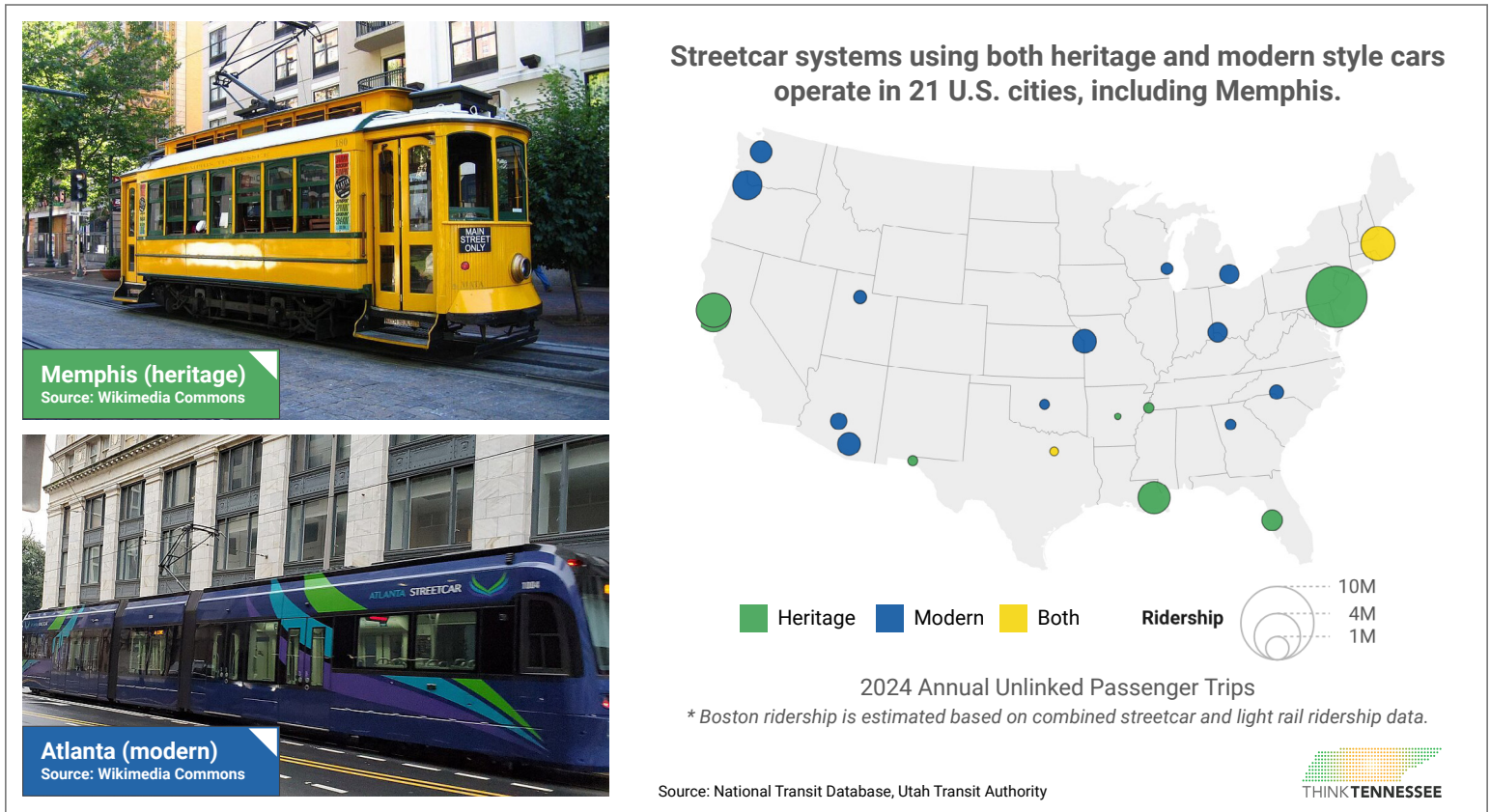


Restoring the Downtown Trolley: Best Practices for Maximizing Memphis' Investment

Downtown Memphis is one of just 21 cities in the country with a streetcar line—street-running rail vehicles also known as trolleys.¹ Streetcars are a transit option that promote mobility, support tourism and hospitality, and create strong downtown neighborhoods.

Memphis' trolley system has experienced challenges over the years—with ridership declines during the pandemic and maintenance issues resulting in suspension of service for necessary repairs. Restoring frequent and reliable trolley service would improve transit connectivity for Memphians and visitors and help to generate economic growth for the city.



Memphis' investment in this streetcar system would cost between **\$675.4 million (\$93.8M per mile) for streetcars** and **\$1.5 billion (\$214.5M) for a modern light rail system** if it were built today.² As the Memphis Area Transit Authority (MATA) continues to work on restoring this valuable asset's role in downtown transit, we share best practices drawn from other cities with similar systems for operating and funding streetcar trolleys.

KEY TAKEAWAYS

- 1 **Operating Model:** A nonprofit operating model, working in partnership with transit agencies, maximizes flexibility, service, and efficiency.
- 2 **Funding:** Development districts help provide revenue for maintenance and operations.
- 3 **Service:** High-frequency service of 15 minutes or less maximizes ridership.
- 4 **Amenities:** Modern streetcars would allow more focus on service and less on maintenance.

Multiple challenges have paused the initial economic benefits of the streetcar system.

The Memphis streetcar network opened in 1993 with the 2.3-mile Main Street line, followed by the 2.4-mile Riverfront Line (1997), and the 2.5-mile Madison Avenue Line (2004).³ Initially established as part of a major downtown redevelopment initiative, construction of all three lines cost \$104.3 million—the equivalent of \$198.6 million in 2025 dollars.⁴ The Main and Madison lines were funded in part—79%—by federal funding.⁵

Ridership was high in the early 2010s, with Memphis' trolleys carrying more than 1.1 million passengers annually, including 700,000 tourists.⁶ The system even recorded the largest growth in ridership of any streetcar or light-rail system in the nation in 2012.⁷ Additionally, property values surrounding the Madison Line saw large increases—between 2002 and 2008, commercial land values increased by 70%, and residential property values increased 780%.⁸

Prior to service suspension for maintenance repairs, ridership was over 1.4 million trips per year.



Source: American Public Transportation Association Annual Fact Book



In recent years, however, the streetcar network has experienced challenges and setbacks, leading to suspension of trolley service.

Most streetcar systems in the United States are one of two systems—“heritage,” those built in the 1980s and 1990s and which use mostly vintage streetcars, or “modern,” those built after 2001 and that feature new cars. Memphis is one of the nine cities with heritage systems, and while they provide vintage character and charm, they are costly to repair or replace and require specialized personnel to service and maintain.⁹

Trolley service has been suspended, restored, and suspended again for maintenance issues over the past decade. After two electrical fires, service was suspended in 2014. Service on the Main Street line was restored in 2018 after a \$10 million investment in repairs, but ridership declined sharply during Covid, and service was suspended again in 2024 due to safety concerns with braking.¹⁰ Currently, only the Main Street line is running, but with rubber wheeled trolley buses, not street-running rail trolleys.

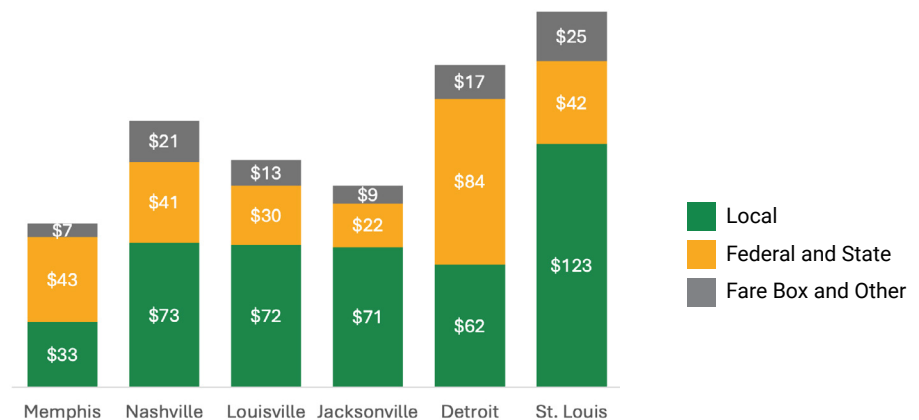


Transit-funding shortfalls make it difficult to maintain assets and deliver reliable service.

Memphis' transit spending has not kept pace with peer cities—from 2017 to 2024, Memphis spent a total of \$83 per capita annually on transit compared to \$115 in Louisville and \$190 in St. Louis.

The funding shortfalls in part have led to systemwide cuts in service and decreases in ridership—from 2005 to 2023, Memphis transit service was cut by 39%, and total ridership decreased by 80%.¹¹

Memphis spends less per capita than peer cities on transit.



Source: National Transit Database - Transit Agencies Profiles. 2017-2024 average operational spending per service area population by source.



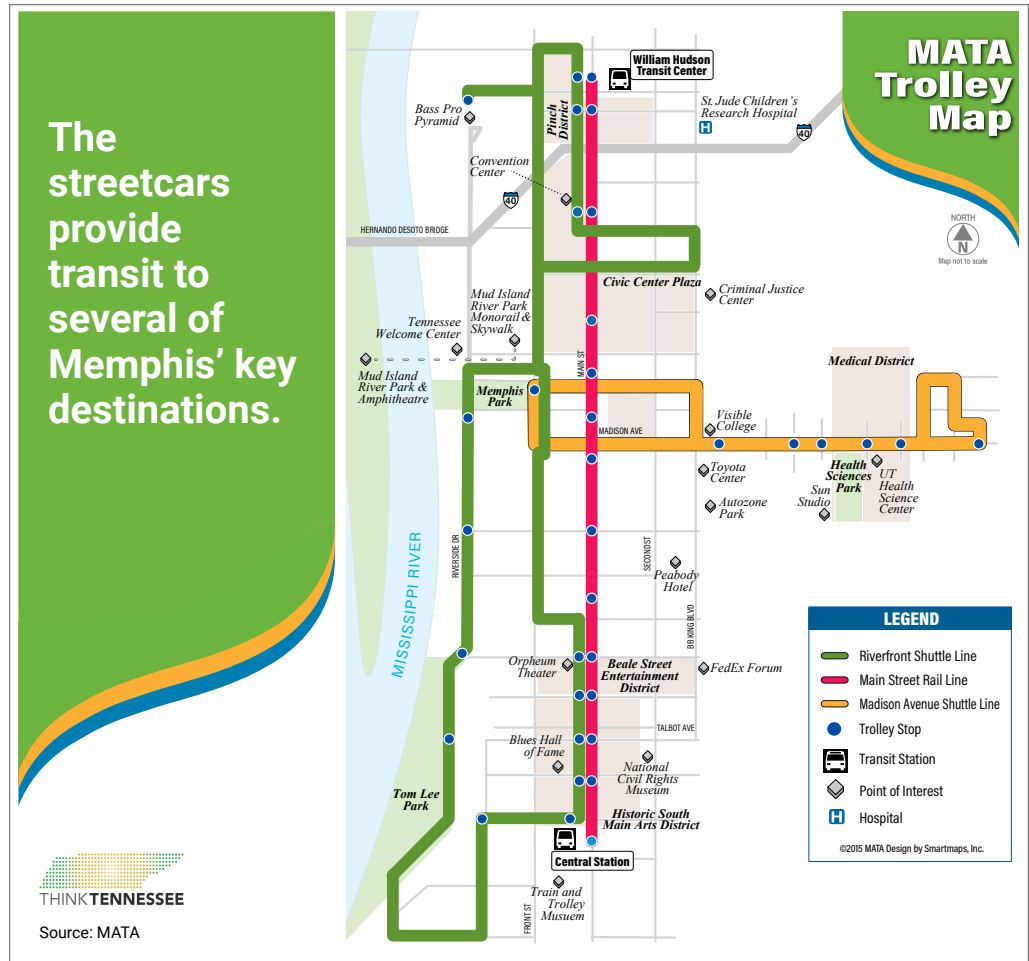
Restoring the Memphis trolley system will improve transit access and encourage economic development.

If Memphis were to build a 7.2-mile urban rail system today, it would cost between **\$675.4 million for streetcars (\$93.8M per mile)** and **\$1.5 billion for a more modern light rail (\$214.5M per mile)**. Restoring the existing streetcar system would leverage this investment to increase transit access, encourage economic development, and support tourism in downtown Memphis.

As Memphis continues to work on restoring its trolleys to service, we draw four key takeaways from successful implementation of similar trolley services in other cities: operating through a nonprofit rather than a transit agency, providing dedicated funding through development districts, investing in high-frequency service, and using modern streetcars.

The streetcars provide transit to several of Memphis' key destinations.

THINK TENNESSEE
Source: MATA



1

Operating Model: A nonprofit operating model, working in partnership with transit agencies, maximizes flexibility, service, and efficiency.

Some cities, like Kansas City and Portland, run streetcar operations through a nonprofit rather than the more traditional transit agency-operated model. While the city or transit agency owns the trolleys, supplies drivers, and provides maintenance services, the nonprofit oversees operations such as scheduling, sourcing funding, marketing, and general management decisions.

These systems can also generate revenue to fund operations through private sector advertising and co-marketing—including offering streetcar rentals or charters, exterior advertising, sponsorships (of individual lines, stops, or trolley cars), or covering fares for special events and occasions.

CASE STUDY Tampa

Shared responsibility between the Tampa Historic Streetcar (THS) and the Hillsborough Transit Authority (HART) improves funding and operations.

Tampa's streetcar is governed by THS, a nonprofit corporation created by the city and the HART. THS is responsible for operation, management, and maintenance, overseeing major policy and service decisions, managing the system's balanced budget, and sourcing revenue. THS contracts operations, maintenance, and safety personnel to HART's Streetcar Division through an operating agreement.¹²

Tampa's streetcars are partially funded by an endowment fund fueled by private sector contributions, as well as selling naming rights for stations and trolley cars, advertising and fares, and private charters.¹³

2

Funding: Development districts help provide revenue for maintenance and operations.

Development districts—areas where property owners opt in to an assessment to build, operate, and maintain infrastructure—generate dedicated funding that supports frequent, dependable transit service that results in growth and economic development for the entire district. Tampa, Kansas City, Portland, and Dallas use these districts to support their streetcar systems.¹⁴ The cost of the tax is recouped by the increased property values, denser development, and increased foot traffic to nearby businesses.



The Main Street Rail Transportation Development District (TDD) supports KC Streetcar operations.

Voters surrounding the KC Streetcar approved the TDD in spring 2018. Revenue collected from a special property assessment on applicable properties, a 1% sales tax, and an annual fee for surface parking lots supports daily operations and maintenance, as well as debt service on outstanding construction bonds.¹⁵

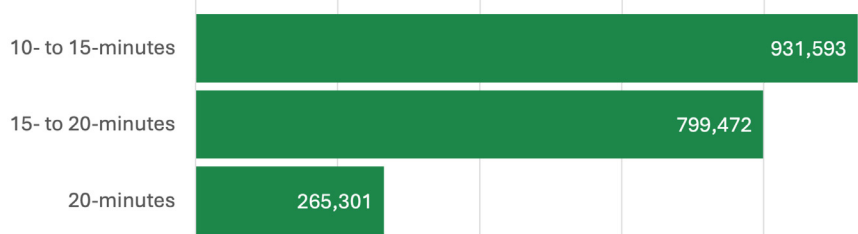
3

Service: High-frequency service of 15 minutes or less maximizes ridership.

Streetcars see the highest ridership per mile when service is provided frequently.¹⁶ When streetcars arrive every 10-15 minutes, they become essential, reliable transit options for both daily commuters and tourists.

Cities with high ridership—Kansas City, Tampa, Portland, and New Orleans—provide service at least every 15 minutes.

On average, systems with more frequent service have higher ridership.



Average ridership of 15 U.S. streetcar systems by frequency of service.

Average Annual Unlinked Passenger Trips
Source: National Transit Database and Transit Agencies



4

Amenities: Modern streetcars would allow more focus on service and less on maintenance.

Heritage systems like Memphis' often require a specialized maintenance team, and it is becoming harder to find available personnel with the necessary expertise. Modern streetcars, in addition to less extensive maintenance needs, provide higher capacity, faster passenger loading, increased accessibility, and improved energy efficiency.



Modernizing a heritage system allowed for growth.

Downtown Tucson's Old Pueblo Trolley—a 1.1-mile heritage system launched in 1993—provided limited service and saw minimal annual ridership of 33,000.¹⁷ Voters approved a half-cent sales tax in 2006 to modernize and expand the system.¹⁸ Coupled with a \$63 million TIGER grant, the city purchased seven modern streetcars, expanded the track to 4 miles, and rebranded the system as Sun Link.¹⁹ By 2024, there were 1.5 million passenger trips.²⁰ The city is working to further expand the system, recently receiving a \$450 million federal infrastructure grant.²¹

The Memphis streetcar system has demonstrated over the years that it can provide critical transit service and economic development. With new partnerships and investments, a revitalized trolley system could again bring these benefits to the heart of Memphis.

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