



D.C.'s Silver-Line Slog

A costly and long-delayed subway project raises questions about America's ability to build needed infrastructure.

By Ethan Epstein
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A trip through Washington, D.C.'s Dulles International Airport offers a glimpse of what people in the past thought transportation would look like in the future. Opened in 1962, the airport boasts a quintessentially “mod” look, thanks to a stunning, Eero Saarinen–designed main terminal meant to evoke flight. But Dulles evokes the early 1960s in another way: its lack of a rail connection to the city it serves recalls a time when the automobile was king. Indeed, Dulles, the city's primary international airport, is situated nearly 30 miles of congested highway away from the District of Columbia's downtown core and linked to the city by only infrequent public buses. Chronic heavy traffic makes the ride painfully slow.

But change is coming. This past summer saw the opening of the first segment of a new Washington subway (dubbed Metro) rail line that eventually will connect Dulles to D.C.'s central business district. The new line's first phase cost \$2.9 billion to construct, and the most optimistic estimates put the final price tag for the project—decades in the making—as high as \$5.6 billion. That's nearly \$1,000 for every man, woman, and child in the Washington metro area. The sluggishness of the process and its eye-popping cost raise troubling questions about America's ability to construct vital infrastructure.

Considering the growing population that it's meant to serve, Northern Virginia's aging infrastructure is woefully inadequate. Over the last several decades, Virginia's Fairfax and Loudoun Counties, west of Washington, have expanded enormously. Fairfax's population has jumped from fewer than 600,000 people in 1980 to more than 1.1 million today. And Loudoun has topped that. A primarily rural county in 1980, with fewer than 60,000 residents, Loudoun now has a population of approximately 336,000. Population growth in Washington's western suburbs has coincided with a surge in household wealth. The District of Columbia's median household income is about \$63,000—versus \$102,000 in Arlington County, Virginia, just across the Potomac, and \$105,000 in Fairfax County. Loudoun, meanwhile, is now the richest county in the United States, with a median household income of about \$120,000, according to county figures.

But wealth, population growth, and real-estate development often lead to traffic problems, and Northern Virginia is no exception. The roads around the capital city—and especially in the Old Dominion—are among the nation's most congested, in part because of Washington's capricious building-height limit, which prevents development in the District itself. (See “[Washington's](#)

[Battle of the Skyline](#),” Autumn 2013.) A study by Lauren Donnelly of George Washington University found that the average Northern Virginia commuter spends nine days a year in traffic. As far back as 1999, writing in the *Washington Post*, Frank Ahrens called the area “a hopeless, sprawling Love Canal of steel, rubber, asphalt and carbon monoxide” that was “impossible to clean up, impossible to navigate, impossible to escape.”

On weekdays, more than 80,000 people commute to Fairfax County’s Tysons Corner to work (the community’s nighttime population is just 20,000). Tysons boasts not only the largest shopping mall in the Baltimore-Washington metro area but also some 50 million square feet of office space. But until this summer, no Tysons stop existed on the current Washington Metro line; almost all commuters arrived by car, rendering the area an eight-lane hell-scape of slow-moving vehicles and surly drivers. Better public transportation will surely help cut commute times, reduce emissions and runoff, and unlock the lost productivity that economies suffer when people are stuck in traffic.

Dulles, meanwhile, has recently seen a drop-off in usage, which may have something to do with what a slog it is to get there. The airport serves about 22 million passengers every year, down from a peak of 27 million in 2005, while nearby Reagan National typically serves 2 to 3 million fewer. Reagan benefits from its close proximity to downtown D.C. (it’s just across the Potomac in Alexandria) and from the fact that it’s already connected to the Metro. As such, its traffic has grown at a rapid clip, from 14 million passengers in 2003 to about 20 million today. (During one month of 2013, Reagan actually had more passengers than Dulles.) But because it has only one active runway at a time versus Dulles’s four, Reagan is highly congested and can’t handle increased traffic without risking delays. Things have gotten so bad for Dulles that even cramped Thurgood Marshall Baltimore-Washington International Airport—better known as BWI—has surpassed it in annual passengers.

Construction on Washington’s Metro began in late 1969, overseen by the Washington Metropolitan Area Transit Authority (WMATA), which was created by Congress three years earlier to oversee most of the area’s rail and bus service. The authority is funded by a combination of fare revenue and state and local tax dollars; the federal government contributes to capital costs. The subway began operating in 1976, linking the Rhode Island Avenue and Farragut North stations, a distance of less than five miles. In the intervening decades, the system grew rapidly. With more than 100 miles of track, connecting 91 stations throughout the District, Maryland, and Virginia, the system now ranks second only to New York City’s in the number of subway passengers carried annually.

Transportation advocates had envisioned a rail connection to Dulles even before WMATA’s existence. In 1962, a local government study proposed a monorail linking Dulles to D.C.’s tony Georgetown neighborhood. The FAA, meanwhile, recommended that a median be left in the middle of the road leading to the airport as reserved space for future rail construction. That was just the beginning of what was to become decades of studies, proposals, bureaucratic infighting, and inertia. A task force charged with studying the project was finally formed in 1998. It included representatives from the Commonwealth Transportation Board, the Virginia Department of Rail and Public Transportation, the Virginia Department of Transportation, WMATA, the Metropolitan Washington Airport Authority, Fairfax County, Loudoun County,

the Town of Herndon, the City of Falls Church, the Northern Virginia Transportation Commission, the Northern Virginia Planning District Commission, and the Federal Highway Administration. With so many “stakeholders,” it’s no wonder that construction took so long to begin.

A toll road near the airport had opened in 1995, but work on the Silver Line (Metro lines are identified by color) was still years off. All the relevant entities, including the federal government, finally approved the project in early 2009, and construction at last began that March. The Silver Line would run 23 miles and make 11 stops, with eight stations in Fairfax County (including one in Tysons Corner) and an additional three (including Dulles Airport) in Loudoun County. The Metropolitan Washington Airports Authority (MWAA) would oversee construction; after the building was completed, the line would be turned over to WMATA, which would operate it.

In the years prior to final approval, the project was nearly derailed several times. Most significantly, in early 2008, the Federal Transit Administration, which was to supply the project with hundreds of millions in federal grants, rejected the Commonwealth of Virginia’s proposal. “The project in its current form . . . would receive a New Starts Rating of Medium-Low, which would render it ineligible to advance into Final Design,” wrote FTA administrator James S. Simpson in a letter to then-Virginia governor Tim Kaine, explaining that ratings of at least “medium” were required to secure funding. The FTA thought that MWAA’s toll-revenue projections were overly optimistic and noted that the authority lacked experience in building large infrastructure. And since WMATA was regularly strapped for funds, the FTA worried that it wouldn’t be able to maintain the Silver Line once it was up and running. Kaine and the authority went back to the drawing board.

Nearly a year later, the FTA reversed itself and released nearly \$1 billion in funding. The *Washington Post* noted that “11 months of frantic activity by the region’s top politicians, who have steadfastly pressured [U.S. Transportation Secretary Mary] Peters and even the White House to keep alive a project that state, federal and airport officials have planned for more than 40 years,” seemed to have tipped the scales. The FTA, for its part, claimed that MWAA had made necessary adjustments, rendering the project more cost-effective. The changes did nothing to accelerate construction. Missed deadlines and failed safety checks delayed the Silver Line’s opening date repeatedly.

As a point of comparison for just how expensive the Silver Line will prove to be, consider the 2014 Winter Olympics in Sochi, for which the Russian government was roundly mocked for its vast spending—some \$51 billion on construction, nearly \$10 billion more than China spent on its 2008 summer games. In particular, critics pointed to a 30.4-mile railroad/highway connecting the ski slopes to the town of Sochi, which alone cost \$8.7 billion—about \$286 million per mile. As one commentator noted, it would have been cheaper to pave the pathway with a centimeter-thick layer of beluga caviar.

But Washingtonians shouldn’t be quick to chortle. If the Silver Line meets its currently projected cost, it would cost \$243 million per mile. And the Russian project included both road and rail, while ascending mountains.

Blame labor costs for the Silver Line's enormous expense. The construction contract for Phase I included a so-called Project Labor Agreement (PLA), a union-friendly provision mandating high wages and certain working arrangements, such as a rule that contractors on the project seek worker referrals from unions. (Critics noted that the PLA violated the spirit of Virginia's right-to-work law, but Kaine, who enjoyed heavy union support, remained unmoved.) Phase I, the first 12 miles of the Silver Line, stretching to Reston, cost a whopping \$2.9 billion.

Virginia had elected a new governor, Republican Bob McDonnell, when it came time to solicit bids for Phase II of the Silver Line, an additional 11 miles continuing from Reston to Dulles and beyond. McDonnell threatened to withhold state funding unless the contract for the second phase excluded the PLA. With the mandatory PLA removed, bids for Phase II ran an estimated 12 to 18 percent lower than originally projected.

Project leaders trumpeted the savings. Pat Nowakowski, executive director of the Dulles Corridor Metrorail Project, noted that the winning bid came in \$200 to \$400 million lower than expected. "This has been a very successful competitive procurement process," he said. Ben Brubeck, Associated Builders and Contractors' national director of labor and federal procurement, added, "This is what happens when projects are subjected to rigorous competition by eliminating union favoritism inherent in all PLA mandate schemes."

Even with the savings, construction won't be cheap. Phase II still must conform with Davis-Bacon, the Depression-era federal law requiring that the government pay its construction contractors "prevailing wages." The labor costs have forced MWAA to find savings elsewhere. For example, in the original plan, the Dulles stop was to be underground, a manageable 550 feet away from the terminal. In 2011, as a cost-savings measure, MWAA decided that the Dulles stop would be aboveground and farther from the terminal. Travelers will now have to walk 1,150 feet, luggage in tow, to reach the airport from the station that bears its name.

Nor has MWAA covered itself in glory in other regards. Monitoring how the authority spent its \$975 million grant, the federal Department of Transportation (DOT) issued a January 2014 audit report, finding that MWAA "lacks financial management controls to ensure FTA grant funds were spent on eligible costs." Translation: the authority has been spending the grant funds on things unrelated to building the Silver Line, such as lobbying expenses. That came on the heels of an even more damning November 2012 inspector general's report that found that MWAA employees had accepted improper gifts from contractors, including Super Bowl tickets and junkets to Hilton Head. The inspector general also determined that MWAA had violated antinepotism guidelines in its hiring. Ten MWAA employees were fired or disciplined.

The slow pace of Silver Line construction has piled on expenses. Though the line wasn't ready to open this past January, as initially hoped, WMATA had already hired a workforce of train drivers and transit police, which it had to pay—this without the help of \$2 million to \$3 million in monthly fares that a running system would be bringing in.

Who pays for all this? Nearly half the costs (48.1 percent) are covered out of receipts from the toll road that runs near the airport. The rest is carved up among the federal government (16.4 percent), the Commonwealth of Virginia (10.5 percent), Fairfax County (16.1 percent), Loudoun

County (4.8 percent), and airport funds (4.1 percent). Given the high construction and operating costs, the airport toll, currently \$2.25, is likely to rise. One MWA projection suggests that by 2018, the toll will have to triple, to \$6.75 per car.

Decision-making paralysis and runaway labor costs are hardly unique to the Silver Line. Infrastructure projects across the United States experience similar problems. Two years ago, in Los Angeles, the California DOT spent \$1 billion to add one carpool lane, in one direction, along ten miles of highway—that is, \$100 million per mile. Amtrak wants to spend \$7 billion renovating D.C.’s Union Station. Boston’s infamous Big Dig, finished in 2006, involved building a 3.5-mile tunnel under the city’s downtown. (See “[Lessons of Boston’s Big Dig](#),” Summer 2007.) Though the end product proved successful, it took a quarter-century from planning to completion, with a price tag of nearly \$15 billion. California’s high-speed train linking San Francisco to Los Angeles, in the works since the 1980s, will cost upward of \$67 billion; its first phase won’t be operational until 2022, at the earliest.

Is there a saner approach to transportation infrastructure? For starters, local and state governments should first look for cheaper alternatives to big construction projects. Dedicated express bus lanes, for example, may be more affordable and efficient than hugely expensive rail projects. Indeed, Randall O’Toole of the Cato Institute and Gabriel Roth of the Independent Institute proposed them as an alternative to the Silver Line. They noted that a bus lane could get passengers to Dulles much faster than a subway. “For example, passengers traveling from the Metro Center [a station in downtown D.C.] to Dulles Airport would have to stop at eighteen stations before reaching their destination,” they observed. “Travel from Wiehle Avenue to the Pentagon would take 57 minutes, involving 12 stops, the one at Rosslyn requiring a train change. In contrast, express bus services can make this trip in less than thirty minutes.” The bus option would be much less expensive, too. Express-bus services are now operating successfully in Bogotá, Colombia, and Guangzhou, China, among other places, but the idea hasn’t caught on yet in the United States.

Rail has its defenders, of course, and some evidence suggests that people would rather, for whatever reason, take a train than a bus. Consider two 2012 studies from Germany and Switzerland, which found what the researchers termed a “psychological rail factor.” When all other factors, including time and cost, are equal, the researchers found, 63 to 75 percent of commuters favor taking rail over the bus. And, though it’s a hotly debated topic, there is some justification for the belief that rail can trigger economic development and lift property values. A 2007 study in Buffalo, New York, for example, determined that “for homes located in the study area, every foot closer to a light rail station increases average property values by \$2.31 (using geographical straight-line distance).”

At a minimum, though, when rail projects are proposed, reformist governors should make every effort to keep them on budget. They should certainly follow Governor McDonnell’s lead and ban PLAs. Only about 15 percent of American construction companies are unionized; governments have no excuse for saddling taxpayers with the bill for unionized labor when so many other options exist. (In Virginia, using union labor was especially dubious—95 percent of the state’s construction workforce is nonunion.) And, of course, Congress could go further and repeal Davis-Bacon. Forward-thinking Democrats would do well to get on board with these and other

reforms, since badly executed projects undermine support for infrastructure spending altogether. At the grand opening of Phase I this summer, Representative Gerald E. Connolly, a Virginia Democrat and longtime backer of the project, was exultant. “Nineteen years ago, there weren’t many believers,” he rhapsodized. But it’s unlikely that this torturous process has won many converts.