Interchange: Highways and Displacement in the Postwar American City

Abstract

Though its route cleaved to a 19th century rail corridor, building the urban extension of the Massachusetts Turnpike (1962-1965) was an unsettling experience. The six-lane highway overflowed the tight dimensions presented by the Boston & Albany Railroad’s graded right-of-way. The result was significant land-takings and human displacement, on either side of the rail bed and especially at the interchanges within the limited-access road network. In West Newton, an African-American community (in place since the 1870s and organized around the Myrtle Baptist Church) was ruptured by a wide-swinging turnpike interchange. In Boston, the Mass Pike connects to the Central Artery at Kneeland Street (figure 1), the site of a longstanding Chinese-American community that was partially displaced. By urban space to the function of traffic, Turnpike planners and builders embraced the some and exiled the other, thus inscribing a selective realm of citizenship. As a physical system, the toll road unevenly reflected commuter trends: a center-seeking automotive circuit, built by a bond-issuing Authority, and largely paid for by the dime-tossing motorist. Chartered by the State Legislature to implement an explicitly spatial policy, the Authority marshaled extra-legal instruments of eminent domain, as well as a normative rhetoric of citizenship that equated traffic projections with democratic validation. By doing so, the Pike enthroned white-collar commuters as the heirs apparent to urban space in the postwar American city. This paper shows how the legal inception of the Turnpike Authority set into motion an unaccountable politics of displacement, framed in the language and logic of rational planning. I also argue that the Authority’s (led by a garrulous Chairman, William F. Callahan) none-too-gentle methods of land condemnation and resettlement would catalyze a virulent anti-highway lobby in Massachusetts, which culminated in the 1970 moratorium on the construction of freeways by Governor Francis Sargent.

---

1 Today, the same place hosts the “mother of all interchanges,” a six level automobile transition hub that is the fulcrum of Boston’s “Big Dig” highway reconstruction project.
In the early 1950s, both the Massachusetts Turnpike Authority and the Prudential Insurance Company of America cast their eyes at an increasingly obsolescent rail infrastructure in Boston as an armature for modernization and development. The “Pike” would follow the route of the Boston & Albany rail bed, and the “Pru” would be built on a 30-acre railyard in the Back Bay. The two projects were designed and planned together. But the coordination was more than physical. Eventually, the Prudential bought nearly one-third of the $180 million bond issue used to finance the construction of the Pike. Together, the Pike and the Pru represented the aspirations of a “New Boston,” an office center for the white-collar service economy. The architecture of Prudential Center accentuates the closed-system of this postwar highway-megastructure. The Pike and the Pru form an urban interchange, a broad ramp delivering cars to three levels of parking garages that straddle a broad easement for the Pike. The Pike continues to South Station where it connects with the Central Artery, a limited-access elevated highway that has recently been placed underground (the “Big Dig.”) It was at this site of connection that a Chinese community was partially displaced. It was here that the arbiters of urban space – the Turnpike Authority, backed by a State charter, and its bond-holders; contractors, and politicians – decided to sacrifice stability for movement by assigning urban space to traffic as opposed to communities. The “public good” was equated with traffic flow, which became a central priority of urban planning. Creating refugees was less costly than congestion.
II. Boston’s Chinatown and the Ethnic Geography of Rail

Figure 2. Rhoads Murphey’s land use map for downtown Boston, 1952. “Chinatown” is the small sliver in the Southeast quadrant of the map, adjacent to the yards of South Station and surrounded by a manufacturing and wholesale district. Economic Geography, Vol. 28, No. 3 (July, 1952).

Chinese are the ultimate foreigners in the U.S. The majority of those who live and carry on their business in Boston’s Chinatown do so because race prejudice makes living and business difficult or impossible elsewhere.²

The mixed-use tenement district around rail terminals has served a consistent function in American cities: to house new immigrants before moving on to pleasanter climes. In 1952, Geographer Rhoads Murphey used public school records to chart the sequential occupation of a small district adjacent to Boston’s South Station. By reading ethnicity in the surnames listed in the Quincy School’s enrollment records, Murphey establishes an ethnic succession in the neighborhood. In this model, immigrant groups eventually gain access to new residential geographies (and perhaps become accepted as “white” in American society.) But, geographer Murphey argues, “succeeding immigrant waves have had a lower and lower status in American eyes and have been progressively more foreign.”³ Chinese settlements in American cities typically occur near the point of arrival. In San Francisco and New York this was the harbor. In Boston, Chinese began arriving overland from the West by rail in 1870, and Chinatown coalesced as a recognizable district between 1900 and 1920. But the Chinese are the “ultimate foreigners” in the United States, Murphey writes in 1952, because of their slow process of Americanization and the fixity of their residential geography.

---

³ ibid., p. 247.
III. At the Crossroads: Inertia of Transport Investments

In the 1830s, the earliest railroads to Boston traversed the marshlands of the Back Bay before terminating on filled land in the South Cove. A manufacturing, wholesale, and immigrant tenement district developed there. Once marked as a transportation crossroads, the South Cove would be targeted for successive infrastructural improvements. The rail terminal itself was expanded and modernized in 1900. An elevated streetrail was installed in the first decade of the 20th century. By the 1920s, many tenements were destroyed when land became more valuable as surface parking lots to service the central business district. By mid-century, major highway projects were planned for downtown Boston, and the then-established Chinese community fought for minimal concessions regarding land acquisition. The very reasons that Chinatown thrived in a small, circumscribed area around South Station – its low exchange value, its perceived undesirability – were the same reasons that this district was targeted as the path of least resistance for modern highway infrastructure. In 1952, the Central Artery – an elevated, limited-access expressway (which followed the path of the elevated rail on Atlantic Avenue) -- planned as the central link in Boston’s postwar highway plan, was interjected through Chinatown toward Boston’s congested CBD. Adding insult to injury, the newly constructed Consolidated Chinese Merchants Association and Benevolent Society building (opened in 1951, and designed in a “Chinese Modern” style) was partially destroyed to make way for the Central Artery. Only a few years later, William F. Callahan, Chairman of the Massachusetts Turnpike Authority, sought to connect his statewide toll road with Boston’s new urban expressway.
IV. From Rail Road to Toll Road: the Mass Pike and the Modernization of Rail

Figure 4: Cartoon from Perini News in 1957 – the “Turnpike Pilgrim” eyes the right-of-way of the B&A in order to make his way to the “hub” of Boston.

The Massachusetts Turnpike Authority was chartered by the State legislature in 1952 to build a road from a point in the “vicinity” of Boston to the New York border. This public corporation was viewed as an efficient institutional arrangement for the purpose of building highways that the state could not afford. The Authority would issue bonds and repay them with toll revenue. In 1955, William F. Callahan persuaded the legislature to make a crucial amendment to the original charter, empowering the Authority to build and operate a road “from a point in the vicinity of the city of Boston, or from point or points within said city” (amended language in italics.) This seemingly benign manipulation became the legal mandate for the urban extension of the Turnpike. By 1957, Callahan had built the Turnpike from the New York border to the Route 128 beltway.\(^4\) By no accident, this terminus was designed to align with the right-of-way forged by the Boston & Albany rail-bed, which ran principally through the City of Newton. Here lay the path of least resistance to Boston.

\(^4\) Using Callahan as the chief actor is a narrative crutch. However, Callahan was also instrumental in building Route 128, which was opened in 1952, when he served as Commissioner of the State Department of Public Works. This is an indication of the crucial role William F. Callahan played in mid-century road-building in Massachusetts.
V. Interchange: West Newton

Chairman of the Mass Pike William F. Callahan was quoted in a press release on January 22, 1962:

Although the Boston Extension will be built along the depressed roadbed of the Boston & Albany Railroad tracks . . . there will still be relocations of many people from homes and places of employment. They have been on the tenderhook of anticipated relocation since 1956 when we selected the railroad tracks as the right-of-way for the Boston Extension. . . . We are fully aware of the hardships they will have to endure, no matter what the price may be; however, the public is paying an even greater price in death, injuries, inconvenience an inefficiencies because of sub-standard and dangerously overcrowded road and streets that fail to properly serve the biggest segment of our metropolitan population.

Callahan made no apologies for his projected route to Boston. By cleaving to the Boston & Albany right of way, the Authority’s engineers were merely capitalizing on the landscape’s “natural” advantages. The route was all the more appealing to road builders because the B&A had channeled their rail-bed below street grade in the 1890s. Railroad executives at the B&A commissioned the firms of F.L. Olmsted and H.H. Richardson to landscape the corridor and design station houses of stone and shingle, respectively. A series of commuter “villages” developed around each station. The Mass Pike would

---

5 William Cronon would refer to the accretion of infrastructural investments in the landscape as “second nature.” See *Nature’s Metropolis*.

6 In fact, the villages of Newton can be traced to colonial settlements, and Newton had since the early 19th century been characterized by villages organized around the falls of the Charles River, where mills were established.
dramatically re-map these villages, ironically mimicking the spatial logic of the railroad. The strategic placements of rail stations were similarly appealing to Turnpike planners seeking to design points of access at high-traffic sites. Callahan may have believed that the damaging affects of “dividing a town in two” had already been established by the railroad. Nevertheless, building the Turnpike in Newton displaced hundreds of families, and particularly at three interchanges – Auburndale, West Newton, and Newton Corner. The Turnpike was also designed with truck commerce in mind, but these access points cast the Mass Pike as a commuter network, and Newton as a white-collar bedroom community. In West Newton, the Hicks Street became an African-American enclave on the North side of the B&A railroad tracks, organized around the Myrtle Baptist Church, not far from the train Station. But this was the “other side of the tracks,” and the area was targeted by the Turnpike Authority for a wide-swinging interchange that was designed to accommodate commuters to Boston coming from the South Side of the tracks, where Newton’s picturesque 19th century middle-class subdivisions and gridded 1920s infill tracts were located. The Turnpike was not built for the Hicks Street community. In fact, access to the Pike was not intended from the North in West Newton. Though the Church itself was left untouched, a large adjacent lot was taken for a Turnpike service station that was never built.

---

7 I mean this as a short-hand for all of the familiar discrepancies in land use, land value, and residential segregation by race and class that are typically observed in town and cities endowed with rail infrastructure. It is a similar phenomenon to land use around rail termini; however, the “other side of the tracks” applies along a linear path and not at single node.
VI: The Public is Traffic

Figure 6: The 1948 Master Highway Plan for Metropolitan Boston used origin & destination studies to project desire lines from the periphery to the center. The red lines are proposed highway projects intended to satisfy these desires.

If a road wasn’t built into Downtown Boston that they better look up Chief Chickatawbut’s descendants (he is the Indian Chief from whom Gov. Winthrop purchased boston) and arrange to give downtown Boston back to the Indians.  

To carry out its task, the Turnpike Authority was chartered with the power of eminent domain, a Constitutional tool that called for personal sacrifice in the face of public good. In the history of American road-building, eminent domain has commonly been used to compensate property owners compelled to cede a portion of their parcel in order to build a road that represented communal prosperity and connectedness to new markets. In this vein, William F. Callahan may have believed sincerely that his Turnpike would be a lifeline for Boston, a city that had seen little new investment since the 1920s. However, his desire to extend the road into Boston was not purely altruistic. He had the financial stability of his own bureaucratic enterprise to consider. Extending the Pike to Boston, and connecting it with the Central Artery, would ensure a considerable market for the road. A substantial cottage industry of consulting transportation engineers flourished in postwar America to rationalize highways such as the Massachusetts Turnpike. The method was essentially statistical, and rested on a bewildering quantity of origin-destination studies and traffic counting exercises. No further proof of public benefit was necessary. The powerful cultural notion of progress in the automotive age made it

---

8 Turnpike Authority press release, quote of William F. Callahan, 1961. The parenthetical statement is Callahan’s, intent on demonstrating his knowledge of Boston’s colonial history.
difficult for urban elites or politicians to oppose highway building. The statistical roots of traffic planning were firmly in place at least since they were employed in the 1930 Thoroughfare Plan for Boston, and reaffirmed by the 1948 Master Highway Plan for Metropolitan Boston, which used traffic statistics to project desire lines across the landscape of Greater Boston. For the most part, these desire lines reflected center-periphery commuting patterns; and the most vigorous of these were charted due West of Boston – precisely the road that Callahan proposed to build. But what is ignored in this vision of the highway and the city are human costs of removal, and the desires of those social groups that are geographically excluded from the flow of traffic.

VII. Conclusion: Inscribing Citizenship

Callahan’s turnpike to Boston would not go uncontested. Political leadership in the City of Newton, afraid that the Pike’s land-taking would adversely affect the City’s tax rolls, advocated a route that would have used the Charles River as the avenue to Boston. In the wake of the 1956 Federal-Aid Highway Act, Governor John Volpe (who had a long-standing rivalry with William F. Callahan) organized a campaign to build a freeway to Boston. A group of professors from M.I.T. published a report that questioned the legitimacy of the Pike’s traffic projections. But none of these counterproposals fundamentally challenged the premise of an urban highway to Boston.

Under eminent domain, homeowners are entitled to “fair market value” on their property should it be seized by the state; or in this case, the Turnpike Authority. In reality, the Turnpike Authority did everything in its power to manipulate the cost of land acquisition. Both the Chinese community in the South Cove and the Myrtle Baptist Church community in West Newton were unprepared to organize a social movement to question the logic of state authority. However, the experience of building the Pike would influence a generation of planners, local leaders, and young politicians who sought a more equitable discourse on the outcome of urban development. After two years of wrangling, construction of the Pike and the Pru went forward together in 1962 and both were completed in 1965. But the Turnpike Extension would sabotage the remainder of Boston’s postwar highway plan. When it came time to plan the “Inner Belt,” a virulent anti-highway lobby had coalesced – a coalition of cultural elites, who sought to preserve F.L. Olmsted’s “Emerald Necklace” park system, as well as community leaders in Roxbury and Cambridge who fought against reckless land takings. In 1970, Massachusetts Governor Francis Sargent called a moratorium on highway building in Greater Boston. Mere traffic projections were no longer an adequate reflection of the public interest. In this sense, the very constituency of the “public” would be expanded to embrace those who previously had not organized a social voice.

---

9 But the institutional complicity goes even further. There was little incentive for traffic engineers not to predict the need for new roads. Were they to do so, their services would no longer be commissioned by highway authorities with a desire to build. Since the organization of modern government, road-building has served as an important source of patronage and power-brokering. The economic interests of contractors such as the Perini Corporation (which built both the Pike extension and the Pru) were also at stake.