

THE HISTORY OF ARLINGTON COUNTY'S ELECTRIC RAILWAYS

By

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For forty years, electric railways provided the prime means of personal transportation in Arlington County, and in Alexandria County before it. Those forty years were the years of fastest growth as the county changed from a rural to a suburban area, beginning the trend which exploded the population from 10,000 before the turn of the century to 153,000 today.

The everpresent internal combustion (gasoline) engine was invented by Gottlieb Daimler in Germany in 1886. It was applied to personal transportation in the United States by Charles E. Duryea in 1893. The first Ford was sold in 1896.

In that same year of 1886, Montgomery, Alabama came forth with the first functional electric street railway, followed in 1888 by Richmond's first technologically successful electric railway system.

The electric railway, in the form of the streetcar or trolley, and the automobile came forth at almost the same time, but development was not at all parallel. The electric railway was then an ideal activity for private enterprise. Billions of dollars of private capital rushed in to provide electric railways wherever population concentrated, and sometimes to where it was hoped that it would concentrate following rail construction.

The automobile was not nearly so financially attractive at that time. It was less reliable and had only a small market because of its high cost. Private enterprise could not afford to build highways for it, even without the income tax penalty of today (1984). It was not until 1914, when the federal government undertook to subsidize highways over President Wilson's objections, that the economic superiority of the electric railway was countered by the convenience of the automobile, made possible by free highways built with tax funds, with no requirements to earn a return on investment, or contribute to general tax revenues as the railways had to do.

The twenty-five years from 1889 to 1914 gave the electric railway its great impetus from which it coasted until the Great Depression that nearly wiped it out entirely.

Without the government support that built and sustained the parallel paved highway facilities, the electric railways could not continue to operate profitably, and disappeared from Arlington County by 1959 when the last trolley circled Rosslyn Plaza for its return trip to Washington over Key Bridge. Most of the lines, and almost all of the mileage, however, disappeared between 1936 and 1940.

With government support, the electric railway has now returned to Arlington County in embellished form. In 1977, the Blue Metrorail line came to Rosslyn, the Pentagon, Crystal City and National Airport, leading the way for the Orange Line to reach Clarendon and Ballston on December 1, 1979. The Yellow Line arrived in

Arlington, on its way from L'Enfant Plaza and the Archives to Alexandria and Huntington Avenue in Fairfax County on April 30, 1893. This new breed of electric railway now carries more passengers (but not more per capita) than the historic old lines ever did in their heyday.

The Pennsylvania Railroad Company also operated electric railroad service in Arlington County from 1934 until its takeover by Conrail (a government creation) in 1976, but this operation was for interstate freight only. It was deenergized recently to avoid payments by Conrail to Amtrak (another government creation) for the use of the facilities. This shift from domestic coal produced electricity to foreign oil is most paradoxical in the face of growing energy problems and balance of payments deficits, but that is the way decisions are made in uncoordinated situations.

Arlington (then Alexandria) County was not long in obtaining the benefits of the then new electric railway technology before the turn of the century. In 1891, the Washington, Arlington & Falls Church Railway Company was formed to provide electric railway service here, just three years after the first successful system was developed in Richmond. The Washington, Alexandria & Mount Vernon Railway Company was then formed to begin actual service between Alexandria and Mount Vernon in 1892. This may well be the very first long distance trolley line in the nation, as the Portland to Oregon City line which is usually accorded that distinction did not commence operations until February 16, 1893. By 1896, the Mount Vernon line had been extended through Arlington to Washington, a total distance of sixteen miles. It proved to be very popular, with two-car trains every twenty minutes for crowds of commuters and tourists, for which last group a unique private parlor car, the Mount Vernon, was provided. This deluxe vehicle was built for the Saint Louis Exposition of 1904, then brought to the Four Mile Run car barn for service to Mt. Vernon. This is the same Four Mile Run facility that now cares for Metrobuses just west of Jefferson Davis Highway. Service through to Mount Vernon was hourly, with a trip time of fifty-five minutes. Metrobus time via the Parkway is now fifty-three minutes, if traffic permits.

After initiating service in 1892, the Washington, Arlington & Falls Church Railway Company extended its line west over a new bridge spanning the Southern Railway track between Dunn Loring and Vienna in July 1904 to reach Fairfax Court House, twenty-one miles from Washington. A shorter line had also been built from Rosslyn to Fort Myer, Arlington Village, Nauck and Green Valley, a distance of three and a half miles. Service was provided every fifteen minutes. Fairfax Court House service was hourly, with more frequent service within Arlington County.

On March 1, 1905, the Washington, Arlington & Falls Church Railway sold \$2,370,000 of bonds to help finance these undertakings. At 1984 dollar values, those old bonds must have had the purchasing power of \$25 million today. It was a major undertaking, entirely without tax support or subsidy.

The Pentagon is now located near the site of Arlington Junction, where the Fairfax line joined the Mount Vernon line to cross the Fourteenth Street Bridge into Washington, D. C., at which point they looped around Constitution Avenue, 13½, D, 12th and C Streets to reach the Twelfth and Pennsylvania Terminal, more

recently served in different form by Alexandria, Barcroft & Washington (A.B.&W.) buses.

Rosslyn developed as a major complex of electric railway services. In January of 1900, the McLeans of publishing fame organized the Great Falls & Old Dominion Railroad Company to build a double track electric railway free of paved streets from Georgetown (the present Car Barn Building) across Aqueduct Bridge through Rosslyn, parallel to Lee Highway, then out through Cherrydale and on to McLean and Great Falls over what is now Old Dominion Drive. This super-service line was opened to travel on March 7, 1906, with fourteen miles of line, twenty-eight miles of track, nine passenger motor cars (interurban trolleys), ten trailer cars for them to pull at busy times, ten other cars for utility and freight work and three steam locomotives to pull the non-powered utility cars. The fourteen miles were covered in forty-five minutes, considerably less time than now required for bus travel on the crowded highways. The old trolley time from McLean to Rosslyn was twenty-four minutes. Bus time is now twenty minutes from McLean to and from Ballston, with fourteen minutes more for the transfer to and ride on Metrorail to and from Rosslyn. That ten minute difference, with a transfer involved, makes a big difference between choosing auto travel or bus travel. For trips on into the District, however, Metrorail is clearly superior.

Service on the Great Falls line was provided every half hour, and every fifteen minutes at busy times, such as rush hours and on busy amusement park days at Great Falls. During the depression, service had to be cut to every half hour in rush periods, with cars every hour and a half to Great Falls.

The Washington, Arlington & Falls Church Railway was not nearly so pretentious, but it provided much more service to Rosslyn, with its three single track lines, or routes. Cars operated in both directions on the same track, with short segments of a second track at predetermined locations to permit opposite bound cars to pass each other with minimal delay, if any.

One of these three lines was the aforementioned line to Green Valley through Nauck, the second was the long line west on what is now Fairfax Drive and Electric Avenue to Clarendon, Ballston, Lacey, Falls Church and Fairfax Court House, and the third was the connection to Arlington Junction and Washington, D. C. via Arlington National Cemetery parallel to what is now George Washington Memorial Parkway. For faster service from Clarendon and communities to the west, a short cut was built along the south side of US highway 50's location to Arlington Cemetery, bypassing Rosslyn for direct trips to Washington.

It was not until 1912 that the now famous Washington & Old Dominion Railway was formed to bring interurban electric railway service to Arlington County. The McLean family of Great Falls and the Elkinses of West Virginia leased the rural Southern Railway line from Alexandria to Bluemont (fifty-four miles) and built a new double track electric railway from Bluemont Junction (Glen Carlyn) to Thrifton near Cherrydale to connect with the Great Falls line into Rosslyn and Georgetown. The Great Falls and Old Dominion Railroad was absorbed by the Washington & Old Dominion Railway.

The Alexandria to Bluemont rail line had a much longer history than that of the electric railways. It was built in 1858 up Four Mile Run and out through

Vienna to Leesburg as the Alexandria, Loudoun & Hampshire Railroad. (Hampshire is a county in West Virginia.) It was involved in Civil War logistics and was set upon by Mosby's Raiders. A plaque along the right-of-way at South Park Street in Vienna explains this.

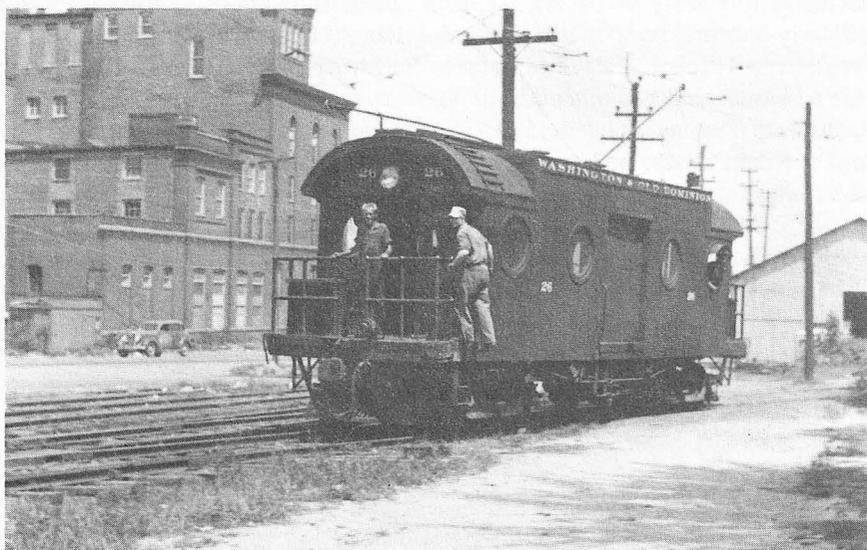
In 1874, the railroad was extended to Round Hill, and in 1884 it became the Washington, Ohio & Western Railroad to enhance its aspirations and prestige. Alexandria might have become a great seaport, rivalling Baltimore had this been completed. Ten years later, the Southern Railway absorbed the Washington, Ohio & Western Railroad and extended it to Bluemont in 1900. Lacking access to Washington, D. C. except by way of Alexandria Junction with a switch to the main line into Union Station, it was never a great passenger carrier, or freight either, for that matter, but it did boost Bluemont as a mountain retreat resort, once the name was changed from Snickersville. Hotels developed and prospered for a time after electrification came, bringing more frequent and direct service to Georgetown, beginning in 1913. The need for locomotives and firemen on passenger trains was eliminated and speed was increased.

The Washington & Old Dominion bought ten multiple-unit electric passenger cars from the Southern Car Company. One motorman could operate any number of cars, just as Metrorail operators do today. A conductor was employed also to avoid the need for fare card machines. Tickets were handled manually. Two electric cars were fitted out as Railway Post Offices. These not only carried the mail and Parcel Post, but also had the mail sorted and cancelled on board, offering overnight delivery to a much wider area than is available today. The roster also included five trailer coaches, along with one parlor observation car for the Loudoun Limited which carried fox hunting commuters and a white jacketed porter or steward who tended to the passenger's every request. Two fifty-ton electric locomotives were added to the fleet, displacing the old steam locomotives. Two other freight locomotives were built right in the Rosslyn shop using damaged passenger car parts. There were only eighteen freight cars. Most of the freight cars used were obtained by interchange with the steam railroads at Alexandria's Potomac Yard.

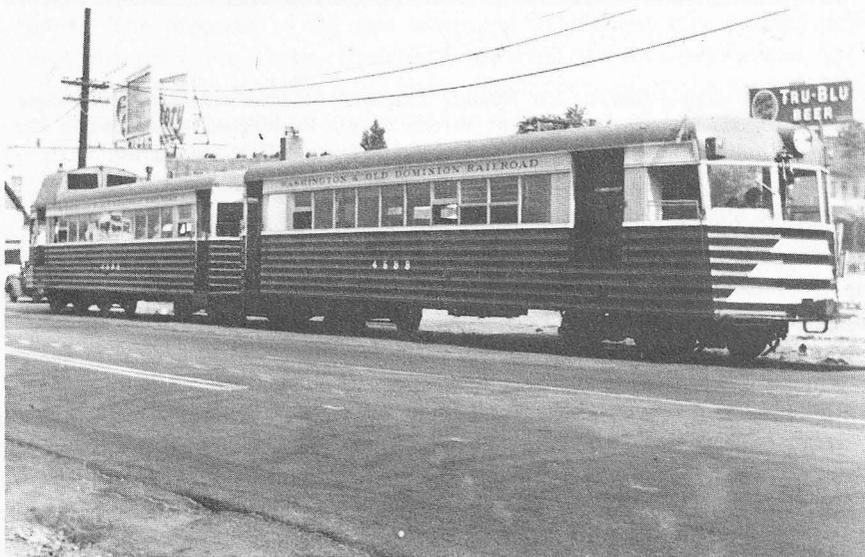
Washington & Old Dominion passenger train services consisted of ten trains each way each weekday as far as Leesburg (thirty-five miles) with six of them continuing on to Bluemont (fifty-two miles). Two additional round trips were scheduled between Georgetown and Falls Church in each rush hour. Alexandria Junction (Lynhaven) was served by nine trains each way each weekday shuttling between Bluemont Junction and Alexandria Junction. Old Town Alexandria had only two round trips per weekday from Bluemont Junction (seven miles). A shuttle car left Barcroft at 7:54 a.m. each weekday to connect at Bluemont Junction with a train to Georgetown.

On Sundays, five trains were operated to and from Bluemont, with one more as far as Leesburg. Six shuttle trips made the connection between Alexandria Junction and Bluemont Junction. The Washington & Old Dominion carried almost two million passengers a year then.

Also in 1913, the Washington-Virginia Railway (the product of a merger in 1910 between the Washington, Arlington & Falls Church Railway and the Washington, Alexandria & Mount Vernon) was very busy. It was carrying nearly 20,000



Washington & Old Dominion Railroad Box Motor Number 26, switching in Rosslyn opposite the Bottling Plant August 9, 1941. This electric freight locomotive was built in Rosslyn from wrecked passenger car components. The automobile is on Lee Highway.

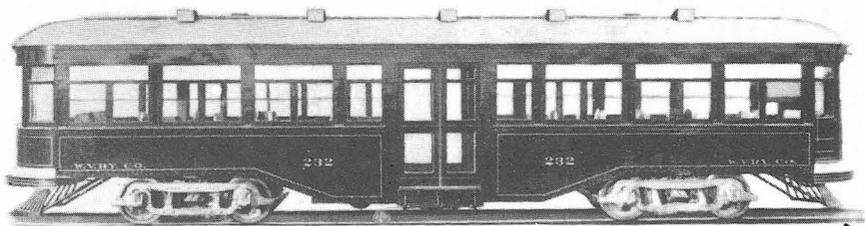


Washington & Old Dominion Railroad stainless steel diesel train Number 5 waiting to load passenger at Rosslyn alongside Lee Highway on July 14, 1943. Car numbers are Pennsylvania Railroad from whom the Budd train was leased. (There was no station anymore)

passengers a weekday over forty-five miles of line and sixty-three miles of track. It had forty-one passenger motor cars, that fancy Mount Vernon parlor car, and seventeen trailer cars. It also had a dozen freight and express cars, five utility cars, a snow sweeper, and two other cars.

Annual revenues totalled \$537,157 with only \$243,378 spent on operations. However, debt service and taxes of \$200,933 reduced profits available to stockholders to a mere \$92,846 - hardly six percent on their investment. The average fare was only nine cents, but this was twice as high as the Capital Traction's four and one half cents. Bus fares today are fifteen times higher, yet do not cover half of the expenses, much less making a profit.

The Washington-Virginia passenger cars operated 1,853,392 miles in 1913, about the same average mileage per car as a Metrobus averages today. The freight cars totalled only 73,434 miles, indicating much less intense utilization.



Washington-Virginia Railway Car Number 232. Built to train with electric passenger cars for excursion crowds to Mount Vernon on the Washington, Alexandria & Mt. Vernon Railway as it was known after 1926. (Photo from M. D. McCarter)

This happy pattern was broken in 1923 when the old Aqueduct bridge was replaced by the new Key Bridge. The Capital Traction Company sought to extend its line from Georgetown to Rosslyn, where it could connect with the Arlington County trolleys to Fairfax and Green Valley. It arranged to displace the Washington & Old Dominion on the river crossing over the new Key Bridge, terminating in a loop in Rosslyn Circle. In exchange, the Washington & Old Dominion was provided with a classic new Rosslyn Terminal building where the Marriott hotel now stands.

With Capital Traction service direct to Rosslyn, the Washington-Virginia Railway began to suffer. It had \$6 million in property, but with the loss of some of its Rosslyn to Washington business to Capital Traction (the Rosslyn-Benning number 10 line in later years) it could not service its mortgage debt. It was sold at foreclosure in 1926, with two new companies taking over the bulk of the operation. The Arlington & Fairfax Railway acquired the lines west out of Rosslyn to Green Valley, Ballston and Fairfax, while the Washington, Alexandria & Mount Vernon operated south of Washington to Mount Vernon, as in 1896. The May family acquired this portion to supplement their growing Alexandria, Barcroft & Washington bus operation. Unfortunately, the new arrangement did not last long. The stock

market crashed in October 1929 and by 1932 the economy had reached its deepest depression. At this difficult time, the federal government ousted the railway from its Washington Terminal to make way for the Federal Triangle redevelopment. There was no money to relocate an electric railway, particularly one requiring underground conduit electrical pick-up, prescribed by law, in the District of Columbia. The right-of-way south from Alexandria was taken over by the National Park Service for conversion to the George Washington Memorial Parkway. Commonwealth Avenue in Alexandria is also a segment of the right-of-way. A few of the best cars were sold to the Washington & Old Dominion Railway to replace the original 1906 model cars in 1932.

The Arlington & Fairfax Railway tried to continue, however. It bought newer second hand cars from the Slate Belt Electric Railway of Bangor, Pennsylvania and trimmed its mid-day service to Fairfax Court House to every two hours, continuing hourly service as far as Vienna. Inside Arlington County, the cars continued to operate every twenty minutes as far as the car barn at Lacey (Glebe Road). Two trips per hour were provided to Veitch Switch, near Bon Air, much the same as bus service today. Travel time from Rosslyn to Fairfax Court House was sixty-one minutes, as compared to sixty-two minutes by Route 2B bus and Metrorail today. Rush-hour I-66 express buses now offer a forty-two minute trip, but these serve none of the intermediate communities along the line.

Four more years of economic depression strapped the company for cash. It could not maintain its aging overhead wire system for electric power distribution, so the copper was sold to Japan to assist that country with its munitions manufacture. The proceeds of the sale were used to purchase tiny gasoline powered buses with rail guide wheels. These were too small to carry a paying load, but were very low in first cost. These little buses, which operated on the same principle as the Metrorail construction trucks used in the median of I-66, lasted only three years. The rails were abandoned in 1939, so that they too could be made available to Japan. One of the rail-buses was sold to the Washington & Old Dominion for maintenance work and another went to the Chicago, South Shore & South Bend Railroad (an electric railway still in operation) where it too performed many years of maintenance duty.

The Great Depression was also wreaking havoc with the Washington & Old Dominion Railway. With mounting losses, the McLean and Elkins families would no longer carry it, leaving it to the bankruptcy courts in 1932. Wilton J. Lambert and Davis Elkins were appointed Receivers by the court, and George C. Baggett was promoted from Traffic Manager to General Manager. Arlington and Fairfax counties pressured for the collection of delinquent taxes, forcing the abandonment of the Great Falls Line through McLean. The proceeds from the liquidation of the rails and wire went to pay the bills. The right-of-way became Old Dominion Drive in 1935, a year after abandonment.

Freight revenue helped to keep the Bluemont line going, but in 1939 highway authorities forced the demolition of the relatively new Rosslyn Terminal to expand Rosslyn Circle. From that date on, passengers had to walk to a lean-to on the side of the car shop south of Lee Highway to board their trains. Service consisted of six trains each day as far as Leesburg, with three of them continuing on to Bluemont.

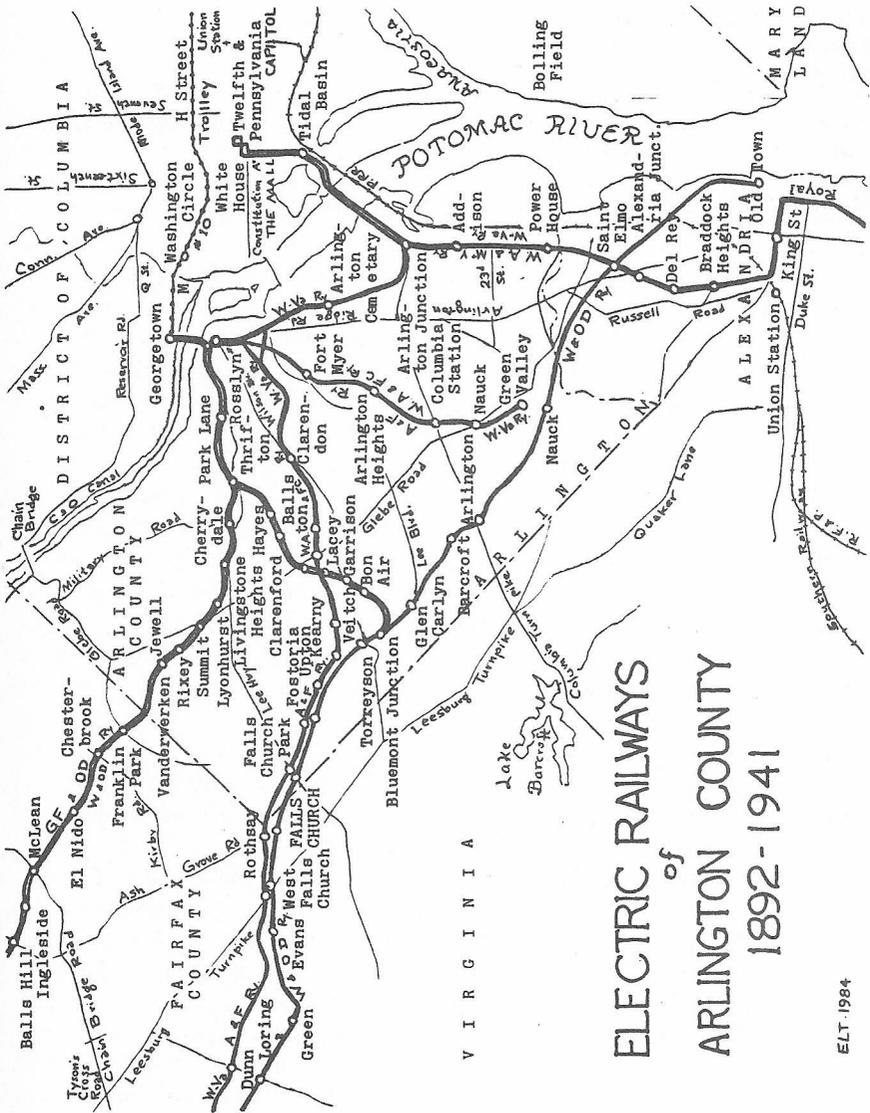
On Sunday, only the three Bluemont trains operated. The shuttle along Four Mile Run had been discontinued in 1932 when bankruptcy closed in. Freight continued along Four Mile Run to reach the Alexandria yards and connecting main lines.

In 1936, the Washington & Old Dominion was able to reorganize. A "new" company, the Washington & Old Dominion Railroad was activated. Later the Bluemont line was cut back to Purcellville.

In 1941, on the very eve of gasoline rationing, passenger service was discontinued, and the electrification was cut down and liquidated, except for the segment between Rosslyn and Bluemont Junction, where the new small diesel-electric locomotives were not adequate for the grades. The new company bought the entire line from Alexandria to Bluemont from the Southern Railway for \$70,000 to end the lease payments. It was worth more than twice that for scrap. The double track between Rosslyn and Bluemont Junction had also been salvaged, leaving but one track remaining. When larger diesel locomotives were purchased, the remaining electrification was removed, thirty years after being installed.

The Second World War forced resumption of passenger service in 1943, using second hand diesel powered railroad cars. These were both slow and infrequent, hardly capable of competing with highway transportation, even in war time. The original electric Railway Post Office trolley car was retained, to be towed by a little diesel locomotive, until 1951 when the Post Office cancelled the mail contract.

Freight service grew in dollar and tonnage volume as the area developed, and as Dulles Airport construction got underway. In 1963, planning efforts were made to incorporate the Washington & Old Dominion in the Metrorail system, but policy makers opted for a totally new system. After Dulles Airport construction was completed, the volume of freight movement receded, and the Chesapeake & Ohio Railway, which had bought the line in anticipation of serving a new coal-fired power plant, lost interest as the power plant evaporated as a planning dream. In 1968, the highway department took an interest in the line to obtain the right-of-way for I-66, between Glebe Road and Rosslyn. The railroad was gone. The name carries on as a bicycle trail. Metrorail will have its own separate right-of-way. It will use none of the Washington & Old Dominion right-of-way. It does, however, utilize the Arlington & Fairfax Railway right-of-way from Clarendon to East Falls Church where I-66 follows the same route west of Ballston. Bluemont Drive has been created from the Washington & Old Dominion right-of-way between Wilson Boulevard and Bluemont Junction. The Virginia Electric & Power Company uses much of the right-of-way for its high tension power line.



ELECTRIC RAILWAYS
of
ARLINGTON COUNTY
1892-1941

ELT 1984

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