

Central Corridor Highway Planning in Boston, 1900–1950: The Long Road to the Old Central Artery

Massive highway projects are the result not only of sound planning and technological achievement but also of political will and consensus.

YANNI TSIPIS

Between 1951 and 1959, the streets of downtown Boston reverberated with the crash of wrecking balls, the crack of pile drivers and the staccato of rivet guns. For those eight years, the city lay torn open while the urban doctors of the day administered their chosen cure for the city's congestive ills. When the dust settled and office workers in the financial district peeled the tape off their windows, they looked out on a city whose very identity had been shaken to the core — enough to completely redefine the city's

image for the next half-century. In a city that had changed little physically since the turn of the twentieth century, here was remarkable change — massive, wrenching change on a scale not seen in the old city since men named Quincy and Pierce held court in the Boston city offices on School Street. "Boston carried its twentieth-century decay with the immense dignity of an old dowager in reduced straits," reported *Architectural Forum* in October 1959. "But her composure, unshaken by traffic-choked streets, grim elevated railway structures, honky-tonk shopping districts, and skid-row squares, has been decisively shaken."¹ Also remarkable was the speed with which this change proceeded. Although the idea of a new thoroughfare through downtown dated back at least to the first decade of the twentieth century, repeated and concerted attempts by city officials and private interests alike to bring these ideas into meaningful fruition had for decades come to naught. Beginning in the summer of 1947, however,

the long-dormant vision for a radical response to the city's traffic ills sprang suddenly to life, fueled by a unique and revealing confluence of public and private forces. Within the space of a few years, that vision passed — or more precisely, was pushed with great force — from a fuzzy line on a planning map to a hulking steel and concrete viaduct pouring through the streets of downtown Boston. Why had an idea nearly as old as the motorcar itself come so suddenly to fruition?

"Ancient" History

The troubles in Boston started early. In June 1639, the English General Court that presided over the Colony of Massachusetts Bay fined the nascent town of Boston "twenty shillings for defective highways." Furthermore, the court directed Boston "to repair them, upon penalty of five pounds." In 1665, a British Royal Commission visited the town and noted that "the streets are crooked, with little decency and no uniformity."² During the postrevolutionary period, as newer American cities grew according to grand plans based on rectilinear street grids and comprehensive systems of avenues and boulevards, Boston's downtown street network saw remarkably few alterations to its original seventeenth century street alignments and dimensions — yet at that time it continued to serve the city's residents and commercial interests. Until well into the city's third century of existence, Boston's compact density allowed residents to walk from their places of residence to conduct daily business and communications. In addition, the majority of the city's commercial activity took place on and in close proximity to its bustling waterfront, requiring little in the way of overland transport or the infrastructure to support it. Beginning in the 1850s, however, shifting demographic trends and advances in transportation technology began to lay the foundations of obsolescence for the old network of downtown streets.

In March 1856, a horse railway began service from Harvard Square in Cambridge to Bowdoin Square in Boston near the city's retail district. The service, reported the *Boston Transcript*, "exceeded the most sanguine expectations of the proprietors as well as our subur-

ban friends."³ Within a decade of the introduction of horsecar technology in Boston, service had rapidly proliferated to outlying residential areas, with rather un-sanguine effects on travel conditions in the city's downtown core. Because the greatest demand for horsecar service came from commuters, competing companies initially established line-haul service along many of the major radial thoroughfares leading into the city's downtown core from outlying residential districts such as Cambridge, Roxbury and Brookline. These early radial routes converged on the city center, but most of the tracks stopped just short of the business core, leaving crowds of passengers to reach their destinations on foot. By 1880, several major competing horsecar companies began to merge and to realize the efficiency of running relay service over routes that passed through downtown. The effect of the new through-routes on street traffic in the few major thoroughfares of the downtown core was swift and dramatic. Traffic passing through the central district was "gorged and dammed and struggles slowly through," observed the Rapid Transit Commission, which was convened by the General Court in 1891 to develop a comprehensive proposal for a rapid transit system in Boston. The commission in its 1892 report to the legislature noted that:⁴

the necessities of transportation have forced new uses upon the streets for which they never were designed, and to which they are not adapted at all . . . We have already pointed out their present inadequacy. It is needless to insist on what is seriously denied by nobody.

The situation downtown was made worse by the proliferation of electric streetcars in the 1890s. Since these cars used inexpensive and reliable power to run, they enabled the city's single street railway company to run more frequent service over an expanded network of routes (both in breadth and density), further exacerbating the crowded conditions downtown.

As street railway and municipal services networks expanded outward from the central city in the closing decades of the nineteenth

century, so too did the extent of outlying residential districts. The cycle of radial street railway development and new housing construction was spurred by a sustained influx of immigrants into the city's older residential districts, replacing native or older immigrant residents on their way up the socioeconomic ladder and out of the central city. Because commercial and retail activity in the region was still focused sharply in the downtown core, increasing numbers of streetcars serving an ever-expanding ring of residential suburbs continued to converge on a compact downtown core whose boundaries and streets had changed little since the revolutionary days. Between 1871 and 1891 alone, the annual ridership of the city's street railways (the overwhelming majority of which entailed radial journey-to-work trips with downtown destinations) quadrupled, from 34 million to 136 million. The congestion created in the downtown core by this volume of traffic — or more precisely, by the numbers of streetcars needed to provide service to these riders — threatened the viability of downtown Boston as a place to do business. The Rapid Transit Commission concluded that:⁴

we must make more room or submit to be squeezed and squeezed tighter and tighter as the years go on, until stagnation supervenes, or the strife is abandoned in despair, and trade betakes itself to more accessible quarters.

Traffic conditions on the streets of downtown, and the dire predictions that accompanied them, proved sufficiently alarming to inspire the General Court to pass sweeping legislation promoting the public construction of a transit tunnel under one of the city's most congested thoroughfares. The court also authorized the creation of a private company charged with constructing additional grade-separated transit facilities. By the turn of the twentieth century, streetcars flowed smoothly under Tremont Street and above Atlantic Avenue, and construction would soon begin on a long tunnel under Washington Street designed to "provide real rapid transit through the business section of Boston."⁵ For half a cen-

tury, the city had endured steadily deteriorating traffic conditions on the streets of downtown. By 1900, a comprehensive program of construction designed to remedy the city's congestion ills was nearing completion.

Origins & Destinations

On the first day of 1906, John F. Fitzgerald became the first mayor in Boston's history to ride to his inauguration in a motorcar. Promising a "bigger, better, busier Boston," Fitzgerald took the reigns of an old city growing with unprecedented rapidity and struggling to adapt to the emerging conditions. In the decade prior to Fitzgerald's election, the city's population had grown by 20 percent, the assessed valuation of its real property grew by 37 percent and expenditures on transit projects between 1895 and 1905 alone eclipsed the total of all expenditures made prior to 1895 by 185 percent.⁶ Downtown business was booming, and recent advances in construction technology made possible the construction of tall steel-frame office buildings with efficient floorplates on sites that once housed structures of masonry whose heights were encumbered by the inefficient space configurations created by thick stone columns and by limitations in vertical transportation. Downtown had no monopoly on new construction during this period, however. Along the broad avenues leading to Governor Square, a dozen modern hotels and apartment buildings rose from the recently reclaimed flood plain of the Muddy River. Farther still from the core, in the newly annexed districts south of the old city, residential development flourished on an unprecedented scale, enabled by major capital programs in transportation and sanitation. This development was turning Boston into what historian Sam Bass Warner called "a city divided." No longer the singular dense and cohesive nucleus of old, by 1900 Boston had become "a two part city — a city of work separated from a city of homes."⁷ Downtown, the demand for commercial and retail space supported the rapid development of the working city. In outlying areas of the city and neighboring suburbs, a great exodus from the inner city neighborhoods and the resulting demand for residential space supported the develop-

ment of tens of thousands of new homes. Apart from the city's network of radial street-car lines and new downtown subways, precious little physical infrastructure supported the critical transportation link between the city of work and the city of homes.

Rising from the tenements and narrow streets of the city's North End, Mayor Fitzgerald was intimately familiar with Boston's congestion in the residential sense. In 1910, inspired by a movement to beautify the city, the Edward Filene-sponsored *New Boston* magazine cited the need for "an investigation into present conditions of congestion" in the city's central district.⁸ The congestion referred to overcrowding in the city's tenement houses. Altruistic intentions aside, Filene and his fellow downtown businessmen soon were concerning themselves primarily with congestion of a different sort. Along Washington Street in front of Filene's flagship department store — and two blocks from the mayor's office on School Street — street and pedestrian traffic frequently moved at little more than a crawl for hours at a time.

The same year Fitzgerald took office, the city's Rapid Transit Commission reported that "the narrowness of the streets and sidewalks gives rise to a condition of things which is at times and in certain places insufferable."⁹ Aided by advances in building technology and engineering, the building stock of downtown Boston was adapting to the economic prosperity of the early 1900s, encumbered only by a 125-foot limit on building height imposed by the legislature in 1904. The same could not be said for the city's transportation network. Despite an extensive program of subway and elevated railway construction that tapped both public and private capital resources, street traffic conditions continued to deteriorate even as the new grade-separated facilities came into operation. The downtown streets that had served the old dense and compact city for centuries lacked the capacity to handle the rapidly growing throngs of vehicles and people who converged on downtown from all parts of the metropolitan area.

Early Metropolitan Approaches

In the first decade of the twentieth century, while the city's downtown struggled to adapt

to the complex logistical necessities of twentieth-century commerce equipped only with its centuries-old complement of narrow thoroughfares and ways, the surrounding region bore witness to a curious but systematic program of arterial road construction taking shape through virgin forests, along streams and shorelines, and around outlying commercial centers. Beginning with its charter in 1893, the Metropolitan Park Commission (MPC) embarked on a broad program to endow the Boston metropolitan region with a system of parks and recreation facilities linked by "parkways" that were intended to "make the reservations available and to facilitate pleasure travel between different parts of the District."¹⁰ By 1911, the MPC's system of parkways stretched for nearly 30 miles in and around the Boston metropolitan district, providing, in the words of the commission, "main thoroughfares for the district according to a systematic plan." In its 1911 annual report, the commission noted:¹⁰

Now that automobiles have come into such general use it is hard to imagine what the District would do without these arteries of travel . . . justified not merely by the beauty of its drives, but by its usefulness as a road system and the incidental solving of many sanitary and economic problems.

While the parkway system indeed offered the region's motorists a "beautiful, convenient, and complete system of intercommunicating pleasure ways," the system proved wholly unequal to the task of providing an efficient means of motor transport to and from the central district of Boston for those living in the region's rapidly expanding suburban region. In practice, the gracefully curving and well-appointed parkways proved ill-suited to handle the volumes and speeds of general (non-pleasure) traffic that flowed daily over the system. Worse still, each of the MPC's parkways ended far short of the downtown core for which most parkway motorists were destined. These motorists were left off in the Fenway, in Somerville or in Dorchester to slog their way into or through downtown over the city's existing roadway network. Conceived in

an era when widespread travel by motorcar seemed as unthinkable as travel by airplane, the metropolitan parkway system was not the regional solution to the city's congestion troubles by the time it was approaching completion in 1911. Caught by surprise by a rapid and unforeseen technological advance, the region's first attempt at comprehensive transportation planning expended significant sums building new highways in the wilds of Hyde Park, Medford and Milton while downtown Boston choked on congestion of "insufferable" proportions.

Between 1880 and 1910, the Commonwealth of Massachusetts's regional planning efforts in the Boston metropolitan area had resulted in the development of a water supply system serving Boston and nineteen other municipalities, a sanitary sewerage system serving a dozen communities, a well-developed park and parkway system stretching from Lynn to Milton and west to Newton, and a mass transit system (constructed largely by private capital) serving all towns adjacent to the city. These instances of metropolitan planning arose from the need and desire to provide public services to an increasingly decentralized populace, and were made possible by advances in technology that permitted the conception and construction of facilities large enough in scale to serve large numbers of customers in a broad geographic area. The metropolitan programs enjoyed the strong political support not only of legislators whose districts stood to benefit from the new facilities, but also from progressive political interests that were enjoying the height of their political power during this period.

The last major effort at metropolitan planning undertaken by the legislature before war intervened came in 1907 with the formation of the Metropolitan Improvements Commission (MIC), a five-member body appointed to "investigate and report as to the advisability of any public works in the metropolitan district which in its opinion will tend to the convenience of the people, the development of local business, the beautifying of the district, or the improvement of the same as a place of residence." More specifically, the MIC was to "consider the establishment of a systematic

method of internal communication by highways." In its 1909 report, the MIC recommended the creation of a "Metropolitan Highway Board" empowered to propose, investigate, lay out, design and construct new highways in the metropolitan Boston area.¹¹

Although the legislature took no immediate action on the MIC recommendation, it appointed a Joint Board composed of members of city, regional and state planning and transportation agencies to investigate those recommendations, develop more specific project-oriented recommendations and draft legislation based on the broad recommendations of the MIC. The board advocated a program of improvements that for the first time bridged the design gap between measures intended specifically to relieve local intown traffic congestion and those intended to provide more convenient metropolitan travel outside the central city. The Joint Board recommended several major improvements to the streets in downtown Boston, noting that:¹²

extensions and improvements of highways may be considered to be matters of metropolitan concern whenever they would provide thoroughfares . . . for the convenience of traffic and travel of all classes through and about the Metropolitan District.

The most significant of the Joint Board's recommendations was the opening of a "New Highway between North and South Stations." The board noted in its final report that:¹²

travel from all parts of the District north of the Charles River gathers at Causeway Street near the North Station and freight terminals, suffers from the inconvenience of the present streets leading to the South Station and freight terminals and to the southern portion of the District; while, on the other hand, much of the travel from the south portion of the District gathers about the South Station, and . . . is inconvenienced in reaching the North Station and freight terminals and portions of the District to the north and west.

For the first time in the commonwealth's history, transportation planners had made the case

that downtown congestion affected travel throughout the metropolitan region. These planners proposed to address the problems of regional transportation with a localized improvement — an 80-foot wide new street carved out of the existing street network leading directly from the major approaches to the north (the Warren and North Washington Street bridges) through downtown and connecting with Atlantic Avenue and the Northern Avenue bridge just south of the downtown core. The Joint Board proposed constructing the so-called New Business Thoroughfare in conjunction with a railroad tunnel following a similar alignment, connecting North Union Station with South Station. "The advantages of a short and speedy connection . . . are manifest," wrote the board. This joint road/rail artery through the city's old congested district promised to benefit the city's downtown by relieving surface traffic (including rail passengers transferring between terminals by streetcar or motor taxi), and would alleviate a longstanding regional transportation bottleneck by providing a direct highway route through downtown Boston for crosstown traffic.¹²

This New Business Thoroughfare was intended as a central link in a proposed system of regional arterials included in the Joint Board's 1911 final plan. The board, however, lacked any real political power of its own and could only make recommendations to the General Court. Despite the Joint Board's prescient and comprehensive evaluation of regional transportation needs, the legislature shied away from funding or commissioning further study of any of its plans. The well-reasoned and repeated suggestions that a comprehensive "metropolitan highway" system be actively investigated and pursued faded with the wane of progressivism and the concurrent ascent of the political machine of James Michael Curley as mayor of Boston in 1914. With the state legislature entering a decade of overwhelmingly Republican control, the ascent of the pugnacious Democrat Curley as Boston's mayor spelled the end of state support for metropolitan programs whose primary beneficiary was the city of Boston. Only for a brief period during the mayoralty of Andrew Peters between 1918

and 1921 was any serious suggestion again made that the possibility of an empowered metropolitan planning entity or metropolitan government should be explored. For much of the next three decades, the legislature's attention was focused primarily on highway construction programs in rapidly developing outlying parts of the metropolitan area, leaving Boston to tackle its congestion troubles with only token support from the commonwealth.

Local Initiatives & the Re-emergence of the Crisis Mentality

Late in 1923, the decade-old Boston City Planning Board presented Mayor Curley with its plans for a new "Intermediate Thoroughfare," a 100-foot wide traffic artery cutting through the downtown district and connecting to existing major routes serving outlying areas. The new thoroughfare was intended to provide a solution to the "intolerable conditions in the down-town section of Boston" by "rectify[ing] a fundamental error in the street plan of the city."¹³ The congestion caused by the fundamental error in Boston's street pattern cited by the City Planning Board had, by the early 1920s, driven all of downtown's transit service underground into subways or onto elevated structures, leaving the streets to pedestrians and rapidly increasing numbers of motorcars and trucks. Street traffic conditions downtown deteriorated with startling rapidity as the number of motorcar registrations in the state — concentrated in the Boston metropolitan area — nearly quadrupled between 1918 and 1925. The root of the downtown problem, according to the City Planning Board, lay in its estimate that of all the street traffic coursing through the two existing major downtown thoroughfares — Tremont and Washington streets — 90 per cent of it "has no business in that district and is simply going through to some other point."¹⁴ Furthermore, the board pointed out that the increasing numbers of motorcars crowding onto downtown streets were impeding the trucking and cartage operations that served downtown's retail establishments. The board estimated that downtown traffic cost the city's retail customers \$6 to \$7 million annually as the increased cost of transporting goods was passed on to the consumer

in the form of higher retail prices. The board's Intermediate Thoroughfare plan was intended to address the city's traffic ills by opening up the city's most congested district and allowing through-traffic to bypass the crowded retail streets. The plan's sponsors noted that the Intermediate Thoroughfare was "a city-wide rather than a local improvement and that the entire business district will derive a direct, substantial, and assessable benefit therefrom."¹⁴ Although generally referred to as a comprehensive street improvement plan, the city's 1923 plan was in fact a highly localized initiative whose constituents commanded little influence beyond the city's borders.¹⁵

With an estimated price tag of nearly \$33 million, the city's Intermediate Thoroughfare plan proved impossible to finance at the city level, so Mayor Curley took the plan to the legislature in 1924 in the hope of securing state funds to pursue the project. The General Court spurned Curley's immediate request of funding for the thoroughfare (although it did see fit to appropriate funds for two smaller improvements), but took the modest step of appointing an unpaid commission of city officials to investigate the proposal and report its findings to the next session. Of the five members of this Special Commission eventually empaneled by the legislature, only one (Charles Carr, Chair of the Boston Finance Commission) had the prescience to note in his report:¹³

In city planning the whole region, not only the city proper, but the surrounding territory, must be studied. So in Boston all the problems and all the proposals for relief must be considered together. . . . The coming of the thoroughfare . . . would tend to check the growth of the city towards the suburbs; it would force the decision that the business of Boston must be concentrated in the two square miles of the downtown district . . . The consequence of this would be that in a short time not only all the other street improvements proposed by the majority of the Commission would be necessary, but many more.

On one hand, Carr's hypothesis that the proposed plan would stem decentralization of the

existing business district galvanized the support of downtown business interests who looked forward to the proposed thoroughfare's "direct, substantial, and assessable benefit." More importantly (and far more perceptively), Carr underscored the city plan's fundamental political weakness. Although the Special Commission advocated in strong terms funding the Intermediate Thoroughfare plan to successive legislative sessions (in 1925 and again in 1926), the city's plan offered nothing to the constituents of legislators whose districts lay outside the boundary lines of corporate Boston. Rather than treat the downtown thoroughfare as a conduit for regional travel demand with potentially broad regional benefits, the City Planning Board emphasized instead the benefits its plan would deliver directly to stakeholders in the downtown business district. Absent any evidence that the city's proposal would benefit constituencies in outlying or distant districts, the General Court received both reports with interest, but decidedly took no action to commit funds for the plan's implementation.

Without denying the existence of the street traffic problems of downtown Boston, legislators had made unequivocally clear their unwillingness to pledge state funding to remedy a problem most still viewed as highly localized. The city's case was not helped by the longstanding disdain for, and distrust of, the Irish-Democratic city government among the Republican legislative majority, which balked at the idea of funneling tens of millions of state dollars into the hands of those who they viewed as corrupt city officials at the helm of what would have been the most expensive public works project in the city's history. With the tales of graft and inefficiency on public works projects in Tammany-controlled New York City still fresh in the minds of legislators, the appeal of granting substantial state aid to a city run by the former president of Boston's Tammany Club was limited.

Although rejected by the legislature on political grounds, city officials and downtown business interests found that traffic conditions in the city's central district did not respect political setbacks. Motorcar registration in the commonwealth — and especially in the resi-

dential-commuter districts surrounding the corporate city of Boston — ballooned in the mid-1920s, with nearly 380,000 new registrations (representing nearly 10 percent of the state's population) recorded between 1923 and 1926 alone. The trend seen in Massachusetts in the 1920s was typical of states throughout the nation, but the sharp increase in auto ownership was doing more than just crowding the streets of cities around the country. Between the early days of the city's Intermediate Thoroughfare initiative and the time Malcolm Nichols settled into his School Street office in 1926 (Curley was barred by state law from succeeding himself), both the academic discipline and the professional practice of traffic engineering nationwide had made substantial advances, in terms both of public recognition and of technological competence as a result of the rapid growth in motorcar ownership and advances in automotive technology. Mayor Nichols, who in his inaugural called for "a sound program of street development . . . accompanied by scientific plans to use existing traffic facilities in the safest and most efficient manner," quickly took advantage of the newly available local expertise afforded by the Erskine Bureau for Street Traffic Research, headed by Miller McClintock, one of the nation's foremost experts on traffic control, and recently transplanted from the University of California at Los Angeles to the mayor's alma mater, Harvard University, in Cambridge. Accompanying the work of the Mayor's Street Traffic Advisory Board and its Harvard consultants was a major initiative by the City Planning Board, also begun in early 1927, to develop a comprehensive and modern plan of citywide arterials. To take the lead in preparing the new plan, the board enlisted the expertise of consultant Robert Whitten, a nationally recognized authority on traffic planning and at the time the president of the City Planning Institute of America. At a time when planners nationwide were enthusiastically broadening their view of city planning to accommodate — and celebrate — the geographic implications of high-speed motorcar travel over limited access regional expressways, both the Erskine Bureau's McClintock and the City Planning Board's Whitten had

remained fervent proponents of a central city that retained its density and cohesion, as long as it could be made easily passable to large volumes of auto traffic. The proposals produced for Boston under the guidance of McClintock and Whitten would prove nothing short of revolutionary in a city in which, in the words of planner Nelson P. Lewis of New York, "few notable improvements have been carried out in recent years."¹⁵

McClintock proposed a sweeping new regulatory code for street traffic in the city that laid out broad definitions of pedestrian rights, provided measures for strict control of standing and stopping, and, most notably, imposed a total restriction of parking on most streets of the downtown commercial district. Whitten drafted a comprehensive and technically pioneering proposal that outlined ten major new projects and over fifty smaller improvements, together estimated to cost \$47 million and designed to "provide, in so far as it is economically feasible, for a free and continuous movement of traffic." The centerpiece of Whitten's Thoroughfare Plan for Boston was a six-lane, \$28-million limited-access elevated express highway called the "Central Artery," which was intended to correct "the most serious defect in the street system of central Boston . . . the lack of an adequate north-south traffic route." The proposed elevated roadway would stretch from Nashua Street near North Station between the North End and the market district, through downtown, over Kneeland Street, and alight on Albany Street just beyond South Station. Whitten asserted that the new elevated roadway would "attract to itself practically all the through traffic that now clogs the streets of Central Boston," and "permit practically all traffic to and from the wholesale district, that market district, the waterfront, the North Station, the South Station, the North End and the West End to by-pass the congested retail and office districts."¹⁶ Despite the elevated road's promise for relieving downtown congestion, Whitten made sure to address potential critics of the road's grade. Wary of recent agitation among residents of several Boston neighborhoods to rid their streets of the turn-of-the-century elevated railway structures, Whitten wrote:¹⁶

As a matter of first impression the erection of additional elevated structures in Downtown Boston is very objectionable. . . . It must be remembered, however, that the proposed upper-level roadway will occupy the central portion only of a broad avenue; . . . that great care will be taken in its design to make it attractive and to reduce noise and vibration; that it will be used by motor vehicles and not by railroad trains.

In fact, Whitten's concerns about the city's objections to the construction of "additional elevated structures" proved to be greatly overestimated. As with the 1923 Intermediate Thoroughfare initiative, both Whitten's and McClintock's proposals for traffic relief in downtown (with the exception of McClintock's proposed parking ban) were met with enthusiastic support by most city officials and downtown business and civic groups.¹⁶

McClintock's recommendations led Mayor Nichols to seek the immediate establishment of the Boston Traffic Commission to oversee the regulatory aspects of street traffic control in the city, which was swiftly approved by the governor and legislature in April 1929. Within its first year of existence, the Boston Traffic Commission implemented programs to put traffic signals at busy intersections, set parking regulations, train police officers in the traffic control tactics detailed in McClintock's report, and launched a public information campaign intended to acclimate the motoring public to new policies and technologies. McClintock's proposed parking ban, however, proved unworkable amid intense political pressure from downtown retail interests. At a heated public meeting convened by the city traffic commissioner in March 1930, Daniel Bloomfield, executive secretary of the Retail Trade Board of the Boston Chamber of Commerce, angrily charged that the parking ban constituted "the most destructive proposal for traffic relief ever presented," and cited the testimony of merchants in Chicago who claimed that that city's downtown parking ban had done nothing to help their businesses.¹⁷ Nevertheless, aside from the political controversy over the proposed parking ban, McClintock's many regulatory recommenda-

tions all shared a lack of major capital outlay that made their adoption at the city and state levels far less contentious than congestion relief proposals such as Whitten's, which relied on the construction of expensive new roadways.

Whitten's Thoroughfare Plan carried an estimated cost of nearly \$50 million, and proposed an eight- to twelve-year program of construction. Whitten rationalized the unprecedented expenditures by calling attention to the costs of the existing traffic conditions in the central district. "The proposed express roads and other projects are costly," Whitten argued, "but they are not nearly as costly as the present congestion and delay."¹⁶ Furthermore, Mayor Curley pointed out in a speech before the City Council in May 1930 that the city had never before engaged in the comprehensive planning of street improvements:¹⁸

The hit-or-miss method of making street widenings and extensions by piece-meal, made necessary by changes in administration and divergent opinions, should no longer be tolerated.

Surely, he reasoned, the city would get a bigger bang for the buck if it expended greater-than-usual sums on a comprehensive program of street improvements, rather than dabble in highly localized street improvements absent some overarching plan. Besides, three decades of "hit-or-miss" street improvements had yielded little in the way of real relief from congestion in the downtown district. The widenings of several key city streets (Cambridge Street, Stuart Street, and Dock Square, for example) had partially alleviated problematic conditions at key bottlenecks, but did nothing to address the fundamental error in the central district's street network or provide for improved regional travel in and through the city. Curley, the City Planning Board and a host of other city government officials and private groups saw the Whitten plan as an opportunity, according to Retail Trade Board President George Johnson, to "secure for Boston a real and permanent relief."¹⁹

By 1930, relief was on every Bostonian's mind. Congestion due to car and truck traffic in

the central district had never been worse. "There is probably no city in the United States where traffic conditions on the streets of the downtown business section are so near the saturation point as they are here in Boston today," wrote City Planning Board chairman Frederic Fay in 1930.²⁰ McClintock observed that in the streets of the downtown district, motorists spent fully forty percent of their travel time stopped in traffic due to various traffic obstructions (implying, of course, that a substantial additional fraction of travel time was spent merely slowed in traffic due to congestion). The ever-worsening traffic conditions on the streets of downtown led many advocates of the expensive construction projects outlined in the Whitten plan to publicly espouse the notion that the central district was approaching a crisis, avertable only by the addition of substantial additional capacity (at great expense) to the existing street network. "If effective steps are not taken now to relieve the situation downtown, matters can never grow better," warned Johnson of the Retail Trade Board.¹⁹ In 1930, City Planning Board chairman Fay went on record in the city's official tercentenary history with the pronouncement that "a crisis in traffic congestion is fast approaching." He predicted that "the next few years will of necessity witness the adoption of a variety of radical measures for the relief of the traveling public."²⁰ Fay's forecast of crisis and radical measures for relief would prove prophetic — less prescient were his beliefs that the impending crisis and its radical relief measures had anything to do with traffic congestion.

The alarmist hyperbole born of bygone downtown boom times did little to ease the political and fiscal realities facing the city of Boston as the Great Depression deepened in the early 1930s. Barely had Curley had time to send legislation up to Beacon Hill requesting funds for the construction of Whitten's Central Artery before the priorities of the city's people, economy and government shifted in response to the nationwide economic downturn. Even as cutting-edge plans for citywide congestion relief and capacity-building sat ready on the shelf in the mayor's School Street offices, the city found itself mired in a fiscal morass of emergency relief programs necessitated equal-

ly by the onset of the Depression and by the mayor's apt recognition that his public popularity depended in large part on his ability to deliver basic services to the destitute masses — not traffic relief to downtown business interests. The city's unwillingness to support the Central Artery proposal had been made more acute by Mayor Nichol's commitment in the summer of 1929 of \$16 million to construct a traffic tunnel under Boston Harbor (today's Sumner Tunnel). With a vast sum of city money already earmarked for that large highway construction project, both Curley and the City Council balked at the prospect of scraping together a funding package for another major new highway improvement. Their reluctance increased with the recognition that an estimated 80 percent of the \$28 million total cost of the project would flow not into the pockets of laborers and the accounts of local material suppliers, but into the coffers of downtown property owners whose properties lay in the proposed road's path.¹⁶ (Whitten estimated that \$22.4 million would be required to take private property along the road's alignment, while only \$5.6 million would be required to construct the viaduct and surface artery.) As a means for relief of congestion, Whitten's Central Artery proposal offered great promise and received the endorsement of "practically every business and civic group in the community." As a means for relief of the plight of the city's unemployed and under-employed by providing, in the inaugural words of Mayor Curley, "work and wages to those in need of sustenance and employment," funneling scarce city dollars into the project made little sense.^{20,21} Although support for Whitten's Central Artery proposal continued to run deep among city government and interest groups throughout the Depression years, the city's increasingly tight fiscal constraints and prioritization of work and wages relief programs left little doubt that funding for the project would have to be found outside of city hall.

Of Commonwealth & Capital

Nationwide, the Great Depression marked a profound shift in the fiscal relationships between cities, states and the federal government, and Boston was no exception. Unable to

commit large sums of city money to major public works projects in the early 1930s, Mayor Curley and the City Council turned once again to the commonwealth for financial assistance, and for the first time sought additional fiscal aid from the federal government. Despite the sustained and well-funded national focus on federal aid to local public works projects under the auspices of the Public Works Administration (PWA), officials in Boston never sought PWA aid for the Central Artery project or for other major highway improvements in the central district. Part of the reason lay in the fiscal constraints that accompanied PWA grants, which, even after a 1936 increase, were legislated to cover no more than 45% of any project's total cost. In the case of the \$28 million Central Artery proposal, the PWA would have provided a maximum of \$12.6 million, requiring the city to take on \$15.4 million in additional bonded debt to fund the remainder. Perhaps of greater overall concern to city officials was the disdain with which PWA Director Harold Ickes viewed Massachusetts and its capital city. Historian Charles Trout wrote that after an angry exchange with Governor Joseph Ely in 1933, Ickes' "view of Massachusetts as a place of Byzantine intrigue was indelibly confirmed."²² President Roosevelt's modest view of Mayor (and from 1934 to 1936, Governor) Curley also hampered Boston's efforts at securing federal aid. Not until 1935 would the city see a penny from the PWA, by which time the city's finances were in such strained disarray that it proved impossible to raise the matching municipal funds necessary to undertake a project on the scale of the proposed Central Artery.

Throughout the Depression years, Boston's fiscal shortfalls prevented the city from assuming debt in amounts sufficient to finance and construct large public works projects. Trapped in the web of exorbitant tax rates, overvaluation of real estate and tight state control of borrowing, the city had fully outgrown its own capacity to finance the roadway infrastructure projects needed to maintain tolerable traffic conditions on roads in, and leading to, downtown. Boston's attempts at securing federal aid to make up for this municipal shortfall yielded only modest

returns, resulting in the construction of just a few smaller and largely unrelated street improvements. The city's efforts consistently met with a similar outcome on Beacon Hill, where throughout the Depression years a solidly Republican legislature refused to raise the city's debt limit or ease state control over city tax policy. Above all, the legislature balked at appropriating state funds for public works jobs run from School Street and that provided few benefits to the state's far-flung districts. Under the leadership of Republican stalwart and Speaker of the House Leverett Saltonstall, Republican legislators preached and imposed tight fiscal conservatism on the state's capital city. Boston, burdened by disproportionately expensive public works needs and swollen relief rolls, and handicapped by its minority legislative delegation and solidly Democratic municipal power base, managed to fund just a handful of major public works projects in the 1930s (the largest being the \$8.5 million extension of the Huntington Avenue subway, paid for in part by the federal government).

During the early 1930s, Mayor Curley's futile efforts on Beacon Hill focused either on securing greater fiscal liberty for the city in the form of relaxed state-imposed debt and taxation ceilings, or on obtaining direct appropriations for city-proposed public works projects. The legislature, however, showed itself consistently unwilling to give up its control over city finances or give away state money. As the Depression deepened and Curley's efforts on Beacon Hill continued to prove fruitless (even after his election to the governorship in 1934), this conventional wisdom about the construction of major public works projects inside the city boundaries began to change. Within a few years, the popular sentiment in Boston had shifted away from the tradition of local project control and toward state control in the practical interest of getting badly needed public works into construction. This shift found its origins in the political and fiscal realities facing the city of Boston and was nurtured by a nationwide paradigm shift in the fiscal relationships between different levels of government. Across the nation, projects such as street repairs that had once been exclusively the

domain of municipalities suddenly became eligible for federal funding under programs administered at the state level. In Boston, by 1937, "animated discussion of the traffic problem ha[d] brought state highway activity to the fore."²³ Until the late 1930s, highway improvement proposals within the city limits, including the Central Artery, had been the exclusive concern of the City Planning Board, the Boston Transit Commission (which had overseen the construction of the Sumner Tunnel) and the city's Department of Public Works. Funding for municipal highway projects was raised locally almost without exception through the property tax levy and other municipal fees.

At the state level, most of the funding for highway projects went to the Massachusetts Department of Public Works (DPW), chartered in 1919 to replace the Massachusetts Highway Commission, the first statewide highway agency in the country at the time of its founding in 1893. State highway money came from a dedicated Highway Fund, created by the legislature in 1925. Funded initially by motor vehicle registration fees, beginning in 1929 the Highway Fund became the exclusive recipient of a two-cent tax on gasoline sales statewide. Between 1925 and 1937, the state's Highway Fund expenditures for road construction projects totaled \$185.6 million and by 1937 comprised about one quarter of the state's total budget. "Boston, unlike other populous centers, is excluded from any part in this program," concluded the Boston Municipal Research Bureau in a 1937 bulletin examining the disparity present in Boston's allotment from the Highway Fund.²³ During the twelve-year study period, the bureau observed that Boston's streets served approximately 30 percent of motor vehicles in Massachusetts annually and Boston motorists paid about 10 percent of the annual state gas tax levy, but the city received just 2.5 percent (\$4.7 million) of the state's total highway expenditures.²³ A subsequent legislative commission concluded that the disparity "obviously is quite out of line in relation to the intensity of the traffic problem and the local contribution to the gas-tax fund."²⁴

The legislature had originally written Boston out of the Highway Fund for two reasons. First, it assumed that the city could pay its own way on necessary street improvements

through its property tax levy. Second, much of the emphasis in the commonwealth at the time was on the construction of farm-to-market and intercity roads. A 1940 legislative commission explained that "originally the Highway Fund aimed to build the main routes in the rural sections by which to facilitate traffic between our cities and towns and across the State from neighboring states."²⁴ The congestion troubles in downtown Boston never made it onto the agenda of the statewide coalition drafting the Highway Fund bill, leaving Boston "a no-man's-land for state highway aid."²⁵ The legislature found it easy to justify its exclusionary position as long as the state's highway network still lacked desperately needed intercity connections that served a broad coalition of regional and local interests in the districts of many legislators. By the late 1930s, however, the state's arterial highway system was showing the dramatic benefits of several years of attention by the man who would make a career building highways in Massachusetts. Appointed to the commissionership of the DPW in December 1934 by departing Governor Joseph Ely, William F. Callahan soon proved himself an able practitioner in two important areas — modern highway construction and political power-brokering in the state.

Callahan quickly recognized the multiple benefits of a program of modern highway construction across Massachusetts. On the one hand, he oversaw and controlled the employment of thousands of men on highway projects during a time of biting economic hardship statewide. On the other, motorists, commercial and industrial interests, construction contractors, real estate interests and a host of other constituencies delighted at the construction of miles of modern highways, and together created a pro-highway lobby no governor could ignore. The pressing need for work and wages for the commonwealth's unemployed could thus combine with the powerful highway lobby to create an unassailable political mandate for more highway projects. "He's a master at manipulating the machinery of government — jobs, pressures, patronage," U.S. Attorney Elliott Richardson said of Callahan years later. To Callahan, "jobs, pressures, and patronage" meant highway projects. The more

highway projects Callahan's DPW took on, the broader his power base became.²⁶

Callahan embarked on an ambitious program of highway improvements across the state, but focused his and the department's attention on a few major new highway projects along heavily traveled corridors. He reconstructed the Newburyport Turnpike — long the bane of travelers to Boston's North Shore and points beyond. He did the same for the Providence Turnpike, and he also began work on a circumferential highway a dozen miles from downtown Boston through the northern suburbs of Lynnfield and Peabody. Callahan's campaign for modern highways in the state was not limited to construction, however. His chief engineer, Edgar F. Copell, had a large-scale model of a typical intersection constructed at the department's South Boston laboratories, complete with working traffic lights and realistic roadway surfaces. Copell's model became an invaluable tool for the department to test-drive proposed street traffic control measures, and became a mecca for students, attorneys and public officials seeking a comprehensive understanding of the workings of traffic control. Callahan championed the importance of maintaining not only the wearing surface of his new roadways, but their immediate surroundings as well. In April 1938, he publicly shouted down the Board of Selectmen in the northern suburb of Saugus, through which the brand-new Newburyport Turnpike passed, for allowing hot dog stands, gasoline filling stations and other roadside commercial enterprises to spring up along the new highway. "The town of Saugus has done all it can to ruin the new road," Callahan charged. The new highway, he continued, "incorporating virtually every modern and scientific improvement" had, he claimed, been turned into "one of the most dangerous highway hazards in the state." The outspoken roadbuilder's campaign worked. In 1936, even before some of the department's larger projects had been completed, the legislature passed a \$13 million bond bill earmarked specifically for DPW construction projects — the state's first-ever highway bond issue.²⁷

Despite Callahan's determined and pre-scient campaign to promote the construction

of modern highways, his efforts had little tangible effect in and around the city of Boston. In 1936, Callahan appropriated \$4 million to "enable 5,000 men to be put to work for approximately eight months" constructing sidewalks along existing state highways (even in areas where pedestrian traffic was prohibited) rather than begin to tackle the long list of roadway improvement projects sought by the city.²⁸ "Apparently the Commonwealth has avoided the populous, high value center where traffic concentrates," observed the two-year-long Works Progress Administration (WPA) Survey of Boston Metropolitan District and Adjacent Areas in early 1940. The WPA report found that the DPW's funds "have gone to development of a highway network which either skirts or stops short of urban centers, especially Boston."²⁹ Similarly, the Urban Land Institute reported in 1940 that "state and metropolitan highway funds have been used to construct highways and arteries leading into Boston, but Boston has supported almost entirely the cost of continuing these arteries within its limits."³⁰ As a result, the *Christian Science Monitor* reported in June 1940 that "thousands of Boston's daily motorists are commuters who skim over smooth highways to the City limits, and then find themselves lost in a maze of tangled traffic."³¹

Accompanying the Depression's autumn years came a renewed sense of urgency to address the consistently grave street traffic conditions in downtown Boston. Although the downtown economy had begun to show signs of rebound as early as 1935, regional observers noted not without alarm that the suburban business districts outside Boston were experiencing a significantly more rapid and pronounced recovery than the city's central business district. In a 1940 study, the Urban Land Institute found that in six of eight categories of retail activity, sales rebounded more strongly in eleven cities and towns surrounding Boston than in the city itself. The report also pointed to the alarmingly stagnant performance of downtown's department stores, whose annual sales in the recovery years leading up to 1940 had stalled at approximately 70 percent of pre-Depression figures.³² The Depression was not solely to blame for the sluggish downtown

recovery, however. The process of decentralization that had begun decades earlier was by the late 1930s taking a more noticeable toll on the city's economic health. Although residential development had been spreading far into the metropolitan district for many decades, not until the 1920s had this "centrifugal trend" of decentralization begun to mature. The result was a suburban ring around the city in which "the functions of shopping, entertainment and finance which had once been concentrated in a central business district . . . were diffused by . . . facilities at widely scattered centers." In a 1941 report, the Boston City Planning Board pinned some of the blame for the trend on the city's high municipal tax rate, blight of areas close to downtown, overcrowding and the nuisances of urban life. Taxes and smoke aside, the City Planning Board ultimately concluded that "the wholesale building of paved roads made decentralization possible on a scale hitherto unparalleled," and noted that "it was not until the decade of the thirties that disintegration caused by decentralization became acute."³³

City officials and downtown business and civic groups noted the dual effects of the Depression and decentralization on the health of the city, and concluded that the best way to address these troubles was by improving access to downtown from the outlying districts. "Alarm must be felt over the plight of the central districts. . . . The time has come when the City must take vigorous action to apply an antidote," insisted the City Planning Board in 1941. The Planning Board argued that "better highway connections through the heart and to the outside communities are necessary to enable the central area to retain its advantages." Gone were the days when city officials and interest groups treated downtown congestion as a local problem. As the region's shoppers, diners, theater-goers and Sunday strollers fled from the city to suburban districts, the city's proposals for downtown reconcentration stretched out to meet them.³³

In his 1941 inaugural address, Governor Leverett Saltonstall, who had once quashed Mayor Curley's calls for greater state public works aid to his struggling city, spoke of Boston's "serious traffic problem which the

state cannot ignore."³⁴ Although the city's fiscal and economic health was still struggling to show real signs of recovery, the basic troubles with downtown congestion still plagued the city. "Traffic from all points of the compass converges upon the business heart not only of the Metropolitan District but the State and indeed New England," reported a legislative commission in 1940. "Wide four- to eight-lane boulevards funnel traffic to the City's limits, but at this point of concentration adequate facilities to handle this bulk of traffic do not exist."³⁵ Governor Saltonstall's inaugural words were followed quickly by legislation sponsored by Boston Mayor Maurice Tobin's Conference on Traffic. The conference had been established in January 1940 "for the purpose of preparing a comprehensive program for the relief of traffic congestion," and it adopted the decade-old Whitten report as its basis for action.³⁶ Specifically, the conference championed the construction of the Central Artery in order to "make more wheels turn faster and cut down on stopping and starting." Learning from past failures, the conference presented its Central Artery plan in language calculated to appeal to motorists and their elected officials from all over the state. No longer was the congestion of Boston's central district a local — or even a regional — problem. The Central Artery, the conference claimed, would "remedy statewide traffic's greatest bottle-neck," and "provide for the free flow of statewide traffic to, from and through the chief business and trading center of the Commonwealth."³⁷ The Central Traffic Artery Bill arrived in draft form on Beacon Hill in the spring of 1941, accompanied by the support of a wide variety of public and private sector organizations, ranging from the city and state planning boards to the Massachusetts State Federation of Labor, Boston Fruit and Produce Exchange, New England American Automobile Association Clubs, Boston Chamber of Commerce, and the Mayors' Club of Massachusetts, to name but a few. Accompanying the city-sponsored legislation was the report of the Special Legislative Commission set up to investigate the findings of the 1940 WPA Survey of Boston Metropolitan District that had so succinctly

identified the central flaw in the state's system of appropriating highway funding. The Special Legislative Commission concluded "that the problem in Boston is State and Regional rather than local and that it should be dealt with on that understanding" and recommended "that substantial funds should now and for the immediate future be allocated from the Highway Fund for the construction of the major arteries within . . . Boston."³⁵ The Central Traffic Artery legislation filed by Mayor Tobin and his Conference on Traffic proposed that the Massachusetts DPW plan, design, cost out and construct the elevated roadway. Tobin's bill proposed that the city float its own bonds to cover the costs of construction, but stipulated that the bonds themselves would be paid for by appropriations from the state's Highway Fund. Mayor Tobin's Central Traffic Artery Bill differed from previous city attempts at securing state funding in two ways. For one, the bill's sponsors recognized the importance of assembling a statewide coalition of public and private sector interests, evidenced by the language of the bill and the endorsements sought and secured prior to its filing. Second, the bill came on the heels of a series of reports from state and federal sources advocating the construction of major traffic arteries in downtown Boston at state expense. Both state and federal investigators recognized that the state's need for rural and intercity highways had "to a very substantial extent been met and the critical traffic problems are now within the cities at the points of maximum congestion."³⁵ Tobin and his Conference on Traffic had drafted a bill with language accessible to lawmakers across Massachusetts, successfully lobbied for the support of a wide variety of public and private organizations, and backed up their legislation with the WPA and Special Legislative Commission reports. The prospects for a warm reception for the city's highway plans on Beacon Hill appeared promising.

The Central Artery Traffic Bill reached the state Senate in the spring of 1941, too late to be taken up in the 1941 session. The bill sat dormant in the Ways and Means Committee through the summer recess awaiting its turn on the senate floor when the session

reopened in the fall. But its turn never came. Abruptly, the concerns of wartime eclipsed any thought of major municipal improvements not immediately related to the war effort. Not until an Allied victory became a relative certainty in 1943 did attention again begin to focus on the traffic problems of the state and its capital.

New Perspectives in Space & Time

By mid-1943, with emergency wartime mobilization efforts maturing, the state legislature turned its attention to domestic affairs largely neglected during the early wartime period. Legislators found that among the most pressing of their constituents' postwar concerns was the condition of the state's aging highway infrastructure. From downtown Boston to the New York border, residents, business interests, civic groups and local public officials took their protests to the legislature even at a time when motor vehicle travel statewide had declined significantly due to gas and rubber rationing and other travel restrictions. In the summer of 1943, unfamiliar with the overall scope and scale of the statewide highway problem and unable to allocate immediate material and human resources to address specific constituent concerns, the General Court, supported by governor and former Boston mayor Tobin, convened an eleven-man commission "for the purpose of making a study of such highway projects in the Commonwealth as may, in its opinion, be necessary or advisable to be carried out after the termination of the present war."³⁸ For the first time in Massachusetts's history, a commission produced a comprehensive investigation into the condition of the state's highway infrastructure, accompanied by a specific program of recommended improvements. Highway planning in the prewar years had traditionally been a piece-meal process and was the exclusive domain of the state Planning Board and the state DPW. Planning most often focused on addressing specific corridor travel demands or problematic local conditions. The new legislative commission brought a new spatial perspective to the question of highway planning in the commonwealth. Within a few years, the collective vision that created the

Post-War Highway Commission largely redefined the state's traditional planning paradigms to focus less on short-term localized improvements and, for the first time, more on systematic, regional approaches to highway planning.

Between the fall of 1943 and the spring of 1945, the Post-War Highway Commission surveyed the state's existing highway infrastructure and found it desperately in need of improvement. Even during the war years, when gas rationing and thrifty driving habits curtailed motor vehicle traffic throughout Massachusetts, the state's major trunk highways experienced severe traffic congestion, especially in areas near major cities. The poor conditions on the state's highways, the commission reported, "result primarily from the vast sums of highway funds diverted to other than highway purposes during the last twelve years, the suspension of construction during the war period, obsolescence and insufficient maintenance appropriations, and the lack of any adequately financed state highway program."³⁹ The commission found the highway troubles especially pronounced around the city of Boston, where even several of Callahan's modern highway projects of the 1930s were rapidly approaching functional obsolescence. Within the city, the commission found "the daily traffic congestion . . . on the downtown Boston streets, even in these days when gas rationing and rubber shortages have greatly reduced travel . . . are well known far beyond this immediate neighborhood as constituting one of the worst traffic spots in the country."⁴⁰ To address the special problems of Boston, in the fall of 1943 the Post-War Highway Commission convened a special panel of city and state highway engineers in the public employ, known as the Boston Arterial Highway Engineers Committee. The committee worked on a part-time, unpaid basis "for the purpose of making a study of projects to relieve or eliminate traffic congestion in Boston . . . and in particular the so-called Boston Central Artery and necessary connections."⁴⁰ This committee found early on that "Boston must chisel a great artery through a maze of narrow, winding city streets, flanked with towering and

costly office buildings, banks, residential blocks and never-ending cross streets. . . . Traffic is slowly strangling the city, and nothing short of a major operation on the traffic situation can avoid serious consequences to its future growth and prosperity."⁴¹ Grand imagery and alarming forecasts of impending crises did little to inspire any real planning innovations, however. In its lengthy report to the legislature in April 1945, the committee recommended a program of improvements that closely resembled the city's 1941 Central Traffic Artery Bill, itself based almost entirely on the Whitten report dating from 1930.

During the early postwar years, the dire predictions of the Boston Arterial Highway Engineers Committee appeared to be unfolding with alarming rapidity. The expected postwar rebound in downtown retail and commercial activity failed to materialize as individual wartime savings went into the purchase of larger consumer goods like automobiles, appliances and home improvements, rather than towards the types of low-volume, high-value goods typically carried by downtown retailers. By 1948, the total volume of retail sales in the city had failed even to reach Depression-era levels, while retailers in suburban areas reported strong growth throughout the early postwar years. As automobile registrations in Massachusetts reached growth rates not seen since the 1920s, ridership on the Boston metropolitan area's mass transit system dropped more precipitously even than it had at the outset of the Depression as fewer shoppers, workers and recreational travelers journeyed into the city center. Both major new office starts in the city in the early postwar years were corporate headquarters to replace existing buildings, and the larger of these — the John Hancock headquarters — was a half-mile from downtown in the newly-identified insurance district. The city's prohibitively high (and ever-rising) property tax rate kept most other commercial development out of downtown, and many of the city's staple industries began abandoning their urban facilities for more auto-accessible and less costly suburban locations. From many perspectives, the outlook for downtown Boston appeared bleak.

The real causes of downtown Boston's decline — or perhaps more precisely, failure to rebound — in the early postwar years were many and complex. Street traffic congestion — and more specifically, the impact it had on the accessibility of the downtown core to suburban workers, shoppers and leisure travelers — continued to take center stage as the cause most often cited and decried. Additional constituencies clamoring for relief from downtown traffic congestion were composed of daily commuters who lived outside the city but drove to work downtown and industries and their transshipment contractors who still relied on the city's wholesaling markets, port facilities and retail outlets. Their well-heeled and politically influential voices added a powerful metropolitan dimension to the issue of downtown congestion as plans for a program of statewide highway improvements passed from the preliminary reports of the Post-War Highway Commission to more detailed planning studies. The 1945 report of the Boston Arterial Highway Engineers Committee had detailed the local traffic conditions in downtown Boston, but its recommendations had not been well integrated with those of the statewide Post-War Highway Commission. The rapid emergence of commuter and regional transport constituencies, however, made the longtime problems of downtown traffic into very regional concerns that the state's elected officials could not afford to ignore.

In the late summer of 1947, Governor Robert Bradford issued an Executive Directive creating and funding a Joint Board "for the purpose of preparing a Master Plan of Highways for the Boston Metropolitan Area." Bradford, eager to show swift action on a popular political issue, issued the directive during the General Court's summer recess in order to avoid a lengthy legislative process and to speed plans for relief into public view. The board's membership consisted exclusively of officials from the state DPW, the state Planning Board and the Metropolitan District Commission, and included Charles A. Maguire and Associates as its chief engineering consultant to aid in the preparation of plans and engineering analyses. The organizational makeup of the board,

although indicative of the priority the state was finally placing on the city's traffic ills, ensured that Boston's local officials and private interest groups, who had for decades been seeking traffic relief in their city, would have little say in formulating the final plans.

The urgency of Governor Bradford's actions, though driven as much by political motives as by the real need to address traffic conditions, produced a remarkable result. Within a few months, the broadly stated and dated recommendations of the Boston Arterial Highway Engineers Committee gave way to a new and detailed expressway plan that represented nothing short of a paradigmatic revolution. The Joint Board's consultant embraced the comprehensive planning ideals embodied by the Post-War Highway Commission, incorporated an advanced systematic approach to regional traffic flow and applied advanced developments in express highway design. The resulting 1948 Master Highway Plan proposed a scale of improvements never before considered in the commonwealth. No fewer than eight radial limited-access highways reached far out into the metropolitan area, converging on a circumferential expressway called the Inner Belt that tightly encircled downtown and was designed to collect regional traffic and channel it into or around downtown Boston. At the core of the consultant's proposed highway network was a new role for the old proposed but never realized Central Artery. For decades viewed as the single stand-alone destination for the city's local arterial streets, Maguire's engineers treated the Central Artery as the downtown leg of the Inner Belt loop, and merely an integrated component of a much larger expressway system. The Central Artery would serve as the spout of a great regional funnel, pouring regional traffic collected on the Inner Belt or entering directly from selected radial routes into the heart of downtown Boston. The proposed system of expressways would thus seamlessly link downtown Boston with the surrounding metropolitan area and, it was hoped, it would restore the Hub's fading role as the social and economic focal point of the region.

The Maguire Plan was a clear reflection of the belief that the solution to the congestion

and accessibility problems of downtown should be based entirely on a systematic regional approach to accommodating the travel desires of the motoring public and the transportation needs of business concerns. The \$322 million highway plan did just that, and received widespread support from a broad-based and powerful coalition of public and private interests, as well as from both sides of the political aisle on Beacon Hill. Legislators of both parties recognized the political necessity of supporting the wildly popular highway initiatives, and in 1948 Governor Bradford publicly made highway funding his "top priority." With the statewide highway program at the top of the legislative agenda during a period of relative fiscal stability, by the summer of 1948 the prospects for a rapid implementation of the statewide highway improvements initiative appeared strong. But 1948 was a key election year, and Democrats sensed the opportunity to take not only the governorship, but the General Court as well. Although the protests of constituents condemning "wretched conditions" and calling for "desperately needed" highway improvements could not be ignored by elected officials, neither could the basic realities of the Massachusetts's political conventions.⁴²

"It should be noted," concluded Maguire's report, "that no one can ride to work on plans for highways. This report must be implemented by proper legislative action, by a sound financial plan and by a vigorous construction program to assure these recommendations being transmuted into steel and concrete."⁴³ Attempts by the Republican majority in the 1948 session to take "proper legislative action" in the form of a \$100 million highway bond bill were stymied by the so-called "stubborn sixteen" Democratic senators in the months before the fall election. Risking criticism from their constituents, the Democratic senatorial delegation (few of whom were up for re-election that year) blocked the bond bill in order to deny the Republican governor and legislative delegation the bragging rights to the bill so close to election time. Not until Democrat Paul Dever was swept into office by a substantial margin and the Democrats gained a slim majority in the House did the \$100 million

highway bond bill sail through in the spring of 1949. Among the first projects to be funded by the proceeds of the sale was the Central Artery, which received over one-quarter of all state highway money allocated that year. That summer, newly re-appointed state DPW Commissioner Callahan moved to expedite the project's design and push it into construction. Just over a year later, the first piers supporting the artery's Charles River crossing were driven into the riverbed, signaling the start of construction.

At the unveiling of the final design for the roadway in January 1950, Boston's Mayor John B. Hynes said of the plans: "This is what we have been waiting for for twenty-five years and more."⁴⁴ Hynes was modest in his tally; after nearly four decades, the city's wait was over.

"The Stars Were Right"

The legislature's decision to construct the Central Artery through downtown Boston marked a curious point in the history of the Commonwealth of Massachusetts, and a major turning point in the relationship between the state and its capital. For decades prior, the street traffic problems of downtown Boston had been viewed on the state level as local ills that "could never justify state aid."⁴⁵ This long-standing conventional wisdom eventually fell victim to a powerful confluence of forces resulting from the broad trends of suburbanization and regionalization, increased reliance on vehicular travel and transport, and redefined relationships and responsibilities among different levels of government — trends that took shape and matured during the years of the Depression and World War II. It was during this critical period that the traffic problems of downtowns nationwide became regional traffic problems, that the bell tolled for already struggling streetcar systems across the country, and that the federal and state governments first took an active and well-funded interest in the problems of cities as part of President Roosevelt's New Deal programs. In Boston, these trends catalyzed a profound postwar shift in the way the commonwealth's governor and legislature perceived Boston's traffic problems and their appropriate role in addressing them. Only after this change in governmental

perspective could the attention of disparate interests statewide converge on the city and secure its place as a major focus of the state's postwar highway program.

The confluence of interests that laid the foundations for the construction of the Central Artery through Boston were first manifest on paper in the form of Maguire's 1948 Master Highway Plan. This plan, and the legislative intent that created it, represented the culmination of a decade of changing perspectives around the state, and the immediate interests of a relatively new and politically powerful coalition of regional commuters and business interests. For the first time on paper, downtown and the suburban regions were seamlessly interconnected by a network of expressways whose alignments bore no resemblance whatsoever to the existing street network, determined only as functions of regional origin-destination studies and the most prominent of topographic features. Unlike in prior decades, by 1948 downtown's Central Artery had become just one key piece in a regional package of new expressways. This regional highway program commanded broad political support from constituents statewide, from industrial concerns in the Pioneer Valley to the bankers on State Street and Mayor Curley. Rarely in the state's history had a legislative initiative received the unequivocal support of such a broad coalition.

In the spring of 1949, Republican Senator Edward Staves filed and saw through to Governor Dever's desk the \$100 million bond bill that provided funding for the Central Artery project, whose construction started the less than two years later. "Our state capital will disintegrate unless we give it the proper facilities," he stressed.⁴⁶ Staves, champion of the commonwealth's capital and its plight, the man who ultimately brought the decades-old plans for the Central Artery to fruition, hailed from the tiny Central Massachusetts town of Southbridge. The Central Artery, viewed for decades as a highly localized traffic improvement not worthy even of metropolitan consideration, had finally matured into a major regional initiative that commanded the support of legislators from districts halfway across the state.



YANNI TSIPI is the author of three books that chronicle the development of the region's highway network in the 1950s and 1960s. He holds degrees in civil engineering and city planning from the Massachusetts Institute of Technology. A Boston resident and BSCES member, Tsipis is a project manager at Meredith & Grew in Boston.

REFERENCES

1. Miller, R.E., "Expressway Blight," *Architectural Forum*, October 1959.
2. Massachusetts Colonial Records, i.141., *Memorial History of Boston*, Vol. 1, Osgood, Boston, 1880.
3. *Boston Transcript*, March 26, 1856.
4. Report of the Rapid Transit Commission, April 5, 1892.
5. Boston Elevated Railway Company, *Fifty Years of Unified Transportation*, 1930.
6. Compiled from *Fifty Years of Boston — A Memorial Volume*, published by the city of Boston in 1930, and *Fifty Years of Unified Transportation*, 1930.
7. Warner, S.B., *Streetcar Suburbs*, Harvard University Press, Cambridge, Mass., 1962.
8. Quoted in Kennedy, L., *Planning the City Upon a Hill*, University of Massachusetts Press, Amherst, Mass., 1992.
9. Boston Transit Commission, *12th Annual Report*, 1906.
10. Report of the Metropolitan Park Commission, 1911.
11. Massachusetts Acts of 1907, c.108, *Report of Joint Board on Metropolitan Improvements Commission*, 1911.
12. Report of Joint Board on Metropolitan Improvements Commission, 1911.
13. Final Report of the Special Commission Established to Investigate the Laying Out and Construction of a New Thoroughfare in the City of Boston, and the Extension and Widening of Certain Streets in Connection Therewith, December 1925.
14. Boston City Planning Board, *Progress Report on Proposed Intermediate Thoroughfare*, December 1925.
15. Boston City Record, December 22, 1923.

16. Report on a Thoroughfare Plan for Boston, April 1930.
17. *Boston Traveler*, March 19, 1930.
18. Curley, J.M., to Boston City Council, May 5, 1930, from city council minutes.
19. *Boston Traveler*, October 30, 1930.
20. *Fifty Years of Boston — A Memorial Volume*, City of Boston, 1930.
21. J.M. Curley's 1930 Inaugural quoted in Trout, C.H., *Boston, the Great Depression, and the New Deal*, Oxford University Press, New York, 1977.
22. Trout, C.H., *Boston, the Great Depression, and the New Deal*, Oxford University Press, New York, 1977.
23. *Boston Municipal Research Bureau Bulletin* No. 62, December 6, 1937.
24. Report to the Legislature of the Special Legislative Commission, 1940, filed 1941, c.71 acts of 1938.
25. *Christian Science Monitor*, June 6, 1940.
26. Elliott Richardson quoted in the *Boston Record American*, September 9, 1962.
27. *Boston Post*, exact date unknown (some time in April 1938) from clipping file in State Transportation Library; *New York Times*, November 3, 1958.
28. Letter from William F. Callahan to George Moyses, Chairman, Ways & Means Committee, July 9, 1935.
29. *Survey of Boston Metropolitan District and Adjacent Areas*, WPA Project 18151, 1940.
30. Ballard, W., *A Survey in Respect to the Decentralization of the Boston Central Business District*, report for Urban Land Institute, October 1940.
31. *Christian Science Monitor*, June 6, 1940.
32. From charts in Ballard, W., *A Survey in Respect to the Decentralization of the Boston Central Business District*, Urban Land Institute, October 1940.
33. Boston City Planning Board, *Building a Better Boston*, October 1941.
34. *Massachusetts Legislative Record*, 1941.
35. Report to the Legislature of the Special Legislative Commission Appointed by c.71, Acts of 1938, 1940.
36. Undated letter from the Boston City Planning Board, Mayor's Conference on Traffic, entitled "Summary of Committee on Projects Relating to Traffic Arteries."
37. All from *The Motorists' Case for a Central Traffic Artery*, pamphlet published by the Mayor's Conference on Traffic in the summer of 1941.
38. *Acts and Resolves of Massachusetts for 1943*, c.46, 1943.
39. *The Commonwealth of Massachusetts Highway Problems*, booklet accompanying the Report of the Post-War Highway Commission, March 29, 1945.
40. *Report of the Boston Arterial Highway Engineers Committee*, House no. 1850, April 1945.
41. *Report of the Post-War Highway Commission*, House no. 1850, April 1945.
42. *Boston Herald*, July 29, 1948.
43. Charles A. Maguire & Associates, *Master Highway Plan for the Boston Metropolitan Area*, 1948.
44. *Boston Traveler*, January 30.
45. *Christian Science Monitor*, June 6, 1940.
46. *Boston Herald*, March 3, 1949.