

Defined by Distinctiveness

Washington Metro

Photo courtesy of Oren's Transit Page

By Rich Sampson

Visitors to the Washington, D.C. region will often recount the details of their experience on the area's Metro rapid transit as much as they describe visiting its hallowed memorials, monuments and museums. They'll mention the Metro's comfortable railcars, or its station facilities that could easily be mistaken for the interiors of some of the area's most famous monuments. For the Metro, like its namesake city, there is nothing else quite like it anywhere in the nation.

And while these symbols of the Metro are outward representations of a much more complex transportation network, the system – now in its third decade of service – has always been defined by its distinctiveness. The prominence of unique elements such as the padded seats and

flashing lights that frame its station platforms, once needed to attract riders to a better way around the nation's capital, have now become the visible markers of the nation's second-busiest rail transit system. Here, a much more profound and substantial story is being told. Today, Metro's burgeoning ridership, surging rail-oriented development and a vision for the future are the true hallmarks of its uniqueness.

As residents of, and workers in the Washington region, this magazine's staff witnesses the magnitude of Metro's rail operation unfold on a daily basis. Our offices are located one block away from one of its busiest stations at Metro Center, while its Red Line trains rumble beneath our floors under G Street. Your author lives along the bustling Rosslyn-Ballston Orange

Line corridor in Arlington County and chose to live there based on the quality of life benefits it offers. RAIL's Editor was present in the early 1980s at many of the system's Red Line openings as the original service first made its way north from the District. Therefore, this lengthy look at Metro is as much an observational analysis stemming many years as it is a focused profile of one of the nation's most distinct rail systems.

Engaging the Washington Region

The Washington area rail network and its surrounding communities in Maryland and Virginia has always possessed an aura of uniqueness befitting its location in the capital city. The first horse-car line – which, unsurprisingly, connected Capitol

Hill with the White House along Pennsylvania Avenue beginning in July 1862 – was built to link into the same track gauge as the Baltimore & Ohio Railway, the nation's first railroad.

Soon after the advent of electric traction in Washington in 1888, the U.S. Congress, which then had complete administrative control of the District of Columbia, banned all overhead wiring downtown to maintain the aesthetic beauty of the capital city. This meant the streetcar companies had to create a new means to power their vehicles. They responded with a slot between the rails, which would carry electric current under the roadbed. Streetcars picked-up their power using a hook which hung underneath the cars – similar to how cable cars gripped their motive power. The city's streetcars would utilize that infrastructure as the system expanded to its height in the 1930s, experienced a brief revitalization with PCC cars, and finally saw its outright replacement with buses by 1958.

Within the Washington region, private transit companies had operated its streetcar, and later, its bus networks – entities such as Capital Transit, the Alexandria, Barcroft & Washington, and the Washington, Marlboro & Annapolis. But whether the mode was streetcar or bus, these carriers found slipping ridership and increasing costs on their routes during the mid 20th century, and gradually reduced service and abandoned some lines altogether.

In an effort to improve the economy of the region and revitalize downtown Washington, public officials from the federal government, the states of Maryland and Virginia, and the District of Columbia identified an improved transportation network as perhaps the most crucial aspect of regional revitalization in the 1950s and early 60s. Better travel options from more highways to enhanced bus service

were investigated, along with a concept that had been proposed in Washington for more than 50 years – a rapid transit system.

It took a vote of Congress and the signature of President Eisenhower to create the National Capital Transportation Act of 1960, which would establish a plan for the region's transportation system. The final report – stipulated by the Act – was issued to President Kennedy in November 1962 and recommended a massive re-envisioning of the network by coordinating new road infrastructure with better bus service and a newly constructed rail transit system. The plan called for the rail operation to include multiple routes underground in downtown Washington, with branches extending above-ground along railroad rights-of-way, highway medians and elevated structures reaching from the District into its suburbs in Maryland and Virginia. It recommended that a combination of investment from the Federal Government, Maryland, Virginia and the District be pooled to support the network.

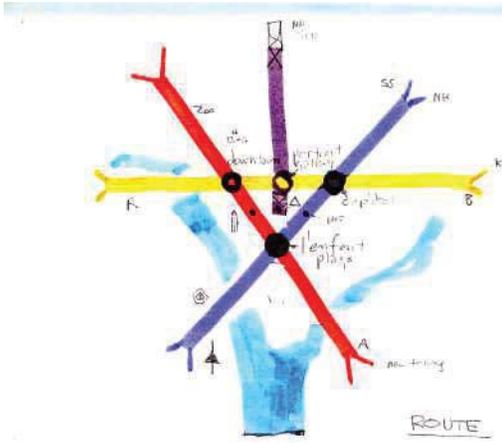
But before any action could be taken to secure funds and craft more specific designs for the system, there would need to be a governing

body created to ensure that all the entities and constituencies involved would find their positions represented. A group of leaders from the four key jurisdictions – the federal government, the states of Maryland and Virginia and the District of Columbia – met in late 1965 to hammer-out a compact on the issue. Their creation was an authority which would oversee all transit service in the region, collect the funds contributed by the four government sources, adopt formal plans for improvements, and manage the construction and implementation of new services. As a result, the Washington Metropolitan Area Transportation Authority (WMATA) was formed on February 20, 1967 after President Johnson signed legislation approving the Federal Government's involvement on November 6, 1966, while Maryland, and Virginia and the District did likewise on November 11 and November 22, respectively.

After more than a half-decade of proposals, debates and procedures, the Washington region had a publicly-led, comprehensive transit agency. While other cities and regions were also establishing public transportation entities around the same time, this one would be

Streetcars ply Pennsylvania Avenue and 15th Street alongside the U.S. Treasury Building.





Plans to serve the Capital area took numerous forms before settling on the current network.

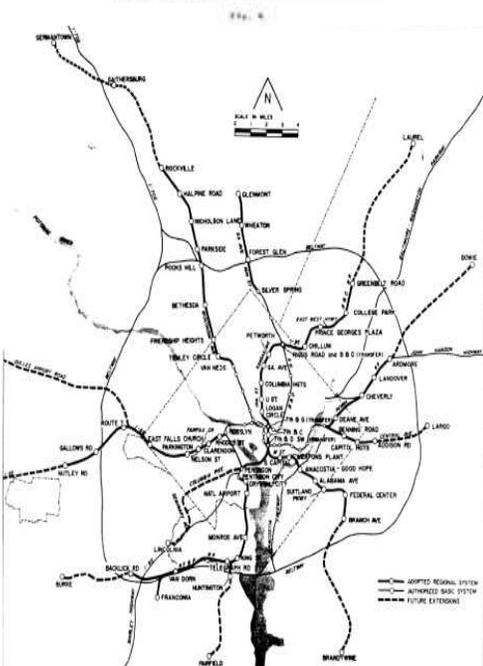
unlike any that had ever existed in the nation, considering it found the United States government, two states, an incorporated district and four counties all playing key roles in its functioning. Now, WMATA (pronounced: wuh-matta, locally) was tasked with an equally difficult mission – finalizing and implementing a plan for a new rail transit operation that would satisfy the needs and demands of such diverse constituencies.

the time, and rivaled those available during the first wave of rail transit construction in places like New York, Boston and Chicago. While the confluence of four jurisdictions hindered rapid progress in establishing a governing body, their ultimate alignment would render a total of more than \$4.5 billion to support the system’s construction. Not surprisingly, planners had little trouble sketching-out a series of lines that would easily satisfy all the project’s backers, concentrating all the routes to serve downtown Washington, while striking out in multiple directions to neighborhoods and communities in the District, Maryland and Virginia. The route design would make use of new rapid transit concepts available at the time, by placing tracks along the same rights-of-way used by active railroads, and in the middle of – or alongside – highways and other roadways, to compliment more traditional settings such as subway tunnels and elevated structures. In all, planners decided on a network that would include four different routes through downtown and nine branch lines reaching to Rockville and Wheaton in Montgomery County, Greenbelt, Benning Road and Branch Avenue in Prince George’s County, the Huntington neighborhood in the City of Alexandria, and Franconia and Vienna in Fairfax County. The District and Arlington County would see service on multiple routes in their vicinities. Combined, the system would extend over 97 miles and serve 81 stations.

Controlling Uniqueness

When WMATA officials set out to design a rail transit system for the region in the mid-60s, its leadership was presented with an opportunity it was determined not to waste. There had been few new rapid transit networks built since the early part of the century – the Bay Area Rapid Transit in Northern California network was being planned around the same time, but the most recent system to open was Cleveland’s Red Line in 1955. As a result, a plethora of new technologies and concepts for rail transit existed that would allow the new system to establish new trends and break new ground. Meanwhile, the inherent significance of creating a transit network in the nation’s capital tasked the system’s planners to design for a grandeur befitting the city, much as Congress had insisted on a capital vista bereft of wires and obstructions almost a century earlier. Indeed, President Johnson set the bar high with a letter to planners in January 1966 instructing them to “search worldwide for concepts and ideas that can be used to make this system attractive as well as useful. It should be designed to set an example for the Nation, and to take its place among the most attractive in the world.”

While planners and engineers worked on where trains would go, another team of WMATA officials considered the ethos of the new network. Taking their cue from President Johnson’s directive, they studied every detail that would constitute the system – from the maps to the train cars. Although a strong and profound identity for the service was a key goal, its ultimate



Maps courtesy of the Zachary M. Schrag collection

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– President Lyndon Johnson

success would be determined by one factor – its ability to attract riders. Since the collective region had little to no history with a mass transit network and nearly all commuting was conducted via private vehicles, the new service would have to provide a compelling reason to lure passengers from their cars. To do so, the planners determined that it would need to exceed the common expectations of subways at the time. Moreover, the region hosted a large number of visitors to the nation’s capital every year, and the system was aimed to be a key means of moving them to their destinations. That would require a degree of simplicity and universality in its fundamental design. For both groups of passengers, stations and vehicles must be attractive, clean and easy-to-navigate spaces, with understandable fare structures and routing options. Additionally, while the geographic location of a given station was crucial to generating riders, its interaction with its surrounding neighborhood

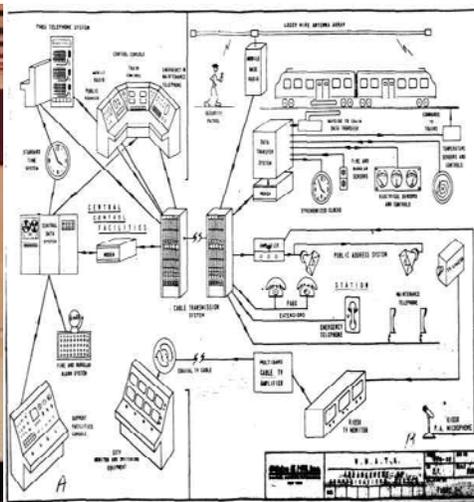
and community – in terms of parking facilities, pedestrian access and connection to area housing, retail and attractions – was just as important.

Meanwhile, an architectural team tasked by governmental leaders and WMATA to envision the system’s stations returned with a singular, iconic statement for the system’s stations – underground facilities would feature train wide platforms positioned under a vaulted ceiling – inspired by Washington’s Union Station – with copious amounts of open space, and illuminated by indirect lighting. The concept was a direct response to common understandings of subway stations as dirty, claustrophobic places with garish light. Additionally, while historic subway systems could mostly be accessed only by stairs and ramps, the elevator and escalator technology that had evolved since then would be installed in all stations – allowing for easier movement for people with disabilities as well as the general

ridership. Every underground station in the system would be the same, and intended to reinforce to visitors and commuters alike their presence in the capital city. The same themes would be applied to outdoor stations as well. For added flair, railroad engineers recommended utilizing the technology that allowed railroad crossings to warn the advance approach of a train, which led to a band of lights on the edge of the station platform that would flash when a train was approaching – an especially beneficial element in underground stations.

Likewise, the design of train cars was afforded the same level of scrutiny. They would be long and wide – measuring 75 feet end-to-end and 10 feet across – offering plenty of room for riders to move around. And although each car would feature 81 seats and room for a crush load of 175 passengers, each seat would be softly padded and covered, with armrests, handrails and indented seatbacks for additional knee and leg room, all to yield a more enjoyable

WMATA officials conjured up a number of innovative station, vehicle, and infrastructure concepts during the design process.



Images courtesy of the Zachary M. Schrag collection



Photo courtesy of the Zachary M. Schrag collection

The Red Line station at Union Station was under construction in early 1970s, with the Capital Dome in the background.

ride for some commuters venturing on long trips from terminal stations. Additionally, the floors of the cars would be covered with thin, fireproof carpeting, to not only enhance the vehicles visually, but also offer riders better traction while moving and prevent slippery tiles from wet shoes.

The system's routing design would include five simple, color-coded lines – Red, Yellow, Green, Orange and Blue – and each line would at least link communities in Maryland or Virginia to downtown Washington, while several would link Virginia and Maryland directly through the District, such as the Orange Line spanning from Vienna, Va. in the west to New Carrollton, Md. in the east. A passenger could reach one station from any other in the system with a maximum of one transfer of trains.

After receiving resounding praise for the system's innovative design from its federal, state and local supporters, WMATA was ready to begin construction. But a project this massive in scope and significance demanded precision. The Authority's leaders tabbed Major General Jackson Graham – then-head of the U.S. Army Corps of Engineers – to shepherd the effort to completion as General Manager. Graham and

his staff oversaw a workforce of ___ at its height, from tunnel-diggers and tile-layers to railbed-graters and elevator-installers. Construction began in August 1969. A project of this magnitude ran the risk of becoming unwieldy, but Jackson's focus and experience brought an operating philosophy that grounded its prospects for success.

“Manage by example,” Graham said in 1974. “Be fair, firm and human. Avoid bombast and rhetoric. Follow modest habits. Encourage cooperation and good feeling between offices and individuals. Step on bureaucratic jealousies. Set standards for all activity from paperwork to construction, and require correction often enough to sustain them.”

Work ultimately stretched more than 21 years, from August 1969 until the final segment of the Green Line was completed in January 2001. Graham retired in January 1976, two months before the first trains began rolling on March 27, 1976 in the year of the nation's bicentennial. The system would receive a brand name – Metro – indicating its connection of the metropolitan Washington region. Those first trains began service on the Red Line between Rhode Island Avenue and Farragut North in the District. Meanwhile, WMATA had purchased the operations of all the region's private bus operations by 1973, creating Metro Bus. At long last,



Map courtesy Washington Metropolitan Area Transit Authority

The last of the system's stations, and thus its completion, was finished in 2001.

a comprehensive transit system for the nation's capital had come to fruition.

Moving Millions

In the 31 years since Metro's first trains hit the Red Line, the system has been a bastion of growth. It gradually added miles and stations through the 1970s, '80s, and '90s to fill-in its 97-mile original network plan. But those additions are only the underpinnings that make possible a far more important measure of growth – ridership. From a region that – prior to 1976 – had no rapid transit service since 1958, Metro rail carried an average weekday ridership of more than 700,000 in 2007. And growing. That's good for the second highest daily passenger count in the nation – behind only New York City's five million daily riders.

Surely, the opening of new route miles and stations is responsible for the bulk of the system's ridership base. However, Metro's passenger numbers have expanded at a staggering rate in the last five years, well after the system included its last major addition – the completion of the Green Line between Anacostia and Branch Avenue in January 2001. This surge added to an already significant ridership foundation around 500,000. What might explain this crescendo of volume?

It is easy to point to the region's crushing congestion as a chief factor. A 2007 study ranks the Washington region the 2nd worst area in the nation for tie-ups on highways and roads, trailing only Los Angeles. Metro's completely grade-separated rail system operates independently of the road network and can't be slowed by disruptions on highways such as I-95, I-270 or the infamous Beltway (I-495), or the rigid downtown Washington street grid.

However, more subtle and less volatile forces also play a significant role in attracting more riders. Washington maintains a uniquely large and consistent base of employees working for the



The vaulted ceilings create the intended effect: this is a substantial system.



The system sits above ground in Virginia's Fairfax County alongside I-66, just outside the Beltway.

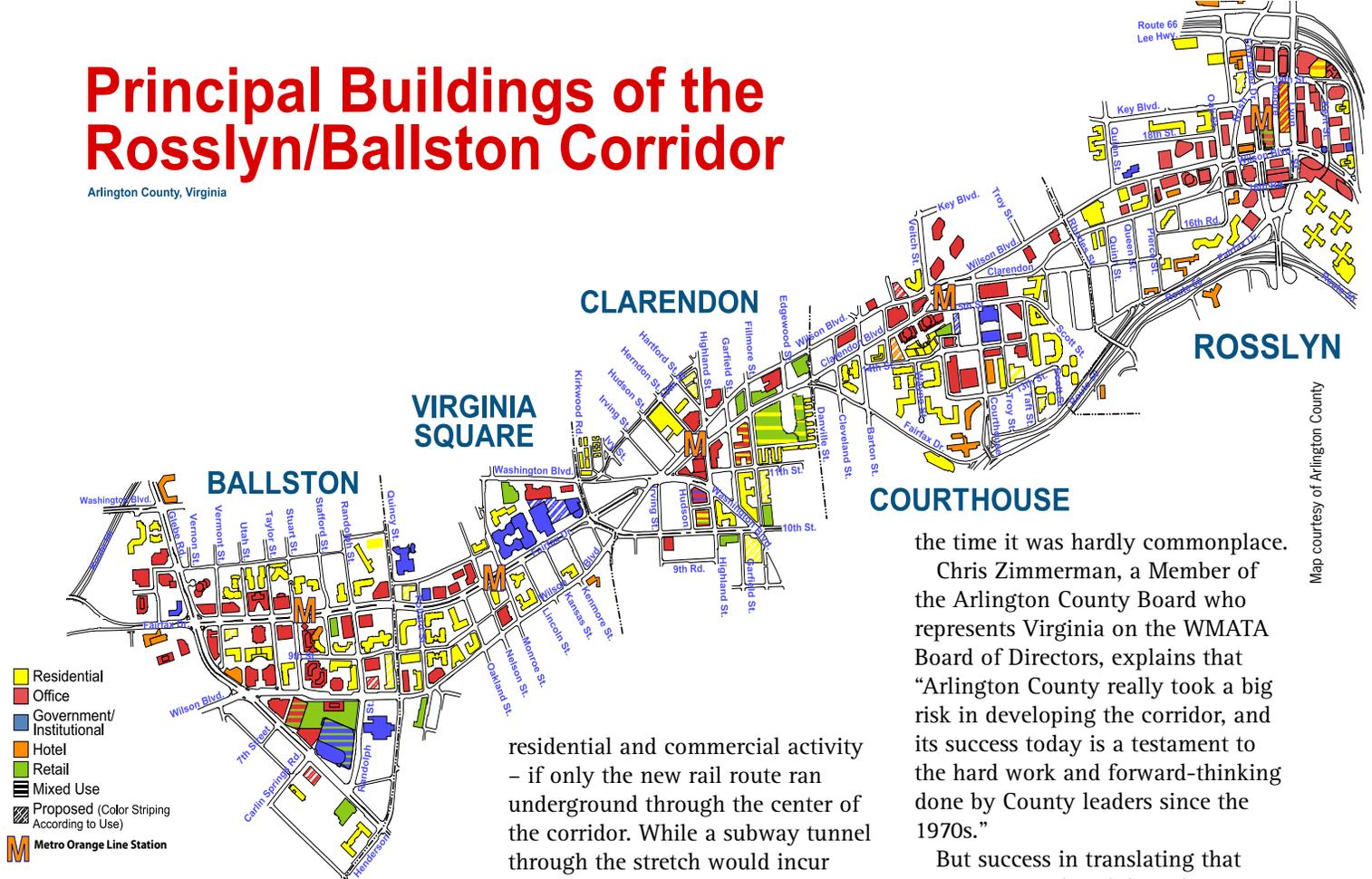
Federal Government in downtown Washington and its immediate vicinity. Meanwhile, hundreds of thousands of contractors, non-profit organizations and law firms, among other ancillary businesses and organizations doing government-related work, yield a permanent and predictable source of jobs and activity in the region. Since its inception, Metro has captured an increasing share of these commuters as the system has become more familiar and ingrained in the area's identity. The Federal Government even contributes a portion of their employees' fare costs to ride Metro,

while many other firms and agencies have followed suit. This has made Metro trains and buses a more attractive alternative to the region's clogged byways.

Additionally, the Metro rail network possesses a valuable trump card in its ability to lure passengers – its ability to shape land use and development patterns. Due to the large volume of passengers that the Metro system can accommodate, any one of its stations can handle tens of thousands of riders every day. That makes them natural venues of activity in a given neighborhood or area. This, in turn, makes any

Principal Buildings of the Rosslyn/Ballston Corridor

Arlington County, Virginia



residential, retail or service-oriented locations nearby more convenient, useable and, ultimately, more valuable. In a self-fulfilling prophecy, more riders are attracted by an active Metro station.

Nothing Draws a Crowd Like a Crowd

During the design phase, planners originally mapped out the Orange Line to parallel a new highway that was being constructed through North Arlington – I-66 today – from Rosslyn on the Potomac River all the way through to Vienna in Fairfax County. However, as Arlington County officials reviewed the proposals, their opinions differed from the planners. They identified that the heart of North Arlington, neighborhoods such as Rosslyn, Clarendon and Ballston, would be underserved by a line next to the highway. Instead, they argued that they could achieve a massive revitalization of these communities with greater land density and more

residential and commercial activity – if only the new rail route ran underground through the center of the corridor. While a subway tunnel through the stretch would incur appreciably higher costs than an above ground alignment near the thruway, county leaders explained that the alternative plan would be justified long-term with higher ridership and greater property tax dollars they could use to support the system’s operations.

The WMATA Board of Directors agreed with Arlington County, and instructed engineers to work instead on the subway route. The new line included stations in Rosslyn – a growing urban hub – Court House, Clarendon, Virginia Square and Ballston, beneath 2.63 miles of Clarendon Boulevard and Fairfax Drive. The stations opened on December 1, 1979. But work for Arlington County leaders and planners was only beginning. With Metro service now realized to these areas, they moved to leverage the investment it offered by changing zoning laws, updating land-use plans and offering incentives around the stations to encourage development. Although this practice might appear to be de-facto in today’s transit-oriented-development universe, at

the time it was hardly commonplace.

Chris Zimmerman, a Member of the Arlington County Board who represents Virginia on the WMATA Board of Directors, explains that “Arlington County really took a big risk in developing the corridor, and its success today is a testament to the hard work and forward-thinking done by County leaders since the 1970s.”

But success in translating that vision into reality did not happen immediately. To build momentum, Arlington planners developed relationships with housing developers, business coalitions and community groups to explain the potential of the new subway. Steadily, restaurants and small residential projects opened near stations in the corridor. Small retail shops and services followed. By the late 1980s, a healthy commercial district was established in North Arlington. Although they were encouraged by the results, County leaders expected more.

In the early 1990s, planners and county business development teams worked directly with investors to coordinate large development projects in the area. Approval was granted for a series of high-rise condominium and apartment buildings to take advantage of the region’s strong real estate market. Meanwhile, substantial commercial developments brought mixed-use retail and residential activity at locations such as Clarendon Station between the Clarendon and Court



Photos by Rich Sampson

The Rosslyn-Ballston Orange Line Corridor is a textbook study in rail-oriented development, as seen here at the Ballston (left) and Court House (right) stations.

House Metro stops, and Ballston Common, adjacent to the Virginia Square and Ballston stations. With that, the race to grab a piece of the Orange Line corridor real estate action was on.

Between 1979 and today, the five stations have spurred more than \$9 billion in development, including 22.5 million square feet of office space and 3 million square feet of retail activity. Most significantly, while the corridor represents 7.6 percent of the county's land area, it produces more than 32 percent of its property taxes. Equally as important, Arlington County also boasts the lowest real estate tax rates in the region.

"Arlington's approach to focusing transit-oriented development around its Metro rail stations has been central to the county's economic health," said Dennis Leach, Director of Transportation for Arlington County. "This approach has allowed Arlington to continue to expand its tax base, expand local services and invest in the conservation of existing neighborhoods."

Indeed, while Metro provided the railcars that drove the progress of North Arlington, even WMATA officials credit the hard work of the County as the linchpin of the line's success.

"While moving Metro underground instead of along I-66 allowed for a greater impact of the service between Rosslyn and Ballston, it was truly the initiative and effort of Arlington County – its leaders and planners

– that made it the success that it is today," says Nat Bottigheimer, Metro's Assistant General Manager for Planning and Joint Development.

Today, the Orange Line route in Arlington County is cited as a preeminent case study in transit and rail-oriented development. But the mindset that spurred its prosperity has found similar utility in other communities and corridors throughout the Metro system. At King Street in Old Town Alexandria, Silver Spring and Bethesda in Montgomery County, and Gallery Place-Chinatown, U Street-Cardozo and Columbia Heights in the District, Metro-oriented development projects are flourishing, bringing more riders to the system and contributing to tax-driven revenues to their respective jurisdictions.

For Metro, the work is just beginning.

"We need to continue to build our commitment to development around our stations," Bottigheimer says. "Keep your eyes on projects near the Branch Avenue, New York Avenue and Franconia-Springfield stations, as we help to make more Metro stations instruments of development for their surrounding areas."

Focus on Operations

As much as Metro is still identified by its passenger-friendly design, and enhancing its reputation through focused development, the contemporary system is best understood by the immense number

of riders it moves on a daily basis. Clearly, the central mission of the early days of the network has been accomplished – developing its ridership base. The case has been made and accepted by the region at-large that Metro is a reliable and effective way to traverse the metropolitan area. Now, could it become a victim of its own success?

"We're preparing for the day where we carry one million riders in a single day," says Metro's Assistant General Manager for Rail Gerald Francis. "The focus of Metro has changed from the days when we needed to lure people from their cars. We need to provide all our riders the best service possible."

That is no small task. To move hundreds of thousands of people every weekday, 134 trainsets move across the system, which takes 800 railcars driven by 551 train operators, controlled by 31 dispatchers, kept in working order by 734 maintenance personnel, and marshaled by 525 station managers. In short, Metro must orchestrate a battalion of more than one thousand transit professionals who ensure the system works as well as possible.

"We don't live an ideal world, and it's incredibly difficult to have a perfect day, especially on a system of this size," explains Francis. "But our employees do a fantastic job. They're responsive and dedicated to getting people from point A to point B."

After three decades of service, the system is beginning to show its

age. Work to upkeep the network's fleet of 230 elevators and 588 escalators – especially those at above-ground stations battered by rain and snow – is needed often, while train cars experience problems with doors, brakes and heating and air conditioning units. At the same time, track switches, third rails and automatic train control functions all are showing signs of wear. For a period in the 1990s, preventative maintenance projects were deferred in an effort to control costs. Delays and backlogged maintenance is a direct result.

WMATA and Metro are now actively working to make the case that sustaining the system now is just as crucial to the region's vitality as was its undertaking its initial construction. Congressman Tom Davis, who represents Fairfax County (Va.) in the U.S. House of Representatives, has proposed legislation to deliver \$1.5 billion over a decade to support Metro operations and maintenance. The only condition is that the District and the states of Maryland and Virginia must contribute an equal amount of local funds to match the federal investment.

"The federal government relies on Metro for its workforce to commute,"

Metro's not done: A connection to Dulles Airport is moving forward.

says Davis. "It's time that Metro receive dedicated funding so it can do the planning and infrastructure work needed to maintain it as one of the top transit systems in the world."

"I know it isn't as inspiring to the leaders and the public as building new tracks and stations, or planning expansions, but we need to focus on maintaining the excellent system we have now," says Francis. "Metro has always set the bar high for transit across the nation, and we have to live up to those standards. I think our daily ridership justifies that kind of commitment."

Out and Around

While WMATA leaders and area officials work to enhance investments available for operations and maintenance, planners continue to scope-out new ways for Metro to serve the region. Plans are already moving forward to build and initiate a wholly new line in northern Virginia, to connect with the existing Orange Line at East Falls Church and extend 23 miles out to Washington-Dulles International Airport in Loudon County.

When a new highway connecting I-66 to Dulles Airport was constructed along with the airport

in 1962, a wide median was included with the intent of one day hosting rapid transit trains. Through a combination of over \$2.1 billion in federal, state and local investment, the first segment of the Silver Line route to the Airport – and beyond – is in its final stages of engineering. An official groundbreaking is expected this fall, and Metro trains are planned to reach Wiehle Avenue in Reston in 2013 and connect to Dulles and Route 772 in Loudon County by 2015. Although a substantial number of its riders are expected to head inbound to downtown Washington and other communities in the region, a significant amount are also anticipated to travel outbound to Tysons Corner, Reston, Herndon and Dulles, where job opportunities are plentiful. For the first time, WMATA and Metro will not lead the construction effort, but instead will be key technical advisors to the Metropolitan Washington Airports Authority, who will build the line. The Authority owns and oversees Dulles Airport and the highway.

"We've marked a very large step toward the fulfillment of a longstanding vision – not just linking the airport to the region via Metro rail, but to make that same rail service available to all the residents and businesses in the corridor," said James Bennett, President and Chief Executive Officer of the Metropolitan Washington Airports Authority.

Still, Metro rail does not offer service everywhere in the region. When routes were originally sketched-out in the 1960s and 70s, planners proposed a stop on the Orange and Blue lines in the popular Georgetown district in northwest Washington. However, community opposition – fueled by a fear of the system's ultimate success and potential negative consequences of rapid transit – derailed hopes of a station in that area. Today, many Georgetown business leaders and residents wish they had better access to the Metro network.

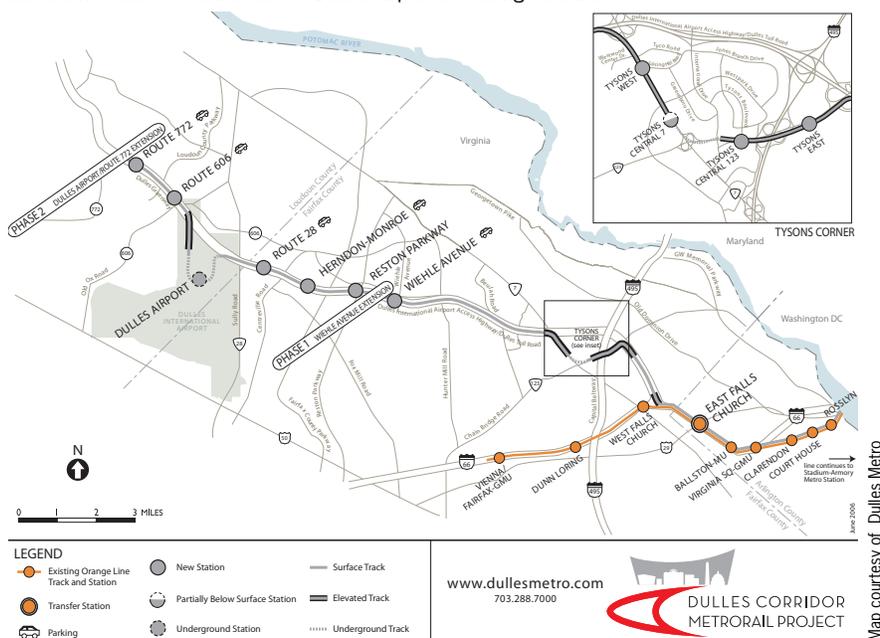




Photo by Rich Sampson

The Dulles Airport Silver line will branch off the current Orange Line route near this location in Arlington.

Presently, the Silver Line marks the only significant Metro rail extension project likely to emerge in the coming decades. However, the states, counties and cities in the region also envision other passenger rail services to complement the existing system. Among these, the District of Columbia is in the process of constructing an initial streetcar service in Southeast Washington to be centered around the Anacostia Green Line station. That route is expected to open for passengers in spring 2008. The District also has a more expansive vision of additional streetcar routes throughout the city, running along Georgia Avenue and 7th Street between the Silver Spring and Waterfront stations and from Georgetown along K Street and New York Avenue to Minnesota Avenue on the Orange Line.

Another remaining drawback of the system's initial design is an inability to move traffic around, but not through the District of Columbia. Planners originally envisioned a ridership base primarily focused on needing to reach downtown Washington from outlying areas. As a result, they designed a hub-and-spoke network of routes concentrating rail traffic into the city. But since then, suburban communities in Maryland and Virginia have grown to an extent

where much of the region's travel bypasses downtown altogether. Those trips are not ideally served by Metro, as nearly all such travel would require passing through one of the transfer hubs downtown.

Due to this, the state of Maryland is developing plans to link Metro lines in Montgomery and Prince George's counties via a light-rail route, connecting the Red Line branches at Bethesda and Silver Spring with the Green Line in College Park and the Orange Line at New Carrollton. This so-called Purple Line would create approximately one quarter of a circumferential rail route around the hub-and-spoke Metro system that exists today, mirroring the city's famously congested Beltway. The full realization of an entire loop around the network has yet to move beyond preliminary designs. Maryland is also considering a light-rail route extending from the end of the Red Line at Shady Grove to the Montgomery County communities of Gaithersburg and Germantown. Likewise, Virginia is formulating plans to build a light-rail service along Columbia Pike in south Arlington, from the Pentagon City station west to Bailey's Crossroads.

While expansions of stations and tracks mark important projects for Metro's future, it also anticipates more incremental enhancements of

its service. WMATA is completing plans for pedestrian tunnels to connect the Metro Center and Gallery Place-Chinatown stations along with those at Farragut North and West. These will allow for easier connections between lines for passengers and reduce congestion at stations. Additionally, the system is phasing-in deployment of new designs of railcar interiors that offer more space and better layout to accommodate the often-packed trains during peak hours. New technologies already provide real-time information to riders, through trip-planning on Metro's website, service announcements to email and personal data devices, and information signs on every station platform indicating train arrival times and train lengths.

"While we'll probably never again see projects the size and scope of the original Metro system implemented all-at-once, we still very much intend to always improve the service for our riders and make Metro more useable and efficient," says Metro's Francis.

Setting An Example

Not much in the Washington region could ever be considered ordinary. Its role as the nation's capital is an inherent source of distinctiveness. The same is true for its rapid transit system, the Metro. Envisioned with lofty goals and constructed with unique attributes, Metro's greatest distinction is its standing as the nation's fastest-growing rail transit operation. All of this seems entirely in keeping with the mission established for it by President Johnson 40 years ago to set an example and become the most attractive rail system in the world.

That mission is not lost on Gerald Francis and his colleagues at Metro, as he explains that, "we must strive to be nothing less than the very best transit system in the nation." **R**