OHIO CANAL ERA
A Case Study of Government and the Economy, 1820–1861

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CHAPTER I

Toward a Canal Policy
1820–1825

When the 1819 panic first struck, many in Ohio blamed the banks for the crisis, and they were taken by surprise when the depression continued into 1821 and then 1822. But the crucial problem of the West was in fact not banking but transportation. For only improved transport facilities could provide what one Cincinnati editor correctly perceived as the solution: "a steady and adequate market for produce."¹ Two decades of inflated wartime prices had obscured the more fundamental difficulties which threatened to retard long-term economic growth in the West. As Ohio’s political leadership came to recognize this fact, men like Ethan Allen Brown gave more sustained attention to the prospects of improving transportation, and especially to the project for a canal between Lake Erie and the Ohio River.²

It came naturally enough to seek government action in a crisis of this kind. Much as laissez-faire ideas may have been debated and occasionally exalted in the early nineteenth century, Americans were well accustomed to using their state governments to remove bottlenecks that hindered economic growth.³ Ohio was no exception, and evidence of a positive attitude toward state intervention in the economy abounded in the statute books. Even before Ohio’s admission to the Union in 1803, the territorial legislature of the Old Northwest had asserted commonwealth interests in important areas of economic life. Some territorial laws had been designed to regulate enterprises deemed essential to the prosperity of agriculture, as for instance a statute of 1799 that required millers to keep on hand standard measures of volume
and specified the rates a miller might charge. After 1803 the state’s legislature set bounties on the hides of wolves, to aid in protecting livestock; it permitted municipal governments to regulate local markets and required them to oversee the fencing of livestock; it required construction of locks at private dam sites on navigable streams; and it brought order into the terms of commerce by instituting standard weights and measures. Perhaps the most far-reaching measure of early economic policy was a banking law of 1816, designed both to assert state power over bank operations and to enhance the public revenues. The law required newly chartered banks to issue a portion of their capital stock to the state, and thereby assured the state a proportion of any profits.4

But the most sustained attention was given to the problem of transportation: the Ohio legislature provided for financing of local roads, regulated bridges and ferries, issued charters to private companies for turnpikes and other facilities, permitted river-improvement and bridge companies to run lotteries, granted local governments the right to exercise eminent domain for road construction, and required two days of labor on the public roads from able-bodied males over age 21, or else commutation of the road service at one dollar per day. Nevertheless, this wide range of policies did not yield much in tangible benefits. The key problem was lack of capital. The total tax revenues of the state government itself amounted to $200,000 annually during the decade before 1820; and since most of this was required to support general-purpose government, little was left to finance roads and other transport improvements. Moreover, the private companies that were granted charters to build turnpikes, bridges, and other facilities faced the problem of deficient capital. As a result, few of them built at all, and those that did could seldom maintain their works in good repair. Nearly all the money expended on public road construction came from the Three Per Cent Fund—obtained from the Federal government under terms of the statehood compact, which had provided for 3 per cent of the proceeds of public land sales in Ohio to be paid to the state—and in all this fund amounted to only $170,000 up to 1815.5

Even the Three Per Cent Fund did not lead to the construction of major highways. For each year the legislature parcelled out the
money to each county, never concentrating funds on a few major highways, never adopting an overall statewide road plan, never establishing priorities. Thus the fund was dissipated. And the process whereby this had occurred gave vivid evidence of the power of localism in Ohio state politics: in every session of the legislature, each member struggled to increase his local district’s share of the state revenues. His constituents expected it of him, and the fact that the state revenues were so limited intensified the rivalry over appropriations.\(^6\)

With so many obstacles to transportation improvement, the settlers in Ohio remained dependent mainly upon the navigable rivers and streams. Most of the population before 1820 therefore clustered along the Ohio River and in the valleys of streams tributary to the Ohio, where farmers could reach an outside cash market by way of the Ohio and Mississippi rivers.\(^7\) So long as prices had held up under unusual wartime conditions, there had been profits in shipping downriver to New Orleans. But even before 1819, when prices finally collapsed, the rivers and the New Orleans route had burdened western commerce with severe problems. The state’s surplus farm produce was shipped southward almost exclusively by flatboats prior to 1820. Farmers and small country merchants built their own flatboats, 30 to 90 feet long and 12 to 25 feet wide. As a rule of thumb, they figured a cost of a dollar per foot for the lumber, and when the boat reached its downriver destination it was broken up and the wood sold for 25 to 75 cents a foot, depending on local market conditions.\(^8\) Nearly every young man in the villages of early Ohio went downriver at least once in his teens, either as a deckhand on the family boat or as a paid hand—earning perhaps fifty dollars for the trip—on a neighbor’s craft. Thousands of these boats went downriver each year, and hundreds were lost on snags, bars, or ice floes; others overturned while attempting to run the treacherous falls of the Ohio near Louisville; a few “disappeared” when hired hands sold the cargo for their employer and made off with the proceeds.\(^9\) If he was fortunate and made it safely to the lower Mississippi’s waters, the boatman had to contend with the climate, for the heat and humidity subjected foodstuffs to rapid spoilage. New Orleans itself was an uncertain market in any case. Its warehouse and port
accommodations were inadequate, and because all the West's produce came downriver on the same freshets, market gluts were the common condition. Shipping service to New Orleans was erratic, so that the gluts were aggravated by frequent lack of cargo space for export to Atlantic or overseas markets. Even if the boatman could dispose profitably of his produce at New Orleans (or possibly at one of the towns or plantations upriver from the port city), and could recapture some of his investment by selling the boat for lumber, he still faced the arduous task of making his way back home up the Mississippi Valley. Few could afford steamboat passage, which became available on a regular basis after 1817, and the overland journey required traveling through swampy regions that harbored brigands and where malaria was an ever present danger. Some returned to Ohio via Baltimore, Philadelphia, or New York; this was especially true of the merchants, who bought their goods for the next season in the East and then went overland across the mountains, returning home three months or so after their departure for New Orleans.  

The upriver trade, which brought eastern dry goods and manufactures, southern cotton and hemp, and other products north to the commercial cities of Ohio, was even more expensive and difficult. Keelboats, driven by long poles, operated regularly on the upriver route, and by 1820 the steamboats were being used more frequently for high-value merchandise. Yet the costs of transportation remained high, and in towns like Cincinnati the buying power of the dollar for purchase of merchandise from the East or South was small indeed. A flow of goods came overland through the Appalachians: the National Road to Wheeling was opened in 1818, and by 1820 a Pennsylvania turnpike from Philadelphia to Pittsburgh was carrying wagon traffic between the seaboard and the West. But again the costs of transportation remained high. The new roads made emigration easier and did permit some high-value western products, mainly furs, hides, and whiskey, to be sent eastward by wagon. But the only sizable western export sent to market by the roads was livestock on the hoof. Cattle drives from the Scioto Valley and eastern Ohio to Philadelphia produced some spectacular individual fortunes in Ohio, yet they involved costs and risks that ruined many men in the trade. For the export
of the principal western staples—meat, flour, and grain—the region remained dependent on the rivers and New Orleans. Except for its contributions through the Three Per Cent Fund and the National Road (built with funds realized from the proceeds of land sales, and not by direct appropriations), and through construction of postal roads and military highways, the Federal government contributed little to the solution of western transportation problems. Ohio in 1820, as before, remained dependent on its own resources.¹³

For the business leaders and state politicians who hoped to see internal improvements built in Ohio, the political conditions in 1820 were not much more promising than fiscal circumstances. To undertake a major state investment, on the scale of a lake-to-river canal project, meant above all to combat the influence of localism in the legislature. For in every region the citizenry felt a strong attachment to their local interests: they kept up unremitting pressure for state appropriations that would benefit their own districts, and they viewed with jealousy any projects designed to benefit other areas of the state.

Among the principal regions of the state, the Miami country, north of Cincinnati, was the most populous and wealthy. By 1820 more than 100,000 settlers lived there, the farmers working rich land that produced each year perhaps 250,000 bushels of wheat in addition to nearly 500,000 bushels of corn (fed to hogs) and a considerable quantity of other grains. The focus of the Miami Valley's commerce was Cincinnati, which with its population of 7,000 was already one of the largest cities west of the Appalachians. It was the site of "about 1,500 buildings, most of which are of brick," one traveler wrote. It boasted "a large and stately court-house, brick and framed churches, . . . three brick market-houses, an elegant Lancasterian Seminary," and factories manufacturing textiles, furniture, meat, candles, and a score of other products.¹⁴ The townspeople were mainly concerned with improving the Ohio River, to perfect their communications with the south. When the idea of a lake-to-river canal within Ohio was presented in Governor Brown's administration, the Cincinnatians appeared, on the whole, quite ready to subordinate the
DISTRIBUTION OF OHIO POPULATION, 1820
(Major regions of the state are shown.)

entire question and use state funds to build instead a Falls Canal near Louisville.¹³

A second major center of settlement was the Scioto Valley, along a major tributary of the Ohio River upstream from Cincinnati. To this area in south-central Ohio had come southern uplanders, planters, and a sprinkling of Yankees and Pennsylvanians. They produced wheat, corn, and livestock, and although they undertook direct trade in livestock with the east, they relied almost exclusively on the rivers for their export of flour, whiskey, corn meal, and other products. In the Scioto country, settlers were concerned chiefly with improvement of the Ohio River, with the development of communications between central Ohio and the river, and with local roads.¹⁶

On the thinly settled Lake Erie shore the tiny villages vied with one another for harbor improvements, designation as Federal customs ports, and state appropriations for roads to the interior. In eastern Ohio, beyond the Pennsylvania boundary, was the "backbone district" of the state with many settlers from Pennsylvania. They were heavily engaged in the commercial production of wheat. Their principal interest was to gain access to Baltimore by the way of that city's Chesapeake & Ohio Canal Company project, with prospects for extending the National Road westward into Ohio, and with manifold projects for local roads.¹⁷

Everywhere in the state, however, a striking characteristic of the society was "the extraordinary animation with which the people . . . flung themselves into political activity." and especially the consistency with which they pursued local and regional ambitions through the medium of politics.¹⁸ It was indeed a society of expectant capitalists, and men in each region seemed to assume that their own communities would grow and prosper only if they could steal a march upon rival communities. Development was regarded as a race, a desperate struggle. And this was understandable enough. For in the early phase of growth, wilderness areas were first being settled, new towns were being laid out, and the region as a whole was starved for capital. Investment by an eastern capitalist in one town or region seemed to be at the expense of another; every new family that settled elsewhere was regarded as one lost to its rivals; the growth of commerce or manufacturing at one center seemed a threat to similar growth elsewhere.
In the Federalist and early Jeffersonian years, Ohioans had enlivened their politics with the pursuit of ideological and national-party aims, but when the spirit of national partisan conflict waned after 1815, the spirit of localism gained new force in the state. It was in this political milieu, in which every policy proposal in the legislature must be put in the crucible of localism, that the transportation problem would have to be debated.

Because localism militated against orderly planning in the allocation of state resources, to fashion a solution to the transportation problem of the commonwealth required astute political statesmanship. The first man to approach it was Thomas Worthington, elected governor in 1814. Worthington was one of the wealthiest men in the state, a planter and merchant who built a local business complex of his farming and commercial activities at Chillicothe, the seat of economic life in the Scioto Valley. A Virginian who had helped lead the Jeffersonian struggle against the Federalist political establishment in territorial days, Worthington had served with distinction in Congress before his election as governor, and in Washington he had become one of the foremost spokesmen for Federally supported internal improvements in the West.19

As governor, Worthington urged that Ohio improve her roads and highways systematically, giving priority to the strategic commercial routes used most heavily to export farm products, instead of dissipating the public’s limited resources on a multitude of local roads. Although he failed to reform the legislature’s view of road policy, he did make a major contribution by his continual reiteration that a comprehensive state transportation policy was crucial to Ohio’s economic future. He did not, however, confine himself to the question of roads. For when the New York State assembly first discussed De Witt Clinton’s Erie Canal plan, Worthington urged the Ohio legislature to contribute financial support. Considering the difficulties that Ohio then faced in financing even a limited road program, it was unrealistic to expect appropriations in aid of a New York canal; and the Ohio legislature responded only with a public-spirited resolution wishing New York well. But at least Worthington had given public exposure to the Erie Canal idea, and in the process he publicized the potential economic benefits of the New York project for Ohio and the West.20
Toward a Canal Policy

Worthington’s successor as governor was Ethan Allen Brown, who took up the cause of internal improvements soon after his election in 1818. No less than Worthington, Governor Brown understood that the Erie Canal would open a trade route of great significance to Ohio, and in his first message to the legislature Brown asserted that Ohio should build its own canal to link the Ohio River and Lake Erie. Thereby the densely settled regions, in the southern half of the state on streams tributary to the Ohio River, would obtain access to the New York canal. In the legislature, Brown’s friends promptly introduced bills providing funds for the necessary engineering surveys. But zealous in their pursuit of local ambitions, the lawmakers burdened the survey appropriation bill with amendments requiring the engineers to include various specified localities and routes when they ran their surveys, and finally the entire proposal was voted down. At a time when the state’s revenues were barely sufficient to support a system of poorly maintained local roads, rival local ambitions thus blocked a canal policy for the state as a whole. Individual legislators might recognize the desirability of a lake-to-river canal, but each feared that allocating state resources to such a mammoth project would end all practical hopes of financing local projects of special importance to his own constituents.

Some of those who opposed Brown’s plan, however, argued that the Federal government and not the state should finance such large-scale improvements. Others believed that a private company should be chartered to build a lake-to-river canal, a view that Brown deplored both because sufficient private capital probably could not be obtained, and because he felt that so important a project should not be permitted to pass out of public control.

In order to skirt the dual obstacles of fiscal conservatism and localistic rivalries, Brown shifted course in 1819. Instead of emphasizing the canal project, he recommended internal improvements by the state in general terms only. And later, when the legislature itself debated a lake-to-river canal, Brown urged Congress to provide financial aid for its construction. Specifically, he suggested a canal from the Scioto Valley northward to the lake, running through the unsettled Congressional lands between Columbus and the lake shore. Brown proposed that Congress sell Ohio four million acres of land at a low price, so that the state
might sell the land at a profit after the canal was built, thereby defraying construction costs. Although the legislature appropriated funds for a canal survey, it made the survey contingent on such a land grant from Congress. The state’s Congressional delegation worked to obtain a land grant on these principles, but without success, and the surveys were not conducted. In the 1820–21 session of the Ohio legislature, Brown once again requested appropriations for a survey. But though a bill to accomplish it might have won approval, friends of the scheme decided not to press for a vote, fearing that “the murmurs and alarms of a large minority” might offset any good that a survey would do.

In his December 1821 message to the legislature, Brown proposed a canal survey for the fourth consecutive year. The assembly this time appointed a special committee to study the question, selecting Micajah T. Williams of Cincinnati as chairman. As a journalist and local politician, Williams had long been an ardent proponent of active state planning of transport improvement. His committee’s report reflected his conviction that a lake-to-river canal was the essential prerequisite to economic recovery in Ohio. It declared that New York’s progress on the Erie Canal and the British record proved that canal construction would be feasible and would diffuse “wealth, activity and vigor” throughout the state. The committee strongly urged, too, that the canal be built as a state enterprise. The record of New York in building its great canal was cited as “practical refutation of the doctrine which has so long prevailed, that the public could not accomplish works of this kind so cheap as a corporation.” As for engineering practicability, the report stated that a canal from the Scioto Valley to the lake, via either the Sandusky River or the Black River, probably could be supplied with sufficient water. As for financing, the committee urged an appropriation for surveys; then, once “scientific inquiry” had determined the precise location and estimated costs, the legislature might decide whether or not the canal should be built.

The Williams Committee Report was a public document in the broadest sense, its arguments being directed as much to the electorate as to the legislature. It catalogued comprehensively both the direct and indirect benefits that a canal would provide; and
it sought to refute the doubts, especially concerning engineering feasibility and financing, that skeptics had expressed in earlier debates. As expected, the report was given wide attention in the press, and it introduced the canal proposal as a practical and immediate question of state policy.\(^27\) At the same time, however, the report was vague enough to avoid arousing local jealousy. Probably for this reason, the legislature was disposed to take favorable action. In January 1822 a bill was enacted providing for surveys of five possible routes from the Ohio River to Lake Erie. It established a canal commission of seven members to direct the surveys, and authorized the commission to engage an expert civil engineer.\(^28\)

The commissioners appointed by the legislature represented a broad cross-section of the state's commercial and regional interests. Named were Ethan Allen Brown, recently elected to the U. S. Senate; Alfred Kelley of Cleveland, a banker, lawyer, and real estate speculator; former governor Thomas Worthington of Chillicothe; Ebenezer Buckingham, a wealthy merchant and salt manufacturer of Putnam, a town near Zanesville in the Muskingum Valley; Benjamin Tappan of Steubenville, lawyer and former federal judge; Isaac Minor of Madison County in west-central Ohio, also a former member of the judiciary; and Jeremiah Morrow of Warren County in southwest Ohio, farmer and onetime Congressman. All seven had been active in politics and several were members of the legislature. Moreover the broad range of their business activities—in most cases some combination of land speculation, banking, manufacturing, farming, and commerce—gave the commissioners an informed sense of the need for transportation improvement. Although some members of the legislature believed a seven-man commission to be too large, a wide geographical representation had been deemed necessary to allay local jealousies and to “effect the object and get the bill through.”\(^29\)

Despite some personal frictions, the commissioners early reached a consensus among themselves that a canal project was indispensable. Instead of being confined to scientific inquiry, therefore, their work took on an increasingly political character. In its private deliberations, the board gave fully as much attention to producing a canal plan that was politically realistic as it did to
Canal routes surveyed, 1822-25, and approved, 1825

- - - Routes surveyed and considered, 1822-1825
- - - Canal routes approved for construction, 1825

NOTE: Preliminary surveys were also conducted for two additional routes between Coshocton and Lake Erie (Ohio Canal route), one to a point east of Cleveland, one to a point west of Cleveland, on the lake. The "Mad River-Maumee" route, a projected extension of the Miami Canal, was a preliminary survey only.
questions of engineering. Originally the legislature had established the commission to serve as a fact-finding agency. But the commissioners soon assumed a different role: they became actively committed to the goal of producing a politically acceptable canal plan, and they soon began to function as a pressure group, engaging in publicity and lobbying at the state capital on behalf of a specific policy. As such, the canal commission became similar to the private organizations that had developed the initial popular support for canal programs in New York and Pennsylvania. In those states, groups of private citizens had formed to consider transport projects of common concern to various local communities and interest groups; and out of their efforts had come compromise plans for state-financed public works. In Ohio there was no concerted private effort on the part of communities and groups interested in a canal policy. From the beginning, the quest for a politically workable plan was linked with the task of scientific inquiry, and the commission itself was the arena in which local interests were taken into account and molded into a policy for the commonwealth. Because the canal commissioners chose to perform this role, political acumen would be critical to their ultimate success or failure.\(^{30}\)

**The Surveys, 1822–23**

One of the board’s first decisions in 1822 was agreement that the projected lake-to-river canal should pass through as many settled regions of the state as possible. Toward this end, the commission hoped to prove the practicability of a “diagonal canal.” With its southern terminus at Cincinnati it would run north through the Miami Valley, and then cross eastward to the Scioto region; thence turn northward to Lake Erie somewhere near the Muskingum River, with a branch line running from the main trunk to the Ohio River near Steubenville. But this “very grand design” was soon abandoned when initial surveys proved that there was insufficient water to build a line across the southern foothills lying athwart the route between Cincinnati and the Scioto region.\(^{31}\)
With the cooperation of Governor De Witt Clinton of New York, the Ohio commission engaged James Geddes, a senior engineer on the Erie Canal staff and one of the nation’s most prominent engineers. Geddes conducted careful instrument surveys of two routes: one from the Scioto Valley directly northward across the Scioto-Sandusky portage, thence down the Sandusky to the lake; the second, from the Scioto eastward to the upper Muskingum River, and then northward to Lake Erie by way either of Black River or Cuyahoga River. Presenting his findings to the legislature in January 1823 the canal commission urged additional surveys, declaring that “in a matter of such high importance to the state, nothing should be left to conjecture.” Like the Williams Committee Report a year earlier, the commission’s document catalogued the advantages of the canal—asserting that indirect economic returns, in the form of higher farm prices and reduced import costs, would be incalculable, and that any debt incurred for the project would seem as “light and trivial” as the Revolutionary War debt appeared in retrospect, compared with “the great blessings” involved.

The general assembly complied with the request for additional appropriations. Micajah T. Williams was appointed to succeed Commissioner Morrow, who had been elected governor; the commission was instructed to name two of its members as “acting commissioners,” to serve in a supervisory capacity and spend full time in the field; and the board was given funds to hire another engineer to replace Geddes, who had returned to New York. In addition, the legislature instructed the commission to investigate how the canal project could best be financed.

Because construction of the Erie Canal was reaching its climax at this time, the Ohio commission found it impossible to engage a civil engineer to succeed Geddes. Thrown back on their own resources, the commissioners sent Alfred Kelley to New York, where he examined the Erie Canal line “very minutely” between Rochester and the Hudson River, and where he “ascertained from the Commrs., Engineers, and contractors the cost of performing the various kinds of work... as well the contract price as the actual cost. Also the manner of constructing the various aqueducts, culverts, embankments, &c. &c.” Commissioner
Tappan, a stout o’d-line democrat, objected that any surveyor “of ordinary good judgment and discretion” could lay out a canal line; nevertheless, the commission financed additional visits to the Erie Canal for Micajah Williams and a Dayton surveyor, Samuel Forrer, who had been engaged to work for the commission.\(^{56}\)

In June 1823 the commission appointed Micajah Williams and Alfred Kelley, who were to become the central figures in the Ohio canal enterprise over the next decade, to serve as the acting commissioners. With the aid of their field staff, Kelley and Williams accomplished three major engineering tasks in 1823: they carefully gauged the streams in the Sandusky-Scioto portage region, tentatively concluding that the water supply was inadequate for a canal; they made further surveys of the Scioto-Muskingum-Lake Erie line, favored by Geddes the previous year; and they struck out on a new course, locating a line from Cincinnati northward to the Maumee River and thence east to the river’s mouth (at the present location of Toledo) on Lake Erie. Reviewing the field surveys, the entire commission accepted the need to abandon the Sandusky route. This was done reluctantly, for all believed that “on this route there would be less difficulty in uniting the public feeling and opinion than on [any] of the others.”\(^{57}\) In late autumn, the prominent Erie Canal engineer David S. Bates was asked to review the commission’s findings. Bates concurred in the view that the Sandusky route was an “extremely doubtful” prospect, and he asserted that either of the two remaining routes might be feasible.\(^{38}\)

Presenting their own findings and those of Bates to the legislature, the canal commission also reported the results of inquiries at New York as to the possibility of financing canal construction. Appended to the board’s report were letters from William Bayard, Cadwallader Colden and other New York financiers, from each of whom came “very flattering assurances” that Ohio would be able to market its state bonds in the East on favorable terms, just as New York State had been doing since 1817.\(^{39}\)

Publication of the commission’s report to the 1823–24 session of the legislature produced “a thrilling effect” at Columbus.\(^{40}\) Indeed, it aroused sufficient enthusiasm to overbalance even the local jealousies aroused by abandonment of the Sandusky route.
Sensitive to political dangers, the commissioners pleaded that they had been dispassionate and impartial in all their deliberations: "The members of the board," they wrote, "have uniformly felt disposed to yield something of their local sentiments and wishes, in order to unite cordially in accomplishing an object which they deem essential to the honor and prosperity of the state. . . . There has been a concurrence of opinion in the direction of all our principal operations." To cap the argument, they shrewdly suggested that a second canal might be built from Cincinnati northward less than seventy miles to Dayton, through the densely settled Miami Valley. In this way, they played on the local ambitions of Cincinnati's large delegation in the legislature, whose support appeared essential in view of rising hostility from the Sandusky country.

With publication of the January 1824 report, it became obvious that all the surveys to date favored the Scioto-Muskingum-Lake Erie route. Meanwhile, the Cincinnati-Dayton canal was gaining support as an ancillary project. The resultant coalition of local interests was strong enough to secure enactment of a bill appropriating funds for further surveys. But to allay discontent in the regions threatened with frustration of their hopes for canal facilities, the legislature further required the commission to engage an experienced engineer to supervise the final surveys, to draw up estimates of construction costs, and to provide a disinterested comparison of the varying merits of the several routes. Leaders of the canal movement privately admitted that further surveys were approved by the legislature only because the question of specific routes had been left open, indeed "studiously avoided" in debates on the floor. Had it been otherwise, they believed, "the whole fabrick would . . . have gone by the board." The persistence of localistic jealousies lent increased urgency to the ensuing year's task of locating specific routes, leading to presentation of a final program to the legislature.

Throughout 1824 the canal commission worked to produce a final report and recommendations by the winter, when the legislature would meet. All its hopes were pinned on successful location of a canal on the Scioto-Muskingum-Lake Erie route. The key
engineering question was whether the water supply would permit a canal to penetrate the divide on the Licking Summit between the Scioto and the Muskingum watersheds. But engineering questions were also political questions. Design of a deep cut through Licking Summit, Micajah Williams wrote in March, "must be done, whatever the cost may be," for this route would "tie together the interests of the two great valleys of Scioto and Muskingum." Devising a strategy of construction "whatever the cost may be," on any one route, had not originally been conceived by the legislature as the canal commission’s concern. But so had political realities affected the commissioners’ activities.

To assure that the board’s final recommendations would carry the weight of scientific authority, Williams implored Governor Clinton to lend the Ohio commission an eminent Erie Canal senior engineer. Geddes proved unavailable, and so it fell to David S. Bates to return and review the canal commission’s work. During the summer of 1824, the actual field surveys were directed by staff engineers in Ohio. Bates arrived in the autumn, and immediately went to the Sandusky region again to gauge the streams there. His findings confirmed his earlier view that they were inadequate to sustain canal navigation. But he found that the engineers had indeed solved the problem of the Licking Summit, and approved their plan for an elaborate deep cut at the summit requiring construction of an extensive reservoir.

At some point in early 1824, the commission apparently decided that a second canal between Cincinnati and Dayton was politically no less essential than finding a way to penetrate the Licking Summit divide. Surveys were run from Cincinnati, and the final plans there were also approved by Bates. As the report to the legislature took shape, Bates endorsed as well the full long-line canal plan, from the Scioto to a point south of Columbus, through Licking Summit to the Muskingum’s headwaters, and then northward via any one of three alternative routes (the final choice to be determined later) to the Lake Erie Shore.

On Micajah Williams’ principle that if the people were well informed "their representatives will act accordingly," the commissioners conducted an active publicity campaign for the emergent canal plan. Throughout 1824 Kelley and Williams kept
newspaper editors informed on the progress of surveys, always couching their reports in most optimistic terms. Thomas Worthington contributed to the board’s political effort in southern Ohio by writing a series of newspaper articles, widely reprinted, which set forth the advantages and anticipated benefits of canal construction in carefully reasoned, often eloquent arguments. Meanwhile other members of the commission worked to marshal popular support in their home localities.\textsuperscript{50}

As soon as the specific terms of the commission’s impending report became evident, opposition to the project crystallized. It was concentrated, as might have been expected, in the Sandusky Valley and in the river counties of eastern Ohio, neither of which would benefit from the projected canals. Spokesmen for these regions questioned the technical competence of the commission; they accused individual commissioners of “perpetual efforts . . . to prejudice and prepossess the public mind in favor of one general route, and against others”; and they denounced the entire board as “a band of speculators, intent upon aggrandizing themselves at the expense of the public.”\textsuperscript{51} But while the tone of the opposition became more venomous, enthusiasm for the project gathered strength in towns and regions which did expect to benefit from the proposed canals. The press gave close attention to the progress of the surveys, and friendly editors faithfully reported the publicity statements issued by the canal commissioners, predicting benefits of cheaper navigation, improvement in land values, and provision of new waterpower sites, if the state were to build canals.\textsuperscript{52} As the autumn elections approached, one journalist asserted that “every representative . . . ought to be chosen in reference to this canal,” declaring the canal question “greatly more important to us . . . than who shall be President.”\textsuperscript{53}

The outcome of state contests for the legislature gave little indication of how the canal commission’s proposals would fare at Columbus. Many representatives were elected who had made no commitments for or against canals, and ominously there were many who had gone on record as opposed to any large new expenditures by the state.\textsuperscript{54} The uncertainty deepened because the canal commission’s report was not ready when the legislature convened in late December.\textsuperscript{55} But two developments contributed
toward dispelling the clouds of doubt that shrouded the canal plan. First, Governor Jeremiah Morrow threw his full support to the canal commission, on which he himself had served. Anticipating that opponents of the report would attempt to discredit the engineering competence of the board, Morrow urged the legislature to place full confidence in the judgment of David Bates, the Erie Canal engineer who had advised the board; and he exhorted the assembly to provide for financing of the canal enterprise by revision of the state's antiquated tax system. The second development, which was even more important in generating support for the forthcoming commission report, was the publication in mid-December of the Erie Canal's financial record for 1824. This showed that canal tolls on the partly completed New York canal exceeded interest costs on the state debt by more than $50,000. Jubilantly, supporters of the Ohio canal scheme declared it a "convincing and undeniable demonstration, not merely of the practicability of constructing so noble and everlasting a work, but also the benefits that resulted from it." Meanwhile, Governor Clinton of New York—whose fame for his brilliant role in the Erie Canal enterprise lent exceptional weight to his opinion—declared before his legislature in Albany that an Ohio canal could be financed in the eastern money market "on easy and satisfactory terms." Moreover, Clinton provided the Ohio canal commissioners with a letter asserting his optimism about the possibility of financing, a document that they apparently circulated to good effect at Columbus.

Against the background of rising optimism at Columbus in early January, the canal commission finally produced its report. Its recommendation, fully endorsed by David Bates, was for construction of two canals. The main "Ohio Canal" was planned to run up the Scioto Valley to a point south of Columbus, thence to the east where it would meet the tributaries of the Muskingum. From there, the commission declared, it might run to Lake Erie either along the Black River or down the Cuyahoga. The report estimated the cost of construction at $2.8 million to $4 million. The second canal, termed the "Miami Canal," was planned on a 66-mile route from Cincinnati through Middletown to Dayton,
at an estimated cost of $673,000. Once state finances permitted, the commission asserted, the state might readily extend the canal northward to the Maumee River, near the Michigan and Indiana borders, and run down the Maumee to Lake Erie.

In a second set of recommendations, the board asked for establishment of a newly constituted canal commission to supervise construction of the canals and, once completed, their operation. It proposed that the agency be authorized to seize lands and materials for the canal, to establish the specific locations along generalized routes recommended in the report, to engage engineers and other staff, and to establish tolls and regulate traffic on the completed works. But financing of the public works, the board asserted, should be left to a separate commission, empowered to issue bonds backed by the credit of the state. The concept of separate agencies for administering finance and construction was founded on the example of New York, which had adopted such a system eight years earlier, upon authorizing the Erie Canal project.81

The report also proposed a major tax revision, which would assess lands ad valorem, instead of merely classifying lands without reference to market value, as was then the system. Ad valorem taxation not only would increase state revenues, but would also place a larger (and fairer) share of the tax burden on localities where land values rose quickly because of the canals. Finally, the report recommended creation of a sinking fund to pay the principal on the canal debt, the fund to be accumulated from a special state canal tax on land and by allocation of other revenues as needed.

In addition to specific recommendations, the commission set forth full and detailed arguments for the larger policy. It predicted that both canals would be profitable enterprises in time. The proposed Miami Canal would tap a large existing trade, and would therefore produce large revenues and profits from the day it opened. The Ohio Canal, on the other hand, would give the densely settled Scioto Valley a route for inexpensive transportation to New York; but in the central and northern portions of the state, it would have a developmental effect, promoting settlement in a sparsely populated region and permitting commercialized agriculture to take hold. The commission also set forth its views
on state vs. private enterprise, asserting that construction by a private corporation "of citizens or foreigners, as may happen," would be inconsistent "with the dignity, the interest, or the convenience of the state." Projects crucial to the public interest should not be "parcelled out into monopolies." The commission also said that the state could command the necessary capital in eastern money markets better than could any private company. Justifying state borrowing for canal construction, the commission declared that the commonwealth would gain in two ways over the long run: the canals would be worth more "as merchantable stock," once completed, than they would cost; but there would also be substantial indirect benefits to shippers, merchants, consumers, and other private interests by virtue of lower transportation costs. This doctrine of "indirect benefits" was an important element of the argument for a canal in 1825. As will be seen, it would prove no less persuasive when others called for additional public works expenditures in later years.

Publication of the commission’s final report inaugurated a debate in the legislature as momentous as any in the state’s history. Opponents of the program attacked the recommendations on several counts, but their objections fell into four broad categories. First, they deplored construction of the Cincinnati-Dayton canal as part of the plan. That was a strictly local improvement, they declared, and as such it betrayed the high-toned declarations of the canal commission that it spoke for the entire commonwealth. Second, some opponents objected that the report proposed the vesting of unnecessarily broad powers in the agency to be established to supervise construction. They demanded that the precise locations, and not merely the general route, of each canal should be specified in any bill. "We are acting in the dark," one representative complained, urging against yielding sovereign powers of the legislative to a board of administrators not responsible to the people. Third, the opposition questioned the fiscal soundness of the project. One member concentrated on the cost estimates prepared by the engineers, asserting that actual costs would run as high as 12 million dollars. Others expressed doubt that the proposed tax revision would in fact yield increased revenues, objecting as well to the board’s prediction that toll
revenues on the Cincinnati-Dayton would be sufficient to amortize the debt incurred to build it. Fourth, the opposition asserted the positive value of delay. They pointed out that the commission’s final report had been published after the legislature had convened. With concrete proposals at hand, let the representatives go back to their constituents and test public sentiment. Then, in the following legislative session, “if the fever shall then be raging . . . for canalling, as the friends of this policy state to us . . . it does now,” the assembly could act accordingly.\textsuperscript{63} Most significantly, however, the opposition did not lean to any extent upon \textit{laisser-faire} doctrine—an argument that some champions of the canal program had anticipated. Canal advocates and their critics instead seemed to agree that state activism was an appropriate means of undertaking internal improvements on the scale projected.\textsuperscript{64} When the actual vote came on bills that incorporated all the commission’s recommendations, the opposition was revealed as a sectional bloc. In the senate, only two votes were cast against the measure, both by men from counties distant from the proposed public works. In the house of representatives, thirteen negative votes were recorded—again, all by men from the “bypassed” counties.\textsuperscript{65}

Thus large majorities in both houses supported legislation that embodied all of the canal commission’s principal recommendations. By an act of February 3, 1825, the Ohio system of taxation was put on an \textit{ad valorem} basis, with a state board of equalizers appointed to review assessments by local officials. And by what became known as the “1825 canal law,” an act of February 4, the assembly authorized construction of two canals: the Miami Canal from Cincinnati to Dayton; and the Ohio Canal, to be built on the Scioto-Muskingum-Lake Erie route. The canal law also incorporated the administrative organization that the commission had proposed for management of construction and financing. A new canal commission of seven men was appointed to supervise the actual building and operation of the canals. The legislature named to the new board six of the old commissioners—Worthington, Tappan, Beasley, Minor, Kelley and Williams—and also a new member, John Johnston, a former Federal official and farmer residing at Piqua in the upper Miami Valley.\textsuperscript{66} The board was authorized to appoint up to three “acting commissioners,”
to be paid a *per diem* salary and expenses and to supervise work in the field; the other members of the board would be compensated only for expenses.

In addition, the February 4 law established a "board of canal fund commissioners," empowered to "make all arrangements relative to obtaining loans and the payment of interest thereon, and [to] the transfer, transmission, and deposit of moneys, as they may deem conducive to the public interest." The board was authorized to borrow $400,000 in 1825 and $600,000 each year in 1826 and 1827, by issuing bonds and pledging "the full faith and credit" of the state as security for payment of interest and principal. Appointed as fund commissioners were Brown and Buckingham of the old canal commission, and also Allen Trimble, a prominent politician from southwestern Ohio. Despite their awesome duties, the commissioners were apparently expected to operate on a shoestring: they were given no appropriation for a staff and were to be compensated only for actual expenses.

Enactment of the tax revision and canal laws marked the climax of the canal movement in Ohio. Although it still remained to be learned whether funds for construction could actually be procured, the political struggle was now over. An explanation of the large majorities won by the canal measures in the legislature must take some account of the fact that many affirmative votes were cast by representatives of "by-passed" districts. This was partially attributable, no doubt, to the enactment of a bill authorizing extensive improvements of a state road from Columbus to Sandusky—the route once considered for the lake-to-river canal and the scene of growing popular opposition to the canal program. In addition, similar road appropriations were made for the eastern portion of the state, where local political spokesmen and journalists were complaining bitterly about the canal locations. Equally significant, no road funds were appropriated in the 1824–25 session for counties that were on the projected canals. Then too, the power of political patronage through grants of offices and favors may have brought some of the early opponents into "the snare of the intriguers," as one critic charged.67

In the last analysis, however, it was not crass political trading at Columbus that assured the success of the canal measure. Rather it was the shrewd linking of the canal bill with a tax reform that
promised to throw a large part of the state's financial burden upon the localities that would benefit from canal construction; the equally important decision to recommend the Dayton-Cincinnati canal, which won over the large Cincinnati and Miami Valley delegations; the weight of Governor Clinton's public statements and the sensational financial success of the Erie Canal; and, not least, the unanimity with which the canal commissioners themselves resolved personal differences and threw their individual prestige behind the final program.

Appointment of the canal commission in 1822 had brought together a group of able business and political leaders. They shared a common understanding of the state's economic problems which predisposed them to favor construction of a public canal system. Inspired by the example of the Erie Canal and identifying themselves with the national movement for internal improvements, they hammered out a policy that was both politically acceptable and consistent with the needs and resources of the state. In these respects, their policy was conservative. Yet it was also bold and visionary, for they proposed an enterprise of far greater magnitude than any previously undertaken in the West, and comparable to the pioneering Erie Canal enterprise in one of the eastern seaboard's wealthiest states. In the long run, the commission's boldness, rather than its conservatism, would have the more telling influence on the climate of public opinion in the state. Although the reckless expansion of the state's public works a decade later would derive in part from the boom psychology that became prevalent in the mid-thirties, it would also reflect a revival of public attitudes fostered by the canal commission itself during the initial period of canal promotion in Ohio.

NOTES

1. Liberty Hall and Cincinnati Gazette, May 18, 1824; see also William T. Utter, The Frontier State (Columbus, 1942), 284ff.


7. See accompanying Map 1–A, for population distribution; also, Francis P. Weisenburger, Passing of the Frontier (Columbus, 1943), Chap. 1.

8. Cases were recorded of boats selling for as low as $16 in New Orleans (1820), but this was unusual. Berry, Western Prices, 24; see also George R. Taylor, “Agrarian Discontent in the Mississippi Valley,” Journal of Political Economy, XXIX (1931), 476, on average costs during 1800–1810; and Utter, Frontier State, 177.


11. See relative prices at Cincinnati for eastern and western goods, 1824–26 and 1844–46, in Berry, *Western Prices*, 120.


25. H. N. Scheiber, "Entrepreneurship and Western Development," 
26. *Report of the Committee on Canals* (Columbus, 1822), 3, 14, 
and *passim*.
27. Samuel Forrer, MS. sketch of life of Williams, dated 1860, in 
Micajah T. Williams Papers, Ohio State Library (OSL).
28. John Kilbourne, *Public Documents Concerning the Ohio Canals* 
(Columbus, 1828), 27. The routes specified were (1) from 
the Ohio River up Scioto to Sandusky River and Sandusky Bay; 
(2) from the Muskingum at its juncture with the Ohio across 
Cuyahoga-Muskingum Portage and down Cuyahoga River to 
Cleveland; (3) from the Muskingum to the lake via Black 
River; (4) from the Mahoning's junction with the Ohio to 
Grand River and then to the lake; and (5) from the Ohio 
River at Cincinnati northward to Maumee River and the lake.
Papers, OSL. On the commissioners, see Still, "Ethan Allen 
Brown"; Sears, *Thomas Worthington*; Scheiber, "Ebenezer Buck-
ingham," *Museum Echoes*, XXXIII (Dec. 1960); unsigned note 
on Jeremiah Morrow, *Bulletin of the Hist. and Phil. Soc. of 
Ohio*, VI (Oct. 1948), 164-65; *Dictionary of American Biog-
raphy*, on Tappan; and pp. 74-75, *infra*, on Kelley.
30. For a detailed study of the canal commission and its surveys, 
see Scheiber, "The Ohio Canal Movement," *OHQ*, LXIX (July 
1960), 231-56. On the role of private promotional groups in 
other states, see citations, *ibid.*, 232, n. 3.
31. Alfred Kelley to Brown, May 31, 1822, Brown Papers, OSL; 
Brown to Kelley, July 24, 1822, Ohio Canal Commission 
Papers, Ohio State Archives (hereafter cited CC Papers).
32. De Witt Clinton to Allen Trimble, Feb. 26, 1822, Clinton to 
Geddes, March 30, 1822, De Witt Clinton Papers, Columbia 
University Library.
33. *Report of the Canal Commissioners*, January 3, 1823 (Colum-
bus, 1823), 5, 8, 9-11; *Canal Report Made by James Geddes* 
(Columbus, 1823), 9ff.
35. Kelley to T. Worthington, May 20, 1823, Thomas Worthington 
Papers, OSL; also, Williams to Brown, Feb. 3, 1823, Brown 
Papers.
36. Tappan to Williams, March 11, 1823, Williams Papers, OSL;
also, Buckingham to Worthington, Jan. 3, 1824, Thomas Worthington Papers, OHS.

37. Williams to Worthington, Sept. 19, 1832, Worthington Papers, OSL; also, Canal Commission Minute Books, entry of Sept. 19, 1823 (MSS., Records Room, Ohio Dept. of Public Works, Columbus).

38. Report of the Board of Canal Commissioners, January 21, 1824 (Columbus, 1824); Bates's report is in ibid., Appendix.


40. Forrer, MS. sketch, cited n. 27.


42. Ibid., 26.

43. By the same act of the legislature, the board was expanded to eight members, Nathaniel Beasley being appointed to represent the district between the Scioto and the Miami. (Williams to Kelley, Feb. 25, 1824, CC Papers; Williams to Brown, Feb. 22, 1824, Brown Papers, OSL.)

44. R. D. Simons to Brown, Feb. 26, 1824, Brown Papers, OSL.

45. Williams to Brown, March 7, 1824, ibid.

46. Williams to Clinton, March 7, 1824, Clinton Papers.

47. Report of the Canal Commissioners, January 10, 1825 (Columbus, 1825), passim; Buckingham to Worthington, Sept. 28, 1824, Worthington Papers, OHS; Bates to Kelley, Oct. 1, 10, 18, 1824, CC Papers.

48. Buckingham to Brown, Dec. 27, 1824, Brown Papers, OSL.

49. Williams to Brown, March 15, 1824, ibid.


52. Liberty Hall and Cincinnati Gazette, Aug. 27, 1824.

53. Ibid. Oct. 25, 1824; see also Williams to Kelley, Oct. 18, 1824, CC Papers.


55. Buckingham to Brown, Dec. 27, 1824, Brown Papers, OSL; also, Alfred Kelley to his wife, Nov. 27, 1824, in Albert L. Cummings, The Alfred Kelley House . . . and Some Family Letters (Columbus, 1953), 42.
57. Columbus Gazette, Dec. 18, 1824. Buckingham wrote that the news "produced . . . excitement not only in the Legislature, but in the community in general." (Letter to Brown, Dec. 27, 1824, Brown Papers, OSL.)

58. Liberty Hall and Cincinnati Gazette, Jan. 28, 1825. Clinton had promised Williams that he would make such a statement. (Clinton to Williams, Dec. 4, 1824 [marked "Private"], Clinton Papers.)

59. "I have no doubt but that loans may be obtained on the credit of your State amply for the construction of the work," Clinton wrote (ibid.). See also Kelley to Clinton, Jan. 20, 1825, Clinton Papers, acknowledging the usefulness of Clinton's letters.

60. The report is cited, n. 47, supra.

61. When the board formulated its proposals, it apparently had in hand a letter from Clinton urging organization of two separate agencies, along the lines followed in New York State. (Clinton to Worthington, Dec. 14, 1824, Clinton Papers.)

62. This analysis is based upon a reading of the debates, as reported in Columbus Gazette, Jan. 29-Feb. 24, 1825.

63. Ibid., Feb. 8.

64. This is not to say that private construction had never been considered. In correspondence with Ohio promoters of the canal project, De Witt Clinton had since 1818 discouraged all thought of building a lake-to-river canal by private enterprise. Only the state itself, Clinton reiterated, could finance the project. (See Clinton to Steele, June 24, 1818, Clinton Papers: Brown to Clinton, May 29, 1820, Brown Papers, OHS; Brown to Col. Haines, Feb. 7, 1821, Brown Papers, OSL.) For a public letter advocating private construction, see Cleveland Herald, Jan. 14, 1825.

65. The canal bill was enacted Feb. 3 and the taxation bill on Feb. 4, 1825 (documented copies in OHS). The voting was reported in several newspapers; I have used Sandusky Clarion, Feb. 5, 1825.

66. On the new canal commission, see Chap. 3, infra.

67. Blickensderfer to Kelley, March 27, 1825, CC Papers; Kelley to Brown, March 11, 1825, Brown Papers; Liberty Hall and Cincinnati Gazette, April 19, 1825; Columbus Gazette, Dec. 23, 1824, Feb. 15, 1825; Delaware Patron, Feb. 24, 1825; Sandusky Clarion, Aug. 13, 1825.