenue distribution of 1841	<u>9,729</u>
Total	\$1,628,415

*Michigan, Legislature, Report of the Committee on Federal Relations (House Documents, 1847, H. D. No. 16). Data presented in the committee report is a minimum assessment of federal aid, because the committee was attempting to prove that Michigan had not received its fair share of federal funds.

APPENDIX VI

STATE EXPENDITURES ON INTERNAL IMPROVEMENTS
BY SOURCE*

Five million loan	\$2,560,630
Five per cent fund.	174,224
Outstanding internal improvements warrants.	508,468
Internal Improvements lands sold.	258,012
Outstanding land warrants	25,991
Due on Palmyra and Jacksonburg bonds.	26,300
Proceeds of Central and Southern. railroads, from 1838 through 1845 inclusive	504,951
U. S. Distribution of 1841.	9,729
Received from State Bank assets	47,293
Overdrafts from other funds	<u>276,991</u>
 Total.	 \$4,392,589
 Minus Resources supplied by the federal government.	 <u>467,956</u>
 Total	 \$3,924,633
 Plus Detroit and Pontiac Bonds	 <u>100,000</u>
 Total state resources applied to internal improvements	 \$4,024,633

* Michigan, Legislature, Report of the Committee on Ways and Means (House Documents, 1846, H. D. No. 1), pp. 12, 13.

APPENDIX VII

DISPOSITION OF STATE INTERNAL IMPROVEMENT BONDS*

New York Banks, deposited with the	
Comptroller of Currency.	\$ 334,000
U. S. Bank, hypothecated with:	
Hope & Co.	1,220,000
Rothschilds & Co	798,000
Morrison & Sons	262,000
Denison & Co.	1,533,000
Farmer's Loan & Trust Co., N. Y.	570,000
Banks, estates, private individuals, and	
full paid bonds purchased by the B.U.S.	<u>483,000</u>
Total	\$5,200,000

* Michigan, Legislature, Communication from the State Treasurer in Relation to the Five Million Loan and Other State Bonds (Joint Documents, 1843, J. D. No. 1), pp. 54-61. Bonds are listed by number and purchaser.

APPENDIX VIII

MICHIGAN WHEAT PRODUCTION BY TIER AND COUNTY^a
(Thousands of Bushels)

	1837	1840	1850	1854
Lenawee	132*	168*	314*	446*
Hillsdale	43	81	220*	341*
Branch	28	67	156*	208*
St. Joseph	---	131	257*	365*
Cass	54	95	160*	209*
Tier Total	<u>256</u>	<u>542</u>	<u>1,106</u>	<u>1,570</u>
Washtenaw	165	161*	523*	760*
Jackson	163	177	477*	654*
Calhoun	105	193	391*	481*
Kalamazoo	104	171	228*	354*
Tier Total	<u>536</u>	<u>702</u>	<u>1,618</u>	<u>2,248</u>
Oakland	---*	265*	604*	779*
Livingston	41	85	304	360
Ingham	3	23	82	146
Eaton	4	16	51	113
Barry	---	13	20	109
Tier Total	<u>47</u>	<u>402</u>	<u>1,060</u>	<u>1,507</u>
Lapeer	15	35	85	142
Genesee	---	36	121	164
Shiawassee	3	20	62	74
Clinton	3	24	54	99
Ionia	4	32	77	171
Kent	3	19	69	170
Tier Total	<u>28</u>	<u>166</u>	<u>468</u>	<u>820</u>

^aLanman, History of Michigan, 293-294; Michigan, House Document No. 31, 1841, pp. 70-86; Michigan, Department of State, Census and Statistics of the State of Michigan, 1854, pp. 381, 391. Figures will not necessarily total, because of rounding.

*Indicates that the county had been reached by a railroad on or before that date.

APPENDIX IX^a

FLOUR PRODUCTION AND CAPITAL INVESTMENT IN MILLING.

(Thousands of Dollars)

	1840		1850		1854	
	capital	flour	capital	flour	capital	flour
Lenawee	200	84*	237	335*	132	273*
Hillsdale	33	4	79	120*	83	5*
Branch	60	27	47	103*	15	86*
St. Joseph	31	26	143	206*	95	132*
Cass	49	32	21	26	15	21
Tier total	373	173	527	790	340	517
C/O ^b	2.2		.7		.7	
Washtenaw	53	85*	218	553*	235	540*
Jackson	83	99	146	310*	147	223*
Calhoun	135	81	---	---	287	561*
Kalamazoo	11	39	78	175*	50	86*
Tier total	282	303	442	1,038	719	1,410
C/O ^b	.9		.4		.5	
Oakland	126	104*	211	225*	218	440*
Livingston	12	18	61	109	71	147
Ingham	---	2	27	21	21	2
Eaton	---	---	14	39	32	11
Barry	---	---	7	16	7	1
Tier total	138	124	320	410	349	601
C/O ^b	1.1		.8		.6	
Lapeer	28	58	---	51	20	69
Genesee	---	7	63	94	63	167
Shiawassee	19	3	31	37	23	30
Clinton	---	---	7	33	7	1
Ionia	---	7	---	---	29	47
Kent	40	8	34	79	27	148
Tier total	87	83	135	294	169	462
C/O ^b	1.0		.5		.4	

^aMichigan, House Document No. 31, 1841, pp. 70-80; Michigan, Dept. of State, Census and Statistics of the State of Michigan, 1854, pp. 383, 393, 399.

^bRatio of capital investment to gross output. This ratio is not a true c/o ratio, which would require the use of value added, but if marginal costs do not change substantially, a safe assumption with existing technology, the crude measure will give the same directional measurement as the more refined data.

*Indicates the county had been reached by a railroad on or before that date.

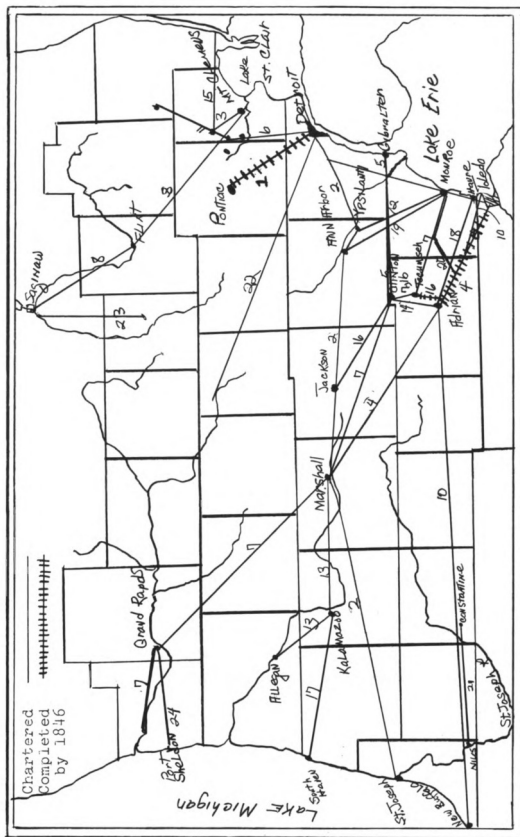
APPENDIX X

LAND USE AND VALUES, 1850-1854*

Counties by tier	Number of farms, 1850	Ratio of improved to unimproved land on farms, 1850	Average improved acreage per farm, 1850	Average value of farms, 1850	Per cent of improved land in wheat, 1854
Lenawee	2471	1.0	56	1660	23
Hillsdale	1411	.9	56	1460	27
Branch	1463	.7	44	1100	27
St. Joseph	1354	.9	69	1866	26
Cass	952	.7	63	1578	29
Total	7651	.9	57	1542	
Washtenaw	2546	1.1	71	1956	27
Jackson	2282	.9	65	1627	36
Calhoun	1834	.9	65	1637	32
Kalamazoo	1000	.9	73	1997	26
Total	7662	1.0	68	1757	
Oakland	3559	1.1	66	1838	32
Livingston	1653	.9	62	1384	29
Ingham	1084	.5	37	905	31
Eaton	747	.5	36	957	27
Barry	750	.4	32	829	35
Total	7793	.8	55	1430	
Lapeer	628	.9	56	1245	25
Genesee	1476	.6	37	1081	26
Shiawassee	746	.5	42	985	26
Clinton	652	.4	32	844	28
Ionia	613	.7	49	1219	28
Kent	885	.5	41	1134	23
Total	5000	.6	41	1083	
State total	34,879	.8	55	1488	26

*Derived from data presented in Michigan, Department of State, Census and Statistics of the State of Michigan, 1854, pp. 380, 390.

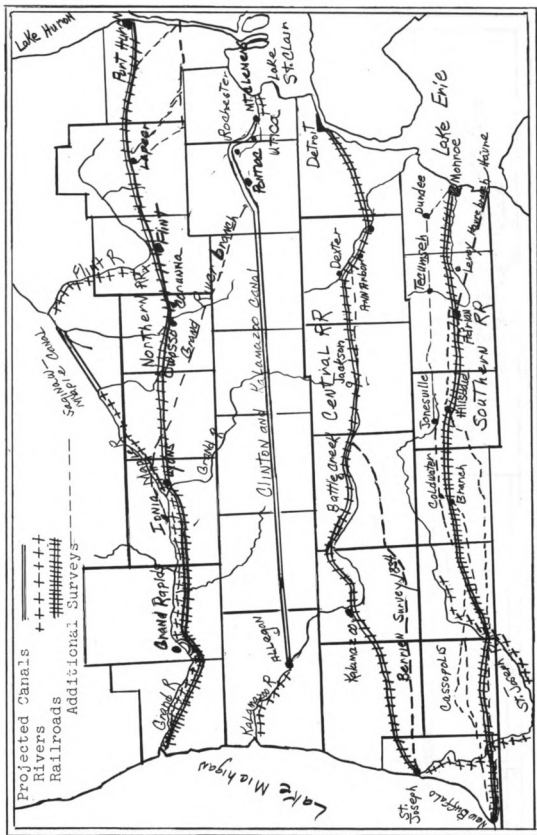
APPENDIX XII

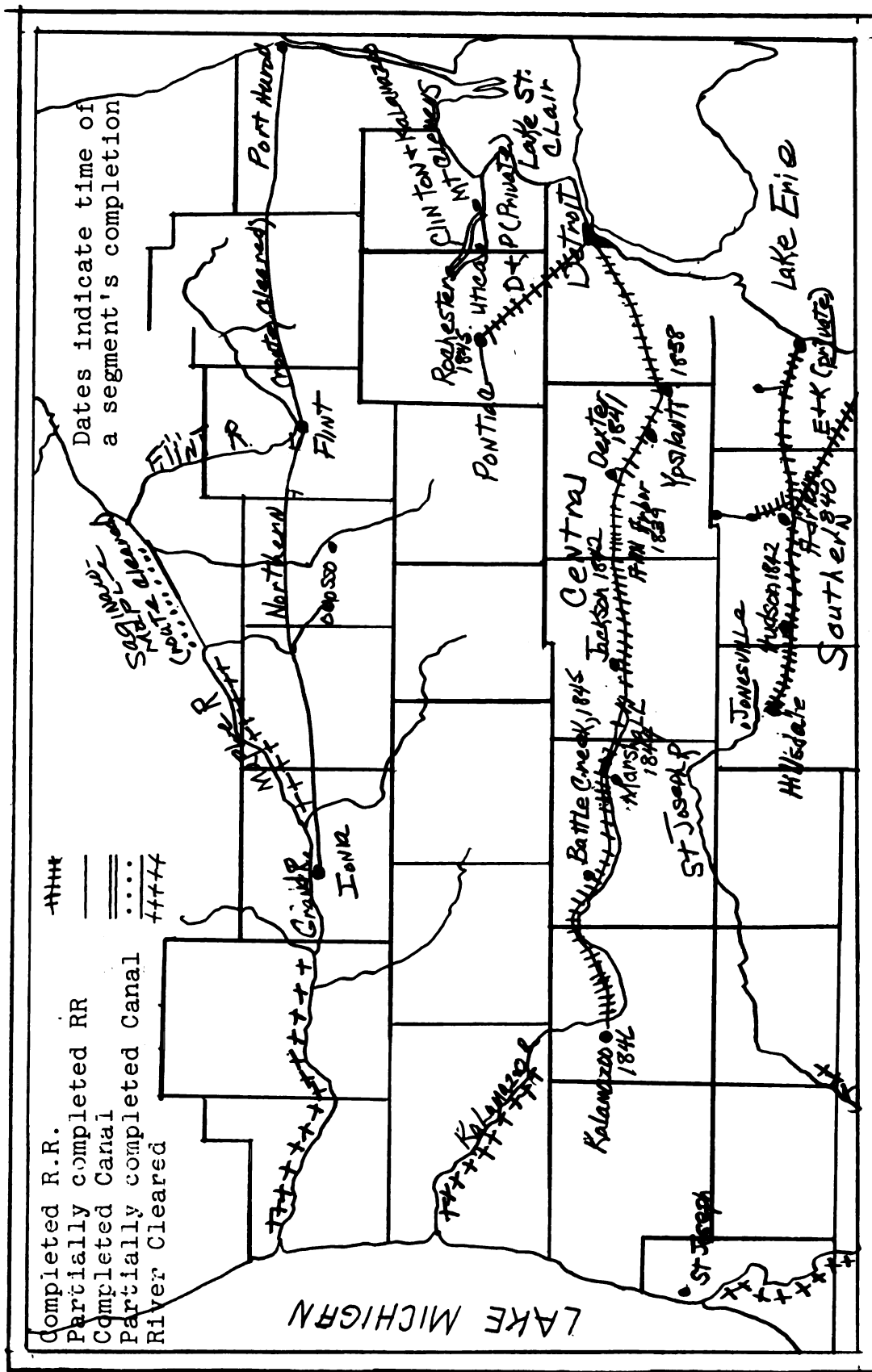


KEY TO APPENDIX XII

1. Detroit and Pontiac
2. Detroit and St. Joseph
3. Romeo and Mt. Clemens
4. Erie and Kalamazoo
5. Gibraltar and Clinton
6. Detroit and Shelby
7. River Raisin and Grand River
8. Macomb and Saginaw
9. Detroit and Lake Erie
10. Maumee Branch
11. Shelby and Belle River
12. Monroe and Ypsilanti
13. Allegan and Marshall
14. Clinton and Adrian
15. St. Clair and Romeo
16. Palmyra and Jacksonburgh
17. Kalamazoo and Lake Michigan
18. Havre Branch
19. Monroe and Ann Arbor
20. River Raisin and Lake Erie
21. Constantine and Niles
22. Detroit and Shiawassee
23. Saginaw and Genesee
24. Port Sheldon and Grand Rapids

APPENDIX XIII





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