



# All aboard The Hop

Shoved aside for rubber-tyred competition, streetcars are making a comeback in Wisconsin's largest city. **Dave Lustig** investigates.

Sometimes you don't know what you had until it's gone. In the mid-20th century, Milwaukee had an extensive network of interconnected streetcar lines. But in a story told over and over throughout the USA, the development of the interstate highway system and improved local roads after World War II led to steady retrenchment and the eventual demise of electric streetcar operations in March 1958.

Buses became the staple of public transport, but travellers were rapidly gravitating to private cars, bringing the inevitable road congestion which trapped bus operations in a downward spiral. And the situation only became worse as the population increased.

Today, the largest city in Wisconsin has around 600 000 inhabitants, while the wider metropolitan area is home to about 1.5 million. But in a reversal of earlier trends, the streetcars are back. While the initial route which opened on November 2 2018 may be short, it has proved popular and planning is already underway for further extensions.

### A desire for streetcars

The Milwaukee Streetcar project began in 2010. Recognising that road congestion was imposing a significant

*Above: Brookville Equipment Corp has supplied five Liberty Modern Streetcars to operate Milwaukee's routes M and L.*

*Right: Heading for Burns Common on N Milwaukee Street, streetcar 04 passes the junction for the Lakeside loop which diverges right into E Michigan Street.*

constraint on economic activity, forward-thinking civic leaders began looking for alternatives. The city produced a comprehensive 10-year plan to make the city centre more conducive to pedestrians, and attract visitors.

Part of the plan was a 3.4 km downtown streetcar line to improve mobility in an already overcrowded area. By opening up more destinations for visitors than could be reached on foot, it would — they hoped — become a catalyst for further growth.

The route was selected to weave together key activity centres through the city, serving an estimated 25 000 residents as well as 80 000 workplaces and many attractions which draw millions of visitors each year.

At its southern terminus, the initial M-Line starts from the Intermodal Transport Station, which is also served



Photos: Hal Miller

by Amtrak, Greyhound long-distance buses and local public transport. Heading east to the Historic Third Ward, which is the fastest growing neighbourhood in the city, the line turns north through the central business district towards City Hall, loops past Cathedral Square and continues to Ogden Avenue, before terminating at Burns Common.

A much-delayed second phase is now expected to open by the end of 2023. The figure-of-eight L-Line will

use the twin single tracks through the city city centre and diverge to serve East Town, the Lower East Side and the Lakefront district.

After much debate, the streetcar project was approved by the City of Milwaukee Common Council in February 2015. The total cost was put at \$128m, of which the first phases were priced at \$99m and the Lakefront extension at \$29m. In a relatively unusual funding model, an initial federal grant of \$54.9m was matched locally by the use of Tax Incremental Financing districts, intended to capture a proportion of increased property values. The Federal Transit Administration also provided a TIGER grant of \$14.2m towards the construction of the Lakefront branch.

Tenders for construction were called in April 2016, and four months later Omaha-based Kiewit Infrastructure was selected to build the first line and

depot. Preparatory works and utility relocation began the same year, and tracklaying started in February 2017.

Tenders were also called for rolling stock, with a Request for Proposals geared towards service-proven vehicle types. An initial four Liberty Modern Streetcars were ordered from Brookville Equipment Corp for \$18.6m, with a fifth subsequently being added to cover the second phase. The cars feature bicycle racks as well as a ventilation system 'adapted to meet the needs of Milwaukee's climate', according to the manufacturer. Each can carry up to 150 standing and seated passengers.

The Operations & Maintenance Facility on Vel R Phillips Avenue lies underneath Interstate 794, in the shadows of the original streetcar depot. It can handle virtually all repairs in-house, including component replacement and minor body work. A portable wheel lathe is also available.



*The streetcars are maintained by Brookville at a small depot under the Interstate 794 viaduct close to Milwaukee Intermodal Station.*

### Keeping people inside

During the construction phase, the City of Milwaukee engaged a local communications firm to oversee community outreach and engage with stakeholders along the route.

'We were both aggressive and proactive in our communications', recalls Project Engineer David

150

passengers can be carried in each Liberty Modern Streetcar

“We were largely successful at sharing with stakeholders along the route our vision for the project”

David Windsor, Project Engineer



Windsor, 'ensuring that there were no surprises to business owners along the route about construction timelines, impacts on street parking, road closures and more.'

'While that doesn't mean there wasn't frustration at times, we were largely successful at sharing with stakeholders along the route our vision for the project and that the long-term benefits would far outweigh the short-term inconvenience.'

In addition to collaborating with stakeholders, the planners spent nearly a year on a public education campaign before the opening. This included making presentations to local business groups, taking stands at city events, and holding open house events at the maintenance facility where people could look around the stationary streetcars.

'At each of these touchpoints,' says Windsor, 'we focused on the long-term benefits of the system, the broader vision for future expansion, the ins and outs of how to ride, and what destinations were accessible along the route.'

Additional emphasis was placed on safety, with promotional materials aimed at streetcar riders as well as those driving cars or riding bikes and motorcycles along the route.

However, still car culture remains dominant in Milwaukee and the planners have worked hard to highlight the many ways people can integrate the streetcar into their daily routines, including the provision of free parking at either end of the route.

**Funding constraints**

The Milwaukee Streetcar was originally envisaged as a conventional fare-based system, but in October



In wintry conditions, streetcar 04 calls at Cathedral Square's island platform, working a southbound service through the city centre.

2017 the city signed a 12-year sponsorship and naming rights with the Potawatomi Native American community. This saw the line formally renamed as 'The Hop', mirroring the local name for the Potawatomi Hotel & Casino. The \$10m funding deal also provided free ridership for the first year of operation.

Nevertheless, long-term operational funding remains a significant challenge. As construction was nearing completion and revenue service was about to commence, the Wisconsin legislature passed legislation that restricted state operating assistance for rail-based transit systems in cities of a certain size. That was effectively only Milwaukee, implying that the legislation had been specifically directed at The Hop.

Despite carrying more passengers per hour than any other transit system in the state, at a comparable cost per passenger based on pre-pandemic 2019 data, The Hop is currently ineligible for any of the state operating assistance funding that is provided for all other public transport operators in Wisconsin. As a result, the city relies disproportionately on local funding to cover the vast majority of operating costs. And it is also currently

prohibited from introducing a sales tax to fund the streetcar operation.

The Hop's 2022 operating budget projects costs of \$4.6m and only \$1.4m in income, including the Potawatomi sponsorship, leaving about \$3.2m to be found from other sources. These include revenue from city-owned parking facilities and advertising, as well as a small contribution from a federal congestion mitigation and air quality grant. The introductory free travel period was due to be superseded by a flat fare of \$1 a ride, although free travel is still being offered pending the procurement of a suitable fare collection system [correct?].

Former Milwaukee Mayor Tom Barrett had hoped to obtain operating support from the federal Covid relief programme last year, but the application proved unsuccessful.

**Operating contract**

Operation of The Hop is managed by Transdev North America, under a five-year contract awarded by Milwaukee's Department of Public Works in mid-2017, which includes an optional five-year extension. Transdev employs about 30 people locally, but has subcontracted the vehicle maintenance to Brookville.

The streetcars run from 05.00 to midnight on weekdays, 07.00 to midnight on Saturday and 07.00 to 22.00 on Sunday. Headways are every 15 min at peak hours and every 20 min off peak, although technical problems saw the service cut to every 40 min in the early months of 2022. During the first couple of years the operating hours were extended and

service frequencies increased during festivals and other high-volume city events, but this has not happened much since the onset of the coronavirus pandemic.

As with many public transport operations, The Hop was badly impacted by Covid-19. Services were cut following the imposition of stay-at-home orders, and because of the impact of the virus on staff. Ridership was also affected by health concerns, although patronage is starting to recover.

Average ridership is reported to be around 2 300 passengers/day, well above the 900 carried at the worst point in the pandemic but still down on the average of 3 343 recorded in July 2019. The highest recorded figure for a single day was just over 9 000.

**Initial feedback**

As with any publicly funded, large infrastructure project, the Milwaukee streetcar remains controversial, but in general the feedback has been positive, Windsor reports. 'What we've generally seen is that the voices most critical of the project prior to launch have largely faded away, either because they've come around on the system's benefits or just accepted that it's here to stay.'

'We've received great feedback from business owners along the route who benefit from the increased traffic, and the city already has numerous examples of new development being pursued along the route, specifically citing the streetcar as a motivating factor. Feedback from riders has been largely positive, although there have been complaints about the service being too infrequent.'



**Extensions proposed**

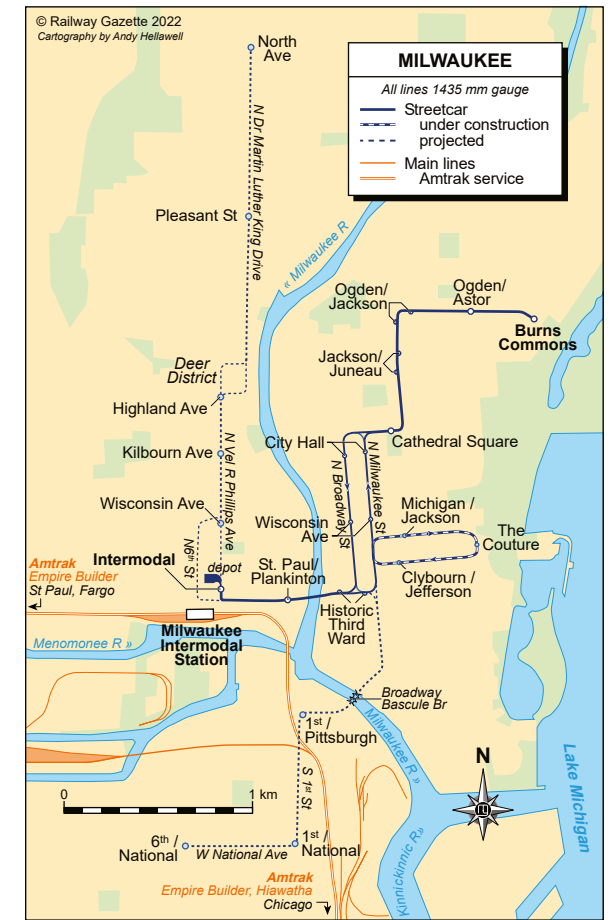
From the beginning, city planners have looked to expand the streetcar network into surrounding neighbourhoods.

The 640 m Lakefront extension being built as the second phase of the project was originally expected to open in 2020. However a short section of the route in East Michigan Avenue passes through a \$122m development project known as The Couture, which is being built on the site of the former Downtown Transit Centre and will incorporate one of the stops. Approved as long ago as 2012, this 44-storey tower with 322 apartments was repeatedly delayed, and construction did not begin until May 2021. The city is now confident that the missing section of trackwork can be completed in time for Route L to open in the second half of 2023.

Further extensions are also on the cards. Addressing a Rotary Club luncheon at the end of March, shortly before being elected as the city's new Mayor, Milwaukee Common Council President Cavalier Johnson said he saw the streetcar network as a way to stimulate the city's economy, generating 'family-supporting jobs and more.'

'When you have fixed rail development around that infrastructure, what you get is nodes of economic activity,' he explained. 'I don't think that it was ever meant to be solely a circulator for downtown Milwaukee in the footprint that it's in right now. It should stretch beyond and go into the neighbourhoods so we can see that economic development along its tracks to happen outside of downtown as well.'

Proposals are now being developed to build a further 11.3 route-km over the next six years, at an estimated cost



Track and catenary for the Lakeside loop are already in place at the future stop on Clybourn Street, looking east towards the unfinished development at The Couture.

of around \$330m, of which up to 80% would be federally funded. The package includes connections to Bronzeville, Walker's Point and Marquette University, as well as the western side of the city centre and commercial areas on the East Side.

Windsor says the city has completed much of the planning and engineering work for a short extension from the Intermodal Terminal into Milwaukee's Westown neighbourhood to serve the Fiserv Forum, and the surrounding Deer District. Another branch would diverge at Third Ward and head south and west to the Walker's Point neighbourhood.

Some funding for these projects may be available from the federal infrastructure bill passed at the end of 2021, and Windsor suggests that planning needs to focus on getting the implementation right. 'While we can't always control available funding and grant opportunities to facilitate that expansion, we can control the level of service we provide and the effort we put in to introducing the streetcar and its benefits to new segments of our community,' he concludes.