

URBAN INFRASTRUCTURE POLITICS AND METROPOLITAN GROWTH

Lessons From the New York Metropolitan Region

Richardson Dilworth is a visiting assistant professor of politics at Drexel University. His recently completed dissertation, "Paving Bodies Politic: Government Fragmentation and Infrastructural Development in the American Metropolis," (Johns Hopkins University, 2001) examines the relationship between local public works and municipal autonomy in the United States.

RICHARDSON DILWORTH
Drexel University

In 1874, the towns of Kingsbridge, Morrisania, and West Farms were all annexed to New York City. A fourth town, Yonkers, was also considered for annexation but was instead incorporated as a city in 1872 and remained independent of its expanding neighbor to the south. The argument made here is that infrastructural development reinforced Yonkers's autonomy and thus limited the geographic expansion of New York City. Kingsbridge, Morrisania, and West Farms were relatively undeveloped by 1874, and annexation was thus a more viable strategy by which those towns could be supplied with infrastructural and other urban services. The case of Yonkers thus suggests that local infrastructure development contributed to the proliferation of independent municipalities and the fragmentation of metropolitan regions. To the extent that metropolitan fragmentation creates an unequal distribution of resources across a metropolitan area, the case of Yonkers suggests further that infrastructural development ultimately endangered municipalities' future prosperity.

Infrastructural development reinforced Yonkers's autonomy and independence and thus limited the geographic expansion of New York City.

This article examines the relationship between infrastructural development and metropolitan fragmentation in the New York metropolitan region, looking specifically at the development of street and water supply systems in New York City and lower Westchester County in the decade after the Civil War. Although New York's present-day boundaries are the product of the famous 1898 consolidation, the city first expanded its jurisdiction beyond Manhattan Island in 1874 by annexing three towns in Westchester County—Kingsbridge, Morrisania, and West Farms—that would form a part of what later became the Bronx. A fourth town, Yonkers, was also considered for annexation but was instead incorporated as a city in 1872 and remained independent of its expanding neighbor to the south.

The argument made here is that the residents and local government of Yonkers opposed annexation and opted to incorporate as a city because they had already invested in the physical development of their community to a degree sufficient to supply essential services. Incorporation as a city was both a product of the physical development of Yonkers and a necessary means to continue that physical development. Infrastructural development reinforced Yonkers's autonomy and independence and thus limited the geographic expansion of New York City. In contrast, Kingsbridge, Morrisania, and West Farms were relatively undeveloped at the time that New York City began to seriously consider geographic expansion, and annexation for these towns thus represented a more viable option by which they could be supplied with infrastructure and other services.

To say that infrastructural development in an outlying area provided the means by which that area could maintain its independence and impede the territorial growth of the central city is to

depart from standard explanations. Most authors have attributed the ability of suburbs to maintain their autonomy from central cities to state incorporation laws; the increasing wealth of suburbanites, which meant that they could afford to provide their own municipal services; or the power of local business interests to shape municipal boundaries to their economic benefit (Burns, 1994; Jackson, 1985; Teaford, 1979). These explanations may have some applicability to the case of Yonkers, but they are insufficient; they cannot, for instance, adequately explain why Yonkers was able to resist annexation whereas a much larger and arguably more powerful city, Brooklyn, later assented to join New York City as part of the 1898 consolidation, despite significant local pressure to remain independent. To explain the causes and motivations behind incorporation and annexation in these cases, we need to understand how urban infrastructural development enabled autonomy from, and created dependencies on, New York City.

The motives behind annexation have certainly changed since 1874. A city today may be more hesitant to annex relatively undeveloped land into which it would have to extend its infrastructure and other services, especially when that land was to be used primarily for residential purposes, as was the case with lower Westchester County in the 19th century. As early as 1900, in fact, Mayor James Seymour of Newark noted that although “Newark’s door should be kept always open to the neighboring communities, the annexation of which is desirable,” still, “it is an unprofitable experiment to include within the corporate limits outlying territory which is thinly settled, and . . . would necessitate vast expenditures out of the municipal treasury without any compensating income.” More generally, although Jackson (1985) attributed the desire of outlying areas to be annexed to the central city to a rather straightforward desire for the “comforts of the city,” such as “decent sewerage, water, and educational systems,” he attributed the desire of central cities to annex outlying land in large part to a more nebulous “municipal booster spirit.”

The annexation of undeveloped land may be a relic of an antiquated booster spirit, but it did arguably serve the long-term interests of metropolitan regions. Indeed, because New York City was unable to annex additional territory, the metropolitan region is more fragmented among different municipalities. As numerous authors have argued is true of metropolitan regions across the United States, fragmentation has created a more unequal distribution of resources than there might otherwise have been. As Wood and Ameringer (1961) noted of the New York metropolitan region in the 1950s, fragmentation created a situation in which “the communities under the heaviest density pressures to spend have a tendency to be poorly equipped to meet those needs” (p. 57). With territory divided “among hundreds of jurisdictions . . . the political economy goes forward in ways localized, limited, and largely negative in character” (pp. 112-113). Twenty years later, Danielson and Doig (1982), although disagreeing in significant ways with Wood and Ameringer’s (1961) description of the regional political economy, agreed that political fragmentation was one of the key variables that created “a significant mismatch of resources and needs in the region’s suburbs” (p. 78). Shefter (1985) noted further that one of the more prominent explanations of New York City’s fiscal problems in the 1970s was the loss of a tax base due to the movement of the city’s middle class into the independent, outlying suburbs.¹

Of course, no city could expand its boundaries to cover a metropolitan region that sprawls across three states, but as Jackson (1985) noted, had New York City been able to expand geographically into the 20th century, it “would reach to White Plains in Westchester County and at least to the Suffolk County line on Long Island” (p. 140). The geographical expansion of New York City was inhibited after the 19th century in part because it confronted communities such as Yonkers that had earlier established their independence through infrastructural development. Ironically, as we will see, infrastructural development was also the very means that New York City had used to expand its territory. In the New York metropolitan region, infrastructural development underwrote both metropolitan growth and metropolitan fragmentation. Through infrastructural development, metropolitan growth and fragmentation were inextricably intertwined in ways seldom realized.

This article proceeds in three steps. The first step is to recount the basic facts of Yonkers’s development and incorporation as a city and the annexation of Kingsbridge, Morrisania, and West Farms to New York. The following section makes the argument that infrastructural devel-

opment, and the politics of infrastructural development, can help to explain why Yonkers incorporated as a city whereas West Farms, Morrisania, and Kingsbridge chose to be annexed to New York City. Finally, in the conclusion, I examine the ways in which the experience of infrastructural development and annexation in Westchester County and New York City during the 1870s is relevant to a more general understanding of urban history and contemporary urban policy.

The City of Yonkers and the Annexation of Lower Westchester County to New York City

Throughout the metropolitan region that was developing around Manhattan Island in the 19th century, a typical response to urbanization was a division of existing political jurisdictions into smaller units, followed by a reconsolidation of those units and an expansion of governmental power. For instance, in New Jersey, the town of Newark was divided into four separate towns in 1832, which then came together again as the city of Newark in 1836, and the town of Bergen split up into numerous towns and cities during the 1850s and 1860s, a number of which consolidated in 1870 and 1873 to form what is today Jersey City. Likewise, in lower Westchester County, in response to population growth brought about in large part by the introduction of railroads that connected the area to New York City, the western half of the town of Westchester split off in 1846 to form the town of West Farms, and in 1855, the southwestern portion of West Farms that lay across the Harlem River from Manhattan split off to form the town of Morrisania. During this period, the towns were also being divided into separate villages, such as Riverdale and Spuyten Duyvil, that exercised a greater degree of local autonomy over the opening, grading, and paving of streets and other public works. The concentrated area of settlement located along the Hudson River and midway between the northern and southern ends of the town of Yonkers was one area that incorporated as the village of Yonkers in 1855 and would serve as the nucleus for the later city (Dilworth, 2001; Stone, 1969).

That lower Westchester County was urbanizing is clear from the fact that, of the 24 towns that comprised the county in 1858, Yonkers, West Farms, and Morrisania ranked first, fifth, and sixth, respectively, in terms of the value of assessed property. Edward Spann (1981) noted that “the combination of real estate promotion and the railroad tripled the population of southern Westchester between 1850 and 1855” (p. 191). The population of the town of Yonkers alone increased from 4,160 in 1850 to 18,318 in 1870. In response to increasing urbanization after the Civil War, the northern portion of the town of Yonkers, led by the village of Yonkers, incorporated as a city in 1872, and the southern portion of the town became the town of Kingsbridge. In 1874, Kingsbridge, Morrisania, and West Farms were annexed to New York City (“Equalization of Assessments,” 1858; Spann, 1981; Stone, 1969).²

Several factors came together to make the area that would become the city of Yonkers the largest settlement in lower Westchester County. First, because the area was blessed with “an excellent supply of water power,” it had attracted by the early 19th century “a few saw mills, grist mills and blacksmith shops” (Steigman, Vol. 1, p. 14). This industry in turn made the area “the first stopping-off point for stagecoaches between New York City and Albany,” (Steigman, Vol. 1, p. 14) and then in 1849 the first stop on the Hudson River Railroad between New York City and Albany. In this same year, a wealthy newcomer to the city, Robert Getty, built a large hotel near the railroad depot and became one of the most prominent boosters for the creation of a village of Yonkers. Getty apparently envisioned incorporation as a village as a first step toward the area’s becoming the “Queen City of the Hudson,” second only to New York. In fact, when the City of Yonkers was created in 1872, Getty was serving as village president. With the introduction of rail service, the village of Yonkers became increasingly a center for industry, especially for the manufacture of elevators, carpet, hats, and, as a result of the Civil War, firearms.

Although Yonkers was the largest and most thriving of the villages in lower Westchester County and may have had a justifiable claim to “Queen City” status, it was similar to neighboring villages in its role as a suburb of New York. As early as 1857, the New York correspondent to the *Missouri Republican* described the life in Yonkers as follows:

Breakfast at half past seven, A.M., New York morning papers and cigar till 8, steamboat at 8, a sail down to the city at one hour's length, past a panorama of exceeding beauty. A disgorging of passengers at the foot of Warren street . . . A vigorous battle with the dust, dirt, noise, bulls, bears, mock auctions, Peter Funks, and Jeremy Diddlers, of the city, till 5 P.M. Steamboat up to Yonkers, supper at 6, then talking, laughing, sailing, rowing, fiddling, flirting, dancing, etc., etc., till midnight, or as much later as may seem proper. Then a sweet, sound, country sleep, without mosquitos to molest or make afraid. (*Yonkers Gazette*, "Yonkers by a New Yorker," 1857)

Twelve years later, a local Yonkers newspaper provided a similar, although more sober, description of the growing village: "spread over a tract about two miles long, by a mile wide, nearly every street and avenue being thickly studded with residences, mostly of people doing business in New York" ("Westchester: Interesting Historical Reminiscences" 1869).

Yonkers was certainly not the only industrial suburb in lower Westchester County. For instance, as Spann (1981) noted, by the 1860s, Morrisania also offered "an affordable opportunity for New Yorkers to escape their congested city" (p. 202). Spann further claimed that Morrisania's role as a site for industry, "its railroad spur, lumber yard, crowded housing, and spindly trees omen[ed] its eventual absorption into Greater New York at the end of the century" (p. 202).³ However, the fact that a neighboring industrial suburb such as Yonkers might consider incorporation as a city rather than annexation to New York throws doubt on the ability to predict a community's "eventual absorption" into a central city, simply by the fact of that community being an industrial suburb. Moreover, the fact that two industrial suburbs developed such different relationships with New York City suggests that we cannot explain annexation or resistance to annexation in Westchester County in the 1870s simply in terms of class differences between the city and suburb.⁴

The idea of incorporating as a city first served as a partisan issue in the village and town of Yonkers. In 1870, the Democratic town paper, *The Yonkers Gazette*, came out in favor of a proposed city charter introduced into the state legislature that year, although it did concede that it was "capable of some judicious amendments." The bill, introduced into the senate by William Cauldwell (the Democrat who represented lower Westchester County), stipulated that the new city was to include all the land in the present town of Yonkers, that it was to be divided into five wards that were identical to the existing county electoral districts, and that each ward would "have a [county] supervisor, two aldermen, two fire wardens, and two constables" (from *The Statesman*, February 3, 1870). The mayor, recorder, and the aldermen were to be elective positions, whereas "the rest of the officers named in the charter, except supervisors" (*The Statesman*, February 3, 1870) were to be appointed by the city council, which was to be composed of the mayor, aldermen, and supervisors.

Arguments presented for incorporation in the *Gazette* were that a city government could provide "a uniform system of streets, avenues and sewers, a new code of civil and criminal ordinances, new wharfage privileges and power over the speed of trains passing through" (*Yonkers Gazette*, "The City of Yonkers"). In addition, it was argued that incorporating both the town and the village under a single local government would rationalize and improve the system of taxation for local services. The town's Republican newspaper, *The Statesman*, argued that the proposed charter was designed primarily to increase Democratic representation on the County Board of Supervisors and to bring advantage to some town Democrats with large real estate holdings. *The Statesman* argued further that the charter would increase taxes for unnecessary services and create a government bloated with patronage positions, thus ensuring an increase in corruption that would ultimately harm the progress of the town. In any case, after Republicans won control of the town government in the elections of March 1870, the *Gazette* noted that "there is no use of pressing the matter at present."⁵

Noticeably absent from the debate over this first city charter bill was any discussion of incorporation as a way to thwart the expansionist urges of New York City, although at least some town residents were aware of the possibility of being annexed.⁶ However, when it became apparent that "certain influential political leaders of [New York] city and Westchester county" ("The Proposed Annexation," 1870) were planning to present a bill at the 1871 state legislative session

enabling New York to annex the towns of Westchester, Eastchester, New Rochelle, Pelham, Morrisania, West Farms, and Yonkers—the “seven most populous and wealthy towns in Westchester”—the *Gazette* resumed the cause for incorporation, this time as a method to defend the town’s independence from New York City.⁷ The new argument for incorporation turned *The Statesman*’s arguments against incorporation on their head. Because annexation to New York City would raise taxes, the *Gazette* argued, Yonkers needed to incorporate as a city to maintain its independence and thus keep taxes at a lower level. Furthermore, as New York City was then under the control of the notorious “Tweed Ring,” annexation would lead to greater corruption; incorporation was thus an anticorruption measure.⁸

Incorporation as an anti-annexation policy appears to have dislodged *The Statesman* from its resolutely anti-incorporation stance from the previous year. In January of 1871, the Republican paper declared that “we do not wish to be annexed to New York,” and claimed that it was not opposed to incorporation per se, but that a proposed city charter must be subject to public approval (from *The Statesman*, January 5, 1871 and January 26, 1872). Nevertheless, there was still substantial opposition to incorporation. At a town meeting in the same month, for instance, one attendee noted that “the taxes of small cities . . . were very much larger in proportion, than those of large ones” (“Annexation!” 1871). Another attendee, James Sanders, noted that Yonkers had as corrupt a ring as did New York, and it was the Yonkers ring that was using the threat of annexation to attempt to push incorporation. Sanders was rebuked for being “grievously troubled because he was neither in the New York ring or the Yonkers ring . . . and that his (Mr. S’s) sole anxiety was to form a ring for himself” (“Annexation!” 1871). A resolution approving incorporation of a city of Yonkers did not have enough support at the meeting to pass, although a resolution in opposition to annexation did pass.

This first annexation bill began to distinguish those communities in lower Westchester County that would entertain the idea of being annexed to New York City from those resolutely opposed to the idea. One popular opinion appears to have been that annexation might be advantageous for “Morrisania, West Farms, [the Town of] Westchester and the lower part of Yonkers” (*Yonkers Gazette*, February 4, 1871) but that it presented more dubious benefits for areas lying farther north, including the village of Yonkers. There were, however, other proposed schemes. In December of 1870, a group of influential property owners suggested that Morrisania, West Farms, and the town of Westchester be incorporated as a single city, and *The New York Daily Times* reported in early January of 1871 that “Morrisania, West Farms, and Westchester have protested in emphatic terms against the scheme for annexing them.” Yet, by the end of January, citizens’ committees in the towns of Morrisania and West Farms had sent a joint committee to Albany to lobby in favor of passing the annexation bill and to offer some amendments. On January 28, 1871, the *Gazette* wrote simply that “Morrisania craves annexation.” One author, Stone (1969), even claimed that Morrisania was interested in being annexed to New York as early as 1864.⁹

The 1871 annexation bill was reported negatively out of the Senate Committee on Cities on February 10, although the issue of annexation itself was clearly still alive. At the end of 1871, *The New York Sun* reported that plans were under way to present a bill for the annexation of Morrisania and West Farms to New York City, and in January of 1872, the *Gazette* reported that “a proposition will go before the next legislature to unite Brooklyn and the lower part of Westchester county with [New York] city, under one municipal government.” It is not clear if Yonkers was included as a part of this annexation bill (and any legislative records saying so were burned along with the state legislature in 1911), although the *Gazette* urged once again that “what we want, and must have, to save us from being ‘gobbled’ by New York city, is a city charter.”

The *Gazette*’s calls for incorporation were now apparently meeting with broader approval. In December of 1871, the Board of Trustees (the governing body of the village of Yonkers) had established a special committee “to prepare a bill to be presented to the legislature, to extend the limits of the village, and to prepare such amendments to the charter as they might deem necessary.” Approximately 3 months later, on February 28, 1872, the special committee “reported that they had prepared a charter for a city government for the town of Yonkers . . . with a recom-

mendation that it be printed.” In regard to this proposed charter, *The Statesman* commented that it “is a great improvement over the charter presented two years ago, and will meet with very general endorsement.” The chief difference between the 1872 charter bill and those before it was that it did not include the southern part of the town in the boundaries of the proposed city.¹⁰

By April, the proposed charter had passed the Assembly with some minor amendments and had been referred to the Senate Committee on Cities. Apparently there was no referendum on the city charter within the village of Yonkers, or the surrounding area that was to be included in the city, although there does appear to have been majority support among village residents. Steigman (1954) claimed, for instance, that in regard to the city charter, “the whole village was in agreement . . . the villagers presented a united front on this matter and rallied behind their token leader, the village president, until victory was assured” (p. 26). Residents in the southern section of the town were apparently “given a choice as to whether they wished to join in the consolidation or remain outside of it” (pp. 62-64) and did in fact register their disapproval of being included within the jurisdiction of the proposed city. Thus, the southern boundaries of the proposed city were reduced to exclude much of the lower part of the town. In June, Governor Hoffman signed the bill, the village Board of Trustees held their final meeting, and the Common Council assumed its position as the governing body of the city of Yonkers.¹¹

Almost immediately after Yonkers became a city, residents in what had been the southern portion of the town lobbied successfully at the first session of the County Board of Supervisors in 1873 to have their area reincorporated as the town of Kingsbridge. A prominent landowner and member of a citizen’s committee in the new town, H. F. Spaulding, expressed his relief and gratitude at a public meeting:

The board of supervisors had made them the free and independent township of Kingsbridge. Thank God for that. We are no longer bound to the nest of office-seekers in the city of Yonkers, no longer held in their aspiration for water-works, docks, etc., for which they would spread their butter over the whole township, if they had been able to annex us. (“The Annexation of Knightsbridge,” 1873)¹²

Immediately after thanking God that the residents of Kingsbridge were free from Yonkers, Spaulding recommended that the new town join with Morrisania and West Farms in their “efforts . . . to get annexed to New York City.” By May, this annexation bill had passed the legislature; by September, it had been signed by the Governor; and in November, the residents of the three towns voted in favor of annexation, as expected. On January 1, 1874, they became part of the city of New York.¹³

Annexation, Incorporation, and Infrastructural Development

The isolationist impulse that Spaulding appears to have been expressing in regard to Yonkers presents an odd contrast to his eagerness that Kingsbridge be annexed to New York City and may indicate a general uncertainty as to what the best options were for the towns of lower Westchester County in the face of rapid urbanization. There was, for instance, a good deal of uncertainty as to how annexation would benefit or harm the residents of the annexed areas financially. On one hand, it was expected that annexation would increase property values. On the other hand, with increased property values would come higher assessments and thus more taxes. In some towns, such as Yonkers, increased property assessments would be offset by New York City’s lower property tax rate. Besides the basic property tax, there would also be special assessments on affected property owners for street improvements, which would, of course, be offset by the introduction of new urban services and a resulting increase in property values. Speaking of the creation of greater New York in 1898, David Hammack (1982) contended that “the enormous number of microeconomic calculations needed to assign precise values to consolidation’s economic impact would make a very doubtful contribution to knowledge” (p. 187). The same can be said of the 1874 annexation of lower Westchester County.¹⁴

The residents of lower Westchester County may have favored annexation to New York City in large part because, by 1872, the purported Tweed Ring was no longer in control of the city government and the fiscally conservative Andrew Haswell Green, who became city comptroller as part of the reform insurgency in 1871, was actively pursuing administrative reforms that would restore the city's credit and establish controls to guard against "the malfeasance characteristic of the ring" (Mazaraki, 1966, p. 124).¹⁵ Under a reform administration, prospective residents of New York City could have more certainty that they would not be charged at exorbitant rates for public improvements of questionable quality. As *The New York Times* noted in the article "Minor Topics" in January of 1873,

The proposition to annex Westchester County to this City, it appears, has lately been viewed with increasing favor by the residents of West Farms and Morrisania. As New-York has been rescued from the grip of Tweed and his gang, it is now thought that annexation would be calculated to greatly benefit the towns named.

In short, residents may have used the absence of corruption and the presence of reform in New York City's government as a proxy for the costs and benefits that they would experience through annexation.

However, if the fall of the Tweed Ring and the ascendance of Green to the comptrollership caused the residents of Kingsbridge, Morrisania, and West Farms to favor annexation, there seems little reason why this reform movement would not have had a similar effect on the residents of Yonkers. As noted previously, one of the original justifications for a city charter in Yonkers was that it would protect the city from being annexed and thus subject to New York City's corrupt government. However, even before Yonkers's final incorporation bill had been drafted, the Tweed Ring had been deposed and Green was city comptroller (Mazaraki, 1966).¹⁶ Thus, the local government and residents of Yonkers certainly had time to review their options before they proceeded with incorporation. Apparently, Yonkers differed from West Farms, Morrisania, and Kingsbridge in ways that reduced their demand for annexation.

One of the most obvious ways in which Yonkers differed from the three towns that were annexed to New York City in 1874 was in its greater degree of physical development. Even before the Civil War, the village of Yonkers was the most developed area in lower Westchester County. Indeed, J. Thomas Scharf (1886) noted that Yonkers was "one of the best governed, best graded, best lighted villages in the country" (p. 25). By the late 1850s, sewers had been laid in many of the principal streets and the Board of Trustees was agitating for greater control from the town commissioners over the opening and improving of streets in the village. By mid-1857, the village had passed an ordinance regulating the width of sidewalks and gutters relative to streets, so as to create a more uniform village street system. Thus, for the residents of Yonkers, incorporating as a city would build on a pre-existing trend of self-sufficiency.

The fact that Yonkers was larger and wealthier than Morrisania and West Farms meant that it could better afford to engage in infrastructural development. As mentioned previously, however, wealth cannot alone explain why an outlying area of a central city would resist annexation to the central city. Wealth did not, in other words, create a spurious association between infrastructural development and resistance to annexation. For instance, Brooklyn, which had a substantial industrial tax base and ranked as one of the largest cities in the United States in the 1890s, voted in 1894 to consolidate with New York City, albeit by a very slim majority. More telling for the purposes here is the fact that Long Island City, which was an industrial city very close to Yonkers in size, voted overwhelmingly (by 82%, i.e., 3,529 to 792) in favor of consolidating with New York City in 1894. One thing that distinguished these two cities from Yonkers was the fact that both Long Island City and Brooklyn, for very different reasons that will be elaborated later, were not able to supply their residents with an adequate urban infrastructure (Dilworth, 2001).

In fact, Yonkers's incorporation as a city was intimately related to infrastructural development. When the village of Yonkers was created in 1855, it was made a "separate road district," supposedly free from the town's highway commission, "which had jurisdiction over all roads,

bridges, lanes, etc. within town boundaries” (Steigman, 1954, p. 42). However, in a move that Teaford (1984) claimed was typical of 19th century state-local relations, a “Boulevard Ring” that apparently controlled the town highway commission had managed through special state legislation to incur an exorbitant level of debt for building roads, amounting to “approximately the equivalent of one-seventh of the total real and personal property (assessed value) in the town and village” (pp. 103-105). Because village residents “paid four-sevenths of town taxes,” they were significantly affected by this town debt, and moreover, had a separate debt for village street improvements to pay off. Steigman (1954) further claimed that village residents’ complaints about the town debt “were grounded in the fear that increased taxation on the villagers for improvements outside would become so burdensome that improvements within the municipality would have to be postponed” (pp. 42-46). At least one editorial in *The Statesman* noted that, as a city, Yonkers would not be so subject to special state legislation and thus might be better able to engage in more rational and comprehensive infrastructural development. Indeed, the final city charter abolished both “the power of commissioner of highways” and “the boulevard bills” (“The City Charter,” 1872).¹⁷

West Farms, Morrisania, and Kingsbridge were not only less developed physically than Yonkers but also much of the infrastructural development that did occur in these towns actually prefigured annexation. Before he became city comptroller, Green had been active in convincing the state legislature to expand the authority of the Central Park Commission (of which he was comptroller) to include the planning and opening of a street system for Manhattan north of 155th Street and for the adjoining territory in Westchester County. Green’s activity in this regard culminated in an 1868 report to the Central Park Commission, in which he recommended the consolidation of Manhattan and lower Westchester County, including Yonkers, under one municipal government as the best means to develop “the water supply, the sewerage, the navigation of the interjacent waters, the means of crossing these waters, and the land ways that should be laid on each side so as to furnish the best facilities for both” (quoted in Foord, 1913, p. 289). Although the state legislature did not at that time take Green’s advice concerning consolidation, it did grant the Central Park Commission “the exclusive power to survey, map, and lay out the street pattern of lower Westchester, improve the Spuyten Duyvil Creek and the Harlem River for navigation, and prepare plans for the construction of bridges over the waterways” (Mazaraki, 1966, p. 112). As *The New York Times* noted, this new authority provided for the “practical, if not political, annexation” of lower Westchester County to New York City (“Metropolitan Annexation,” 1869). Despite the fact that it had been included in Green’s original plan, the legislation granting the Central Park Commission authority over construction in Westchester County did not include the village of Yonkers.

Before the work of opening streets in Westchester County could be accomplished, however, the Central Park Commission was disbanded under Tweed’s home rule charter of 1870, which shifted authority for Central Park into a city-controlled Department of Public Parks. However, Green’s idea of annexation was pursued by the Tweed Ring, as a means by which to find new outlets to spend money for public works. As one contemporary noted,

In the green pastures of Westchester County, the “Ring” sees fresh mines of future wealth Once let those pastures be “annexed” and become a part of this City, and there will be such an upturning of Westchester soil as the plodding farmers of that region never dreamt of . . . magnificent streets will traverse their waste places, laid out at right angles, nicely graded, and paved with “Nicholson,” “Russ,” “Belgian,” or “Fiske concrete,” as one or another of those pavements shall furnish the most profitable “job.” (“Westchester County,” 1870)

Thus, infrastructural development in lower Westchester County was originally planned for the ostensibly benevolent purpose of rationalizing the transportation and service-delivery systems in the metropolitan region, although the motives that ultimately resulted in the implementation of the plan were purportedly more self-serving. In both cases, however, the result was that New York City public works projects were extended into Westchester County, thus tying the fate of the outlying area more closely to the central city.

In fact, even prior to Green's 1868 plan, Morrisania, "with the anticipation that the city would continue to grow northward" ("Department of Public Parks and Yonkers," 1872) had developed a street plan that continued the numbered streets of Manhattan's grid, from approximately 125th to 170th Streets (Stone, 1969, pp. 1-2). Here we can clearly see the effects of relatively late development. Had Morrisania developed a street system prior to the "speculative fever in building lots north of 59th Street" (Moehring, 1985) starting in the late 1850s, it may have developed a street system that did not coincide with the Manhattan grid, thus diminishing the advantages, and possibly the likelihood, of its later annexation.

Although annexation was facilitated by public works that unified the physical infrastructure of New York City and Westchester County, the extension of New York City's physical infrastructure systems could also reinforce municipal boundaries, as in the case of water works. New York City had of course pioneered the development of urban water supply systems with the construction of the Croton Aqueduct in the 1830s and 1840s. The Croton Aqueduct was the largest water supply system of any city in the United States, and much of the motivation for wanting to be annexed to New York City on the part of Morrisania, Kingsbridge, and West Farms was the prospect of being served water from this system. As Melosi (1980) noted, "the suburbs of Morrisania and West Farms, finding it difficult to locate a source of high-quality water on their own, voted to join New York City in 1873" (pp. 16-17).¹⁸

The Croton Aqueduct ran directly through the village of Yonkers, yet was only briefly considered as a source of water there. Agitation for a comprehensive water supply system of Yonkers's own began a generation after construction of the Croton Aqueduct and was initiated by a fire on August 8, 1869, which burned down an entire block of the village.¹⁹ The next month in a special election, village residents voted overwhelmingly in favor of granting the Board of Trustees authority to provide water for the purposes of fire. An engineer was hired to prepare a report on "the best mode of supplying Yonkers with water for household or fire purposes, or both," and in December the Board of Trustees appointed a special committee to draft a bill that relied on the engineer's suggestions. Instead of granting the village the authority to raise money for building a water supply system, however, the legislature passed only a bill allowing for a special election to determine whether or not residents would agree to give the Board of Trustees the authority to issue \$225,000 in bonds for that purpose. The election, held on January 9, 1872, decided by a margin of 25 votes (258 to 233) against authorizing bonded indebtedness for the purposes of supplying the village with water. Both *The Statesman* and the *Gazette* editorialized that the vote did not reflect the true wishes of the majority of village residents.²⁰

As a city, Yonkers had more authority to raise money and more discretion over what it could use that money for. By 1873, the Common Council had prepared a bill authorizing the city of Yonkers to raise a maximum of \$250,000 for the purpose of constructing a water supply system and to appoint five members to a semi-independent commission that would determine the proper source for the city's water and the method for distributing it. The bill passed the legislature early in 1873, and the Common Council had appointed the five commissioners by mid-March ("The Water Bill," 1873).²¹

What forces in the city ultimately came together to approve the water works plan can only be left to speculation. There may have been a referendum in November of 1872 that approved this second proposed bond issue. If there was not a second referendum, demand for a water works may have stemmed primarily from the business elite who controlled the city government, who may have been interested in increasing the local water supply primarily for industrial and commercial purposes. As Steigman (1954) noted of Yonkers's government,

Most of the political figures were large property holders and business or professional men . . . [T]hese people had the greatest stake in community welfare as their own prosperity was linked to its, and so they were active in community affairs primarily to promote its growth and development.²² (p. 26)

It was not always the case that cities' political systems enabled the construction of an adequate water supply system. For instance, in Long Island City, a political system dominated by a

local Democratic machine was incapable of developing a water supply system that met the needs of the city. The Long Island City waterworks was built at the same time as the Yonkers waterworks, using the same system (a Holly pump), for a city of comparable size, yet Yonkers used only a \$250,000 bond issue to build a water supply system that could meet the water supply needs of the city's entire population and indeed of people living outside the city as well. In contrast, the Long Island City water works was built on a \$350,000 bond issue (the actual debt incurred ultimately being \$362,000) and did not extend throughout the entire city, but rather was supplemented by private waterworks, such as that built by the Steinways in the mid-1870s. Not only did the Long Island City waterworks saddle the city with an exorbitant amount of debt but also the inadequacy of the system increased the risk of fires, thus raising insurance rates ("The City Debt," 1891; *History of Queens County*, 1882; "Our Water Supply," 1891).²³

There is good reason to believe that residents in Yonkers also had an interest in a water supply system. A water supply system would not only help to prevent a repeat of the 1869 fire but would also significantly reduce the cost of fire insurance. In fact, Anderson (1988) noted that it was in 1872 that "the nationwide rate sheet published by the Nationwide Board of Fire Underwriters . . . incorporated a rate differential for towns with and without water supply systems" (pp. 141-142). Furthermore, the "water question" in Yonkers was resolved simultaneously to the last widespread outbreak of cholera in the United States. The 1869 fire may not have provided enough of an impetus among residents to approve a waterworks bond issue because the last serious cholera epidemic had occurred 3 years previously, in 1866. The increased threat of cholera in 1873 may have increased demand for a water supply in Yonkers.²⁴

In any case, a significant threat to Yonkers's ability to develop an adequate water supply system was that New York City might usurp the best sources of water in Westchester County for itself. In 1872, members of the Yonkers Common Council met with an official from the Croton Aqueduct Department to look into the possibility that Yonkers could receive water from the Croton Aqueduct. They were informed that not only did the Croton Aqueduct Department have no water to offer them, but also that Yonkers "had better seize on the Nepperhan while [they] had the chance, for [Comptroller] Andy [Green] had an eye on it" ("The Water Question," 1872). The officials from Yonkers were informed that, were Yonkers to be annexed to New York City, it would be supplied with water from whatever new source the city ultimately decided to use.

As previously discussed, Green saw the consolidation of New York City and lower Westchester County, including Yonkers, under a single municipal government as the best means by which a water supply system could be developed for the entire area. It thus seems likely that Green was pursuing the water resources of Westchester County with the hope that it would force Yonkers to consolidate with New York City. Indeed, as a number of authors have noted, it was in large part the need for a greater supply of water that ultimately forced Brooklyn to consolidate with New York City 30 years later (Burrows & Wallace, 1999).

Consolidation with New York was not to be Yonkers's fate, however. In May of 1873, *The Statesman* reported that to supply water to the area of Westchester County that was soon to be annexed, New York City was considering using the Bronx and Saw Mill Rivers. The threat that New York City would "deprive Yonkers of its natural source of supply" ("Our Water Supply," 1873; see also "A Slow Commission," 1873; "The Water Commissioners" 1873) compelled *The Statesman* to urge the water commissioners to action:

Nearly two months ago Commissioners were appointed but they move slow; and we feel justified in saying that they are not meeting the public expectation. They will incur a grave responsibility if, by their inaction, they permit our natural supply to slip away from us. (Our Water Supply, 1873)

By August, the water commissioners had decided on the Sprain Brook for the water supply; by the end of the month, they had contracted for the necessary pipes, stopcocks, hydrants, and labor, and in September, work had commenced.²⁵

We cannot know the actual extent to which a fear that New York City would take over the best sources for water in Westchester County motivated Yonkers's water commissioners to proceed with haste, but to the extent that it did, it provides an example of how infrastructural develop-

New York's plans to expand its water supply system . . . in Westchester County was a factor in provoking Yonkers to build its own water supply system.

ment could work to reinforce the boundaries between cities. As I have already argued, infrastructural development in the form of streets and sewers appears to have played a significant role in Yonkers's decision to incorporate as an independent city rather than be annexed to New York. Furthermore, by incorporating as a city, Yonkers was better able to proceed with infrastructural development in the form of a water works, thus serving to further differentiate itself from New York City. Thus, to the extent that New York's plans to expand its water supply system to include other bodies of water in Westchester County was a factor in provoking Yonkers to build its own water supply system, infrastructural development in New York enabled infrastructural development in Yonkers that further differentiated these two cities from one another.

Conclusion

The argument presented in this article is that the expansion of New York City's physical infrastructure systems laid the groundwork for annexation in Morrisania, West Farms, and Kingsbridge while it provoked Yonkers to differentiate itself physically and legally from the larger city. The difference between Yonkers and its neighboring towns was that Yonkers had already established itself as an independent urban community, in large part through its program of public works, by the time New York City was considering annexation. Although the available evidence is less than clear, the presence of a local business elite that controlled the village and later city government appear to have been the main force behind both Yonkers's physical development and independence from New York City. Infrastructural development and independence worked in tandem. Control of the local government, which would be lost through annexation, enabled economic development, including public works, and those public works projects further enabled Yonkers's independence from New York City.

Later infrastructure projects in other metropolitan areas conform to the basic outlines of the process described in this article. For instance, as Elkind (1998) explained, when San Francisco began to consider the construction of the Hetch Hetchy Aqueduct in the early 20th century, it actively sought the participation of East Bay cities such as Oakland, who initially were supportive and interested in participating in the procurement of a new water supply. However, "as Hetch Hetchy became identified with Bay Area metropolitan consolidation schemes" (Elkind, 1998, pp. 72-73) modeled after the five-county consolidation of New York in 1898, East Bay communities lost interest in the project. For instance, "in Oakland, consequently, Hetch Hetchy was widely condemned as an effort to reduce local autonomy" (pp. 72-73). Notably, Elkind commented that

Oakland's business community, in particular, strongly opposed Hetch Hetchy. The thought that the East Bay's economic fate might one day lie in San Francisco's hands was anathema to ambitious business leaders who had long resented San Francisco's preeminence in northern California. (pp. 72-73)

Thus, in California as well, water infrastructure underwrote a business-elite-inspired balkanization of a metropolitan area.

Except for the very narrow defeat of the first proposed waterworks bond issue, there is little evidence to suggest that in pursuing infrastructural development or Yonkers's municipal autonomy, the local business elite were operating contrary to the general wishes of the residents. In fact, if the local newspapers, both Republican and Democrat, are any indication, it appears that the policies of infrastructural development and municipal autonomy proceeded for the most part with the unanimous consent of village residents. This is in agreement with Peterson's (1981) argument that developmental policies—those that enhance the land, labor, or capital of a community—generally generate consensus because they benefit all members of the community. Thus, although Peterson's argument has been subject to a good deal of criticism, it may very well hold true in the case of Yonkers in the 19th century.

What the case of Yonkers may indicate further, however, is that local developmental policies operated to reinforce municipal boundaries and thus increase the degree of fragmentation within a metropolitan area. To the extent that metropolitan fragmentation then leads to an economic sorting, where resources are distributed unequally across a metropolitan area, the case of Yonkers might thus suggest that local developmental policies ultimately contribute to the economic and social isolation of a municipality, which might harm its future prosperity and sustainability.

Furthermore, to the extent that local developmental policies contribute to metropolitan fragmentation, economic development also becomes a self-reinforcing cycle of local policy. As Peterson (1981) noted, it is because city governments must compete with one another for labor and capital that they are constrained to pursuing developmental policies as opposed to redistributive policies. Thus, to the extent that infrastructural development increases metropolitan fragmentation, it increases intercity competition and thus closes off local policy options. This may provide part of the explanation for Felbinger's (1995) finding that in the 20th century, infrastructural development has become more a component of economic development rather than an essential component "of the complete city—socially, spatially, as well as economic" (p. 126), the result being that considerations for the health and safety of citizens have also been neglected.

To the extent that local developmental policies contribute to metropolitan fragmentation, economic development also becomes a self-reinforcing cycle of local policy.

Notes

1. On the more general effects of metropolitan fragmentation, see Hill (1974), Neiman (1982), and Rusk (1995). For an important criticism of the view that metropolitan fragmentation causes an unequal distribution of government services across metropolitan regions, see Ostrom (1983).

2. Population figures for Yonkers come from Allison (1896) and from "Yonkers in the U.S.A.," (1954).

3. Spann is of course mistaken when he claims that Morrisania was annexed to New York City in 1898.

4. See, for instance, the classic arguments made by Miller (1968) and Warner (1962).

5. Discussion of incorporation received heavy coverage in *The Yonkers Gazette* from January 22 to February 26, 1870, and in *The Statesman* from January 13 to February 17, 1870. The quote noting that there was no use pressing the matter appeared in the *Gazette* on March 19, 1870. *The Statesman* noted on April 4, 1870, that in the recent town and county elections more Republicans had been elected to office.

6. See, for instance, in the *Gazette*, a reprint from *The New York World* in the Local News and Gossip section, April 11, 1869, and a front-page article on the history of Westchester County that noted "it is quite safe to predict that in a few years the lower end of Westchester county will be absorbed by the city" ("Westchester: Interesting Historical Reminiscences," 1869). In 1954, the *Yonkers Historical Bulletin* claimed that the incorporation of the city of Yonkers was a move "reportedly to prevent absorption by New York City" ("Yonkers and the U.S.A.," 1954, p. 5). Stone (1969, p. 5) makes a similar claim.

7. See *The Yonkers Gazette*, August 20, 1870. Apparently, there had been an annexation bill presented in the previous legislative session, although, as *The Statesman* noted, "no action . . . was taken. The plan was not ripe" ("Are We Going to New York?" 1871, p. 4). Stone (1969), who claimed that "the first actual attempt in the Legislature at annexation came in 1869" (p. 3), actually appears to be referring to the 1871 bill, although he mentions only Morrisania, West Farms, and Mount Vernon as areas that were proposed to be annexed. Considering that Mount Vernon was only a village in the town of Eastchester at this time, such a proposed annexation would have made little sense.

8. Annexation received heavy coverage in the *Gazette* from December 10, 1870, to February 18, 1871, and in *The Statesman* from December 29, 1870, to February 16, 1871. For the range of opinion on the impact and significance of the Tweed Ring, see Myers (1917/1971), Callow (1966), Mandelbaum (1965), and Hershkovitz (1978). Although Hershkovitz questioned the very existence of the Tweed Ring, he did acknowledge that the image of such a ring was a salient one in the late 1860s and early 1870s. Most important for the purposes here, the image of the Tweed Ring as a corrupt political machine in New York City would certainly have been known through Nast cartoons and other newspaper coverage to the residents of Westchester County.

9. According to Stone (1969), "in 1864, Morrisania, in an attempt to take steps toward annexation, obtained from the State Legislature a Board of Trustees system which had all the power of a city corporation but without the incidental expense" (p. 2). Stone did not explain why this was a "step toward incorporation."

10. *The Yonkers Gazette*, December 9, 1871 and March 9, 1872; *The Statesman*, March 21, 1872.

11. More specifically, "the north line of Mt. St. Vincent [was] made the south line of the city," ("The City Charter," 1872). For more on the incorporation, see *The Yonkers Gazette*, March 9, April 13 and 27, May 11, June 8 and 29, 1872, and *The Statesman*, March 21, May 30, and June 6, 1872.

12. Spaulding's comment was also treated critically by *The Statesman* on January 23 ("Town of Kingsbridge") and January 30 ("Kingsbridge and Yonkers"), 1872. Spaulding owned a plot of land between the Hudson River and Kings Bridge Road, in the Riverdale section of the town of Yonkers. See plates 20 and 21 in Beers (1868).

13. Articles and other commentary on the annexation of Kingsbridge, Morrisania, and West Farms appeared in the *Gazette* on January 18, February 8 and 22, March 1, April 19, May 3 and 10, September 13, and November 1 and 8, 1873, and in *The Statesman* on January 1 and 16, February 6, April 24, and May 8, 1873.

14. *The New York Times*, April 4 and May 2, 1873; *The Yonkers Gazette*, February 19, December 10 and 24, 1870; *The Yonkers Gazette*, January 7, 14, 21 and 28, February 4, 1871; *The Statesman*, February 3 and 17, 1870; January 5, 1871.

15. Mazaraki's (1966) dissertation on Green is the most comprehensive account available of this important reformer's life. See also Foord (1913).

16. On the fall of the Tweed Ring, see Callow (1966, chap. 17) and Hershkowitz (1978).

17. On the Boulevard Ring, see also the letter to the editor from "Fair Play" in the *Yonkers Gazette*, February 2, 1870.

18. On the Croton Aqueduct, see Blake (1956). On New York City's supplying the newly annexed areas with water, see Stone (1969, p. 14), *The Yonkers Gazette*, August 20, 1870, and May 10, 1873; and *The Statesman*, April 24 and May 8, 1873. Ironically, Kingsbridge and West Farms were not supplied water from any source until 1882, when they began to buy water from Yonkers (Scharf, 1886, p. 25).

19. Actually, at a taxpayers meeting in December 1871, on the subject of supplying Yonkers with water, the president of the Board of Trustees, Robert P. Getty, noted that "the project of supplying this village with water is something which has been agitated for seventeen or eighteen years" (*The Yonkers Gazette*, December 21, 1871). Unfortunately, there is no record (that I have found) of the previous agitations that Getty was referring to.

20. *The Yonkers Gazette*, October 9 and 23, December 25, 1869; February 5, 1870; December 16, 23, and 30, 1871; January 13, 1872. *The Statesman*, September 2, 23, and 30, 1869; January 27 and February 3, 1870; December 21 and 28, 1871; January 11, 1872. See also Allison (1896, pp. 240-246), Scharf (1886, p. 37), and Evans (1995).

21. See *The Yonkers Gazette*, March 8, 1873. There is no direct evidence to show that the residents of Yonkers wanted to incorporate as a city to facilitate the development of a water supply system, although incorporation certainly did facilitate the development of a water supply system. Moreover, given that incorporation was generally desired for an area to better supply residents with services, the development of a water supply system would certainly be a likely reason for the residents of Yonkers to want to incorporate as a city. Only one letter to the editor from "L" in the *Gazette* made the connection between incorporation and the water supply explicit:

I have two suggestions to make: First—To incorporate the city of Yonkers. Second—To incorporate the Yonkers Water Works Company, and then issue city . . . water loan bonds for building of the same. I shall be a liberal subscriber if the thing is put in this shape. (*The Yonkers Gazette*, January 22, 1870)

22. Steigman (1954) noted that there was apparently a second referendum on the Yonkers waterworks in November of 1872 that showed an affirmative vote. However, he provided no documentation of this referendum. In my own examination of *The Yonkers Gazette* and *The Statesman* for this period, I found nothing to suggest that there had been a second referendum.

23. The Steinway waterworks became the most extensive water supply system in Queens County and remained so well into the 20th century (V. F. Seyfried, personal communication, February 2000).

24. On the cholera epidemics of the 19th century, see Rosenberg (1962). Rosenberg discusses the 1873 epidemic in the conclusion (pp. 226-234).

25. *The Statesman*, August 1 and 29, 1873; *The Yonkers Gazette*, August 9 and 30, 1873.

References

- Allison, C. E. (1896). *The history of Yonkers, Westchester County, New York*. New York: W. B. Ketchum.
- Anderson, L. (1988). Fire and disease: The development of water supply systems in New England, 1870-1900. In J. A. Tarr & G. Dupuy (Eds.), *Technology and the rise of the networked city in Europe and America* (pp. 141-142). Philadelphia: Temple University Press.
- The annexation of Knightsbridge. (1873, January 18). *The Yonkers Gazette*.
- Annexation! Town meeting. (1871, January 21). *The Yonkers Gazette*.
- Are we going to New York? (1871, January 5). *The Statesman*, p. 4.
- Beers, F. W. (1868). *Atlas of New York and vicinity from actual surveys*. New York: Beers, Ellis and Soule.
- Blake, N. M. (1956). *Water for the cities: A history of the urban water supply problem in the United States*. Syracuse, NY: Syracuse University Press.
- Burns, N. (1994). *The formation of American local governments: Private values in public institutions*. New York: Oxford University Press.
- Burrows, E. G., & Wallace, M. (1999). *Gotham: A history of New York City to 1898*. New York: Oxford University Press.
- Callow, A. B., Jr. (1966). *The Tweed Ring*. Westport, CT: Greenwood.

- The city charter. (1872, May 25). *The Yonkers Gazette*.
- The city debt. (1891). In *Transcript of news articles (Queens Borough Public Library), 1891* (pp. 23-25).
- "The City of Yonkers: Views of the People on the Subject." *Yonkers Gazette*. (1870, January 22).
- Danielson, M. N., & Doig, J. W. (1982). *New York: The politics of urban regional development*. Los Angeles: University of California Press.
- Department of Public Parks and Yonkers. (1872, December 12). *The Statesman*.
- Dilworth, R. (2001). *Paving bodies politic: Government fragmentation and infrastructural development in the American metropolis*. Unpublished doctoral dissertation, Johns Hopkins University, Baltimore.
- Elkind, S. S. (1998). *Bay cities and water politics: The battle for resources in Boston and Oakland*. Lawrence: University Press of Kansas.
- Equalization of assessments. (1858, January 7). *The Yonkers Examiner*.
- Evans, H. B. (1995). The early history of the Yonkers water system. *The Yonkers Historical Society Newsletter*, 4 (summer), 1-2.
- Felbinger, C. L. (1995). Conditions of confusion and conflict: Rethinking the infrastructure-economic development linkage. In D. C. Perry (Ed.), *Building the public city: The politics, governance, and finance of public infrastructure*. Thousand Oaks, CA: Sage.
- Foord, J. (1913). *The life and public services of Andrew Haswell Green*. New York: Doubleday, Page and Company.
- Hammack, D. C. (1982). *Power and society: Greater New York at the turn of the century*. New York: Russell Sage Foundation.
- Hershkowitz, L. (1978). *Tweed's New York: Another look*. Garden City, NY: Anchor.
- Hill, R. C. (1974). Separate and unequal: Governmental inequality in the metropolis. *American Political Science Review*, 68, 1557-1568.
- History of Queens County*. (1882). New York: W. W. Munsell.
- Jackson, K. (1985). *Crabgrass frontier: The suburbanization of the United States*. New York: Oxford University Press.
- Kingsbridge and Yonkers. (1872, January 30). *The Statesman*.
- Mandelbaum, S. J. (1965). *Boss Tweed's New York*. New York: John Wiley.
- Mazaraki, G. (1966). *The public career of Andrew Haswell Green*. Unpublished doctoral dissertation, New York University.
- Melosi, M. V. (1980). Environmental crisis in the city: The relationship between industrialization and urban pollution. In M. V. Melosi (Ed.), *Pollution and reform in American cities, 1870-1930* (pp. 16-17). Austin: University of Texas Press.
- Miller, Z. L. (1968). *Boss Cox's Cincinnati: Urban politics in the progressive era*. New York: Oxford University Press.
- Minor topics. (1873, January 6). *The New York Times*.
- Moehring, E. (1985). Space, economic growth and the public works revolution in the United States. In *Infrastructure and urban growth in the nineteenth century*. Chicago: Public Works Historical Society.
- Myers, G. (1971). *The history of Tammany Hall* (2nd ed.). New York: Dover. (Original work published 1917)
- Neiman, M. (1982). An exploration into class clustering and local-government inequality. In R. C. Rich (Ed.), *Analyzing urban-service distributions*. Lexington, MA: D. C. Heath.
- Ostrom, E. (1983). The social stratification-government inequality thesis explored. *Urban Affairs Quarterly*, 19, 91-112.
- Our water supply. (1873, May 8). *The Statesman*.
- Our water supply. (1891). In *Transcript of news articles (Queens Borough Public Library), 1891* (pp. 304-305).
- Peterson, P. E. (1981). *City limits*. Chicago: University of Chicago Press.
- The proposed annexation of Westchester towns. (1870, December 28). *The New York Times*.
- Rosenberg, C. F. (1962). *The cholera years: The United States in 1832, 1849 and 1866*. Chicago: University of Chicago Press.
- Rusk, D. (1995). *Cities without suburbs* (2nd ed.). Washington, DC: The Woodrow Wilson Center Press.
- Scharf, J. Thomas (1886). Vol. 2. *History of Westchester County, New York, including Morrisania, King's Bridge and West Farms, which have recently been annexed to New York City*. Philadelphia: L.E. Preston and Company.
- Seymour, J. M. (1900). Annual message to the Common Council. May 7, 1900. In *Newark Annual Reports 1899*.
- Shefter, M. (1985). *Political crisis/fiscal crisis*. New York: Basic Books.
- A slow commission. (1873, June 27). *The Statesman*.
- Spann, E. K. (1981). *The new metropolis: New York City, 1840-1857*. New York: Columbia University Press.
- Steigman, A. L. (1954). *The emergence of executive power in the government of Yonkers: A political-administrative history documenting the period 1853-1908*. Unpublished M.P.A. thesis, Baruch College, City University of New York.
- Steigman, A. L. (1967). *Mayor-council government: Yonkers, New York 1908-1939—A study of "failure and abandonment."* Vol. 1. Unpublished doctoral dissertation, New York University.
- Stone, R. (1969). The annexation of the Bronx, 1874. *Bronx County Historical Society Journal*, 6(January), 1-24.
- Teaford, J. C. (1979). *City and suburb: The political fragmentation of metropolitan America, 1850-1970*. Baltimore: Johns Hopkins University Press.
- Teaford, J. C. (1984). *The unheralded triumph: City government in America, 1870-1900*. Baltimore: Johns Hopkins University Press.
- Town of Kingsbridge. (1872, January 23). *The Statesman*.
- Warner, S. B., Jr. (1962). *Streetcar suburbs: The process of growth in Boston, 1870-1900*. Cambridge, MA: Harvard University Press.
- The water bill. (1873, January 16). *The Statesman*.

- The water commissioners. (1873, July 4). *The Statesman*.
- The water question. (1872, December 14). *The Yonkers Gazette*.
- Westchester County. (1870, December 11). *The New York Times*.
- Westchester: Interesting historical reminiscences. (1869, November 13). *The Yonkers Gazette*. (Reprinted from *The Missouri Republican*, May 14, 1857)
- Wood, R. C., & Ameringer, V. V. (1961). *1400 governments: The political economy of the New York metropolitan region*. Cambridge, MA: Harvard University Press.
- Yonkers in the U.S.A. (1954). *Yonkers Historical Bulletin*, 2, 5.
- "Yonkers by a New Yorker." (1857, January 22). *Yonkers Gazette*.