It is often said the value of real estate is all about location. But perhaps nowhere is location as important—or as uniquely valuable—as when the property is located adjacent to proposed new suburban transit stations.

Today, I am here to share with you our experience in planning and rezoning for Moorefield Station, a greenfields transit oriented development in Loudoun County, Virginia. We can share the lessons we learned at that location which you can translate to similarly positioned properties. I hope this will allow you to consider TOD development, in a different light, since we almost always think about Transit-Oriented Development in the context of redevelopment.
More than a decade ago, I became general counsel to the Claude Moore Charitable Foundation, a not-for-profit foundation dedicated to education. The Foundation’s benefactor, Dr. Claude Moore, was a true visionary. “Opportunities?” he would say, quoting Napoleon, “I make my own opportunities.” The difference is Dr. Moore ended up a philanthropist and local hero – not banished to Elba.

As early as the 1930’s, Dr. Moore began investing in land in Northern Virginia. Not suburban land adjacent to Washington, D.C., but rather land in what was then very rural Loudoun County. In the 1950’s he owned more acres of Loudoun than anyone else. By the time he passed away in 1991 at the age of 98, he had accumulated thousands of acres in what was about to become one of the fastest growing areas in the United States— all of which he generously set aside in the foundation for purposes of furthering the educational needs of young people.
600 of those acres are the subject of today’s discussion.

The Foundation began with a plan. As to traditional land use, the plan was simply to get ahead of the public planning/zoning process, to be proactive, not reactive.

The next thing we did was find the best available consultants to advise us in what was truly a unique situation. We would be planning a transit oriented development with a central business district bigger and denser than most American cities, in a cow pasture. We were planning ahead for an area which was served at the time by one gravel road miles from a hard surface road and on land that had no public sewer or water and which did not perc nor did it have any significant ground water capacity. The Foundation’s first step was to retain the best consultants it could find. The development team then consisted of J. Lambert, who had been County Executive of Fairfax County for 15 years of its hyper-growth, RTKL, an international architectural firm, Land Design, Inc., a planning firm active in the southeastern U.S. but also in China, giving it
experience in massive ground up projects; Patton, Harris, Rust & Associates, Inc., a local civil engineering firm having the size and skills necessary for an undertaking of the size contemplated. The consulting team also included transportation consultants, a mass transit expert, a skill never previously utilized in Loudoun County, and development consultants and people focused on the economics and practicality of the concept, not just the dream. The consulting team met biweekly beginning in late 2000 until the rezoning was completed.

It’s the old 5 P system – Prior Planning Prevents Poor Performance.

Take the time and incur the expense to plan it right from the start.

It begins with location.

On these maps you’ll see that Moorefield Station is located just two miles west of Dulles International Airport – at the interchange of the Dulles Greenway—Loudoun’s only limited access east/west road— and the Loudoun County Parkway, which is planned to become the County’s
major north/south road. The Loudoun County Transportation Plans were revised in the early 1990’s to have these then future roads meet at Moorefield Station, which is also located at what is expected to be the westernmost terminus of the Dulles Metro line. It is anticipated that by 2015, Moorefield Station will be a simple Metrorail ride to Dulles Airport or through Herndon, Reston—Tysons Corner—Arlington, and finally Washington, D.C.

When we began this process, these 600 acres were zoned for one house per acre: typical for outer suburbia. The land was empty. It still is. In fact, the Foundation owned and sold over two square miles of adjacent land. The surrounding properties were largely undeveloped. As all of you know, NIMBYism can grind the process to a halt so we made a decision to petition the County to rezone the property early, before the surrounding properties began to populate, bringing with it the usual complaints of Wrong development
Wrong Time
Wrong Place

We were in the middle of nowhere – and we used the vacuum to our advantage. By the time of the rezoning Loudoun was booming all around the Moorefield Station site.

We worked with the County and created staggered entitlements that will allow us to expand in conjunction with the extension of transportation improvements and ultimately of the rail line.

Initially, that means up to 5,500,000 square feet of commercial and retail space and 2,500 residential units.

Later, when express bus service is available, the entitlements increase to 7,000,000 square feet of commercial and retail and 3,750 homes.
When the rail line comes to the site, the final entitlements kick in – providing for just shy of 10,000,000 square feet of commercial and retail space and 6,000 residential housing units.

So how do you proceed when the extension of the rail line is still in the planning stages? The promise of the trains— which minimally will be ten years in the future— does not by itself justify paying a premium for the location. First, you have to define the geographic limits of the site. We focused on natural or man-made open space areas to be preserved. Then, we developed a general land bay plan. After that we worked on internal circulation, including buses and pedestrians, since a fundamental concept of TOD is to minimize internal car trips.

I know – a lot of people will be looking for transportation even for what would be a short walk to the transit station. We have taken that into consideration in our development plan. This internal shuttle system was created as part of the zoning process. It evolves from planning dogma.
that most people won’t walk more than a 1/4 mile to transit. It includes an internal bus system designed to get people around Moorefield Station or to the transit station, with other stops along the way. The eastern boundary of the property has a street that is designed just for bus traffic to the Transit Center. As you see, the shuttle system is a series of right turns. This allows it to be relatively free flowing – reducing headway times between buses.

The shuttle will be paid for by commercial advertising and through HOA and commercial association assessments. We have also designed a pedestrian system for both local access and into the Transit Center.

But how do we create an economically viable community, starting without any residents or businesses?

The solution to that dilemma is to build from the outside in. Lower density development at the western edge will be built first. Those
properties are already of premium value to buyers who are motivated more by availability concerns than by the existence of public transit. We will build from there towards the transit station. The density will continuously increase as we get closer to the station. This allows us to have land marketable as suburban while setting up the higher density TOD in the future. The first area to be developed is the westernmost, which had a Concept Development Plan at part of the rezoning. That CDP evolved over 3 years to a Final Development Plan which is now proceeding to construction. The more traditionally suburban neighborhoods are where we are now building. They carry overall density of 5 homes per acre, but with actual density closer to 10 homes per acre after providing open space areas and a retail center. This is defined as the Outer Transit Design Supportive Area.
Going in, we had a good idea of how the suburban areas would lay out. Everybody wants roads built to modern standards. In virtually every major metropolitan area, the city streets predate modern standards. The streets are narrow relative to the traffic load. Local deliveries are mixed with through traffic. Parking is limited. People cannot easily navigate from their home to office to retail and back again. In suburbs, roads are wide and the utilities have their own easements. In cities, water and sewer lines run under those packed streets.

We began by creating a prototype of marketable buildings with the necessary parking allocated. That allowed us to size a prototypical urban block of about 140,000 sq. ft., complete with the public spaces that would be necessary. Green spaces were set out. We determined our environmental constraints – and the opportunities they presented.

We worked to maximize urban and suburban centers within the development.
We developed relatively narrow streets to keep Moorefield Station pedestrian friendly—and pedestrian oriented.

Next, we laid out density grids following the same concept. We had to maximize the types of product that would go in each area. We tested the density assigned to the grid system in the urban area to ensure the densities were economically feasible once the parking was included.

The next thing we did was design a street system, based upon a traditional urban road grid design. It used the block size we had determined best fit our future building product and was coordinated with the geographic limitations and development bays we had previously established.

Moorefield Station took all of that into consideration in creating modern parking standards:

2 or more spaces per household
Approximately 1,000 square feet of parking, including access, for every 1,000 square feet of office.

Your packets include a booklet published by the Urban Land Institute. Unfortunately for me, it came out long after the CMCF went through the process but it has several good ideas. Chapter IV focuses specifically on parking, and how parking must be thoughtfully integrated into the overall development in ways that uniquely support the needs of users. Parking is a MAJOR component of any development design. Too much parking is expensive and unnecessarily eats up valuable land. Too little limits the market value of commercial and retail space. Parking garages must be carefully thought through. Do you spend the money today to allow for additional vertical expansion in the future? Do you create retail opportunities on the lower floors? Do you skip the garage and lay out a surface lot which is cheaper to build but finite in capacity? One critical question for Moorefield Station—as it will be for many TOD developments is how to protect the transit oriented development’s
parking from being abused not just by commuters but also airport users? These are all things that must be considered early.

Some of these parking issues are resolved as part of the planning process; some are resolved as part of the zoning process; and some such as preventing TOD neighborhoods from becoming free parking for commuters—may ultimately be resolved with input from local government agencies much later in the process. Suburban jurisdictions are not adept at parking enforcement. Cities recognize parking enforcement can be a revenue resource. All problems and solutions need to be considered upfront. Because it is at the start of the process that you must take the steps necessary to protect the value of the property.

Nothing eats up the acreage and can waste its value faster than a poor parking scheme.
At Moorefield, it is a key element of the planning process that the urban area becomes denser as you get closer to the transit station. After the suburban areas have been developed, we plan to move toward the Urban Core, starting from the south and west, in areas defined as the Inner Transit Design Supportive Area.

Planned densities continue to increase as development gets closer to the transit station, into a greenfields transit oriented development is a unique opportunity. I repeat: You have to plan in order to do it right. At the beginning of the planning process, we determined ultimate needed utilities, roads, etc. and we worked to make sure they were placed and built to the right size. At the beginning of the zoning process, we followed the county’s comprehensive plan and sought 4,700 residential units and 16 million feet of retail and commercial space. We knew that 75% of the proposed mix of commercial and 25% residential was wrong, but it was visionary compared to the pastures that existed when the comprehensive Plan was adopted. THE RIGHT MIX IS ABOUT...
50% residential, 50% non-residential. But we were working within the existing legislative framework. As part of the process, the local government’s comp plan evolved along with a better understanding of the preferable balance.

As I mentioned, ultimately we will ultimately have 6,000 residential units and ten million square feet of commercial and retail. With residential units averaging 1,200 to 1,500 gross square feet, we will achieve the desired 50/50 balance.

At Moorefield Station, the closest building to the transit station will actually be hundreds of feet away. It is not ideal, but it is a function of a rail line designed in a highway median.

Some of you are just starting this long-term planning process. Recognize some things going in. This is an arduous process. It is time consuming. There will be—and in fact, should be—tension between the
architects and the engineers. You want to have balance among aesthetics, property value, and compact design.

Focus on the doable.

It would be wonderful to wind up with downtown Paris. But Paris means green space without parking space. Remember – Paris was built with public, not private funds – and neither the Kings Louis nor Napoleon were terribly concerned with budgets. Paris, like every major city, predates the automobile and the elevator. Today, you have to balance transit and cars, particularly outside historical city centers. You have to think vertically, not just building footprints. And at the same time, you have to design a development that is both economically viable and aesthetically pleasing to residents.

Have a game plan. Know what this is going to cost. The infrastructure alone is an investment of tens of millions of dollars.
We are all familiar with Reston. Reston is a 40-year old planned community now. The first developer, Robert Simon, failed. Even large oil companies with deep pockets like Gulf and Mobil choked on the front-end expense. The initial cost of developing communities like Reston and Moorefield Station is enormous. Two types of costs hit you on the front end: financial costs—the cost of funds—and development costs—the expense of essentially everything you’re doing in the planning stages through construction of the road and utility infrastructure with no income to offset it.

Completion of the project is a function of the market. Phase your projects to the provision of public transportation. There will be a finite absorption every year. The rate of absorption is not straight-line. Any real estate market follows boom-bust cycles. Not only that, but you will be competing with other types of properties, most of which are less expensive per unit to build. Any single planned community will only reach a small portion of the total demand.
Realistically, a property the size of Moorefield Station will take decades to complete. At times, there will be limited or even no activity.

The question you are probably asking now, is what happens if the transit authority decides to delay or cancel the extension of the rail line? Obviously, that changes the complexion of things somewhat. It is taken into consideration with the zoning, which has a built-in constraint as to density if the rail line does not come out that far. The sequential plan holds land for development when transit arrives.

The plan for the transit station makes this a unique property. People are willing to pay a premium to be there. This is a tight housing market and even if the rail line were not extended, the property will largely retain much of its value just based on its location— but being close to the rail line makes this truly unique.
As many of you will experience, this process is not for the timid. It takes patience, money, and time.
We completed the zoning at Moorefield Station at the end of 2002. At this point, we have not even broken ground. And we are still finalizing all of the governmental approvals for the first phase. The first product will be available for occupancy late next year. That means a four-year window from the start of the zoning process until the first major land sale to a developer and a seven-year window from the start of the zoning process to the first occupant. And the Claude Moore Charitable Foundation already owned the land. We had no acquisition issues or expense.

A traditional developer at this point would have been moving with roads and infrastructure, which we cannot do. The Claude Moore Charitable Foundation is a philanthropical organization, not a developer. What we have done, however, is begun to release certain portions of the land.
Since we are a private foundation, our investment is in preparation of the land, getting the zoning right, and creating the overall plan. Then we sell the land.

And, of course, if you have specific issues with which I can be of assistance, please contact me.

Thank you for your time today. I will be glad to answer your questions.