

AN ADVISORY SERVICES PANEL REPORT

Meadowville Technology Park Chesterfield County, Virginia



Urban Land
Institute

Meadowville Technology Park Chesterfield County Virginia

A Strategy for Development

June 12–17, 2005
An Advisory Services Panel Report

ULI—the Urban Land Institute
1025 Thomas Jefferson Street, N.W.
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About ULI—the Urban Land Institute

ULI—the Urban Land Institute is a non-profit research and education organization that promotes responsible leadership in the use of land in order to enhance the total environment.

The Institute maintains a membership representing a broad spectrum of interests and sponsors a wide variety of educational programs and forums to encourage an open exchange of ideas and sharing of experience. ULI initiates research that anticipates emerging land use trends and issues and proposes creative solutions based on that research; provides advisory services; and publishes a wide variety of materials to disseminate information on land use and development.

Established in 1936, the Institute today has more than 26,000 members and associates from 80 countries, representing the entire spectrum of the land use and development disciplines. Professionals rep-

resented include developers, builders, property owners, investors, architects, public officials, planners, real estate brokers, appraisers, attorneys, engineers, financiers, academics, students, and librarians. ULI relies heavily on the experience of its members. It is through member involvement and information resources that ULI has been able to set standards of excellence in development practice. The Institute has long been recognized as one of America's most respected and widely quoted sources of objective information on urban planning, growth, and development.

This Advisory Services panel report is intended to further the objectives of the Institute and to make authoritative information generally available to those seeking knowledge in the field of urban land use.

Richard M. Rosan
President

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About ULI Advisory Services

The goal of ULI's Advisory Services Program is to bring the finest expertise in the real estate field to bear on complex land use planning and development projects, programs, and policies. Since 1947, this program has assembled well over 400 ULI-member teams to help sponsors find creative, practical solutions for issues such as downtown redevelopment, land management strategies, evaluation of development potential, growth management, community revitalization, brownfields redevelopment, military base reuse, provision of low-cost and affordable housing, and asset management strategies, among other matters. A wide variety of public, private, and nonprofit organizations have contracted for ULI's Advisory Services.

Each panel team is composed of highly qualified professionals who volunteer their time to ULI. They are chosen for their knowledge of the panel topic and screened to ensure their objectivity. ULI panel teams are interdisciplinary and typically include several developers, a landscape architect, a planner, a market analyst, a finance expert, and others with the niche expertise needed to address a given project. ULI teams provide a holistic look at development problems. Each panel is chaired by a respected ULI member with previous panel experience.

The agenda for a five-day panel assignment is intensive. It includes an in-depth briefing day composed of a tour of the site and meetings with sponsor representatives; a day of hour-long interviews of typically 50 to 75 key community representatives; and two days of formulating recommendations. Many long nights of discussion precede the panel's conclusions. On the final day on site, the panel makes an oral presentation of its findings and conclusions to the sponsor. A written report is prepared and published.

Because the sponsoring entities are responsible for significant preparation before the panel's visit, including sending extensive briefing materials to each member and arranging for the panel to meet with key local community members and stakeholders in the project under consideration, partic-

ipants in ULI's five-day panel assignments are able to make accurate assessments of a sponsor's issues and to provide recommendations in a compressed amount of time.

A major strength of the program is ULI's unique ability to draw on the knowledge and expertise of its members, including land developers and owners, public officials, academicians, representatives of financial institutions, and others. In fulfillment of the mission of the Urban Land Institute, this Advisory Services panel report is intended to provide objective advice that will promote the responsible use of land to enhance the environment.

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Finally, the panel is grateful to the many public officials, business leaders, representatives of organizations and interest groups, and citizens of the Richmond area who took time to be interviewed as part of the panel's research.

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Foreword: The Panel's Assignment and Summary of Recommendations

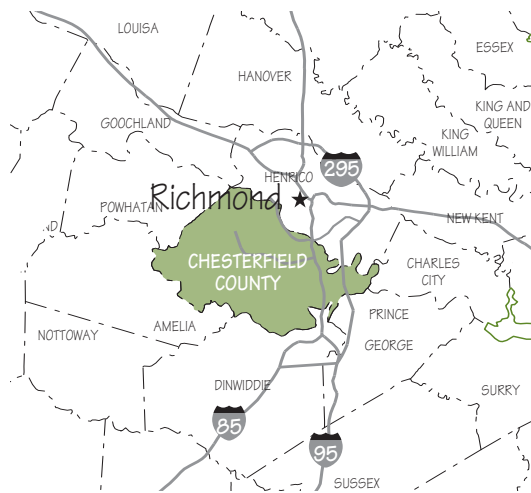
The Chesterfield County Industrial Development Authority (IDA) invited an Urban Land Institute Advisory Services panel to examine development opportunities for Meadowville Technology Park (MTP), an undeveloped 1,300-acre parcel located in eastern Chesterfield County, Virginia, on the Interstate 295 (I-295) beltway surrounding the Richmond area. The site is owned by IDA, a political subdivision created to facilitate economic development transactions within Chesterfield County.

Chesterfield County initiated the concept for MTP in 1995, during the height of the high-technology boom, a time when municipalities across the United States were vying to be the site of the next huge semiconductor plant. At the time, Motorola was negotiating to build a chip-manufacturing plant in neighboring Henrico County's White Oak Technology Park. Motivated by the desire to attract high-tech jobs and investment to augment its predominately residential tax base, Chesterfield County acquired control of the MTP site, zoned it for industrial uses, completed environmental and other necessary studies, and implemented the first phase of infrastructure for the site. The property was purchased through the auspices of IDA, whose members are appointed by the Chesterfield County Board of Supervisors.

The Chesterfield County Department of Economic Development (CCED) and IDA have worked to create a vision and a plan to position MTP as a premier, internationally recognized semiconductor plant site. The current plan also envisions the northern portion of MTP as a suburban campus alternative for large high-tech or pharmaceutical industries. Recognizing that these types of users require a clean, reliable water and power supply, the county has completed Phase I of the utility infrastructure necessary to serve the property, as well as a realignment of Meadowville



Above: Location map.
Left: Regional map.



Road leading into the site. The county's investment in MTP to date is \$31 million.

Current marketing efforts for MTP rely on a network of state, regional, national, and international marketing professionals. While county staff members currently are negotiating with some viable prospective users for the site, no sales have been made to date. Site selection consultants have highly ranked MTP for its strategic location near major interstate and state roadways and for its available utility infrastructure. The site is challenged, however, by competitors with existing

buildings and more completed infrastructure, and by national competition for the same type of users.

The Panel's Assignment

The Chesterfield County Department of Economic Development facilitated a work session with select members of the area's private development community in September 2004 to discuss future marketing opportunities for Meadowville Technology Park. Many of the ideas that emerged from this meeting complement the CCED's current positioning for MTP. Other suggestions from the private development community were geared toward creating a better local and regional brand for MTP by leveraging surrounding assets. Another suggestion was that the CCED should consider what sort of budget and staff will be needed to undertake a revised marketing program during the next 24 months.



A view of Meadowville Technology Park (shaded area) looking southeast from the Varina-Enon Bridge over the James River.

The ULI panel was asked to provide recommendations on the marketing, master planning, and strategic development direction for Meadowville Technology Park, with an emphasis on steps that should be taken during the next 24 months. Key questions that the panel addressed include the following:

- How well is MTP positioned to achieve Chesterfield County's stated goal of creating a long-term anchor that will contribute to a diversified tax and employment base?

- Is MTP positioned for prospects in expanding markets, or should it be repositioned to attract other tenants in addition to the large high-tech users currently envisioned?
- If it should be repositioned, which industries should be targeted, and what are their building requirements?
- How should the master plan be revised to reflect additional target markets?
- What other elements should be added to the master plan?
- Should MTP partner with a master developer?
- If so, what type of partner should be sought, and what is the appropriate process for securing such a partner?
- What entity should have the authority and accountability to implement the master plan for MTP?
- What is the appropriate organizational structure for this entity?
- What critical implementation steps should be taken over the next two years?

The nine-member ULI panel assembled in Richmond for an intensive week of work to answer these and other questions asked by the sponsor. Panel members—all of whom contributed their time—were selected for their relevant expertise and objectivity. Months of preparatory work by the sponsor and ULI staff, including the compilation of extensive briefing materials, enabled panel members to undertake an in-depth evaluation of Meadowville Technology Park and draw up recommendations for it.

During their week in Richmond, panel members were briefed by the sponsor on the assignment and toured the MTP site and surrounding area. The panel also interviewed dozens of state, county, community, and business leaders, as well as several of the county's former MTP prospects and site consultants familiar with the property. The panel then drew up its findings and recommendations, including a proposed conceptual master plan and an implementation strategy with a two-year

action plan, and presented the results at a public meeting on June 17, 2005. This report presents the panel's findings and conclusions.

Summary of Recommendations

The leadership of Chesterfield County has had the fortitude to sustain its vision for the Meadowville Technology Park site through an entire decade when the market was unresponsive. Everything the panel heard, saw, and read indicates that the possibilities envisioned for the site remain, albeit with slight variations from the direction originally charted for the project. The panel's key findings and recommendations are summarized below.

Target Multiple Markets

Based on its evaluation of the market potential for MTP, the panel concluded that the current strategy of targeting primarily large semiconductor facilities, pharmaceutical manufacturers, and biotechnology users will take decades to achieve the county's objective of adding significant jobs and tax revenue. While these companies can and do relocate to Virginia, their numbers are relatively small and the national competition is stiff. MTP, as one of the few sites in the Richmond area with large build-to-suit opportunities, certainly will attract some of this demand. These users, however, will not generate sufficient absorption in a reasonable period.

The panel therefore recommends that the marketing strategy for MTP be revised to target a broader range of potential users. In addition to large life science technology users, MTP should compete in local and national markets for office, flex/tech, and light-industrial user relocations. While MTP will face challenges in marketing itself as an office location, the panel strongly believes that if the development is positioned as a comprehensively planned environment for a broad mix of users, and if it provides a character and amenities not found in other commercial parks in the Richmond area, it will attract the interest of corporate office tenants.

Light-industrial and flex space offers a deeper market than the corporate office space market, and is an excellent target market segment for MTP. This market is highly diversified and gener-

ally is driven by local expansion. The panel believes MTP could capture around 20 percent of the greater Richmond demand for this sector, resulting in 150,000 to 200,000 square feet of annual absorption.

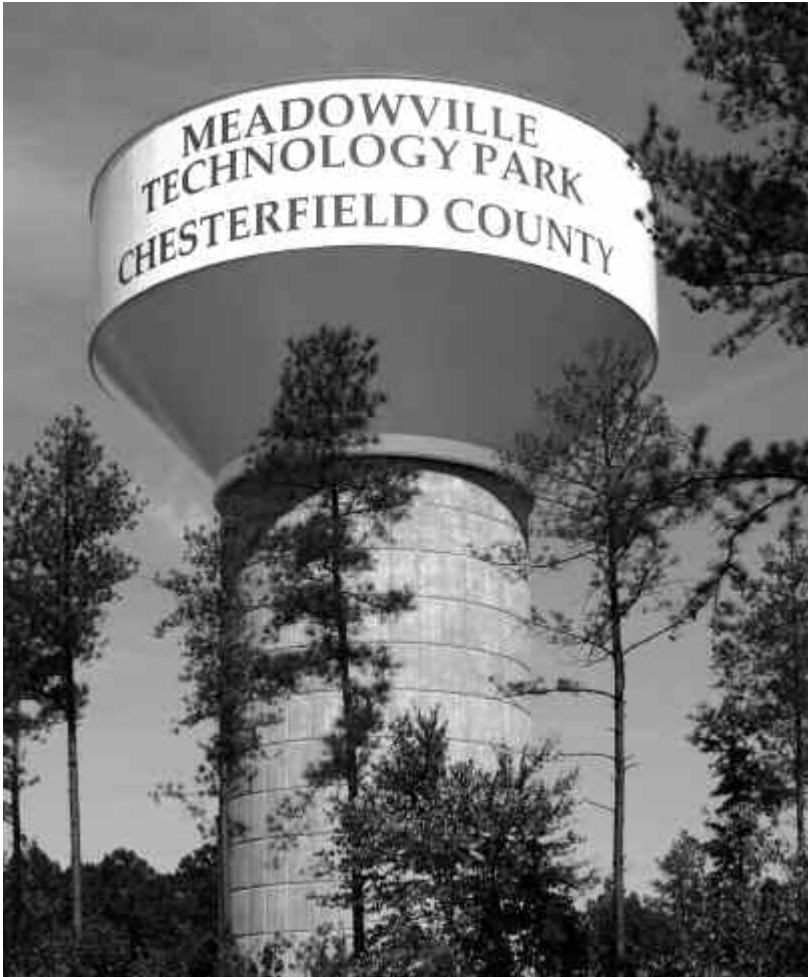
In addition to commercial uses, the panel strongly recommends that the plan for MTP include a limited amount of high-density, urban-style multifamily housing built over ground-floor retail uses in a pedestrian-oriented village setting. A small mixed-use village center would increase momentum for the park, help attract higher-value commercial tenants, and provide upfront cash for the project.

Overall, the panel believes MTP could absorb 200,000 to 300,000 square feet of life science, office, flex/tech, and light-industrial space per year. In addition, more than sufficient demand exists for 300 to 400 units of high-density multifamily housing located in a village center setting. A big user requiring 200 acres or more almost certainly will come along, but it may not arrive for years. The county should be ready for it, but should not rely on it.

Revise the Master Plan for Multiple Uses

The panel envisions a revised plan for MTP that creates an environment that will accommodate multiple user and building types and will feature extensive amenities. Key concepts of the panel's proposed conceptual master plan include the following:

- The 1,300-acre property is divided into eight land use areas, creating buffered zones for various types of users and buildings. The plan includes zones for office, flex/tech, light-industrial, and life science tenants. Also included are zones for a 40-acre village center located along the bluffs overlooking the James River, 260 acres of open space dispersed throughout the development, an area reserved for future development that will respond to market changes, and a 275-acre site reserved for a mega-user.
- The office zone, located at the entrance to the property, will set the tone for the entire development. The highest-quality, most visually appealing buildings should be located in this area.



A water tower painted with the name of the park enhances visibility and helps market the site.

- Twenty percent of the site is designated as open space, which will be dispersed throughout the development as community amenities and as buffers between land uses. A complete streetscape design should be integrated into the planned open-space network to create a high-quality experience for potential tenants and their employees.
- The construction of the planned I-295 interchange leading into the property at Meadowville Road will be essential to MTP's success. At a minimum, a diamond configuration should be constructed as soon as possible as a first phase of the interchange.

Consider a Name Change

As the panel sees it, there are too many technology parks chasing too few chip-manufacturing plants and other large high-tech users. To set it above the fray—and to take advantage of multiple market opportunities—the panel believes that MTP must be positioned as a first-class master-planned development that will accommodate a variety of uses in a live, work, and play environment. The term “technology park” does not convey such

an environment. Rather, it suggests a homogeneous place filled with similar low-rise buildings housing a cluster of closely related businesses.

With no sales to date, and before a comprehensive master plan is created, this is an opportune time to rename MTP. A new name that better reflects the revised vision for the site will reposition and enhance the development's image. The panel suggests that the county consider a name that plays off River's Bend Center, the established technology park and housing development to the west. Such an alignment would allow MTP to leverage the national reputation of River's Bend Center. In addition, the panel believes that combining the marketing efforts for MTP and River's Bend Center would be mutually beneficial.

Seek Out Development Partners

The panel recommends that IDA seriously consider establishing a public/private partnership with one or more private developers to develop certain portions of MTP. If wisely structured, this approach will enable a developer partner to share in the rewards of a successful project while maintaining a risk profile appropriate for a development of this nature. Any such partnership should be structured so that the developer partner would receive a percentage of building sales revenue over and above IDA's required share of the proceeds. Because of the multiple land uses proposed in the panel's conceptual master plan, it may be appropriate to have two developer partnerships operating simultaneously—one for the more office-intensive components and another for the more industrial components.

Empower IDA

The panel recommends that IDA be empowered with the authority and responsibility for the implementation of the MTP master plan. In existence since 1968, IDA offers several key advantages as the central authority for this project. It was created under commonwealth law that envisioned exactly this sort of role for the authority; it is governed by seven individuals who bring to their roles both loyalty to Chesterfield County and private sector business expertise; it has the ability to issue debt for the development of the project, which would not reflect against the

county's own bond ratings for other needed borrowing; and it is the current owner of record.

To carry out its mission, IDA should hire a managing director who would have overall responsibility and accountability for the successful development, marketing, and management of MTP. The managing director would report to IDA's board of directors, but should be selected with the advice and consent of the county administrator. The managing director should have the budget and authority to appropriate staff positions as needed, including full-time positions in marketing, asset management, and administrative assistance. Operating costs for this staff will come from the sales and leasing of property at MTP.

Take Immediate Action

The panel recommends that the following steps be taken immediately to set the stage for the development of MTP:

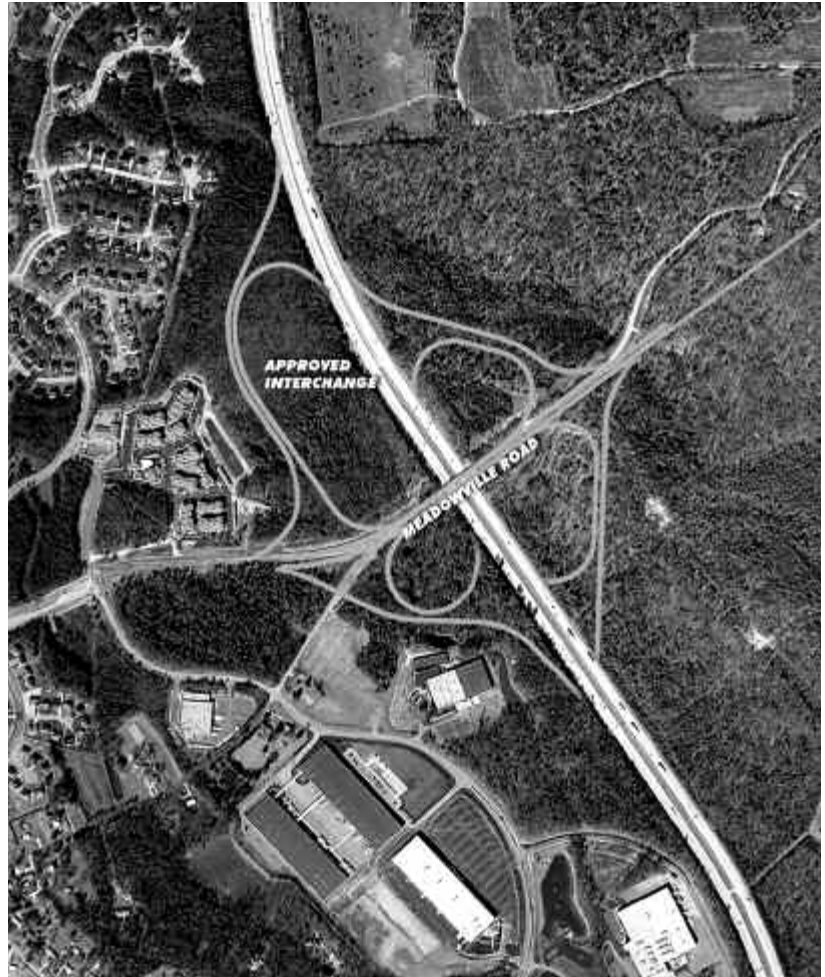
Agree on IDA's role. The appropriate county and IDA officials need to come to an agreement regarding the parameters of IDA's authority and responsibility for MTP.

Continue the current marketing effort. While the county should continue negotiations with prospective tenants for MTP, the sites discussed for these prospects should conform to the panel's proposed conceptual master plan.

Hire an MTP managing director. IDA and county staff should develop a job description and initiate a recruitment effort for this individual.

Prepare a comprehensive plan. The panel's proposed conceptual master plan is a springboard for the preparation of a comprehensive master plan. That document will serve as the official blueprint for MTP throughout the life of the project.

Rezone the village center land. County staff should immediately begin the process of rezoning the proposed village center area from industrial to mixed-use retail/residential. While the proposed residential property is only a fraction of the entire site, the panel believes an early sale of this land at full market value would provide at least \$5 million in operating revenues to IDA.



Prepare a Two-Year Action Plan

The panel also proposes that the following critical action steps be taken within the next 24 months:

Set up an MTP operations center. A marketing and operations center should be set up on site, initially in a temporary structure and later in a speculative office building.

Enhance access and visibility. One of the county's highest priorities for MTP should be to improve access to MTP. The panel urges the county to pursue all avenues in securing sufficient funds to construct the proposed I-295 interchange. At a minimum, a diamond configuration interchange should be constructed as the first phase of the interchange. To improve visibility for prospective tenants and developers, IDA should selectively clear sites and remove undergrowth in accordance with the comprehensive master plan.

Initiate speculative building. IDA should demonstrate the possibilities within MTP by partnering with private developers to build two speculative buildings. The authority should contribute an office site at the entrance to the property for the de-

An interchange from I-295 will greatly improve access to Meadowville Technology Park.

velopment of an office building. Leased space in this building should house MTP staff, the marketing center, and possibly offices for other county departments such as the CCED. IDA also should contribute land for the development of a speculative light-industrial facility in the southeastern portion of the property.

Establish a budget. An early task for IDA will be to establish a budget for the startup costs and revenues associated with MTP. The panel estimates that operating costs for the first two years will be on the order of \$1.5 million.

Market Potential

The panel began its analysis of the market potential for Meadowville Technology Park by assessing the competitive strengths and challenges of the Richmond metropolitan area as a whole, as well as the site's position within the region. In identifying the highest and best uses for MTP, the panel kept in mind that the county's primary goal for the property is to create jobs, investment, and tax revenue throughout the next 25 years. It therefore did not consider fiscally unattractive uses such as detached single-family housing and environmentally unfriendly heavy industry.

The following section analyzes the market dynamics for various potential land uses at MTP and assesses the competitive position of the Richmond metropolitan statistical area (MSA), Chesterfield County, and the site. This market evaluation underpins the panel's recommendations for the project.

Competitive Strengths and Challenges

The success of MTP is tied to both the growth of the Richmond metropolitan area as a whole and the site's specific position within this market. The following section describes the panel's assessment of the strengths and weaknesses of the greater Richmond area, Chesterfield County, and the MTP site as development locations.

Richmond

Richmond, the capital of the Commonwealth of Virginia, has approximately 1 million residents in its MSA and is growing at close to 1.5 percent annually. The MSA includes the city of Richmond; Chesterfield, Henrico, and Hanover counties; and other surrounding—mostly rural—areas. Richmond is the 50th largest MSA in the United States and the 43rd fastest growing. Average household incomes and home prices are lower than those found in Washington, D.C., to the north and Charlotte and Raleigh-Durham, North Carolina, to the

south. Similar metropolitan areas in terms of population and income include Nashville and Memphis, Tennessee, and Birmingham, Alabama. Comparable medium-size capital cities located approximately 100 miles from a top-ten metropolitan area include Sacramento, California, and Austin, Texas.

Richmond's economy is highly diversified and includes significant employment in financial services, diversified manufacturing, semiconductors, transportation, biosciences, and government. Major employers include Capital One, Wachovia, Philip Morris USA, and Infineon Technologies AG, along with the headquarters of 12 Fortune 1,000 companies. The total labor force is close to 590,000. Richmond continues to attract new employment opportunities, as evidenced by two recent announcements: Philip Morris's commitment to build a \$300 million research and development center in the Virginia BioTechnology Research Park in downtown Richmond and Infineon's plans to expand its semiconductor manufacturing plant at White Oak Technology Park in Henrico County. The region's pro-business environment has contributed to a ranking of 13th in the United States for business expansion by *Expansion Management* magazine and as one of the nation's ten best places for business by *Forbes*.

Richmond's key selling points, which set it apart from other competitive cities, include its proximity to densely populated cities along the eastern seaboard, an educated workforce, and an affordable business and housing climate. Challenges include the commonwealth's limited incentive program for relocating and expanding businesses and relatively high air travel costs to and from Richmond. In general, however, the city's central location on the East Coast; strong public/private, pro-business partnerships; high quality of life; and relative affordability result in its being poised to grow faster than its peers.

Chesterfield County

Located seven miles southeast of the city of Richmond, Chesterfield County historically has been an affordable bedroom community for the greater metropolitan area. Recent development efforts and limited land elsewhere have helped create a climate for greater economic diversity. The county population is 295,000, making it the largest of the municipalities in the Richmond MSA. Median household income and housing prices are above regional averages.

While Chesterfield historically has not been a commercial center, the panel believes that the county is well positioned to absorb future commercial growth. Its strengths include the availability and affordability of developable land, access to major interstate and state roads, attractive housing options, and strong municipal services.

Meadowville Technology Park

The 1,300-acre MTP site is located at the intersection of I-295 and the James River in the southeast portion of the greater Richmond area. River's Bend Center and the River's Bend golfing community to the west offer a mix of residential, office, and light-industrial uses. No competitive locations in Chesterfield County offer MTP's potential for a large-scale master-planned environment. The site's selling points, which set it apart from other business centers in Richmond and nationwide, include excellent transportation and airport access, visibility, build-to-suit opportunities, infrastructure, physical attractiveness, affordability, engineering and technical schools support, and an available workforce. MTP's main challenge is that it is an unproven business destination; early users will have to be pioneers. MTP is fundamentally well positioned, but will require creative marketing and implementation to clear the early acceptance hurdle.

Market Potential for Knowledge-Based Industries

MTP's strategic location and large size, combined with Richmond's attractive quality of life and pro-business climate, create an opportunity to attract a broad spectrum of tenants with diverse requirements. The building requirements of MTP's poten-

tial tenants are not easily classified; their space requirements depend on the specific nature of their businesses. High value-added, knowledge-based companies in the life sciences technology industry, for example, use a wide range of range of office, R&D, manufacturing, and distribution space.

Knowledge-based companies are highly desirable tenants because of their skilled workforce, positive contribution to the local tax base, willingness to invest, low environmental impact, and strong multiplier effect on a region's economy. Broadly speaking, employees in these industries earn one-and-a-half to two times the area's median income, and most of these employees live, shop, and pay taxes in the local municipality. Knowledge-based companies also are attractive from the standpoint that they tend to cluster more than typical businesses, leading to rapid growth once a region has been established as a desirable location.

Because life science technologies and other knowledge-based industries include a wide range of companies, the panel examined these users separately from the broader office and light-industrial market. Knowledge-based companies evaluate regions based on a matrix of factors. Key issues include:

- An engaged research institution nearby;
- Intensive networking or clustering of similar companies;
- Available capital at all stages of the development pipeline;
- State-funded incentives for growth;
- Attractive workforce dynamics;
- Stable and supportive business, tax, and regulatory processes; and
- A long-term commitment to the industry.

One of the world's best examples of how successful a technology park can become when these characteristics are present is Research Triangle Park (RTP) in Raleigh-Durham, North Carolina. RTP was developed through a partnership of state and local officials and leading academic centers. It is important to note that while RTP was established in the mid-1950s, it did not attract a

signature tenant, IBM, until 1965. The various players, however, were unwavering in their commitment to the development, which now houses more than 70,000 jobs.

As mentioned above, Richmond's development environment offers several attractive features, including Virginia's low tax and stable regulatory environment, the increasing involvement of Virginia Commonwealth University (VCU) in business development, and Richmond's generally high quality of life and affordability. These selling points, however, are counterbalanced by the relatively small cluster of knowledge-based companies in the Richmond area, the commonwealth's limited financial incentive programs to attract relocating companies, and a limited venture capital pool. Such concerns, however, are increasingly less significant as public/private partnerships such as the Virginia BioTechnology Research Park and the Motorola-funded engineering school at VCU begin to create a critical mass of knowledge-based industries and workers.

As a national player in these industries, Virginia is not in the top ten states in companies, scientists, National Institutes of Health (NIH) grants, patents, or employees. With VCU designated by the Carnegie Foundation for the Advancement of Teaching as an extensive doctoral/research university, however, Richmond does excel in certain niches, including research on diagnostic applications, U.S. Food and Drug Administration (FDA)-regulated device manufacturing, and memory chip development. Notable developments include the Virginia BioTechnology Research Park and White Oak Technology Park. These two developments have helped create the momentum and critical mass to turn Richmond into a viable location for knowledge-based industries.

- *Virginia BioTechnology Research Park.* Established in downtown Richmond through a partnership among the commonwealth, the city, VCU, neighboring counties (including Chesterfield), and private businesses, the park offers up to 1.7 million square feet of space with approximately 1 million square feet occupied or committed. A key recent win for the park was Philip Morris's commitment to build more than 400,000 square feet of life sciences research



White Oak Technology Park in Henrico County targets large-scale high-technology manufacturing uses.

space. As the park nears completion, its management mandate has been expanded to a statewide "Partnership Initiative" intended to spur similar growth at other sites throughout Virginia. The Partnership Initiative team's expertise in attracting high-value businesses will assist locations such as MTP in identifying and closing deals with new tenants. In addition, certain companies outgrowing space at the park may expand to MTP.

- *White Oak Technology Park.* The 2,778-acre White Oak Technology Park near Richmond International Airport in Henrico County is 60 percent occupied. Infineon's semiconductor plant is the park's largest user. White Oak, a similar distance from downtown Richmond as the MTP site, highlights the potential for large-scale commercial development in a previously unproven suburban location. White Oak's focus has been on large users, and its success at luring smaller companies has been mixed.

Within the broad category of knowledge-based industries, the life sciences present the most attractive market. During the past decade semiconduc-

tor manufacturing increasingly has been outsourced abroad, and high-tech R&D functions are centralized in a few locations. Users in these industries may be a source of potential tenants for MTP, but they are not likely to drive absorption.

Life science companies—specifically biotechnology players—prefer to locate alongside major research institutions. For that reason, some of these companies will be attracted to Richmond as a result of the momentum created by the Virginia BioTechnology Park and VCU. These industries alone, however, do not provide the scale of demand needed to drive overall absorption at MTP.

The panel's review of available market research indicates that approximately 2 percent—or 5,000—of the nation's 250,000 bioscience workers currently are employed in Virginia. The nationwide labor pool is projected to grow to 425,000 by 2012. Assuming Virginia continues its current momentum and increases its overall capture to 4 percent of the national total, the commonwealth would have 17,000 bioscience employees by 2012. At 300 square feet of space per employee, the 12,000 new jobs would create a need for an additional 3.6 million square feet of bioscience space in Virginia. If Richmond can capture 30 percent of this growth—with the remainder expected to go to northern Virginia, Charlottesville, and elsewhere—the total space needed in Richmond through 2012 will be slightly more than 1 million square feet. If MTP can capture half of this demand, the park would absorb 70,000 square feet of bioscience demand annually.

This estimate of potential biosciences absorption for MTP agrees with data provided to the panel by the Greater Richmond Partnership and leading commercial brokers. These sources estimate that approximately six to ten major relocating companies, many in life sciences, evaluate Richmond annually, with one 100,000-square-foot user selecting the region each year. Because it is one of the few build-to-suit sites in the Richmond market, MTP could conceivably capture half of this large-user demand, which would translate to 50,000 square feet of annual absorption. Thus the knowledge-based industry relocation market, while highly attractive, is likely to provide less than 100,000

square feet of annual demand at MTP in the foreseeable future.

Office Market Potential

The panel believes that major knowledge-based companies will not provide sufficient demand for absorption in a reasonable period and that MTP therefore needs to compete in the local and national office and light-industrial relocation markets.

The greater Richmond office market mirrors many trends seen in the national market, including limited new construction, moderate vacancy rates, and significant conversion of office to residential space. Overall, the metropolitan area has approximately 25 million square feet of office space, 70 percent of it in the suburban markets. Rents range from \$15 to \$18 per square foot annually and—with the exception of the downtown market—exhibit significant overlap between Class A and Class B space. Broadly speaking, the majority of corporate Class A space is centered downtown and in the northwest. Overall, the southeast part of the metro area, where MTP is located, contains only 2 percent of the market's office space.

Annual net absorption of all types of office space in the metro area is approximately 400,000 square feet. The first quarter of 2005 showed an accelerating pace, leading industry analysts to project annual absorption of more than 500,000 square feet in the coming years. Key recent transactions include the relocation of Philip Morris's corporate headquarters from New York to central Richmond and the expansion of several existing Richmond companies, including Owens & Minor and Wachovia.

Leading office locations in the metro area include downtown Richmond, with more than 4 million square feet, and the 3,500-acre West Creek Business Park in Goochland County, in the northwest part of the metro area. West Creek, the home of Capital One's new campus, likely will provide the most significant master-planned office park competition to MTP. River's Bend Center, across I-295 from MTP, provides a nearby "proof of concept" in its ability to attract leading companies such as Carl Zeiss Optical, Inc., and Alcan. The panel believes that River's Bend will be less of a long-term

competitor to MTP than a synergistic ally in creating a commercial center of significant scale in southeast Richmond.

MTP will face certain challenges in marketing itself as an office location. First, Richmond presently has a good supply of office space and second, the southeast is an unproven location. Nevertheless, the success of West Creek and the initial inroads made in River's Bend Center show that office tenants can and will be attracted to a well-planned park. The panel believes that if MTP is planned and positioned as a high-quality master-planned environment for a broad mix of users, corporate office tenants will be interested. However, unless MTP offers a comprehensively planned environment with a character and amenities not found in other commercial parks in the Richmond area, the panel believes MTP is destined to be a back-office location.

With 70 percent of office absorption driven by local expansion, MTP must position itself as a desirable Richmond office location. Assuming that this effort is successful, that southeast Richmond can increase its capture of total absorption of new office space from 2 percent to 10 percent, and that the total Richmond office market expands to 600,000 square feet in annual absorption, the panel is confident that MTP would be a leading alternative for approximately 60,000 square feet of annual office demand.

Flex/Tech Market Potential

Light-industrial and flex space offer a deeper market than the corporate office space market. Greater Richmond contains approximately 80 million square feet of industrial space, with 20 million square feet of multitenant space, 30 million square feet of single-tenant space, and 25 million square feet or more of occupier-owned space. Of this space, 10 percent, or 6 to 8 million square feet, is classified as "flex" or higher-end construction with a significant office or research component. Overall industrial absorption was approximately 600,000 square feet in 2004, almost evenly split between general industrial and flex space. Thus, higher-value flex space is growing at a far higher proportional rate than the general market.



West Creek Business Park in Goochland County is a leading office location in the Richmond metropolitan area.

Flex and industrial space users are highly diversified. As with the office market, demand for this type of space is driven by local expansion rather than major relocations. Flex space commands more than \$7.00 per square foot, compared with slightly more than \$3.50 for general industrial space.

Within the Richmond metropolitan area, the southeast region represents 16 percent of the overall existing industrial stock but only 8 percent of the flex market. Rents in the area, at an average of \$3.08 per square foot, are below the overall market. The current industrial stock is dispersed throughout Chesterfield County, including in the smaller-scale River's Bend Center. The panel believes an excellent opportunity exists for MTP to be positioned as the first true master-planned setting in the region, accommodating the flex market and a host of other uses.

Market experts generally agree that the greater Richmond industrial market could expand to nearly 1 million square feet of absorption per year.

This growth will be driven by continued expansion from within the local market and by the migration of firms from the Washington, D.C. metro area seeking greater affordability. Without a significant repositioning, however, the southeast likely will continue to capture less than its fair share of higher-value flex space. Overall, the southeast—

An aerial view of call center and manufacturing/warehouse facilities in the neighboring River's Bend Center. Together, Meadowville Technology Park and River's Bend Center will create a commercial center of significant scale in southeast Richmond.



with its available space and affordability—can expect to capture around 20 percent of the total demand for flex space, generating demand of 150,000 to 200,000 square feet of space annually. MTP should receive the majority of this inflow.

Other Potential Commercial Uses

Other commercial uses can help drive absorption of core commercial space at MTP, serve employees and nearby residents, and add to county revenues. Specific possibilities include the following.

Medical Uses

The life sciences and technology recruiting effort would be enhanced by a 150-bed specialized clinic and research center. This could provide on-site health care to employees and serve as a catalyst for medical offices and additional research facilities. This development would need to identify low priorities at VCU Medical Center in downtown Richmond as well as St. Francis Medical Center and CJW Medical Center in Chesterfield County.

Retail Uses

With the recent opening of two new regional malls, there is no demand in greater Richmond for

traditional destination shopping. However, the influx of employees from the development of MTP will create sufficient demand for diversified community-oriented retail.

High-Density Multifamily Development

Residential development generally does not meet the county's goal for MTP of creating a long-term diversified tax and employment base. The panel strongly believes, however, that a limited amount of high-density, urban-style multifamily development built over retail space in a pedestrian-oriented village setting would increase momentum for the park, help attract higher-value commercial tenants, and provide short-term cash proceeds for IDA. Village center residential development reflects the "reurbanization" trend occurring nationwide. Young professionals, childless couples, and empty nesters—the fastest-growing demographic segments of the U.S. population—increasingly seek a mixed-use, more urban life-style, whether in the city or in a suburban village center setting.

The Richmond for-sale residential market, like most U.S. housing markets, is performing extremely well. Median home prices have increased

more than 25 percent in the last 18 months, to more than \$250,000. More than 6,000 units were sold in 2004. With more than 10,000 people moving to the Richmond area each year, relatively affordable home prices, and continued economic growth, the housing market is expected to continue to increase.

The vast majority of housing in the Richmond area consists of single-family detached homes. Higher-density multifamily housing is significantly underrepresented. The panel believes that MTP undoubtedly would capture more than its fair share of the increasing demand for multifamily housing.

Conclusion

The panel believes MTP could absorb 200,000 to 300,000 square feet of life science, office, and flex/tech space per year. This would represent approximately 20 percent of the greater Richmond

demand for these product types and up to 30 acres of annual absorption. Attracting a megatenant such as Infineon is always possible but should not be counted on.

These assumptions require the successful repositioning of MTP as an office and flex space destination. The challenge is to create a destination where leading companies want to be. Successful implementation will require a comprehensive master plan incorporating a mix of uses, a comprehensive marketing strategy, and a strong management team.

Planning and Design

Based on its assessment of the market potential for Meadowville Technology Park, the panel developed a new conceptual master plan for the development. This plan is intended to serve as a springboard for the preparation of a comprehensive master plan, which will guide the planning and design of every portion of the 1,300-acre site. The comprehensive master plan will set forth the development program as well as the site's opportunities and constraints. This document should address the following issues:

- Topography and site grading;
- Wetlands, storm drainage, and water quality;
- Allocation of open-space areas designed to protect wetlands, contain stormwater detention facilities, and provide passive and active recreation opportunities;
- A plan to minimize impacts on any existing historical sites; and
- Comprehensive design guidelines defining elements such as the character of the streetscape and open-space areas, as well as transitions between different types of land uses.

The comprehensive master plan will define the limits of different types of development zones and should be used as the project's master development plan. With this plan in place, IDA would retain the responsibility for establishing the overall character of the park and implementing all parkwide features, such as streetscapes, directional signage, and open-space corridors. Other products of the comprehensive master planning effort should include the creation of design guidelines, which can be used to budget parkwide amenities and will become part of the park's covenants, conditions, and restrictions (CCRs). The comprehensive master plan also can aid in replatting the property to establish master development parcels.

The panel recommends that IDA retain a consultant—a major land planning and landscape architecture firm with extensive experience in the design and implementation of industrial, commercial, and office parks—within the next 90 days to prepare a comprehensive master plan. Based on their experience, the panel members believe that the comprehensive master plan could be completed in six months.

The Site

Meadowville Technology Park is a 1,300-acre site located just east of I-295 and south of the James River. It has more than 2.5 miles of frontage along I-295, stretching from State Route 10 (Route 10) to the river. Approximately two miles of the eastern frontage abuts existing and planned housing development. The remainder of this frontage—and the entire southern frontage—is bounded by small parcels of industrially zoned land.

Immediately to the west of I-295 is the River's Bend Center industrial park and housing development, both of which are nearing buildout. The River's Bend golf and residential community contains a system of paths connecting the upland areas to the riverfront.

The MTP site consists of mostly rolling land, with large areas that are high and flat enough to accommodate different types of users on a variety of parcel sizes. Along the river, a bluff roughly parallel to the river and a second bluff roughly paralleling the first provide boundaries to a zone that most likely would present challenges for medium- to large-floor plate industrial development. Most of the site is covered with second-growth trees and shrubs. Wetland areas have been delineated and will have to be reevaluated during the comprehensive master planning process. Areas of archeological interest may exist, although none have been found on the property to date.

Access to the site currently is circuitous, and it is not easy to find. The most direct access route heading north is off Route 10 onto Kingston Avenue through River's Bend Center. This well-landscaped road turns east and provides access to MTP across the I-295 overpass. While this route provides an attractive front door to MTP, it is difficult to find and offers inadequate access. This will change when an interchange off I-295 is provided for Meadowville Road. Although design plans for this interchange are complete and right-of-way has been purchased, the first phase of interchange construction currently is awaiting funding.

Chesterfield County has constructed much of the basic infrastructure necessary to serve the MTP site. A water storage tank and wastewater pumping station have been built near the south property line, and these utilities have been extended to much of the site.

Recent land transactions and some existing out-parcel ownership also will affect the site's planning and development. To the north, along the James River, the U.S. Army Corps of Engineers (USACE) owns an easement over most of the bottom land between the foot of the existing bluff and the river. Other adjacent parcels not owned by IDA include the land between the foot of the bluff and the southern boundary of this easement, and an approximately 40-acre parcel bordering the planned residential development to the northeast of the property.

Proposed Conceptual Master Plan

To capture the highest value for this large and physically attractive site, the panel envisions the development of a planned environment featuring a wide range of amenities. The proposed conceptual master plan includes the following key concepts:

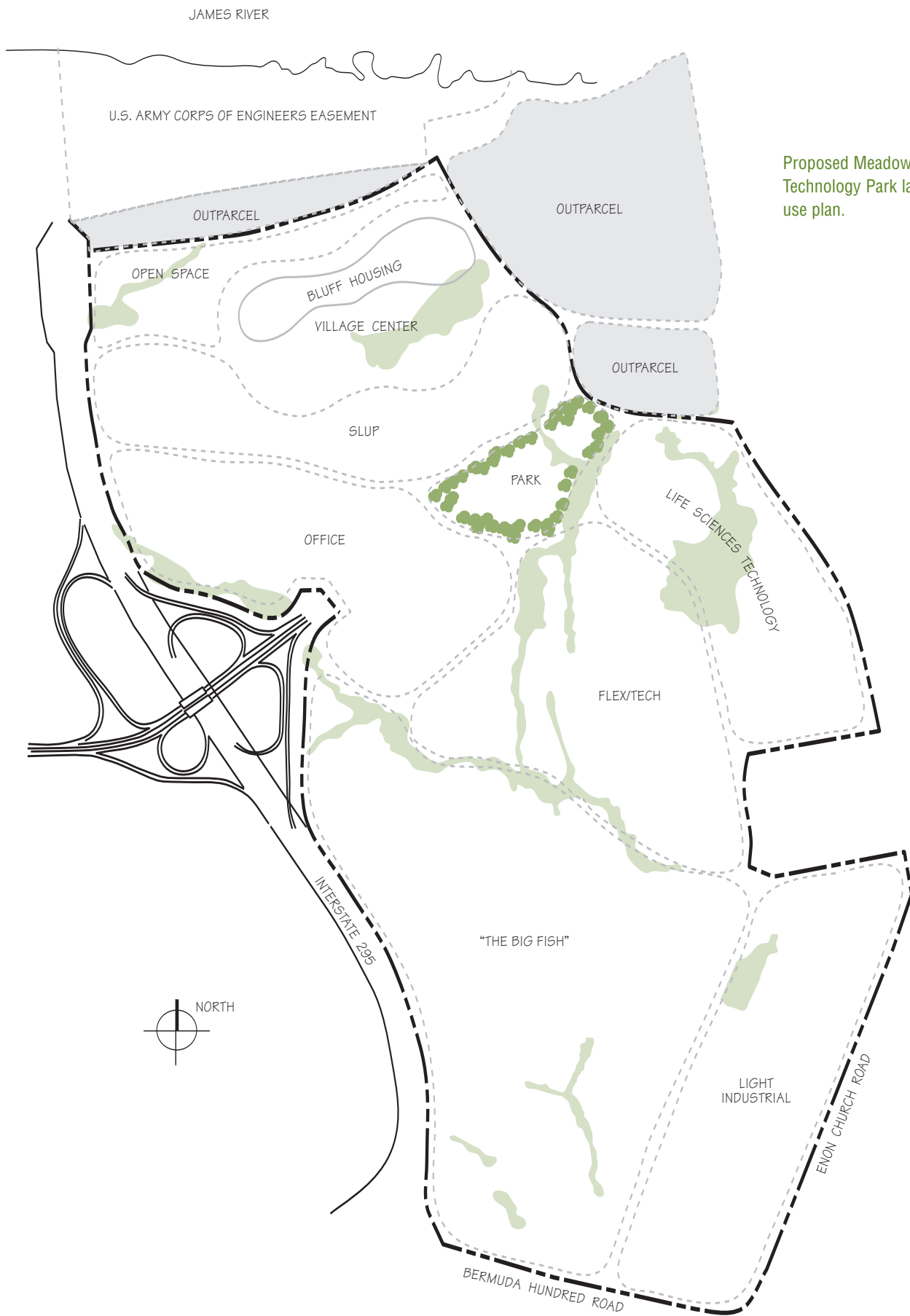
- The 1,300-acre property should be divided into buffered zones for various types of users and buildings.
- Twenty percent of the site is designated as open space, which will be dispersed throughout each of the land use zones and will serve as buffers between land uses and as community park amenities.

- A complete streetscape design should be integrated into the planned open-space network to create a high-quality experience for potential tenants.
- At a minimum, the diamond configuration in the first phase of the planned I-295 interchange should be constructed as soon as possible to position the park competitively as an attractive, easily accessed place.
- The entry from the planned I-295 interchange should be flanked by the highest-quality development to establish a top-quality image for the park.
- The land between the two bluffs along the river, although not readily suited to industrial buildings because of access problems and limited footprint areas, would be ideal for a pedestrian-oriented, mixed-use village center with housing built over retail space.
- A trail system should connect all areas of the park to the James River and provide the potential for future extensions along the river.

Land Use Zones

The plan divides the site into eight distinct land use zones. Upon entering the site, visitors will travel along an attractively landscaped central spine parkway flanked by the highest-quality buildings in the park. This parkway will run east and then turn south at a landscaped traffic circle. The parkway then will continue south and exit the site, connecting with North Enon Church Road and continuing to an intersection on Route 10. Landscaping along this road should be generally natural in character, with a narrow lawn and tree zone immediately behind the curb transitioning to a zone of retained natural vegetation that will screen adjacent parking areas from the view from the road.

The first zone encountered along the parkway is the office zone, which will be the setting for the park's most prominent buildings. Turning to the south, the life sciences zone is on the left side of the road. On the right side of the parkway is the flex/tech zone. In each of these zones, buildings



Proposed Meadowville Technology Park land use plan.

will be less prominent—and less costly to develop—than those in the office zone. Further south on the central parkway are the “big fish” and light-industrial zones. The big fish zone is an unencumbered site of approximately 275 acres that will be set aside for a single large user (the “big fish”). The light-industrial zone will accommodate different types of truck-related industrial uses. Truck traffic to both of these two zones should be encouraged to travel north into the site from Route 10 rather than through the site from the I-295 interchange.

In the northern portion of the park are zones for a village center and an area designated as a swing land use parcel (SLUP). The 40-acre village center will contain flats or loft-style condominiums located above and around a limited amount of retail development. A 40-acre site north of the village center is reserved for future townhouse development that will be dictated by prevailing market conditions.

Each of the proposed land use zones and the buildings they will contain is described in more detail below.

Office Zone

The office zone, located at the property’s main entrance, will set the tone for the entire park. The highest-value, most visually appealing buildings should be located in this zone, which encompasses 100 acres north of the parkway and an area of approximately 400 feet in depth to the south. The panel understands that curb-cut access to the entrance parkway from the new I-295 interchange will be restricted for approximately the first 1,500 feet into the office zone.

The buildings developed in the office zone should contain mid- and low-rise buildings of up to six floors. They should feature significant architectural components and should be designed to take advantage of the fact that they will be located at the highest point in the project, providing wonderful views for occupants and dramatic statements to those crossing the James River on I-295.

Buildings in the office zone should provide space suitable for corporate or regional headquarters as well as high-tech operations, financial centers,

R&D efforts, and general business users. The architectural design should present a first-class image as one drives up to and enters MTP. Buildings should incorporate all-perimeter glass windows with stone, brick, or architectural concrete. Stepped-back or cantilevered floor plans may add to the dramatic statement made by this portion of the development. Entrances should be designed to provide an urban image. Extensive landscaping should take advantage of the existing growth and incorporate new landscape elements.

Floor plate sizes should range from 20,000 to 60,000 square feet. Some buildings should provide space for tenants as small as 5,000 square feet. Ceiling heights typically should be ten feet, with even higher lobby ceilings. The office zone should contain a mix of for-sale, for-lease, and/or build-to-suit structures. Smaller tenants will share common lobbies and corridors, while larger tenants will be able to secure their uses from other users, either by building or by floor. Parking typically will be in surface lots, with some structured parking where dictated by the terrain. Parking ratios should be four to five spaces per 1,000 employees. Floor/area ratios are expected to be between 0.25 and 2.0, depending on the building height, floor plate size, and parking requirement. The value of these buildings, once occupied, will be approximately \$100 to \$150 per square foot, depending upon the site, tenant improvements, and parking ratios.

The panel strongly recommends that IDA initiate construction of a speculative office building on a two-acre site at the end of the 1,500-foot restricted-access section of the parkway. This building would house the MTP marketing center and staff as well as county staff closely involved with MTP, such as the CCED. On an interim basis, some of the MTP staff could be housed in a temporary modular building at this location.

Village Center Zone

The panel believes the development of a 40-acre village center along the bluffs overlooking the James River would generate much-needed activity and serve as an important asset to the park. The panel envisions a neighborhood of approximately 300 to 400 flats and townhouses. The village center should include three- and four-story urban-style mixed-use buildings with community



Proposed Meadowville Technology Park conceptual master plan.



The panel recommends the development of a 40-acre village center at Meadowville Technology Park similar in scale to Chester Village Green.

retail shops featuring village-style storefronts on the street level and multifamily residential units on the upper levels. The design should incorporate outdoor courtyards, elevators, upscale appointments, and architecturally distinctive elements.

Pedestrian movement should be encouraged within the village center through the use of strict traffic controls, limited on-street parking, expansive sidewalks, and bike paths. Parking for residents, visitors, and retail customers should be provided in concrete structures accessible from side streets. Parking structure exteriors should both minimize their visual impact and enhance the area's "village" image. Restaurants should be encouraged to provide outdoor seating for diners overlooking the streets, the village center park, and the James River.

Pedestrian walkways should be designed to provide access to adjacent neighborhoods and to unimproved areas of the property. A centrally located urban park will accommodate community activities such as art festivals, seasonal celebrations, holiday events, concerts, school activities, and county-sponsored functions. When special events are not taking place, the park will serve as an urban recreation area for MTP's residents and employees. The views of the James River will be an important feature in this lifestyle-oriented development, as will the southbound views from I-295 looking down on the project.

A 40-acre site located above the village center on the bluffs below the James River should be set aside for future development of townhouses.

Parks and Open Space Zone

As required by zoning, 20 percent of the 1,300-acre MTP is set aside for open space. This open space should be dispersed throughout the property in each of the land use zones and in buffer areas between zones. The panel envisions a network of open space and pedestrian pathways weaving through MTP.

An approximately 25-acre park, possibly containing a small amphitheatre, would be located just east of the traffic circle at the terminus of the entry parkway. Wetlands and stormwater detention ponds could become attractive features along a network of pedestrian paths that would meander through the development.

Swing Land Use Parcel Zone

Immediately south of the residential area is the swing use land use parcel (SLUP) zone. The terrain here is undulating and includes a second upland bluff area. The nature of the terrain, as well as a need to reserve some portion of the site to provide flexibility to respond to the changing marketplace, drives the panel's recommendation. Should future commercial development at MTP generate sufficient demand for a hotel, the SLUP zone would be a good location for one. This area also could accommodate large temporary uses such as trade shows and other events.

Flex/Tech Zone

South of the entry parkway and below the office zone is the 175-acre flex/tech zone. The panel understands that IDA currently may have two or more active prospects that could be located in this zone.

The flex/tech zone should feature one- and two-story buildings designed to accommodate R&D, light-manufacturing, and lower-cost office users. These buildings would have a high-tech look but generally would not be as architecturally significant as those in the office zone. Landscaping, both natural and installed, should provide a green foreground for the structures. The buildings should incorporate glass and painted tilt-wall or masonry concrete exteriors with architecturally interesting main entrances.

Floor plate sizes should range from 20,000 to 80,000 square feet. In addition to light manufacturing, these buildings could readily accommodate assembly or repackaging activities, along with the distribution needs of those users. Buildings of this type can serve from one to eight tenants. Deck heights typically will be 14 to 18 feet in large, open work areas and ten feet in office areas. Both for-sale and for-lease buildings would be appropriate in this zone.

Smaller occupants in multitenant buildings would have their own entrances and utility connections, with shared parking lots and loading areas. Larger tenants will be able to secure their uses from other users. Parking typically will be in surface lots, with parking ratios of four to five spaces per 1,000 employees. Shared loading areas should be provided for tenants with minimal shipping and receiving needs, and all loading areas typically will be screened and out of sight from roads and pedestrian walkways. Floor/area ratios are expected to be between 0.20 and 0.35, depending on the site layout and parking/loading requirements. The value of these buildings, once occupied, will be approximately \$80 to \$120 per square foot, depending upon the tenant improvements.

Life Sciences Technology Zone

The panel believes that this area is the most appropriate portion of the site to accommodate biotechnology companies and other medical-

related services. The buildings developed in the 75-acre life sciences technology zone should include one- and two-story structures designed to accommodate both biotechnology R&D and office users. The area also should include sites for medical office facilities and other health care uses.

Buildings in this zone should be designed to provide a first-class image on MTP's east side. They should incorporate all-perimeter glass windows with stone, brick, or architectural concrete as well as entrances that present an urban image. Extensive landscaping should rely both on existing growth and new, designed installations. Seating and outdoor picnic areas, pedestrian walkways between buildings, and interbuilding communications all would contribute to a community environment for biotechnology-related businesses.

Floor plates should range from 5,000 to 30,000 square feet. Space suitable for large or small biotechnology labs, pharmaceutical research, or related operations should accommodate tenants as small as 1,000 square feet. Ceiling heights typically will be ten feet. Connections between buildings will provide support for laboratory research. Both for-sale and for-lease buildings will be appropriate in this zone. Smaller tenants will share common lobbies and corridors, while larger tenants will be able to secure their uses from other users. Parking typically will be in surface lots, with parking ratios of three to four spaces per 1,000 employees. Floor/area ratios are expected to be between 0.25 and 1.00, depending on height, floor plate size, and parking requirements. The value of these buildings, once occupied, will be approximately \$120 to \$150 per square foot, depending upon the tenant improvements and parking ratios.

The panel understands that the eastern part of Chesterfield County may be underserved by hospital and urgent care health facilities. These types of facilities, along with related services such as outpatient surgery suites and medical offices, would be excellent uses at MTP and should be located in the life sciences technology zone.

Light-Industrial Zone

A 150-acre light-industrial zone on the southeastern portion of the site will accommodate R&D, light manufacturing, and low-cost office users.

Buildings developed in this zone should be designed to provide a high-quality industrial park image with glass and tilt-wall concrete exteriors. Buildings should vary in depth from 75 to 150 feet. Floor plates should range from 20,000 to 150,000 square feet to accommodate tenants as small as 5,000 square feet, with the optimum-size tenant occupying 20,000 to 30,000 square feet.

In addition to light manufacturing, these buildings could readily accommodate assembly or repackaging activities, along with the distribution needs of those users. Buildings of this type can serve from one to eight tenants. Ceiling heights typically will be 24 feet in open areas and ten feet in office areas. Both for-sale and for-lease buildings will be appropriate in this zone. Smaller tenants in multitenant buildings will have their own entrances and utility connections, with shared parking lots and loading areas. Parking typically will be in surface lots, with parking ratios of 1.5 to two spaces per 1,000 employees. Loading areas should be a minimum of 140 feet deep, while floor/area ratios are expected to be between 0.40 and 0.45, depending on the site layout and parking/loading requirements. The value of these buildings, once they are occupied, will be approximately \$35 to \$80 per square foot, depending upon the tenant improvements.

The typical user in the light-industrial zone will require truck access and will be compatible with the type of large-scale user that eventually could be located across the parkway. Truck traffic would access these sites from the south.

“Big Fish” Zone

The panel recommends that a 275-acre site in the southwestern portion of MTP be set aside for a large-scale, “big fish” user. Such a user would, ideally, be a low-impact manufacturing facility that would require extensive parking, secured entry, redundant and reliable power, and immediate deliverability. Truck traffic would access the zone from the south. If a large-scale user does not materialize in the future, this area could be replanned to accommodate then-emerging markets. Meanwhile, the power company has two sources of electricity that can be delivered to this site once a user has committed to it.

Development Strategies

Meadowville Technology Park represents a once-in-a-lifetime opportunity for the Chesterfield County IDA. Few municipalities can claim a 1,300-acre contiguous piece of land bordering an interstate highway and overlooking a scenic river. The public sector leadership of Chesterfield County and the private sector leadership of its IDA have worked hard over the past decade to gain control of the site. The county's leadership has resulted in a preliminary master plan, utility and road improvements, environmental studies, and a number of other important achievements. The foresight shown by the county's leadership is laudable. In order for Chesterfield County to capitalize on MTP, however, a new and more strategic level of public and private sector leadership is required.

The panel recommends a series of development strategies designed first to help IDA establish momentum for MTP and to generate immediate revenue through land sales and incremental tax in-

come and then, in the longer term, to implement the conceptual master plan described above and to maximize the stabilized income from this investment. The panel estimates that MTP, if developed as proposed, ultimately could generate tax revenue of more than \$14 million per year. (See Figure 1).

Revise Development Goals

The county's original stated purpose for acquiring and controlling the MTP site was to position it as "one of the premier semiconductor sites in the country." While the site remains appropriate for such a lucrative use, the demand for semiconductor sites has substantially decreased over the past decade, while the global competition for such facilities has dramatically increased. Despite these shifts in the market, the panel firmly believes that MTP still is capable of meeting another key county goal: to provide a long-term anchor that ensures a diversified tax base and range of employment opportunities for Chesterfield County's citizens.

Figure 1
Ultimate Potential Tax Revenue

| Land Use | Acreage | Sales Price per Acre* | Total Sales Price | Developable Square Feet or Units |
|------------------------------|------------|-----------------------|---------------------|----------------------------------|
| Village Center (residential) | 50 | \$100,000 | \$5,000,000 | 380 |
| Village Center (commercial) | 0 | – | – | 100,000 |
| Office | 175 | \$40,000 | \$7,000,000 | 1,905,750 |
| Flex/Tech | 200 | \$20,000 | \$4,000,000 | 1,742,400 |
| Light Industrial | 175 | \$10,000 | \$1,750,000 | 2,896,740 |
| Life Sciences | 75 | – | – | 900,000 |
| "Big Fish" | 270 | – | – | 2 |
| Total | 945 | | \$17,750,000 | |

*Net after land contribution incentives.

Chesterfield County is experiencing robust growth in homes and residents. While such growth is indicative of a healthy county, more residents demanding county services—especially public schools—place a strain on county resources. County leaders told the panel that the gap between what an average residential taxpayer pays and the cost to the county to provide services and infrastructure to that taxpayer is nearly \$3,000 a year.

MTP offers Chesterfield County the opportunity to attract private sector development and jobs—and the tax base they bring with them—to the county without a large accompanying increase in demand for county services. At 1,300 acres, however, the site is large enough for multiple uses. Large users of several hundred thousand square feet of space and several hundred employees come along infrequently in today’s market. While it is important for MTP to be ready for such a prospect, it is equally important to show progress by planning for—and marketing to—smaller prospects with compatible uses.

As stated earlier, demographics and generational demands have changed. Once seemingly incompatible uses have become compatible and even synergistic. The panel believes that the proposed plan can create a successful business platform for the

area’s current businesses, as well as those relocating to the area. The proposed mix of land uses, the transitions between different uses, and the proposed development types are designed to allow short-term responsiveness to the market while preserving flexibility for the future.

The panel therefore recommends that Chesterfield County initiate the process of developing a comprehensive master plan based on the panel’s proposed conceptual master plan and creating a series of covenants, conditions, and restrictions (CCRs) to guide future development and operations. The panel’s detailed development strategy recommendations are described below.

Rename the Development

The 1,300-acre site has been known as Meadowville Technology Park since the county secured options for the land ten years ago and began marketing it as a technology park. “Meadowville” presumably is derived from Meadowville Road, which runs through the property, and “technology park” is consistent with the original intent to position the development as a semiconductor site.

As discussed elsewhere in this report, however, the market has changed. As the panel sees it,

| Value per Square Foot or Unit | Value of Completed Project | Applied Tax Rate | Recurring Annual Income |
|-------------------------------|----------------------------|------------------|-------------------------|
| \$200,000 | \$76,000,000 | \$1.06 | \$805,600 |
| \$140 | \$14,000,000 | \$1.06 | \$148,400 |
| \$150 | \$285,862,500 | \$1.06 | \$3,030,143 |
| \$100 | \$174,240,000 | \$1.06 | \$1,846,944 |
| \$60 | \$173,804,400 | \$1.06 | \$1,842,327 |
| \$175 | \$157,500,000 | \$1.06 | \$1,669,500 |
| \$750,000,000 | \$1,500,000,000 | \$0.35 | \$5,250,000 |
| | \$2,381,406,900 | | \$14,592,914 |

today there are too many technology parks chasing too few chip-manufacturing plants and other large high-tech users. To set itself apart from the competition, and to take advantage of multiple market opportunities, the panel believes that MTP must be repositioned as a premier master-planned development that will accommodate a variety of uses and building types in a live, work, and play environment. The term “technology park” does not convey such an environment. Rather, it suggests a homogeneous place filled with similar low-rise buildings housing a cluster of closely related businesses.

With no sales to date and before the creation of a comprehensive master plan, this is an opportune time to rename MTP. A new name that better reflects the revised vision for the site could enhance the development’s image and expedite sales. The panel suggests that the county consider a name that plays off River’s Bend Center, the established technology park and housing development to the west. Such an alignment would allow MTP to leverage that project’s national reputation. In addition, the panel believes that blending the marketing efforts of MTP and River’s Bend Center would benefit both developments.

Rezone the Village Center Area

The panel recommends that IDA promptly begin the process to rezone the area designated for the village center and bluff townhouses. Zoning should provide for a density of ten or more units per acre with a ground-floor retail component. Care should be taken to enforce the density set forth in the zoning, in order to create the lifestyle proposed by the land use plan. The property should be marketed for sale at 100 percent of its fair market value as soon as the zoning process is completed. The panel recommends that no incentives be provided for this use.

Initiate Speculative Development

To stimulate development activity, the panel recommends that IDA include two speculative building sites in the master plan. The panel concludes that because MTP is not highly recognized in the local or national market as a location for small- to

medium-sized users, two speculative buildings of different types may prime the marketplace to reconsider the park as a location of choice.

To motivate developers to build in MTP, the panel recommends that IDA contribute an appropriate office site to a willing developer. In addition, IDA should enter into a five-year or longer lease for a significant portion of the office building to create a “founder’s building” that will house the development team, a marketing center, and other county offices. This commitment from the county will reduce the risk to the office developer while providing an example of the development style anticipated in the comprehensive master plan. The panel also believes that a light-industrial facility could be built very soon if the county contributes the land for it.

Expedite Near-Term Sales

The panel recommends that IDA continue to offer incentives until the development has gathered enough momentum to sustain continuous development with reduced or no incentives. When they are offered, incentives should be carefully designed to match the needs of a user with those of the county. For example, in periods of low interest rates users may prefer to borrow all or most of the cost of the land and improvements and would be best served by future tax abatements or rebates. The county could benefit from this structure by retiring floating interest rate debt associated with the property.

The panel believes that IDA can best expedite sales and increase momentum by considering the circumstances of each prospective purchaser on a deal-by-deal basis. Special and substantial incentives should be considered for developers that will build speculative buildings for uses that will enhance the image of the development, especially during its initial stages.

Be Ready for a Large User

The panel recommends that the “big fish” zone be reserved for a large user until most of the other designated land has been absorbed. The county has always believed that MTP should provide a ready-to-develop site for a very large technology

manufacturer, and the panel supports that concept. However, global changes in the manufacturing and service sectors have significantly reduced the need for large-scale, low-environmental impact manufacturing development. Projects of this nature usually have long lead times, are highly competitive, and are driven by the best incentive and amenity package. MTP will be in a better position to compete for such a user after a substantial portion of the development is complete.

Establish Size and Impact Standards

The comprehensive master plan should establish minimum size and impact standards for each part of the development. Any potential sales or delivery of sites to users that do not meet that minimum qualification should be directed to other areas in MTP. If a mega-user has not committed to the site by the time MTP has been substantially developed, the panel recommends that other uses be considered for the big fish zone in the context of the rest of the park and the condition of the marketplace at that time.

Seek Out Development Partners

The panel recommends that IDA seriously consider establishing a public/private partnership to develop certain portions of MTP. This approach will allow a development partner to share in the rewards of a successful project while maintaining a risk profile appropriate for a development of this nature. Because of its location in an emerging market, a shortage of existing tenants in the vicinity from which to draw, and IDA's desire to stimulate activity—but not give up its value and take all of the risk—the panel recommends that IDA consider entering into one or more public/private partnerships for certain portions of the development.

Any partnership of this nature should be structured so that the developer partner receives a percentage of building sales revenue over and above IDA's required share of the proceeds. The developer would receive current fair market compensation for the services provided—development management, leasing, and so forth—while retaining the opportunity to receive a significant portion of the profits. An example of a potential deal struc-

Figure 2
Summary Pro Forma for a Public/Private Development Partnership Building Sale

| Distribution of Building Sale Proceeds | |
|--------------------------------------------|-------------------|
| Net sales proceeds | \$4,462,000 |
| Amount paid to owner for building | (\$3,700,000) |
| Amount paid to owner for land contribution | (\$ 240,000) |
| Total return of owner's cost | (\$3,940,000) |
| Remaining balance to be distributed | \$ 522,000 |
| Distribution to developer (25%) | (\$ 130,500) |
| Distribution to owner (75%) | (\$ 391,000) |
| Compensation to Developer | |
| Commissions | \$ 67,000 |
| Development fees | \$ 156,000 |
| 25% of sales proceeds | \$ 130,500 |
| Total compensation to developer | \$ 353,500 |
| Cash to Owner | |
| Cost paid to owner for land contribution | \$ 240,000 |
| 75% of sales proceeds | \$ 391,000 |
| Taxes generated in first year | \$ 48,760 |
| Total cash to owner | \$ 679,760 |

ture for a single building is shown in Figure 2 on the following page.

The structure of any public/private development partnership should be based primarily on a balanced and fair approach that promotes expert developer involvement but preserves a fair risk/reward formula that is aligned with the needs of the owner. Because of the multiple land uses proposed in the panel's conceptual master plan, it may be appropriate to have two partnerships operating simultaneously, one for the more office-intensive components and one for the more industrial ones.

The panel does not propose that the public/private partnership approach be applied to the big fish

site. Any large user for that site likely will be a result of the efforts of a statewide or regional effort and will not need a developer partner. The panel also recommends that IDA be open to working with two developer partners on different parcels and different product types if a multidisciplinary developer is not available or willing to participate. Since the panel has recommended selling the village center residential land at fair market value, there is no need for a developer partner for that portion of the project.

Be Disciplined and Stay Flexible

The panel believes that one of the most critical keys to the success of this project is to establish a strategy of discipline in determining where prospective users should be located. It will be very important to maintain the character and quality of the development, and that can be accomplished only if prospective users are located in the portion of the development best suited to the nature of their businesses and their building requirements.

The comprehensive master plan will be an important tool in maintaining both discipline and flexibility. For example, in the event that one building type gains more market momentum than another, the plan should allow fully developed zones to expand into adjacent ones while still maintaining the appropriate neighborhood design and use criteria. All conversions should be carefully considered. To stray significantly from the comprehensive master plan without regard for the long-term goal of establishing well-defined zones for diverse land uses would eventually erode the plan and slow momentum, and could diminish the ultimate value of the development.

Implementation

The panel's implementation recommendations focus on three key areas. First is the organizational structure needed to carry out such a large-scale, long-term development effort. Second are the critical actions that should occur over the next two years in order to launch the development successfully. Third is a picture of the financial support needed to bring the project to life.

Empower the Industrial Development Authority

The panel recommends that the Chesterfield County Industrial Development Authority (IDA) be the entity responsible for the implementation of Meadowville Technology Park. In existence since 1968, IDA offers several key advantages as the central authority for this project. It was created under commonwealth law, which envisioned exactly this sort of role for the authority; it is governed by seven individuals who have both loyalty to Chesterfield County and private sector business expertise to apply to their roles; it has the ability to issue debt for the development of this project, which would not reflect against the county's own bond ratings for other needed borrowing; and it is the current owner of record.

For these reasons, the Chesterfield County Board of Supervisors should empower the IDA board with the authority and responsibility for the development of this project. The panel further recommends that IDA hire a managing director to carry out its mission for MTP. Although IDA currently is well supported by the Chesterfield County Department of Economic Development (CCED), the panel feels strongly that a development project of this magnitude, complexity, and importance to the community demands a full-time, single-focus commitment from a highly experienced professional.

The managing director would have overall responsibility and accountability for the successful development, marketing, and management of MTP. He or she should have an extensive background in real estate design and development, project marketing, negotiating and closing sales and leasing deals, personnel and financial management skills, and demonstrated expertise in dealing with high-level governing boards and the public at large. This person also should have had exposure to negotiating in an environment of government incentives, so as to be able to develop a coherent set of policies regarding appropriate incentives for MTP. Staff support for the managing director eventually should include a marketing function and an asset management function. Although the managing director would report to IDA's board of directors, he or she should be selected with the advice and consent of the county administrator and the director of economic development.

Take Immediate Action

The panel recommends that the following steps be taken immediately to set the stage for the development of MTP.

Agree on IDA's Role

The panel envisions a stronger and more autonomous role for IDA than has historically been the case. As a first step in establishing IDA's role, the Chesterfield County Board of Supervisors and IDA should meet to discuss IDA's enhanced status in some detail. The appropriate county and IDA members need to come to agreement on the parameters of IDA's authority and to reach a level of comfort for the board to empower IDA to act aggressively to implement their agreed-upon plan, knowing that both bodies are committed to the same goals.

The agreement needs to spell out clear parameters of authority for IDA. For example, the agree-

ment might specify that IDA has the authority to issue contracts below a certain dollar value; actions above the threshold amount would require approval by the board of supervisors.

The bodies should agree on the nature of the county's long-term financial support for the project. The panel suggests that they make a distinction between, on the one hand, the costs associated with land purchase and infrastructure improvements (capital costs) and, on the other, IDA operational expenses. To date, the capital costs have been funded from county revenues, and the panel believes this should continue. The expected recapture of those costs ultimately will come from the enhanced tax base created in MTP.

IDA's operational costs, however, should be supported from revenues generated by land sales and leases within MTP. While the county may need to advance funds to IDA for startup operations during the first two years—an amount the panel estimates at roughly \$1.5 million—those funds should be treated as a loan to IDA, and should be repaid to the county as IDA's net operating revenues permit in the years ahead. Another longer-term benefit of leaving MTP's revenues with IDA is to develop a natural operating resource for the future that IDA will be able to use to embark on other projects needed elsewhere in the county.

Continue Current Marketing Efforts

The CCED is in active discussions with at least three serious prospects for sites at MTP. These discussions should continue. The panel suggests that the land use and locational guidelines set out in the proposed conceptual master plan be followed to the extent possible in current negotiations.

Hire a Managing Director

IDA should engage the assistance of the appropriate county staff and seek advice from a recruitment firm specializing in placing real estate professionals to develop a mutually agreed-upon job description for the managing director and initiate recruitment efforts.

Prepare a Comprehensive Master Plan

Under IDA's direction, county staff should move forward with the process of transforming the conceptual master plan into a comprehensive master

plan. This plan will serve as the official land use entitlement document for the property. The county should engage a land planner, landscape architect, civil engineer, and architect to prepare the comprehensive master plan. This document should contain detailed site development criteria and building design requirements, as well as specify infrastructure locations and land use designations. Because it will take many months to prepare the document and shepherd it through the county approval process, it is important that this activity begin immediately.

Rezone Village Center Land

Even before the comprehensive master plan is prepared, county staff should begin the process of rezoning the proposed village center area from industrial to mixed-use retail/residential. As soon as the area is rezoned, county staff should market this property to developers experienced in the development of the type of product envisioned in the village center. An early sale of this land at full residential land values of at least \$5 million will provide operating revenues for IDA to support its other activities in developing and marketing MTP and, perhaps, begin to repay the county for its initial startup funding.

Prepare a Two-Year Action Plan

To facilitate a successful development at MTP, the panel recommends that the following actions be taken during the first 24 months.

Set Up MTP Operations

The mixed-use development of MTP will require a managing director with a full-time staff. The managing director should be allowed and expected to add staff positions as he or she sees fit. The panel recommends that this staff include full-time positions in marketing, asset management, and administrative assistance.

An MTP information center should be created where all relevant information—such as marketing materials, site readiness and conditions reports, maintenance records, the comprehensive master plan, and zoning records—will be stored. This information center will serve two purposes. First, it will allow for easier asset management and the production of regular reports about the



The county has invested significant resources in the development of Meadowville Technology Park, including utility infrastructure necessary to serve the property, as well as a realignment of Meadowville Road leading into the site.

development process. Second, the information center will serve as a marketing tool and will provide an attractive setting in which to give prospective developers easy access to information about MTP.

The panel recommends that the managing director and MTP staff operate from within the development, and suggests that a temporary MTP marketing building be located at the park entrance to demonstrate IDA's commitment to this project. This should be done as soon as the managing director is hired.

A new marketing campaign should be undertaken to communicate the new mixed-use focus of the development. The panel urges IDA to get this campaign underway immediately, even before the marketing position is filled. The campaign should use all means feasible, including print publications, the Internet and, perhaps, direct mail.

The U.S. Army Corps of Engineers (USACE) land located adjacent to the James River on the northern edge of MTP has great potential to increase land values in the village center and to make a significant contribution to county tax revenue. The panel therefore recommends continuing contact between MTP staff and the USACE regarding future control and use of the land for recreational purposes.

Enhance Access and Visibility

One of the first goals should be creating better access to and through MTP. In its current configuration, MTP is difficult to access, which the panel sees as a detriment to marketing the park as the county's prime industrial location. It also makes

it difficult for prospective developers and tenants to fully appreciate the opportunities offered by this well-located site. This is particularly important when the park is marketed to businesses, since corporate executives are asked to imagine scenarios that often fall beyond the realm of their expertise. The panel recommends that the interior road connecting the park entry to the south and Route 10 be constructed as soon as possible. This road also is essential to the construction of the light-industrial speculative building proposed by the panel.

Further, the county and IDA, together with the MTP managing director, should pursue all avenues in securing funds to construct the I-295 interchange, which will provide easier access to the park. However, a simple, less costly interchange like the diamond configuration that has already been designed and approved should be sufficient to accomplish this goal. This action should be undertaken independently of securing a large tenant, and the parties involved should pursue all sources of funds, including potential funding from local, state, and federal governments; the creation of a local assessment district; and the possibility of teaming up with private commercial and residential developers who become active in MTP. The panel believes that construction on the interchange—even before it is completed—will stimulate interest from potential users by demonstrating the future potential of MTP.

In addition to being more accessible, greater visibility is needed throughout MTP. The panel thus recommends the selective clearing of sites and undergrowth removal to enable prospects to better

**Figure 3
Estimated Startup Budget**

| Revenue | |
|--------------------------------------------------------------|--------------------|
| Village center land sales* | \$5,000,000 |
| Expenses | |
| IDA Staffing** | \$650,000 |
| Managing director | \$150,000 per year |
| Marketing manager | \$80,000 per year |
| Asset manager | \$80,000 per year |
| Administrative assistant | \$50,000 per year |
| Benefits (20% of salaries) | |
| IDA general overhead | \$200,000 |
| Master plan preparation (consultant fees) | \$200,000 |
| Marketing and promotion | \$200,000 |
| Temporary marketing center and IDA staff office | \$25,000 |
| Selective vegetation clearing | \$50,000 |
| Miscellaneous property maintenance | \$100,000 |
| Subtotal | \$1,425,000 |
| Contingency | \$75,000 |
| Total startup period expenses | \$1,500,000 |
| Capital Costs | |
| Entry parkway with landscaping and access road | \$8,000,000 |
| I-295 interchange (local share) | (unknown) |
| Annual New Tax Revenues Generated by Startup Sales | |
| From first two buildings | \$100,000 |
| From village center | \$50,000 |
| Total annual revenues generated by startup activities | \$150,000 |

* Assumes 50 acres at \$100,000 per acre.

** Assumes positions will be filled for one and a half years instead of two to account for delays in filling them.

understand the park’s potential and to present the image of a park that is ready for development.

Initiate Construction

No action will better demonstrate Chesterfield County’s commitment to this project than starting construction. As discussed more fully above, the panel recommends that IDA demonstrate the possibilities within MTP by teaming up with private developers and commencing new construction on two concurrent projects.

The panel recommends that IDA select a regional developer experienced in office development with the capability, capacity, and interest in an ongoing role in office development at MTP. This developer should build the two-story office building at the entrance to the park, which will serve as the permanent location for the marketing center that initially will be located in temporary space.

IDA also should establish a relationship with an industrial developer with a long-term interest in the park. This developer should build a speculative light-industrial building in the light-industrial zone located in the southeastern portion of the site. A building in this area will serve as a powerful demonstration that MTP is a place with different building types and users.

Teaming up with two developers for these specific projects will allow the managing director to evaluate the competencies of each and develop a relationship that could progress into the developer-partner scenario recommended by the panel in the previous section.

Establish a Budget

While it is too early to develop a precise budget for MTP’s first two years of operations, the panel presents its order-of-magnitude estimate of the costs and revenues that IDA can expect to incur during this time frame in Figure 3. The panel recommends that MTP’s operating costs be funded by a short-term loan from the county to IDA. The capital costs are those that the county already has committed to through prior bond issuance, and would be offset over time as the MTP tax base grows.

About the Panel

Frank J. Sparicio

*Panel Chair
Rumford, Rhode Island*

Sparicio is founding principal of Corporate Real Estate Strategies, a consulting firm dealing primarily with the repositioning and disposition of assets resulting from consolidations within the corporate sector. He previously served as senior vice president of Fleet Boston, where he was responsible for the bank's corporate real estate assets, including 10 million square feet of commercial space and more than 800 branches, offices, and operations centers.

Before joining Fleet Boston, Sparicio was responsible for all major real estate transactions as director of corporate real estate for GTE. Earlier, he served as an officer of Harco, the Hartford Insurance Company's real estate subsidiary. Sparicio has been a member of ULI for more than 30 years and has served as vice chair of its Corporate Real Estate Council.

Andrew Borsanyi

San Francisco, California

Borsanyi is a principal and director of the Concord Group's San Francisco office. In 1995, he assisted in the founding of the Concord Group—which provides strategic advice on land use issues and the business of development—helping to create its initial business plan, marketing strategy, and financial infrastructure. Today, he builds senior client relationships, directs projects, participates in firm leadership, and manages the San Francisco office. His work focuses on northern California and financial institution clients, as well as on implementing the firm's next-generation business model.

Involved in the real estate industry since 1987, Borsanyi has completed successful marketing and

financial studies for residential, office, and industrial clients for the Concord Group and other firms. He is a member of the Executive Committee of the San Francisco District Council of the Urban Land Institute and speaks frequently on development issues.

Previously, Borsanyi was president and founder of the Trestle Corporation, a publicly traded imaging company. He led Trestle from startup to industry leadership and more than \$7 million in annual revenues, and then oversaw its sale to a strategic buyer. Prior to joining Trestle, Borsanyi worked in investment banking with Morgan Stanley and Robertson Stephens, and in management consulting at McKinsey and Company. He holds a MBA from Harvard University and a BA in history from Wesleyan University.

Rene Circ

Chicago, Illinois

Circ oversees the research function at First Industrial Realty Trust, Inc., where he is responsible for economic, industry, and real estate research that supports corporate capital allocation strategy on a market level and individual investments and developments on an asset level. He was instrumental in the creation of First Industrial's \$950 million development and corporate repositioning joint venture with the California State Teachers' Retirement System.

A coauthor of the Urban Land Institute's *Guide to Classifying Industrial Property*, Circ has written articles on real estate and supply chain reconfiguration for several professional publications. He also acted as a reviewer for two other ULI-published works, *Professional Real Estate Development* and *Just-in-Time Real Estate*.

Previously, Circ worked at Insignia/ESG, where he conducted research in the office, industrial, and

retail real estate sectors. Circ received a BA in economics from Beloit College and has completed graduate work toward a master's degree in economics at DePaul University. He is a member of the Institute for Supply Management and the American Real Estate Society.

William L. Clarke

Ross, California

Clarke is licensed as both a civil engineer and a landscape architect and has more than 30 years' experience in planning, design, and construction projects. He currently consults for developers and other planning and design firms and public agencies, on issues ranging from new community plans to site planning and engineering.

For more than 20 years, Clarke was with two of the largest landscape architecture firms in the United States. As a principal at the SWA Group in Sausalito, California, he worked on projects that include the Weyerhaeuser corporate campus outside Tacoma, Washington; the new community of Woodbridge in Irvine, California; and ARAMCO compounds in Saudi Arabia. As a principal at EDAA, Inc., Clarke led a team that won a design competition for a government complex in Doha, Qatar; prepared two specific plans for more than 6,000 homes and 800,000 square feet of office and industrial land in Tracy, California; and prepared construction documents for Washington Harbour in Washington, D.C.

In recent years, Clarke has been involved in the planning and implementation of a variety of projects. Among these has been an 11,000-acre residential development near Livermore, California; an 800-acre commercial and industrial area in Tracy, California; and a 300-acre business park in Livermore, California. He recently was part of a team preparing a resource management plan for the country of Palau.

Steven L. Kinney

Oxnard, California

Kinney is president of the Economic Development Corporation of Oxnard, California, a private, non-

profit organization dedicated to business expansion and community prosperity in the Oxnard area. The company blends equal amounts of public and private funding into a comprehensive program of business and entrepreneur services. Before founding the company in 1994, Kinney worked in local government, heading the city of Oxnard's redevelopment agency. Before he moved to California, Kinney was city planning director in Hampton, Virginia, during the mid-1980s. He played a key role in the remake of the Hampton waterfront, which included a new hotel, marina, visitor center, and the Virginia Space & History Museum.

Kinney received a BA in English literature from Hamilton College, an MBA from Golden Gate University, and an MPA from Old Dominion University. He is a 15-year member of the Urban Land Institute and currently serves on its Sustainable Development Council.

Robert W. Nilsson

Stevensville, Maryland

Nilsson is an independent consultant. Before founding his own firm, Whatsreallyhappening.com, he held senior management positions with Phillip Holzmann International, Bovis South America, and Turner International, where he served as president and chief executive officer. He has established joint ventures and partnerships in South America, Asia, the Middle East, and Europe. These projects have ranged in value from \$100 million to \$6.5 billion. Nilsson also has a broad range of experience in global project marketing.

Nilsson helped develop an e-commerce trading company, "Industry to Industry," for the development, engineering, and construction sectors. In addition, he advises companies such as Turner, Skanska, SOM, Gensler, Halcrow, and Thornton-Thomasetti in understanding how technology will affect their businesses and how they can expand their services in the global marketplace.

Nilsson received a BSCE from Rensselaer Polytechnic University and a graduate degree from the Amos Tuck School Executive Management Program at Dartmouth College. He has been a ULI member since 1982, has served as a trustee

and council chair, and is a governor of the ULI Foundation.

David S. Pandoli

Charlotte, North Carolina

Pandoli, a registered landscape architect, serves as project director for Woolpert, Inc., an 800-person international architecture and engineering firm. He is responsible for private development master-planning services for the southeastern division of the Woolpert Planning and Development service line. He has extensive experience in leading multi-disciplinary design teams and directing these design teams in the preparation and implementation of large-scale master-planning efforts, and has more than 25 years of experience representing development clients.

Pandoli's responsibilities include directing community development, industrial and office park, recreation/resort, and mixed-use planning and design projects. He has completed numerous projects in the southeastern United States and the Caribbean as well as several assignments in the Middle East. Pandoli has been involved in the development of the Miami Valley Research Park since the park's inception in 1980. He prepared the master plan for the 1,250-acre research and technology park, serves on its design review committee, and is responsible for the development of and periodic updates to its Design Guidelines Manual.

Prior to joining Woolpert, Pandoli served as assistant director of planning and development for the city of Sunrise, Florida, where he was responsible for design and implementation of a citywide \$150 million capital improvement program. He spent 12 years as a senior vice president for Edward D. Stone, Jr., and Associates (EDSA) in Fort Lauderdale, Florida. While at EDSA, he was responsible for large-scale master-planning projects throughout Florida and the Caribbean.

Pandoli is a member of ULI and its Community Development Council, Silver Flight. He has served on several prior Advisory Services panels and is a past member of the Small Scale Development Council. He also is an active member of the National Association of Industrial and Office

Properties (NAIOP), the Design Build Institute of America (DBIA), the Construction Specifiers Institute of America (CSI), and the American Society of Landscape Architects (ASLA). Pandoli is a graduate of Ohio State University, where he received a bachelor's of science degree in landscape architecture.

Richard T. Reinhard

Syracuse, New York

Reinhard is president of Niagara Consulting Group, an urban planning and public policy consulting organization based in upstate New York. He has spent more than two decades working on urban revitalization.

Reinhard began his career as a newspaper reporter in his hometown of Syracuse, New York. He has managed city center revitalization organizations in Richmond, Virginia; Buffalo, New York; Atlanta, Georgia; and Derry, Northern Ireland. He also has served in the public sector, as chief of staff to the mayor of the city of Buffalo, and in the private sector, as chief operating officer of a Toronto-based development corporation. He has taught as an adjunct faculty member in urban planning at the State University of New York at Buffalo, in public policy at Georgia State University, and in the built environment at the University of Ulster.

Reinhard has a bachelor of science degree from the College of William and Mary and a master of business and public management degree from Rice University. He was a Loeb Fellow in Advanced Environmental Studies at the Harvard University Graduate School of Design.

John M. Walsh III

Carrollton, Texas

Walsh is president and founder of TIG Real Estate Services, Inc., a real estate management firm. Since founding TIG, Walsh has expanded the firm's leased and managed real estate portfolio from 1.8 million to more than 8 million square feet. Prior to starting TIG, he spent 17 years with Trammell Crow Company in various leasing, de-

velopment, and senior management roles. While serving as the firm's executive vice president from 1990 to 1994, Walsh was responsible for directing a management team overseeing more than 34 million square feet of industrial properties in the Dallas/Fort Worth area. He founded Walsh Electric Company, a successful commercial and industrial electrical contractor, in 1973 and sold it in 1975.

Walsh currently serves as a member of the board of the Valwood Improvement Authority, where he was president for two years. He also has served on the City of Carrollton Electrical Review Board and on several ordinance review committees in Farmers Branch and Carrollton. Walsh has been a member of the board of directors of Texas Commerce Bank-Quorum and Valwood Park Federal Credit Union. He served as a trustee and chairman of the Trammell Crow Company Profit Sharing Trust for more than ten years.

Walsh also has been involved in civic activities and professional organizations. He has served on two committees appointed by the Highland Park Inde-

pendent School District Board and currently serves on the Public Works Advisory Committee and the City Hall Renovation Construction Oversight Committee for the city of University Park. A member of ULI since 1997, he has served on the Institute's National Programs Committee for the past three years and on two prior Advisory Services panels. Walsh chairs ULI's Industrial and Office Parks Council, Red Flight, and is vice chair of the council's program committee. He is currently chair of the ULI North Texas District Council.

A Dallas native, Walsh graduated from the University of Texas at Arlington with a BS degree, received his law degree from Texas Tech University School of Law, and is currently a member of the Dallas Bar Association and the Texas State Bar.