The Story of H Street and the Revival of DC’s Streetcar Network

By Rich Sampson

Looking down and east from the Hopscotch Bridge – appropriately named for the bright murals which frame the structure which carries Washington, D.C.’s H Street over the rails which host dozens of daily intercity and commuter trains at nearby Union Station – H Street again bustles with activity. Although H Street is one of the oldest commercial districts in the nation’s capital, an economic downturn that coincided with decades of societal unrest stymied the vibrancy of the area from the late 1960s until the first decade of the 21st century.

Among the scores of new and resurgent restaurants, retail stores and cultural institutions are the signs of revitalized public infrastructure – new traffic signals, street lights, trees, bike racks and benches – that correspond with the thoroughfare’s re-emergence. Among these amenities, few represent the growing energy of H Street as clearly as the rails, wires and distinctive red-yellow-and-silver streetcar vehicles that represent Washington’s first streetcar service in more than a half-century. Now in the final stages of testing, the H Street streetcar not only tells the story of the restored vitality of its namesake roadway, but also serves as just the first chapter in a citywide initiative to rebuild Washington’s streetcar network.

Streetcars in DC: Always Distinctive

There’s a familiar story arch in many communities as they go about returning streetcars to their roads, streets, avenues and boulevards. Streetcars were customarily the first wave of mass transit service in a given city, with electrified vehicles taking the place of their horse-drawn predecessors. They reached their peak in the 1930s and ‘40s, and as automobiles became the preferred mode of both local travel, buses replaced streetcar lines during the ‘50s and ‘60s. The chronology in Washington, D.C., doesn’t read too differently: the first horse car lines appeared in 1862, a collection of privately-owned streetcar routes were consolidated into a network...

Despite its conventional rise-and-fall narrative, D.C.‘s streetcar network bore many unique characteristics that left lasting signatures in the region’s collective memory and will likewise leave their imprints on the city’s forthcoming modern streetcar operations. Capital Transit’s patchwork of previously competing lines produced several redundant routes, sometimes only a block apart. The collection of lines served to reinforce a strong northwest-to-southeast orientation of the network, visible on the map at right. Those trends are evident in development patterns still prevalent today, largely producing more activity in those corridors and less in the city’s northeast and southwest reaches.

Additionally, owing to the well-known grid structure for the nation’s capital city devised by French civil engineer Pierre L’Enfant, D.C. streetcars had to contend with numerous circles, squares and triangles that disrupted clean horizontal and vertical lines, not to mention L’Enfant’s famous diagonal boulevards.

The Legacy of Pierre L’Enfant

No American city is as strongly associated with the person who designed its street network as the pairing of Washington, D.C. and Pierre L’Enfant. President George Washington appointed L’Enfant to design what was known then as the Federal City in 1791. L’Enfant presented his design to Washington a few months later, who in turn submitted it to Congress for approval. His plan called for a grid of east-west running streets designated with letters, north-south travelling roads marked by numbers, diagonal streets named after the various states and circles at locations where many streets came together. L’Enfant was ultimately dismissed by Washington after he clashed with Secretary of State Thomas Jefferson and L’Enfant was paid only a small sum for his work. Although the plan was later modified by surveyor Andrew Ellicott, L’Enfant’s plan still formed the foundation of the city we know today as Washington, D.C., along with a downtown district and corresponding Metro station named in his honor: L’Enfant Plaza.
vards bearing the names of the various states. This included a rare streetcar subway tunnel beneath Dupont Circle which still exists – unused – today, as well as winding paths on hilly, cobblestone-lined streets in Georgetown and detours around signature edifices like the U.S. Capitol building and the White House. These navigational quirks meshed with several stretches of private rights-of-way to places like Branchville and Glen Echo, where streetcars operated more like interurbans.

The most distinctive element of Washington’s streetcar network, though, is one that will impact today’s planned network most of all: the prohibition of overhead electric wires through L’Enfant’s 1791 capital city street grid. For good reason, Congress enacted legislation in 1896 to preserve L’Enfant’s sweeping views across the National Mall and the state-named boulevards from the proliferation of electric wires. In response, streetcar engineers applied an alternative method of providing electric power via a slot between the rails known as conduit current collection first pioneered in Denver in 1885 and used extensively in places such as Manhattan, London, Paris, Budapest and Prague. Streetcars within the boundaries of L’Enfant’s capital city grid were required to use the underground power collection method, while vehicles originating further out connected to overhead power lines, a hybrid method unseen elsewhere. As Denver transitioned most of its streetcar lines to overhead power lines and New York replaced much of its streetcar network with its signature subway system, D.C. stood out with its use of conduit current collection until the end of service in 1962.

Although street-level rail service disappeared that year, it did not mark the end of rail transit service in the Washington region. Plans were already underway for a regional rapid transit network today known as the Metro, which opened its first line in 1975. Today, the Metro is the second-busiest rail transit operation in the nation after the New York City subway, carrying more than 750,000 daily riders on average. The Metro complements two regional commuter rail systems – Maryland’s three-route MARC service and the two-line Virginia Railway Express – as well as Amtrak’s Northeast Corridor and nationwide network, all located at Union Station (for more information on Washington’s Metro rail network, see Defined by Distinctiveness in RAIL #19 – ed).

A Reason to Return to Streetcars

Despite benefiting from a regional transit network that ranks among the nation’s best ridership, size and economic impact metrics, city leaders in the District of Columbia, proper, began to focus on mobility needs for shorter-duration trips at the dawn of the 21st century. Although the Metro rail and bus networks operated by the Washington Metropolitan Area Transportation Authority (WMATA)
offered convenient ways to get around the larger region, D.C. residents found the system coming up short in effective ways to get between neighborhoods without being swamped by the hundreds of thousands of daily Metro commuters. New alternatives were necessary.

Their first response was the **DC Circulator** bus system, which opened in 2005 under the auspices of **District’s Department of Transportation** (DDOT). The concept was simple: provide low-cost ($1) fares on routes that complimented the Metro bus and rail system and operate service so frequently (every 10 minutes) that bus schedules were irrelevant. Today, the DC Circulator operates five routes that carry 4.8 million annual riders, and are easy to spot on city streets with sleek, modern buses sporting the Circulator’s swooping red-yellow-and-silver livery – an important distinction in contrast to Metro’s iconic red-white-and-blue motif.

“The Metro network was designed to bring people into and out of the city, and there was not much connecting other D.C. destinations,” Rebekah Braswell, Transportation Administrative Assistant for the Downtown D.C. Business Improvement District said when the Circulator debuted in 2005.

“Streetcars are not just part of our past, they’re also an important part of our future,” added then-D.C. Director of Transportation Gabe Klein. “Today, even with our great Metro system – which was primarily designed to move people in and out of the city – there is still a need for more, high quality transit service that links neighborhoods together and helps residents circulate around the District.”

Having introduced Washington residents to an additional mobility option beyond the regional Metro network, DDOT sought to identify even more ways it could better connect parts of the city. Plans were already on the books since the early 2000s for a **33-mile**...
citywide streetcar network that would begin with a starter line in the Anacostia district utilizing a former CSX freight rail line. Although efforts to begin a revitalized streetcar network in Anacostia area ran into logistical challenges, a then-unrelated initiative to reinvigorate H Street set the stage for the first new streetcar infrastructure in Washington in more than 50 years.

“Metrorail service ... is not equally available throughout the District and does not reach certain areas with high demand for premium transit,” D.C.’s Office of Planning noted in a 2012 report on the streetcar network. “The proposed streetcar system is planned so that it would reach many of those areas, tying them to each other and to Metro. Unlike Metro, the above-ground nature of the streetcar would increase its visibility and expand opportunity for visitors and others to experience the city visually,”

H Street: A Great Street, Primed for Re-Emergence

The revitalization of H Street to its historic role as a key retail and entertainment district was first triggered by the transformation of the 1938 Atlas Theatre into the Atlas Performing Arts Center. The one-time movie house at 1313 H Street had been closed in 1976 and was held in reserve between 1985 and 2001 by a community organization, when the Atlas Performing Arts Center acquired the facility. A $22 million renovation followed in 2005, supported by a mix of public and private investment. The theatre’s restoration signaled to community and business leaders that H Street was primed for reemergence. A handful of new restaurants, retail and entertainment entities followed the Atlas’ lead, establishing a foothold for redevelopment that had been primarily oriented towards the region’s Metro rail stations.

Hoping to leverage the budding success of the H Street revival, the city integrated the corridor into its Great Streets effort, joining 10 other thoroughfares across the District in receiving upgraded road surfaces, new sidewalks and lighting and other amenities to encourage not only economic development, but fortify a sense of place vital to community life. Nonetheless, only H Street’s improvements included the installation of streetcar tracks and lighting fixtures that could support overhead power wires as part of the project. According to local community leaders, H Street represented an ideal mix of existing activity, potential for growth and historic foundations for deploying the city’s first streetcar.
“It’s a great thing for H Street,” said David Holmes, who represents the area as a Commissioner on the city’s Advisory Neighborhood Council. “We waited a long time and it’s almost here. It will make it easier for people to get there. People usually take cabs back and forth, but the streetcar will bring people to the establishments on H Street.”

After a series of procedural measures – many concerning whether H Street was included in L’Enfant’s legally-protected capital city plan prohibiting overhead wires – the city’s ultimate commitment to the H Street line with a vote of the D.C. City Council on May 25, 2010. The route – which utilizes overhead catenary power – extends 2.4 miles from Union Station to Oklahoma Avenue on both H Street and a short stretch on Benning Road, making eight stops en route. Three streetcars manufactured by Skoda-Inekon in the Czech Republic will join an additional three constructed in Portland, Ore., by United Streetcar. The route is expected to open for service this summer and initially serve more than 4,250 daily riders.

**Don’t Stop At H**

While the H Street-Benning Road line will mark the first streetcar service in Washington, D.C. since 1962, it will not serve as a one-off route.

A number of new rail transit projects will be added in coming years to supplement the existing Metro rail network, including DC Streetcar lines (shown in black on the map at left), the Purple Line through Maryland’s Montgomery and Prince George’s counties (at top of map) and streetcar lines in Alexandria and Arlington in Virginia (black lines at bottom right of map).
novelty. The 2.4-mile segment between Union Station and Oklahoma Avenue is only the first reach of a crosstown route between between the Benning Road Blue Line Metro rail station in Southeast D.C. and the historic district of Georgetown, whose reasons for exclusion from the Metro rail network have long been debated in the region. That east-west running line from Benning Road to Georgetown is itself part of a 22-mile, 3-route priority system of streetcar lines currently navigating various stages of the planning process, including a north-south corridor from a Red Line Metro station at either Takoma or Silver Spring, Md., to the city’s Waterfront District and the Washington Nationals’ Ballpark, along with a curving route from the Waterfront across the Anacostia River, utilizing a portion of the originally-planned Anacostia line. A still-larger 37-mile network is proposed to add an additional five routes, serving all eight of the city’s wards. Every route would connect with at least one Metro rail station, as well as numerous DC Circulator and Metro bus routes. Some portions of the system will use conventional overhead electric power, while others operating through L’Enfant’s capital city grid may utilize ground-breaking technology like induction-charge batteries to avoid unsightly wires.

Of course, the city’s eagerness to reinstitute its streetcar network hardly stems from sentimental nostalgia. Most importantly, the District of Columbia has prioritized development of both its Circulator and Streetcar modes to offer greater connectivity to the city’s residents who often find Metro trains over-
period, the streetcar network could attract 7,700 new jobs and as many as 12,000 new households, producing an economic impact of more than $8 billion in new development, $5.8 billion and $1.6 billion in increased commercial and residential property values, respectively, and deliver more than $290 million in new annual tax revenue to city coffers. An earlier study led by the Brookings Institution and others estimated the H Street line alone could attract $1.1 billion in development over 20 years.

“The District has the most ambitious streetcar plan in the nation,” says Washington, D.C. Mayor Vincent C. Gray. “We are the only city talking about putting down 37 miles of tracks. I think the streetcars will compliment the growth and development that we’re seeing in the city.”

First via the H Street-Benning Road line, D.C.’s streetcar network also signals a new era of streetcar and light-rail operations in the Washington region. Following the city’s initial line will be the Purple Line light-rail route in Maryland’s Montgomery and Prince George’s counties by 2020, the first phase of a potential circumferential line that could ultimately connect all Metro rail lines in the region. Across the Potomac River in Virginia, new Bus Rapid Transit infrastructure currently under construction in Arlington County and the city of Alexandria may ultimately be upgraded to include a hybrid light-rail/streetcar operation, one that might also stretch westward through Arlington along Columbia Pike to reach into Fairfax County. Preliminary discussions for new light-rail or streetcar routes are underway in Maryland to link the existing Green Line Branch Avenue Metro rail station to White Plains in Charles County and in Virginia between Tysons Corner and Merrifield, as well as additional extensions of the Metro rail system. By exposing the region to a new form of rail transit long dominated by the heavy and commuter rail modes, the DC Streetcar is already ideally-positioned as a trend-setter.

The Paradoxes of Washington

The quirky history of streetcars in Washington, D.C., serves as both a guide and a foundation for the mode’s return after more than a half-century absence. The manner by which streetcars interact with the nuances of life in the nation’s capital city – from the historically-challenging need to explore alternatives to overhead electric power to how modern streetcars will connect with the busy Metro rail network – will once more define their perception as a regional asset. In many ways, the full sweep of Washington’s streetcar identity is a fitting match for how many view the nation’s capital: an odd place where few things are achieved quickly or easily, but what is accomplished matters a great deal.
Late next year, modern streetcars will begin running along a two-mile starter line in downtown Kansas City. Their appearance will mark both the end of a decades-long struggle to bring passenger rail back to Kansas City, and the beginning of an effort to build a fully-formed, city-wide transit renaissance that weaves together rail, bus rapid transit and fixed-route bus into functional network that drives local economic growth.

And just as track is being laid along the initial line, local battle lines are forming over the streetcar network’s first extension — an 8-mile line along Independence Avenue and Linwood Boulevard out to the University of Missouri’s Kansas City (UMKC) campus. An additional 9-mile bus rapid transit project is also part of the evolving plan.

Streetcars have not plied the streets of downtown Kansas City since June 1957, when the last of the Kansas City Public Service Company’s fleet — largely PCC cars — went out of service. In its heyday, Kansas City’s streetcar network totaled 25 lines and more than 300 miles. Altogether, it will have been 66 years once the new downtown line begins operations next year.

**Struggle — and Success — at the Polls**

The city’s initial foray into raising the local revenues necessary to reintroduce local rail service was an ill-fated 2001 vote to raise a ½-cent sales tax to support a 24-mile light-rail system. It failed with local voters.

Five years later, a citizen’s referendum surprisingly passed a 3/8-cent sales tax for 30 years to implement local light rail serving both the Kansas City International Airport and the Zoo. It was the seventh referendum in nine years that one local citizen, Clay Chastain, had sponsored and its passage with more than 53 percent in favor, did not immediately result in a light-rail network. The 30-year plan was deemed underfunded and unfeasible and was...
eventually overturned by the city council. Fast forward to November 2008, and local citizens once again asked to support light rail — voted down another 3/8 cent sales tax for what supporters thought would be a more realistic 14-mile starter light rail route.

With the idea of light rail in Kansas City fading, advocates turned to streetcars. They also sought a more strategic approach at the ballot box. Streetcars emerged as the answer. In a special election in December 2012, 700 local residents of a special created downtown taxing district were asked to support a local property and sales tax combination designed to collect approximately $10 million per year for the next quarter century — an amount which would collect nearly three quarters of the 2-mile streetcar line’s total $100 million cost. It passed with a nearly 65 percent approval and provided a route to rail success.

Of course, in a tale of abrupt twists and turns like that of rail in Kansas City, Newton’s Law of equal and opposite reactions is apt. That reaction, in Missouri, comes in the form of a statewide referendum in 2010, though not specific to transit or passenger rail, that will likely have a significant impact on Kansas City’s streetcar and public transportation future. Known cryptically as the Let Voters Decide initiative, the Missouri Earnings Tax Initiative was approved requiring voters in Kansas City and St. Louis to re-affirm funding referenda every five years. Further, regardless of how long the original passed legislation stipulates funding, it requires statewide voter approval every five years to continue the earnings tax (a combination of income and property taxes)
in Missouri’s two largest cities for such vital services as public safety and, yes, transit.

The First Step

Directly after the December 2012 vote, HDR, Inc., were selected by the City Council to design the route. Soon after, CAF’s Urbos 3 streetcars were selected as the rolling stock (the same car selected for service in Cincinnati, Ohio).

The first streetcar tracks for what’s now referred to locally as the starter line were laid in November with work on the 2.2-mile line to fully launch this month. The starter line largely follows a north-south orientation along Main Street between the River Market and the city’s historic Union Station and will offer riders connection to both Amtrak and intercity bus routes, including bus service to the airport. Service will be operated by the nonprofit Kansas City Streetcar Authority.

In early April, the Kansas City Council approved a guaranteed maximum construction cost for the project at $61.7 million, which paved the way for full project construction to begin. Interestingly, the guaranteed maximum cost was negotiated down from an earlier estimate published in January. KC Streetcar Constructors, a joint venture of Herzog Contracting and Stacy & Witbeck, Inc., will lead a team of more than 60 subcontractors in building the line.

In late April, the Kansas City Streetcar Authority recommended that Herzog Transit Services – located in nearby St. Joseph, Mo., act as the preferred vendor operating and maintaining the line.

Extending the Reach

In late March, the Kansas City Council unanimously agreed to extending the streetcar line an additional 8 miles, running along Independence Avenue and Linwood Boulevards in a more east-west direction. At least initially, the Council’s decision set in motion a series of court hearings to decide a new local taxing district and future ballot initiative to pay for the extension. Residents in the proposed new district would be asked to pay an additional 1-cent sales tax increase as well as be subject to special property assessments based on proximity to the streetcar line. Current cost estimates of the extension are nearly $500 million. The new taxing district would replace the existing one. (This video provides an excellent resource, detailing the significant community involvement and rationale used to select the second round of streetcar and BRT service in Kansas City – ed)

In addition to the streetcar extension, the new plan approved by the City Council also includes 12 additional miles of bus rapid transit – known locally as MAX.

Reviving Downtown

Kansas City is attempting to attract younger, tech savvy millennials as part of its overall downtown redevelopment strategy. Re-introducing streetcars is an important part of this effort.

And based on initial returns, the effort seems to be paying off. A recent Brookings Institute report ranked Kansas City 14th (out of 51) in adding young people to its population. Between 2009 and 2012, the city added 2,200 people each year aged 25-34. Lower cost of living and access to public transit are keys to attracting this well sought-after demographic.

Like many traditional downtowns, Kansas City’s is one that laid fallow for much of the past 30 years as development peaked in the suburbs and around the Country Club Plaza area. The streetcar’s Main Street starter line – along with the now-proposed second phase – signals a return to downtown investment for which local leaders and advocates have longed.