



# Atlanta Urbanist Book Group

## ***The Big Dig***

By GBH News

The Atlanta Urbanist Book Group met on Aug. 7, 2024 to discuss *The Big Dig*, a documentary podcast created by GBH, Boston's public broadcasting system. It is an eight-part series tracing the 35-year history of a massive transportation and downtown improvement project, with a ninth episode about its legacy and lessons. All episodes and their transcripts are available for free [on the podcast's homepage](#).

The transportation improvements that came to be known as the "Big Dig" included building two massive automobile tunnels in Boston, one leading to Logan Airport, the other heading south and west out of downtown. It also built a new bridge over the Charles River, the cable-stayed Zakim Bunker Hill Bridge, which has become a Boston landmark.

This was a "megaproject," a connected set of improvements meant to solve a host of problems, and it succeeded in doing these things. It allowed the city to tear down an ugly and unsafe elevated highway and opened access between downtown Boston and the waterfront. It created new connections to the airport and downtown. It added an iconic bridge. And it gave the city 17 acres of parks and open space, which set off a wave of development and housing construction.

But hardly anyone in Boston associates the Big Dig today with success. What people think of, the podcast says, is "boondoggle," the most expensive highway project in history at \$15 billion. Or they think of shoddy construction, which resulted in leaky tunnels and concrete panels that fell off walls, costing one motorist her life.

In our discussion, we focused the role megaprojects can play in urban progress, the ways these massive undertakings could be made more successful, and ways of talking about megaprojects so, as problems arise, leaders continue to support the project and its goals and citizens are reassured.



## Five Big Ideas

The Atlanta Urbanist Book Group highlights ideas from books and documentaries that we think could make Urban Atlanta better. Here are five “big ideas” drawn from *The Big Dig* that we think Urban Atlanta could benefit from:

1. We need megaprojects because cities have “megaproblems” that only large-scale solutions can address.
2. To succeed, megaprojects need strong long-term leadership and competent day-to-day management. They may also need political allies and outside advocates because, inevitably, things will go wrong.
3. To survive setbacks, megaprojects must have a vision—a description of how things will look and work when the project is completed—and a clearly articulated set of benefits that most people support. Two critical questions are “Why are we doing this?” and “Why is it worth the cost?”
4. Not all megaprojects exceed their initial budgets, but many do. This is the nature of complex projects that stretch over years and even decades. For that reason, leaders must establish cost expectations carefully and explain honestly and clearly why costs have risen.
5. The documentary reminds us of the important roles state governments could play in cities. Massachusetts officials led the Big Dig, which transformed Boston. Again and again the state stepped in to save this megaproject as it dealt with obstacles and setbacks. A similar leadership role for state government in Urban Atlanta—beyond building highways—would be welcome.

Notes: Atlanta is well acquainted with megaprojects. Among them: the building of Hartsfield-Jackson Airport in the 1920s and its rebuilding in 1980, the planning and construction of the MARTA rail system in the 1970s and 1980s, the staging of the 1996 Summer Olympics, the building of the Beltline and rebuilding of Atlanta’s sewer and wastewater systems. A likely next megaproject: three efforts to “cap” Atlanta’s freeways in downtown, Midtown and Buckhead that will create new public spaces.

Ironically, we sometimes need new megaprojects to alleviate problems caused by past megaprojects. By anyone’s definition, the building of Atlanta’s highways was a megaproject, but it came at a high cost, increasing automobile dependency and seriously damaging neighborhoods and commercial areas. The proposed megaproject to cap the highways, then, is an effort to undo some of this damage.

## Why Do These Things?

As the podcast makes clear, megaprojects are difficult to plan and manage. And when they exceed their budgets, they become politically vulnerable and highly unpopular. Given this, should we support massive efforts at civic improvement? In the right circumstances, we think so. Here’s why:

- We have big problems that sometimes require big solutions.
- When done right, the return on investment of megaprojects can be dramatic. Take the building and rebuilding of Hartsfield-Jackson, which became a cornerstone of Atlanta’s economy. Or the building of the Beltline, which is reshaping development in Atlanta.
- That said, we must also be realistic about megaprojects. They can do much good, but there will almost always be unintended negative consequences, such as gentrification.
- There are two reasons megaprojects might work in Urban Atlanta better than in other cities. One is that Atlanta is still growing, and its momentum makes it easier to try big, bold improvements.
- The other is that, when megaprojects succeed, they build pride of place, restore faith in government and leave behind major improvements. The 1996 Olympics came and went but Centennial Olympic Park in downtown Atlanta remained, becoming the city’s “front yard” around which some of Atlanta's most important museums and attractions have gathered.

## What Are the Obstacles?

Even the most worthwhile efforts create opposition. That may be especially true even for costly, lengthy civic improvements. So our members discussed some of the obstacles or barriers that megaprojects might face in Urban Atlanta. Here are some:

- Megaprojects are complex long-term undertakings that are especially difficult to manage. The “messiness” makes it easy for detractors and opponents to stir discontent. And social media makes the critics’ work even easier.
- Because they are so complex and long-term, megaprojects require strong leadership and steadfast political commitment. We can see in MARTA’s history how commitment sometimes fades. Our transit system would be much larger today had it enjoyed the leadership and support the Big Dig had.
- Cynicism and lack of trust in government are impediments. Critics will always use the mistakes of yesterday’s megaprojects to sow doubts about today’s projects.
- For big projects within the city of Atlanta, there’s an added obstacle: the city’s relatively small size. With 532,000 residents, the city of Atlanta is home to less than nine percent of the region’s six million residents. By contrast, the city of Denver has nearly 24 percent of its region’s population. Because of Atlanta’s relative small size, megaprojects are harder to finance here.

## Ways Around the Obstacles

These are difficult obstacles. Here are some ideas our members offered for overcoming these barriers:

- You must start with a clearly articulated vision, along with clear goals and benefits. Put another way, you need a good story and creative ways of telling the story.
- You also need a good plan, strong leadership and good management. This puts a high premium on responsible agencies hiring the right staff.
- Finally, you need political commitment that endures. For that, you may need outside groups advocating for the megaproject.
- Why do megaprojects need all these things? Because they nearly always run into unexpected issues and obstacles—such as cost overruns. The key is to manage expectations, discussing cost increases with political supporters as soon as they’re known and assuring citizens that the benefits still outweigh the costs.
- It may help to remind leaders and citizens of the cost of not dealing with problems. What is the cost, for instance, of not capping Atlanta’s highways? Of leaving neighborhoods divided, of not creating valuable green space in the heart of the city, and of not encouraging the alternatives forms of transportation that these projects could make possible?

## A Synopsis of *The Big Dig*

*The Big Dig* tells the story of one of the most ambitious—and vexed—public works projects in American history. It involved building two massive automobile tunnels in Boston, one leading to Logan Airport, the other heading south and west out of downtown. It also built a new bridge over the Charles River, the cable-stayed Zakim Bunker Hill Bridge, which has become a Boston landmark.

As the podcast makes clear, this megaproject changed Boston in many ways, nearly all of them good. But hardly anyone in Boston associates the Big Dig today with success. What people think of, the podcast says, is “boondoggle.”

The podcast series covers all of this. But it tells another and even more interesting story, about how megaprojects like this come about, surmounting endless obstacles. It turns out, this is an epic tale about politics, journalism, visionary thinking, changing attitudes about urban highways, love of cities and their neighborhoods, and the persistence of a handful of public officials who simply wouldn’t give up on a transformative idea.

If there's a hero in the story, it's Fred Salvucci, a transportation planner who grew up in Boston. He was such a Bostonian that he proposed to his wife underneath the Central Artery, the highway he later played an important role in tearing down.

As he rose through the ranks of the Massachusetts Department of Transportation, Salvucci became convinced that highways were damaging cities and their neighborhoods. He also became a model bureaucrat: patient, determined, knowledgeable about how systems worked and how they could be changed, and deeply skilled in politics. As one observer said of him, "It's like you are playing checkers when the guy next to you is playing chess."

Among his political skills, he learned to listen to opponents. One of them was the lobbyist for the state road builders association. In one of their many conversations, the lobbyist suggested that the reason that Bostonians had turned against building any more roads was because of one highway, the Central Artery through downtown. The Central Artery was so ugly, unsafe and destructive, the lobbyist said, maybe the answer was to tear it down and replace it with a tunnel.

Over the years, Salvucci couldn't get this idea out of his head. But it was more or less just an interesting thought until it became linked with a completely different problem, access to Logan Airport. Logan is conveniently located on a peninsula across the river from downtown Boston and linked to the city by two overused tunnels (one runs toward the airport, the other toward downtown). Logan needed a third tunnel to keep up with demand.

Problem was, the neighborhood nearest the airport, East Boston, was organized and determined not to sacrifice another house to the land-hungry airport. And every plan for the third tunnel involved taking parts of East Boston.

The lobbyist saw a way of putting these problems together for a grand solution: a tunnel that loops under the airport, across the river to South Boston's waterfront, then turns toward downtown AND connects with another tunnel replacing the Central Artery. No houses would be taken in East Boston. An ugly, unsafe highway would go away, and a replacement for the disliked bridge to Bunker Hill could be built.

Salvucci drove to the place the Logan tunnel might cross the river and saw how it could align with a new tunnel downtown. With that, he realized, there was an engineering solution to two major problems. What he needed was a political solution. Over time, Salvucci assembled the solution with a coalition of airport and business interests who cared deeply about better access to Logan; downtown interests who wanted to repair the damage done by the Central Artery and create a downtown park; and neighborhood activists who did not want to lose houses to highways.

It was, the podcast says, "an unholy alliance" of people and political interests who did not know or trust one another. "But in this case," it added, "they needed each other." At the center of the alliance was Salvucci, the chess player.

But he needed two more to agree to his grand solution: Massachusetts Gov. Michael Dukakis and the federal government, which would bear most of the cost of the project. Dukakis signed on in 1983. Salvucci then turned to the federal transportation bureaucracy for what he thought would be a \$2.2 billion project.

The podcast takes us through the twists and turns of federal approval, including proving to federal highway officials that the project would be worth the price and then surviving a major threat when President Ronald Reagan vetoed a highway spending bill including money for the project. (The veto was overridden by Congress.)

But the real challenges lay ahead, after construction started and a new governor, William Weld, came to office. Weld appointed as his secretary of transportation a brusque, hard-nosed manager named Jim Kerasiotes.

If Salvucci had succeeded by outthinking, outplanning and outlasting his opponents, Kerasiotes had a simpler approach. He announced what he was willing to do and berated any who opposed him. In dealing with the companies Salvucci had hired to design and manage the megaproject, Parsons Brinkerhoff and Bechtel, Kerasiotes focused entirely on cost, not the process, obstacles or even the Big Dig's eventual benefits.

After talking to the contractors, Kerasiotes announced in 1993 that the project would cost \$7.7 billion, plus inflation—and not a dollar more. If anyone questioned these numbers, he shouted them down. Whether intentionally or not, the podcast says, Kerasiotes made “price the yardstick for measuring success.”

Things did not work out as he thought. Among other things, it was difficult to dig under an old seaport city where the water table is high, and utilities, from sewer and water pipes to subway tunnels and electricity conduits, must be found and relocated. As one project foreman said, “Nobody knew what the hell we were gonna find down there.”

What project managers found was that the \$7.7 billion estimate was not enough, but no one had the courage to tell Kerasiotes. This continued until he appointed a new project manager in 1999 who sat down with the Bechtel and Parsons Brinkerhoff teams and learned they had hidden the truth for years.

When news got out in 2000 that the project needed at least \$1.4 billion more than Kerasiotes had guaranteed, it set off a round of congressional hearings, a rebellion by the state treasurer (who threatened not to sign off on the bonds), and even became a minor issue in the 2000 presidential election. And it got Kerasiotes fired.

Despite the torrent of controversy—and its ever-growing budget—the end of the Big Dig was in sight by 2003. In December the last car traveled across the Central Artery and by the following summer it was torn down, reuniting downtown Boston with its waterfront at long last. The tunnel to Logan was finished. So was the bridge. In January 2006, the final exit on the downtown tunnel was opened.

At long last, the megaproject was completed. Then came one last set of disasters. There was flooding in some parts of the tunnel. And in July 2006, concrete panels weighting 26 tons came loose in one of the tunnels and crashed down on a car, killing a motorist. Both problems, the flooding and the panels, were found to be the result of shoddy work and lack of oversight. In 2008 Bechtel and Parsons Brinkerhoff agreed to a settlement acknowledging their failure to oversee the project adequately and paid \$458 million into a trust fund to maintain the tunnels.

By that point, the cost of the Big Dig had gone from \$2.2 billion when Fred Salvucci first conceived it to \$15 billion.

The podcast concludes by asking what was learned from the Big Dig. There were two big lessons, it suggests. First, big projects could be done better. Governments could be better at estimating costs and measuring risks, at speeding reviews and granting permits, at keeping politics out of construction decisions. And they could be better at structuring contracts with private companies so there's greater performance and accountability.

Second, public officials should pay greater attention to public opinion. “The narrative matters,” the podcast's host says. And the Big Dig's narrative was lost the moment Jim Keraiotes allowed it to be only about price and not about results and benefits.

And what were the results? As mentioned above, a great scar is gone from downtown Boston. In its place is a 17-acre linear park called the Rose Kennedy Greenway with splash fountains, murals, memorials, a beer garden, even an old-fashioned carousel.

The park has attracted a wave of development that never would have located near the ugly, polluting freeway. Even older buildings have changed, the podcast notes. Buildings that once turned their backs on a freeway have added windows and balconies so people can admire what is below.

And you can now easily walk from the commercial heart of Boston to the waterfront. Millions do so every year.

## About the Atlanta Urbanist Book Group

Our mission at the Atlanta Urbanist Book Group is to introduce new ideas to Urban Atlanta by reading recent books about cities, identifying the ideas we think would work in Atlanta, and offering civic leaders a guide to these ideas.

We define “urbanism” broadly. We are reading books about transportation, land use, housing, public safety, government reform, neighborhoods, social infrastructure, education, economic development, regionalism, diversity, politics, arts and culture, volunteerism, and more.

Our aim isn't to review books but to **show how their ideas apply to Atlanta today** and suggest ways of moving from good ideas to good actions.

You can learn more about the Atlanta Urbanist Book Group at [atlantaurbanist.com](http://atlantaurbanist.com).