

**The 1787 Origins of the Tiebout Model:  
How Congressional Desire for Revenue Promoted Local School Districts**

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**Abstract:** The Tiebout (1956) model assumes that there are many local governments and that they provide a mix of services that will attract prospective residents. Public schools are the paradigmatic public service. Many observers believe that public school districts are “accidents of geography.” This essay shows that districts were intentionally established during the early history of the United States in order to maximize the value of the land owned by the United States government.

**§1. Introduction: Public Schools and Property Values**

This essay began as part of a book I have been writing about American school districts. It will be published by the University of Chicago Press and is provisionally titled *Making the Grade: The Economic Evolution of American School Districts*. It is projected to be available in late 2009. The book argues for a “demand side” accounting of the development of schools and school districts. Most histories and contemporary policy analyses consider education reformation almost exclusively from a “supply side” view. They emphasize the work of education professionals and national and state reformers in shaping public education. Whether they are attempting to create equality of educational opportunity through the courts or parental choice through voucher legislation, modern reformers take popular demand for education as essentially a passive actor in educational reform.

My view is that the successful reforms of the past were driven by the demand side, the parents and other residents of local school districts. At the beginning of the twentieth century, the transformation of rural schools from one-room, ungraded entities to multi-room, age-graded,

more-or-less uniform schools was accomplished only because and when American voters wanted it. Far from being a chaotic force against which state-level administrators had to battle, school-district voters were led as if by an invisible hand to consolidate tiny, one-room school districts into modern school systems.

The “invisible hand” was concern for property value. Local voters, I argue, agreed to give up their one-room district schools when it became evident that they were a drag on their property’s value. However, voters were only willing to give up so much. They wanted a consolidated school district that was large enough to pave the road from elementary to high school, but no larger than that. For both economic and governance reasons, local voters wanted to keep even their consolidated schools as close to home as possible.

The difficulty with this thesis is that there is no direct evidence from the nineteenth and early twentieth century to support the property-value claim. There are scores of modern studies that show that better schools add to property values. (The touchstone capitalization study was Oates [1969], which was connected to local governance in Fischel [2001].) But it would be next to impossible to go back to 1900, say, and show that a vote for or against school consolidation was motivated in large part by consolidation’s effect on property values. Instead, I will offer evidence of a different kind. I will show that the system of local schools in the states admitted to the union during the nineteenth century was shaped by a desire to maximize saleable property values. This is what economists would call macroeconomic evidence. The trend I focus on was among the largest in American history, the settlement of the United States west of the Appalachian Mountains.

After the American Revolutionary War was ended by treaty in 1783, Britain ceded its claims to land from the original Colonies out to the Mississippi River and south of the Great Lakes. Some of the original states had Colonial-era claims to this territory, but they were soon relinquished under the Articles of Confederation. The new national government as a result became one of the world’s largest landowners. What to do with its land was a critical task of the post-Revolutionary Continental Congress (Gates 1968).

Citizens in the original states had some ambivalence about selling land out west. On the one hand, rapid settlement of the West would contribute to the depopulation of the East and perhaps reduce property values (Taylor 1922, 13). On the other hand, the sale of land would be a source of revenue for the national government. The second consideration—a desire for national

revenue—quickly prevailed. It accounts for why the disposal of western land was designed with a close eye toward maximizing the sale-value of land. Encouragement of settlement was not by itself the dominant objective until the Homestead Act of 1862, and cash land sales nonetheless continued long after because the Act's burdensome requirements to "prove up" a claim often made "free" land costly to obtain. The early national government also wanted to settle the land as a bulwark against other nations' claims, but as the proprietor of the land, Congress wanted to get the best price it could.

## **§2. The Developers' Dilemma and Congressional Land Laws**

The early development of national land-sale policies was informed by some the same problems modern developers of large-scale "planned communities" encounter. Modern residential developers seldom build all their homes and then put them up for sale. Instead, they build them in phases, using the early sales to help finance and market later construction. To attract early customers, developers unilaterally institute a private governance mechanism, usually by establishing a self-governing "community association." The constitution of the association, which usually requires a supermajority to alter, assures early buyers that the developer won't radically alter the plans after they have bought.

The developer is subject to a political risk in this early stage, too. The initial home buyers who become association members might prefer to have less development than the original plan called for, or they might use their leverage to exact some concessions from the developer that he did not anticipate. To forestall this, most developers, who own the unsold lots, allocate three voting shares to each unsold lot while granting only one voting share to lots already sold (Reichman 1976). This means the developer will hold a majority of voting shares in the community association until three-quarters of the lots are sold. Even if all of the new owners in a half-built-out community want a policy that alters subsequent development, they will be outvoted by the developer. This assurance that the initial plan can be carried out enables the developer to attract investors in the first place.

The first systematic attempt to dispose of the nation's newly-acquired land was the Ordinance of 1784, which provided for the establishment of new states, and the Land Act of 1785, which provided for the sale of the land. The laws can get confusing. The 1784 Ordinance was superceded by the famous Northwest Ordinance of 1787. Both had to do with *governance* of the

territories and the process of admission to the union. The 1785 Land Act dealt solely with the surveying and private *sale* of land (Onuf 1987).

The Ordinance of 1784—the first governance law—was largely conceived by Thomas Jefferson, who was an ardent promoter of an agrarian West, one with land owned by resident farmers rather than distant landlords and speculators. He envisioned a process in which small states with predetermined boundaries were rapidly settled and admitted to the union. Jefferson's plan called for almost immediate self-government by the pioneer settlers.

Settlement under this legislation turned out to be much slower than anticipated. One of the problems that prospective settlers worried about was the lack of a governance structure. It was all well and good that new states would be admitted on equal terms with older states, but how would law and order be enforced until they were admitted? For a prospective settler of wilderness land, lack of interim governance was a serious anxiety. Even the previously established French communities in Illinois, whose ownership rights were recognized, subsequently complained about being left “in a state of nature” that they regarded as unpleasantly Hobbesian (Onuf 1987, 52).

But local-self governance was also a problem for Congress. Its representatives worried that initial residents might use their local powers to exploit the remaining unsold land for their own benefit rather than to its owner, the United States government. The 1784 Act recognized this hazard and tried to deal with it by inserting a clause that forbade the new states from interfering with the sale of federal holdings or taxing the government's land. Like modern developers, Congress was concerned that even legitimate pioneers might seek to use their local government powers to improve their economic position at the expense of the original owner.

Monroe and other members of Congress still fretted that the absence of an initial government in the 1784 Act was retarding the sale of land. Its successor, the Northwest Ordinance of 1787, addressed these governance problems by setting up an immediate, interim government that temporarily gave most of the power to Congress and its designated officials. In form it looked like a state government, with a judicial branch, a governor, a “legislative council” (analogous to a senate), and a popular legislature. But only the last office was elected by the residents of the territory. All of the judges and the governor were appointed solely by Congress, and the appointed governor had absolute veto power over popular legislation. The senate-like legislative council was selected by Congress from a slate of candidates nominated by the popular

legislature. (This compresses the population-dependent stages of territorial governance, which are described by Hill [1988].)

Nowadays celebrated as a precursor to the national Constitution that was being drafted in the same year, the Northwest Ordinance was not especially democratic, at least as viewed by the settlers of the new territories. Indeed, even those members of Congress who supported it referred to it as “colonialistic.” They defended it as an essential interim step toward the creation of new states. It provided a secure government that settlers could rely on to defend them from external threats and settle internal disputes. But it was also the product of the same anxiety of modern-day community developers. Pioneer settlers might prematurely seize the apparatus of government and adopt laws that would divert the profits of land sales to themselves. The undemocratic temporary government both assuaged prospective buyers and assured Congress that the value of its lands would be preserved by its own representatives.

The reason for my digression about the origins of the Northwest Ordinance is to establish that its features were consistent with a Congressional desire to maximize the value of the public domain. Its influence was greater than that, of course. Many of its features, especially its bill of rights and prohibition of slavery, were later turned into “usable history” for opponents of slavery and advocates of religious freedom. Taken in its immediate context, however, the Northwest Ordinance was an attempt to deal with a problem that is still familiar to community developers: How to create self-government without losing control your own assets. As will be argued presently, this problem shaped the establishment of school districts as well.

### **§3. National Land Policies Responded to Popular Demand for Schools**

The “Ohio Company,” named for the object of its desire, not its members’ origin, was the first company successfully organized to purchase land and settle the new territory north of the Ohio River. Its proprietors and settlers were mostly from Massachusetts. As described in the previous section, Congress finally came up with the two famous laws that provided a framework to sell the land and establish new states. Both the Land Act of 1785 and the Northwest Ordinance of 1787 were designed to make the federal lands inviting to settlers so as to sell it at the best price. Even before the Ohio Company appeared, however, the 1785 Land Act made provisions for the sale of land that were based on a New England model (Denenberg 1979). New England had the excess population and scarcity of arable land that made its residents the most likely settlers of what we now call the Old Northwest. (The Northwest Ordinance was readopted by

Congress under the Constitution of 1789, and its general features, including donations of school lands shaped the admission of all subsequent states.)

The 1785 Land Ordinance initiated the national survey, which divided the land into square “townships” of thirty-six square miles each. Townships were surveyed so that they could be sold as entire units to groups of settlers or purchased as one-square mile parcels (called “sections”) by individuals. This vast effort resulted in the square patchwork of land that one can see from an airplane when flying almost everywhere west of the Appalachians (Linklater 2002).

The township method of settlement had originated in New England in the seventeenth and eighteenth centuries. Colonial authorities would grant large parcels of land, usually on the order of six miles by six miles in size, to groups organized as “proprietors” (Martin 1991). New England proprietors would attempt to get other settlers, often connected to a parish church in a previously-settled town but not necessarily religiously motivated, to purchase subdivided land within the new town. As an inducement to settlement, Colonial authorities and early town proprietors regularly promised, and sometimes delivered, essential public infrastructure such as roads and land whose rent was earmarked to support churches and schools.

For almost two centuries before the 1785 Land Ordinance, both public and private developers of wilderness lands used education as bait for attracting settlers. In the seventeenth-century, the colonies of Virginia, Maryland, Massachusetts, and Dutch New York used land grants for education as inducements for settlement (Cremin 1970, 177-81, 306-7). Fledgling Massachusetts towns often sought to have land grants donated for schools by the colonial authorities, the better to promote settlement (Martin 1991). Both the larger colony and the towns’ proprietors stood to gain from further settlement of their towns. Dedication of particular parcels of land within the towns for financial support of education was a device by which prospective land-buyers could be assured that they would not be stuck with lots in an uncivilized wilderness. In his review of Colonial land-granting practice, Hibbard (1924, 309) concluded that “the principle of giving land for educational purposes was well established before the adoption of the Ordinance of 1787.”

#### **§4. The School Section Was an Endowment, Not a Campus**

Schools in the late eighteenth century were not necessarily publicly funded, but it was important to settlers from New England towns that some provision be made for them. As a result, Congress thought it a good idea to include a subsidy for schools in the 1785 Land Act. Since the

national government had no money to speak of, its inducement came in the form of the currency it had in great quantity: land. The 1785 Act specified that for each new township surveyed, one of the middle-most of the thirty-six square sections should be reserved “for the maintenance of public schools, within said township.” This was the “sixteenth section” or “school section” of the township. Many states later created political units and school districts along the lines of their Congressional Townships, and these political townships were often modified to account for geographic and settlement patterns that the uniform survey grid ignored.

Many people today assume that because of its central location, the sixteenth section was intended to be the campus of the school for the township. This illustrates how difficult it is to recreate in our minds the conditions of two hundred years ago. Not only were there no motor vehicles, but roads were very poor and draft animals could seldom be spared to haul farm children to a central school site. So children had to walk to school, and a walk of more than one or two miles over irregular terrain was not considered acceptable.

Instead of transporting the children to school, schools were brought to the children in the small, one-room school houses that were dotted across the township. Thus there would have been anywhere from five to twenty one-room schools within the township, depending on terrain, the population density, and neighborhood amity (Fuller 1982). The default arrangement in the Upper Midwest was nine school districts in the 36-square mile township, which yielded districts of about four square miles and walking distances of less than two miles from the farthest farmstead to the school. Most of these schools were governed, as they were in New England, by a separate school district rather than by the township or county.

The function of the sixteenth-section reservation, then, was not as a campus for schools but as an endowment for the schools within the township. Land within the designated section could be rented to farmers or other land users, and the income was dedicated for education. For states admitted later in the nineteenth century, the federal school land donation was pushed up to two or more sections, apparently to compensate for the low value of land in arid states (Fairfax, Souder, and Goldenman 1992). As the century wore on, states were permitted by Congress to sell the land outright and use the money for a “perpetual fund” to support education.

The Congressional township and the sixteenth-section reservation predated the existence of western states. In implementing the 1785 Land Act, the national government initially expected to sell land to groups of settlers who would then populate the township, as had been the Colonial-

era practice in New England. But that happened only occasionally in the new American territories, and land sales did not live up to Congress's hope. With a great deal of land sitting on the market and generating no revenue for Congress, the government soon agreed to sell land in units smaller than sections to individuals. Surveyors subdivided townships into quarter sections (160 acres) and even quarter-quarter sections of 40 acres, and sales of the public domain improved.

As a result of piecemeal sale of land within a township, its residents did not necessarily have much in common with one another except for their collective entitlement to the revenues from the sixteenth section to support local schools. Unlike New Englanders, who from the beginning saw their township as a comprehensive unit of government, purchasers of the western public domain formed municipal governments from geographic and social configurations that often did not conform to the borders of a township. School districts for one-room schools could be formed across township boundaries. Settlers often started schools on their own without public funds. In his detailed examination of an early nineteenth-century settlement in Illinois, Faragher (1986, 126) concluded that "the most reliable support for education came from parent subscriptions, often paid in butter or eggs. A prospective teacher circulated among the households in the area with a 'subscription paper,' and parents put down the number of scholars they wished to send, at a set fee for the three-month term." The school was later replaced by a public school financed by taxes and the school-section endowment..

#### **§5. "Religion, Morality, And Knowledge" Assured New England Land Buyers**

An important problem for funding schools was that the school-section grant of the 1785 Land Ordinance was specifically for township residents and no others. Lack of communal settlement along township lines, irregular school-district lines that often crossed township borders, and spotty revenue from land rents on the sixteenth section worked against its usefulness as source of school funds. A logical modification of it would be for the state to manage the school lands and distribute the revenue to local districts regardless of its origin. The issue came to a head whenever a state government was formed and education issues again came to the fore.

The process by which states were formed was governed by the Northwest Ordinance of 1787, passed only two years after the Land Ordinance of 1785. Like its predecessor Act of 1784 (which it supplanted), the Northwest Ordinance advertised its anxieties that residents of the new territories would adopt schemes contrary to the national interest. Congress worried in particular

that territories and new states might try to interfere with the disposal of federal lands by, say, giving in-state residents more favorable title conditions than out-of-state buyers. By so limiting the market, the federal government's land would sell less readily and at a lower price. So Article 4 of the Northwest Ordinance forbade the territories or subsequent states from such interference, declaring in part:

The legislatures of those districts or new States, shall never interfere with the primary disposal of the soil by the United States in Congress assembled, nor with any regulations Congress may find necessary for securing the title in such soil to the bona fide purchasers. No tax shall be imposed on lands the property of the United States; and, in no case, shall nonresident proprietors be taxed higher than residents.

Perhaps to mitigate the impression of a Scrooge-like grasp on its land, the Northwest Ordinance pointed out that the new territories and the states formed from them could offer an education. The first sentence of Article 3 (not part of the Ordinance's bill of rights) read: "Religion, morality, and knowledge, being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." This was lifted almost verbatim from the Massachusetts Constitution of 1780, and it surely was aimed at the Ohio Company and its successors to help it market their land.

The "religion, morality, and knowledge" clause in the Northwest Ordinance has long been taken to be a Commandment to establish public schools. Because the clause is restated almost verbatim in numerous state constitutions that followed, the Northwest Ordinance has been regarded as the fountainhead of education in the West (Hyman 1986). This is a bit doubtful. The "religion, morality, and knowledge" phrase that found its first expression in the Massachusetts constitution was not actually a guarantee of public education, let alone a founding principle. Schools had been long established in the Commonwealth, largely because settlers in New England towns wanted schools.

The Massachusetts clause seems instead to have been a way of promoting nonsectarian Protestant religious values via the schools rather than by government-supported churches (Wiewora 2007). Both the Northwest Ordinance and the 1780 Massachusetts constitution had separate and almost identical clauses for religious toleration. But Massachusetts was not yet ready to break all ties between religion and the Commonwealth. The "religion, morality, and knowledge" clause served as a conservative balance. The step towards religious toleration was

balanced by a constitutional assurance that public schools could still instill faith-based virtues in the young.

Thus the “religion, morality, and knowledge” clause of the Northwest Ordinance served the same purpose as the Land Act’s school-section grant. Both were designed to make prospective settlers from New England feel that their native institutions would be easy to establish in the new wilderness (Linklater 2002, 81). Its purpose was not to establish education as a right. Education was already widely established, and few people thought of it as a “fundamental right” deserving inclusion in state or federal bills of rights. Education was intended as a device for increasing the value of the government’s salable land. Summarizing the Congressional debates about the Land Act of 1785, Howard Taylor dryly concluded, “The thought of laying a permanent foundation for a public school system seems not to have entered into the discussion of the matter” (1922, 13). Of the Northwest Ordinance, Taylor concluded, “the provision for education in the ordinance was one of the special inducement which encouraged the purchase of lands and settlement in the Northwest Territory” (1922, 52).

## **§6. Statehood Created Tension about the School Lands**

The Northwest Ordinance provided a framework for admission of new states to the union, but admission was not automatic. Territories that were granted enabling acts by Congress to form states had to write a state constitution. The constitution had to be approved by two parties. One was the inhabitants of the proposed state, and the other was the Congress of the United States. This set up a tension with respect to the federal lands that remained unsold within the proposed state. The 1785 Ordinance specified that the school-section reservation was only for the benefit of residents of the township. But this was not an especially fair or efficient way to fund schools. In a typical example, the school-section of the Illinois township examined by Faragher (1986, 127) happened to be a fertile, well drained square mile, and its rental and eventual sale provided generous support for township residents by the middle 1800s. But the sixteenth-section of the township just south of it was barely arable and incapable of even half the revenue of its richer neighbor. School-finance inequality started early in American history.

It was soon clear to most authorities that it would be better for a unit of government larger than the township to manage and distribute the funds derived from the sixteenth section. Steps were taken in that direction over time, but the ultimate, seemingly most sensible step, was to

simply vest the school lands in the state government when it came time to grant the territory statehood.

The logic of state control was obvious, but it risked the possibility that the state might use the federal school-section funds in a way that did not benefit the unsold lands still owned by the federal government. If Ohio, for example, were given control school-land funds without qualification, the state might spend a disproportionate amount of it on schools in the Cincinnati area, leaving the rural areas north of the Ohio River, where the unsold federal lands were located, with little or no benefit. The sixteenth-section grant would still benefit the state of Ohio, but it would not necessarily help the federal government get the best price for its unsold land.

An exhaustive work by Fletcher Swift (1911) detailed the progress of this issue over the next hundred years, when most of the remaining states were admitted under the terms of the Northwest Ordinance and the successive legislation that bore its stamp. The constant of prospective-state negotiations with Congress was whether the school-lands were to be vested in the township or in the state government. Initially, the township remained the sole unit that benefited from school lands. With the admission of Michigan in 1835, Congress allowed the state to assume control of the school lands and pool the profitable with the barren sections in various townships for the benefit of common schools. But Michigan's admission did not establish an invariable rule. Some later states were admitted with the previous township-vesting rules. It was clear that Congress still cared about how the funds were distributed. Yet it was also obvious that township-specific school funds were a cumbersome way to assist education.

### **§7. State Constitutions Assured Congress about School Lands**

One resolution of this tension seems to have been for the newer states to declare their commitment to an evenhanded distribution of education funds in the constitutions that they submitted for approval to Congress. Mimicry seemed to be one way of showing commitment. Tyack and James (1987) note that in the years following the Northwest Ordinance, “at least 17 states adopted language about schooling in their constitutions that closely resembled that of the Ordinance of 1787 and the Massachusetts constitution of 1780.... In part, this copying was an obligatory bow towards their patron, Congress, acknowledging the purpose of the public lands granted to new states for schools.” My addendum to Tyack and James's insight is that insistence on this “obligatory bow” was prudent because Congress still had land for sale whose value was partly contingent on the local availability of schools.

It is possible, of course, that such clauses would have been inserted even if the federal government had sold all of its land in the state and cared little about its future value. Most states wanted to attract more settlers, and perhaps inserting a popular clause in their constitutions would attract more prospects. But other provisions in the new states' constitutions are more explicit about federal land issues. In addition to inserting the "religion, morality, and knowledge" clause, constitutions of states formed under the Northwest Ordinance adopted language assuring that funds would not be diverted to other purposes and that the school system would not show partiality to one group or region within the state. Ohio's original constitution of 1802, stated in article 8:

"that no law shall be passed to prevent the poor in the several counties and townships within this state from an equal participation in the schools, academies, colleges and universities within this state, which are endowed, in whole or in part, from the revenue arising from donations made by the United States, for the support of schools and colleges; and the doors of the said schools, academies and universities, shall be open for the reception of scholars, students and teachers, of every grade, without any distinction or preference whatever, contrary to the intent for which said donations were made."

Clauses like this appeared in the first constitutions at least twelve states. In addition to these commitments, states inserted education clauses into their constitutions that would assure that settlers would be treated equally in school matters. Terms like "thorough and uniform" and "uniform system" and "thorough and efficient," cropped up with remarkable regularity in the constitutions of the newly admitted states (Sparkman 1994, n.22). But there was almost nothing uniform or thorough about the common school system (Fuller 1982). Nebraska's 1855 constitution, for example, commanded the establishment of free schools, but they only appeared when local initiative established them (Olson and Naugh 1997, 98).

Given how little uniformity there actually was among the common schools before and after the new states were admitted, the constitutional rhetoric can best be interpreted as a commitment device. A commitment to a uniform, statewide system of education, even if it remained only an aspiration, was additional assurance to Congress that its school-section donation would still be available to attract buyers for its remaining land. (The clauses are important nowadays because many state courts have seized on them as a way to justify their role in the distribution of school funds.)

The enthusiastic tenor of the state constitutional clauses for education was vastly different from the crabbed view such documents had towards most other state enterprises, which were typically subject to detailed fiscal and procedural constraints. Tyack, James, and Benavot (1987, 45) document education's special constitutional regard with a sense of wonderment. The original thirteen states' constitutions had none of this enthusiastic language about equality and thoroughness in education, even though they were composed in the fervor of Revolutionary equality. As Sparkman (1994, 572) remarked, "only six of the original thirteen states made any general reference to schools in their initial constitutions, although all states ultimately added an education article at some point in their history."

Tyack, James, and Benavot (1987) concluded that American states just regarded education as being a whole lot different than other government functions. My view is not necessarily contrary. Education was important, but not because state constitution drafters came up with the idea that it was important. Their constitutional enthusiasm was induced by the need to convince Congress that giving the state control over federal school-land revenue would not result in devaluation of federal land holdings. And the reason the federal government wanted to keep schools in the picture for every township was that settlers continued to be attracted by school subsidies. Thus what looks like a top-down subsidy was really a sensible, perhaps inevitable, response by those at the top (Congress and state constitution drafters) to the ubiquitous, bottom-up demand for local schools by prospective settlers.

## **§7. Conclusion**

This brief history of the public lands indicates that the establishment of numerous school districts in the West was intentional. Over the years, these tiny districts consolidated into larger districts, almost always with the consent of the residents affected. Schools were started as a means of enhancing property values of landowners, first of the United States and later of the settlers who bought the land. The remarkably decentralized system of education governance, which forms the basis of the Tiebout (1956) model, had its origins in the earliest land policies of the United States.

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