

MEMORANDUM

March 19, 2010

TO: Planning, Housing, and Economic Development (PHED) Committee
FROM: Marlene Michaelson, Senior Legislative Analyst
SUBJECT: Gaithersburg West Master Plan

This is the Planning, Housing, and Economic Development (PHED) Committee's sixth worksession on the Gaithersburg West Master Plan. This worksession will focus on staging and transportation (which are addressed in a separate memorandum), the fiscal impact analysis, sustainability, the open space plan, public facilities, amenities, and follow-up land use issues.

Committee Members should bring a copy of the Sector Plan to the meeting for reference.

Fiscal Impact Analysis

The County Executive contracted for a fiscal impact analysis to help prepare the fiscal analysis he is required to submit to the Council under Article 28. Although he does not typically submit the background materials used to prepare his analysis, some Councilmembers requested a copy. There is an error in the analysis, and the Executive has prepared a revised analysis. Attached on ©1 is a chart that shows the change in the net fiscal impact for 20 million square feet of development (Scenario A) and 18 million square feet of development (Scenario B). Circles 2 to 11 address the questions raised by Councilmember Andrews regarding the fiscal analysis. The detailed revised analysis is not attached to this packet due to the length (115 pages), but is available on the Council's website.

The net change from correcting the error related to the number of moderately priced dwelling units (MPDUs) is a 4.6% decrease in the net fiscal impact over 30 years, decreasing the positive impact from \$1.49 billion to \$1.42 billion, assuming 20 million square feet of commercial development and from \$1.1 billion to \$1.04 billion, assuming 18 million square

feet of commercial development. Staff believes that virtually any reasonable adjustment to the assumptions used to create the fiscal impact analysis (assuming the same level of development) would still result in a positive fiscal impact for the County.

While Staff believes it is useful to prepare this type of fiscal analysis, it should not be the sole basis for any land use decision because it would lead to a far greater amount of commercial development relative to residential development (since commercial development provides greater net revenues than residential development). This is true because residents pay less in taxes than businesses, while requiring more services (education, health and human services, etc.). Planning areas in the County that are primarily residential do not provide enough revenues to pay for the services they require, and Staff suspects that a majority of planning areas fall into this category. Providing a greater amount of commercial development in targeted areas helps the County generate the revenues to cover the costs of serving primarily residential areas and meet other important policy goals, such as providing quality schools and services. A focus on fiscal impact over other planning objectives would compromise other County goals.¹

The Shady Grove Life Sciences Center in the Gaithersburg West Planning Area has always been designated for commercial development. **In Gaithersburg West, the primary way to achieve better fiscal returns is to increase commercial development and/or decrease residential development.** (As shown on © 1, the Executive estimates that decreasing commercial development from 20 million square feet to 18 million square feet would reduce the net fiscal impact from approximately \$1.42 billion to \$1.06 billion.) Staff strongly recommends against any further increases in allowed commercial development (due to the impact on traffic) or decreases in residential development, which would detract from the mixed-use element of the plan and increase the jobs-housing ratio.

Sustainability

The sustainability section of the Master Plan appears on page 24. As Staff noted in the last worksession, it is more limited in scope and depth than similar sections in most master plans. Staff recommended (and the Committee concurred) that the Planning Department be asked to revise and expand upon this section. Their revisions are attached at © 12 to 16. Due to the time at which they were submitted, Staff has not had the opportunity to review them before the distribution of this packet, but will be prepared to comment at the meeting.

Parks and Open Space Plan

The Plan's open space recommendations are described on pages 23 and 26 to 27. The Committee agreed with the Staff recommendation to have this section of the Sector Plan expanded. The Committee also asked that the Department of Parks assess whether there is sufficient parkland in the planning area and what could be done to better describe the functional goals for these open spaces and ensure that they will be an asset for existing as well as new residents. A draft of an expanded section on parks and open spaces appears on © 17 to 19 and additional comments on parks and open

¹ Jurisdictions that focus on maximizing net revenues over other policy goals generally end up not achieving a balanced jobs-housing ratio, not protecting agricultural lands or open space, and also tend to maximize density, even when it negatively impacts the environment or quality of life.

space are also in the descriptions of the specific districts. **Staff believes that Planning Department staff addressed many of Staff's concerns, and this language provides clearer vision of what is intended for the planning area.** At the PHED meeting, Department of Parks staff will address whether the planning area has a sufficient amount of parkland.

Community Facilities and Amenities

Community facilities and amenities are discussed on pages 25 to 27 of the Plan. The Master Plan addresses the potential need for a new school and fire station and describes the planned community recreation center on Travilah Road. The Master Plan indicates that "a library specializing in science and medical research may be desirable" and also indicates that it could be privately accessible and funded through private sector contributions to an amenity fund. This could be a new model for a public-private partnership for the construction and/or operation of a library. Staff believes that the Sector Plan should identify potential locations for the library, so that the Planning Department is reminded to consider this recommendation as part of the development process.

The Plan also describes the recommended multi-use path loop and stream buffers and open spaces. Although it appears that the Master Plan intends to designate these facilities (and the proposed library) as plan amenities, the Life Science Center (LSC) zone, which is recommended for much of the planning area, does not require the provision of amenities. (Staff questions whether such a requirement should be added to the zone as it transitions from an exclusively commercial zone to a mixed-use zone that will allow residential development.) Since the CR zone does have an amenity component (and in case the LSC zone is amended to require amenities), Staff believes this language could be strengthened so that it is clear what amenities are recommended (e.g., park facilities, landscaping, etc.).

FOLLOW-UP LAND USE ISSUES

Transfers of Density

At the previous meeting, the Committee supported the Staff recommendation to allow transfers of density from LSC Belward to LSC Central. To accomplish this, Staff recommends that the text amendment for the LSC zone be amended to allow a transfer of density between two LSC properties if recommended in a master plan. The Gaithersburg West Plan should include a recommendation to allow transfers of density from the LSC Belward to LSC Central, provided that the increased density in LSC Central is not more than 0.5 floor area ratio (FAR) above what is recommended in the Master Plan.

LSC West Issues

At the last worksession, Staff recommended that additional text be added to the Master Plan to address the appropriate connections between LSC West and the existing residential community to the south, as well as transition issues and the function of the civic green. Planning Department Staff have prepared suggested changes to the Master Plan that are attached at © 19 to 22 (additions are highlighted in bold). Staff believes these changes significantly improve the Plan.

Staff also recommended that the Master Plan include a recommendation to increase the minimum amount of affordable housing and/or percentage of building lot termination (BLT) easements on County land when the PSTA is relocated. For example, language could be added to the Plan recommending that a minimum of **30 percent** of any housing built on the site be affordable (MPDUS or workforce housing). Similarly, the Plan could require that 10 or 20 percent of development over 0.5 FAR be obtained using BLTs (the zone requires a minimum of 5 percent, but allows up to 30%). Staff recognizes that this will decrease the sale price for the land, but believes this is a reasonable tradeoff to achieve other important County goals.

LSC Belward

For this property, Planning Department Staff has also drafted new language to address concerns raised by Staff for the last PHED Committee meeting. Attached on © 22 to 25 are revisions that address many of Staff's concerns regarding transitions and connections to neighborhoods and open space requirements. Circle 23 provides new descriptions of a Muddy Branch Park (which replaces the 300 foot buffer), a Mission Hills Preserve, a Darnestown Promenade, a Belward Commons/Historic Farmstead, and an Urban Square at the CCT station. While Staff believes this text needs further refinements (and will work with Planning Department Staff on this), **this is, overall, a significant improvement to the Plan.** In particular, Staff believes the plan should highlight the need for special features in the Muddy Branch Park that will make this an attractive destination for existing residents.

As noted in the memorandum on staging, Staff believes it would be appropriate to include development of one or more of these parks or open spaces in the Master Plan's staging element.

LSC North

There are two specific issues the Committee decided to return to for LSC North: the mix of commercial and residential development on the DANAC property, and the zoning for the Shady Grove Executive Center and BNA properties.

On the DANAC property, the Committee appeared to support the zoning on Lot 7 (CR 2.0: C 1.5, R 1.5, H 150). Staff was concerned that the zoning on the remainder of the property (CR 1.0: C 0.5, R 0.5, H 80) might not allow the property owner to achieve the Master Plan's goal of having any infill development be primarily residential. (It is unclear whether the requirement for 50% commercial would be applied to the entire property, including the previously developed area, or just the infill area.) Staff recommends that the zoning be changed to CR 1.0: C 0.5, R 1.0, H 80 with language in the Master Plan indicating the intent of having infill development have a primarily residential focus.

At Staff's suggestion, Planning Department Staff have worked with the property owners to determine whether the recommended Planned Development (PD) zone is the best option for the Shady Grove Executive Center and BNA properties. They have reconsidered the zoning and now recommend that these properties be rezoned CR 1.5: C 1.5, R 1.5, H 100. Staff supports this recommendation.

LSC South

The Master Plan recommends retaining the Research and Development (R&D) zone on the undeveloped 13-acre Rickman property and providing an option for PD22 zoning. (The general location of this property is shown on page 14 of the Master Plan, and Staff has asked Planning Department Staff to bring a better map to the meeting.) Staff had recommended that Planning Department consider whether this was the best zoning option for this property, given its environmental sensitivities (including that a portion is in a Special Protection Area (SPA)). Staff also suggested that the Master Plan provide guidance related to environmental protection.

The attached language on © 25 and 26 provides new text describing the environmental features on this property and provides some guidance as to how to minimize impacts on the environment. The PD zone, with its requirement for 50% open space and flexibility to increase heights², clearly provides a better opportunity to minimize impervious surface than the R&D, which requires only 30% open space and limits heights to 50 feet (under standard method). While Staff supports the PD recommendation, Staff believes that it may be advisable to also have an option for floating commercial or mixed-use zone that would provide a better opportunity for minimizing imperviousness. (Had the property not just been rezoned to the R&D zone in 2002, Staff would have recommended changing the base zone to eliminate the potential for development under this zone.) To allow the option of commercial development, Staff recommends that property be recommended for PD zoning or an alternative mixed-use zone that allows commercial development. To provide the incentive to apply for one of the floating zones, they would have to allow greater density than that allowed under the R&D zone (while resulting in less imperviousness to achieve environmental objectives). If the Committee supports this idea, then Staff will work with Planning Department Staff to determine whether there is a mixed-use zoning option that can achieve these objectives. In addition, Staff recommends that the Master Plan be further amended to indicate that the property would only be eligible for development under the optional method (which increases density from 0.3 FAR to 0.5 FAR) if there is no increase in impervious surfaces or increased negative impact on the environment.

² Heights are limited by the distance from the nearest single family detached community. If the PD development is 100 feet away, it can be 100 feet high.

**Gaithersburg West
Montgomery County, MD**

Comparison of Scenarios - Revised MPDUs

	<i>Gaithersburg West Master Plan - Scenario A</i>	<i>Gaithersburg West Master Plan - Scenario B</i>
Development Comparison		
<u>Residential</u>	<i>(units)</i>	<i>(units)</i>
<i>Existing Residential</i>	3,300	3,300
<i>Approved and Proposed Residential</i>		
<i>Condominiums</i>		
Market	2,494	2,494
Moderately priced condos	356	356
<i>Apartments</i>		
Market	2,494	2,494
Moderately priced apartments	356	356
Sub-total approved and proposed residential	5,700	5,700
Total residential	9,000	9,000
<u>Commercial</u>		
	<i>(square feet)</i>	<i>(square feet)</i>
<i>Existing Commercial</i>	6,940,000	6,940,000
<i>Approved and Proposed Commercial</i>		
Biotech	4,200,000	3,556,815
Office	3,000,000	2,540,582
Retail	791,000	669,867
Academic	1,900,000	1,609,035
Healthcare	3,169,000	2,683,701
Sub-total approved and proposed commercial	13,060,000	11,060,000
Total commercial	20,000,000	18,000,000
Population³		
<i>Total residents</i>	15,162	15,162
<i>Total students</i>	1,898	1,898
<i>Total employees</i>		
Direct	53,950	45,168
Indirect	32,708	27,604
Total employees	86,658	72,772

	<i>Gaithersburg West Master Plan - Scenario A³</i>		<i>Gaithersburg West Master Plan - Scenario B³</i>	
Revenues and Expenditures³	<i>Annual (Current Dollars)¹</i>	<i>30 Year Cumulative Total</i>	<i>Annual (Current Dollars)¹</i>	<i>30 Year Cumulative Total</i>
<i>Montgomery County Projected Revenues</i>	\$119,625,750	\$4,027,968,602	\$106,424,418	\$3,597,508,891
<i>Montgomery County Projected Expenditures</i>				
County expenditures	(\$23,532,950)	(\$850,812,847)	(\$16,503,985)	(\$808,479,626)
Capital expenditures ²	(\$23,448,230)	(\$703,446,914)	(\$23,448,230)	(\$703,446,914)
Montgomery County public school system	(\$28,793,702)	(\$1,050,518,892)	(\$28,793,702)	(\$1,050,518,892)
Total County expenditures	(\$75,774,882)	(\$2,604,778,654)	(\$68,745,917)	(\$2,562,445,432)
Net County surplus/(deficit)	\$43,850,868	\$1,423,189,948	\$37,678,501	\$1,035,063,458

MuniCap, Inc.

17-Mar-10

¹ Assumes full build-out expressed in current dollars for the approved and proposed development only, not the existing development

² Annual projected capital costs represent the average over the assumed thirty year period shown in Scenario A and Scenario B.

³ Population, revenue, and expenditure impacts represent the new impacts to Montgomery County resulting from the approved and proposed development at Gaithersburg West. Existing population, revenue, and expenditures are not included in the results shown.



OFFICES OF THE COUNTY EXECUTIVE

Isiah Leggett
County Executive

Timothy L. Firestine
Chief Administrative Officer

March 17, 2010

To: Michael Knapp, Chair
Planning, Housing and Economic Development Committee
Montgomery County Council

Fr: Diane R. Schwartz Jones, ACAO

Re: Gaithersburg West Master Plan (Planning Board Draft)

This memorandum is submitted to the PHED Committee in response to concerns raised by Councilmember Andrews and Council staff in response to the Fiscal Impact Analysis on the Draft Gaithersburg West Master Plan submitted by the Executive Branch on September 10, 2009. This analysis, which includes the revenues and net fiscal impact for development scenarios at both 20 and 18 million square feet of commercial development, was provided in accordance with the requirements of Md. Code Art. 28, section 7-108(d)(2)(ii).

Historically, the mandate for the County Executive to provide a fiscal impact analysis of proposed master plans has been met by simply transmitting to the County Council (sitting as the District Council) a summary of the estimated costs of County infrastructure included in a proposed master plan. Executive staff has recognized that a simple statement of costs of infrastructure is an incomplete "analysis" of the fiscal impact of a proposed plan – particularly given the longevity of land use plans. We believe that it is as important to understand the fiscal revenue as well as the fiscal costs when making important long-term land use decisions.

This is even more so for plan areas that are recognized as economic engines for the County. For example, the White Flint Sector Plan has nearly \$1 Billion of costs over 40 years, however, these costs must be understood in the context of the nearly \$8 Billion in revenues that the County can realize as a result of the investment over the same period of time.¹ The Gaithersburg West Master Plan at twenty million square feet is estimated to produce net revenues of \$1.4 Billion over thirty years and at eighteen million square feet it is estimated to produce net revenues of \$1 Billion.

¹ The White Flint Plan review used a forty year window rather than a thirty year window because that was the period used in the Plan appendices.

The White Flint Sector Plan and the Gaithersburg West Master Plan are two critically important plans for the long-term economic development and fiscal well-being of the County. These plans were developed and submitted by the Planning Board at approximately the same time. Recognizing that each of these plans are unique economic engines for the County the County contracted with MuniCap to provide a fiscal impact analysis of the development and infrastructure proposed in the Planning Board Drafts of these plans.

It is important to understand what these estimates of both costs and revenues reflect. They are estimates, based upon a proposed plan, using assumptions at a snapshot in time. The point of these estimates is to get a general understanding of what a plan can cost to implement and yield in fiscal benefits. The estimates are not intended to be – nor should they be expected to be – exact. Historically, the Executive Branch has only provided to the Council the estimated costs of County infrastructure such as County roads, libraries, schools, recreation centers, etc. We treated the White Flint Plan a bit differently by including Rockville Pike and Montrose Parkway. We included Rockville Pike because it involves significant streetscaping and we questioned whether the State would take that on. We included Montrose Parkway because we are already taking on the construction of Montrose Parkway. The fiscal impacts submitted for the Germantown Plan did not include state roads or facilities such as the Corridor Cities Transitway which is central to that plan, but is expected to be paid for by State and possibly Federal funds.

With this background, the specific concerns/questions raised by Council staff and Mr. Andrews are summarized and consolidated to avoid repetition. They are set out in the attached table with responses to each point. As the explanations reflect, there are not major errors or significant flaws with the reports. There is, as noted, *an* error that has been corrected and the overall net revenues of the plan remain very positive. The revised fiscal impact analysis is attached for your information.

While it is easy to get bogged down in assumptions and details, the policy reasons for the Gaithersburg West Master Plan are clear. We want Montgomery County to be a leading location for biosciences. We want to focus development around where we already have made significant investments. As the Federal government is doubling its investment in life sciences and venture capitalists are looking for companies in which to invest, we want that to happen in Montgomery County. The jobs that can be realized with this plan are important for future generations and can yield significant positive fiscal impacts for the County.

The draft plan is better than the currently approved plans for Belward because it creates significantly greater buffer areas, increases the amount of open space (by approximately 70%), reduces impervious area by approximately 20%, makes better use of the long awaited CCT and is consistent with other CCT oriented densities.

Executive staff will be available to answer questions that the PHED Committee may have at its March 22 session.

Question	Response
<p>1. MPDUs</p> <p>The number of market rate and MPDU units is incorrect in Table A.</p>	<p>We agree. The correct number (which was included in a footnote, but an error was made when the numbers were run) is 12.5% MPDUs which should have been based upon 5,700 new units which is the additional number of units that are authorized but not existing or in the pipeline. Thus, the correct number of MPDUs is 712 and the market rate units would be 4,988.</p> <p>The numbers have been re-run and adjusted including for recordation, transfer, income and property tax revenues.</p> <p><i>Using the corrected MPDU count, at 20 msf the net fiscal impact over 30 years is \$1.42 billion, revised downward from the original \$1.49 billion. At 18 msf, the net fiscal impact over 30 years is approximately \$1 billion.</i></p>
<p>2. Market price assumptions</p> <p>The analysis assumes a market price of \$510,200 for a 1,230 sf condo. This assumption is 10-15% higher than similarly sized condominiums sold in White Flint in 2009. The average closing cost in 2009 for White Flint Station was \$407,580 for a 1,166 square foot units and the 2008 average for a 1,361 square foot unit at the Gallery was \$452,733. Generally, units further out and away from a Metro sell for less, so one would expect the averages to be lower in Gaithersburg West/Life Sciences Center than in White Flint.</p>	<p>The draft plan and the staging in the plan is predicated upon the Corridor Cities Transitway, which is mass transit planned as light rail and will provide direct access to the Shady Grove Metro Station as well. Development is also planned as concentrated town center type development. The housing on the PSTA site is at a CCT stop, so we disagree that a lower value would be expected.</p> <p>MuniCap took a number of factors into consideration in identifying comps, beginning with similar town center types of projects located close to transit stations in urban type projects. One could quibble with White Flint Station and the Gallery because neither is at a mass transit stop and therefore, in all likelihood, an appraiser would adjust the value upwards at the PSTA site for CCT proximity.</p> <p>MuniCap used actual assessed value as of January 1, 2009 as determined by the State Department of Assessments for purposes of estimating real property tax values. Assessed value is an objective and reliable approach.</p> <p>Property values are likely to be at the high end of the range – because new development typically has more and better (not to mention newer) amenities. In new development one typically pays a premium compared to older, established areas. Using current values, whether through the assessment base or through comparable sales in today’s market, is a very conservative estimate of unit value; therefore, if anything revenues are understated.</p>
<p>3. Workforce Housing</p>	<p>No specific parameters were noted for workforce housing in the</p>

Question	Response
<p>Although the Plan mentions workforce housing (housing affordable to incomes between 70% and 120% of area median income) there are no assumptions regarding workforce housing units.</p>	<p>Planning Board Draft. Experience has shown that workforce housing is market priced housing near the lower end of the market and not necessarily subsidized, but it can be. MuniCap would have accounted for any specific guidance regarding workforce housing if it had been included in the Planning Board Draft.</p> <p>The County may well increase amounts of workforce housing and MPDUs. On other projects the County has required 10% workforce housing. The extent to which that will occur at the PSTA site will be decided at the appropriate time. MuniCap's assignment was to evaluate the Planning Board Draft of the Plan.</p>
<p>4. Wages</p> <p>Appendix F of the MuniCap analysis assumes an Average Annual Biotech Wage of \$72,881; an Average Annual Office Wage of \$67,048; an Average Annual Retail Wage of \$23,786; and an Average Annual Academic Wage of \$31,793. The current maximum incomes for the MPDU program are \$50,500 (1 person household); \$57,500 (2 person household); \$64,500 (3 person household); \$72,000 (four person household); and \$77,500 (5 person household).</p>	<p>The figures noted are the estimated average wages for the types of jobs contemplated within the Plan.</p>
<p>5. Travilah Fire Station</p> <p>The MuniCap analysis includes \$17.3 million in capital costs for the new Travilah Fire Station as well as assumptions about ongoing personnel and operating costs. The cost of this project should not be assigned to Gaithersburg West as the need for this fire station has</p>	<p>We agree that the need for the fire station is preexisting. The Article 28 mandate is to do a fiscal impact analysis of what is in the Plan. The station has not yet been built so the costs were included. I note that the Travilah Fire Station and the PSTA should be approached consistently and not include additional costs for one but delete costs for the other.</p>

Question	Response
<p>existed for many years and the project is underway.</p>	
<p>6. Public Safety Training Academy</p> <p>The MuniCap analysis assumes \$86 million in costs to relocate the PSTA. At this time, the Council has been told that the estimated cost for design and construction of the PSTA is \$85 million. However, in addition to the design and construction, one-half of the cost of the Webb Tract (\$23.3 million is half the total land cost) and \$850,000 (which is half of the site master planning costs) should also be attributed to the relocation. The total cost for relocation would then be more in the range of \$109 million. This does not include any intersection improvements or road widening costs for Snouffer School Road that might be attributable to the PSTA.</p>	<p>The land for relocation of the PSTA was under contract at the time the fiscal impact analysis was prepared; however, we don't object to including it. The estimates that were used reflect the program of requirements and information available in September based on the scope of the POR. It is important to remember that these are estimates and that in accordance with the County's own budget process more refined numbers will be available for construction once known. We do not dispute these costs, however, the overall impact of these costs on the total fiscal impact analysis is negligible.</p> <p>Snouffer School Road is outside of the plan and at this time DOT is reviewing what may be needed, although we do not expect extensive road improvements to be required as it was planned for by a previous more extensive private project.</p>
<p>7. Value of the current PSTA site (Life Science Center)</p> <p>The MuniCap analysis uses a value of \$81 million for the current PSTA site. The note on page 39 says that this represents the appraised value as of 9/23/2008. The Smart Growth Initiative financing scenario from February 2009 assumed that the net value of the current PSTA site would be \$61.1 million. The value</p>	<p>At the time that the PSTA site was originally appraised the draft master plan was in development and had not been issued. We therefore asked a real estate consultant to review value estimates for the PSTA land based upon the draft master plan. Based on the research that was done a Broker's Opinion of Value was provided which concluded that the value of the property would range between \$81 million and \$103 million (with the CCT in place) based upon the draft master plan. We chose to use the lesser number for the analysis.</p>

Question	Response																																																
<p>of the site would be \$63.5 million but the county would spend about \$2.4 million clearing the site.</p>																																																	
<p>8. Jobs calculation</p> <p>Table B, Employment Impacts, on page 4 includes current employees as part of the economic benefit attributable to employment growth in Gaithersburg West. There are 22,000 workers already employed in Gaithersburg West and should be subtracted from the 53,950 number. That would reduce the wages calculated under total direct impacts by more than a billion dollars. It is likely that a larger proportion of the current workers are in the higher paying sectors because the jobs there now are likely concentrated more in the higher paying sectors (biotech, healthcare, office rather than retail (average wage \$23,786, see appendix) and academic (average wage \$31,793, see appendix). In addition, if the indirect impacts on jobs is dependent on the 53,950 jobs number, it needs to be recalculated as well.</p>	<p>We do not agree with the assumption in the question. The employment impact does <i>not</i> include current employees as part of the economic benefit attributable to employment growth in Gaithersburg West. There is 6,940,000 sf of existing commercial development leaving 13,060,000 sf capacity in the plan. The breakdown on the <i>new</i> jobs is as shown below.</p> <p>The new jobs are broken down to reflect the sectors across which the jobs would be spread. We agree with the statement that the larger proportion of current workers are in the higher paying sectors at the Life Sciences Center because the jobs there are concentrated in biotech, healthcare, office and retail. This trend will continue with the extension of the LSC zone. It is also noteworthy that the jobs are there because of the infrastructure in which the County and others have invested in this area and it is prudent to make use of and capitalize upon this significant investment.</p> <div data-bbox="625 1033 1425 1644" style="border: 1px solid black; padding: 5px;"> <p><i>Gaithersburg West</i> <i>Montgomery County, Maryland</i></p> <p><u>Schedule I: Projected New Employment Data</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Property Type</th> <th style="text-align: right;">SF</th> <th style="text-align: right;">Jobs Per 1,000 SF</th> <th style="text-align: right;">Estimated Jobs</th> <th style="text-align: right;">Average Wage</th> <th style="text-align: right;">Total Wages</th> </tr> </thead> <tbody> <tr> <td colspan="6"><i>Commercial</i></td> </tr> <tr> <td>Biotech</td> <td style="text-align: right;">4,200,000</td> <td style="text-align: right;">4.20</td> <td style="text-align: right;">17,640</td> <td style="text-align: right;">\$72,881</td> <td style="text-align: right;">\$1,285,620,680</td> </tr> <tr> <td>Office</td> <td style="text-align: right;">3,000,000</td> <td style="text-align: right;">4.20</td> <td style="text-align: right;">12,600</td> <td style="text-align: right;">\$67,048</td> <td style="text-align: right;">\$844,810,444</td> </tr> <tr> <td>Retail</td> <td style="text-align: right;">791,000</td> <td style="text-align: right;">3.06</td> <td style="text-align: right;">2,420</td> <td style="text-align: right;">\$23,786</td> <td style="text-align: right;">\$57,572,050</td> </tr> <tr> <td>Academic</td> <td style="text-align: right;">1,900,000</td> <td style="text-align: right;">4.20</td> <td style="text-align: right;">7,980</td> <td style="text-align: right;">\$31,793</td> <td style="text-align: right;">\$253,709,936</td> </tr> <tr> <td>Healthcare</td> <td style="text-align: right;">3,169,000</td> <td style="text-align: right;">4.20</td> <td style="text-align: right;">13,310</td> <td style="text-align: right;">\$60,335</td> <td style="text-align: right;">\$803,045,056</td> </tr> <tr> <td colspan="2">Total commercial</td> <td></td> <td style="text-align: right;">53,950</td> <td></td> <td style="text-align: right;">\$3,244,758,166</td> </tr> </tbody> </table> <p><small>Total approved and proposed residential and commercial development provided by <i>The Gaithersburg West Master Plan</i> dated July 2009 and the Maryland National Capital Park and Planning Commission</small></p> <p><small>Jobs (except retail) per 1,000 SF based on U.S. General Service Administration, Office of Government Wide Policy, Office of Real Property in "Real Property Performance Results," 2002.</small></p> <p><small>Retail jobs were calculated using IMPLAN software by MIG, Inc</small></p> <p><small>Average wages based on estimates calculated using IMPLAN software by MIG, Inc</small></p> </div>	Property Type	SF	Jobs Per 1,000 SF	Estimated Jobs	Average Wage	Total Wages	<i>Commercial</i>						Biotech	4,200,000	4.20	17,640	\$72,881	\$1,285,620,680	Office	3,000,000	4.20	12,600	\$67,048	\$844,810,444	Retail	791,000	3.06	2,420	\$23,786	\$57,572,050	Academic	1,900,000	4.20	7,980	\$31,793	\$253,709,936	Healthcare	3,169,000	4.20	13,310	\$60,335	\$803,045,056	Total commercial			53,950		\$3,244,758,166
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<p>9. Population Impacts</p> <p>The analysis of population impacts in Table C on page 5 does not account for the cost of services for the employees</p>	<p>Like the fiscal impact analysis done for the White Flint Sector Plan, MuniCap evaluated the direct impact on the Gaithersburg West Plan, and not changes throughout the county that might result from the plan.</p> <p>The fiscal impact analysis necessarily must be limited to the Plan</p>																																																

Question	Response
<p>and their families who work in the Life Sciences Center (LSC) but live elsewhere in Montgomery County. By far, the largest cost not accounted for is the cost of educating the children of these LSC employees. The analysis assumes that nearly 60% of Life Science Center employees would live in the County, and that 96% of this cohort would live outside of the Life Sciences Center. These costs need to be calculated. Table E on page 6 has an estimated annual operating budget cost to MCPS of \$28,793,702, which only accounts for the cost of educating the projected 1,898 students of families projected to live in the 5,700 planned residential units in the Life Sciences Center. The cost of educating the children of LSC workers who live elsewhere in the County would be much more than the \$28.7 million projected cost for educating students who live within the LSC.... In addition, what are the capital costs associated with educating the children of LSC workers who live in the County but outside of the Life Sciences Center?</p>	<p>area in question or it will be too broad to ensure any validity and every time a plan is undertaken it will reflect double counting of impacts and skewing of results.</p> <p>The Gaithersburg West area is as close to parts of Frederick and Howard Counties, as it is to some parts of Montgomery County. Any impact analysis of the area outside of the Plan area would have to extend to these other counties, if it were to be done at all, and the more extensive the area encompassed by the analysis becomes, the more speculative it becomes.</p> <p>An evaluation of the impact on the county would require an evaluation of existing and surplus capacity to determine whether and to what extent additional population or students would be a cost to the county.</p> <p>MuniCap prepared a working draft sensitivity analysis assuming no revenues from employees who do not live in Gaithersburg West. That sensitivity analysis is more conservative than estimating the costs of employees who work in Gaithersburg West and live somewhere else in the county and is overly conservative, and even with this assumption, the fiscal impact analysis showed a significant positive impact.</p>
<p>10. Schools</p> <p>The analysis estimates that there would be 1,128 additional elementary school children in the Plan's area, but the Plan only provides for</p>	<p>Publicly available school generation numbers were used for the Fiscal Impact Analysis. This is a more conservative estimate of the number of school children that would potentially reside in the Gaithersburg West area. We defer to MCPS and MNCPPC for the actual number of projected students recognizing that the projections relate to actual unit type. The Fiscal Impact Analysis is not itself a planning tool, and therefore does not seek to answer</p>

Question	Response
<p>one elementary school, which would not be sufficient for all of the children. Where would the rest of the elementary school children go to school, and has any capital cost been included? If so, what is the estimated cost? What are the expectations regarding where the middle school and high school students would go, and any related costs?</p>	<p>any questions about how elements of the Draft Plan are to be funded, nor does it select sites for facilities.</p> <p>The school capacity analysis is on pages 25-29 of the Appendix to the draft Plan. There are numerous area schools including the following future/proposed schools (with sites already dedicated; most are shown on the map on page 29 of the Appendix) in the area: Elementary Schools: Jeremiah Park (Shady Grove Sector Plan) Wootton ES #7 (Willows of Potomac; Cavanaugh Drive); King Farm (Watkins Pond Road); Falls Grove (Shady Grove Road; Falls Grove, Rockville); Middle School: King Farm (Piccard Drive); and High School: Crown Farm.</p> <p>Existing elementary schools in the Plan area include Stone Mill, Dufief, Rachel Carson, Fields Road, Diamond, Thurgood Marshall, and Jones Lane.</p>
<p>11. Corridor Cities Transitway</p> <p>The analysis does not appear to include operating costs for the Corridor Cities Transitway or for any additional bus service. If this is the case, what are the anticipated operating costs of the CCT to the County? Of additional bus service? In addition, it appears that none of the cost to build the CCT is included in the analysis. Although the County might not pay any part of the capital cost, the State would have to pay half of the construction cost. Light rail on the CCT is estimated to cost \$999 million; BRT is estimated to cost about \$550 million. A significant portion of the CCT's cost would be attributable to Gaithersburg West. On September 15, 2009, the Maryland</p>	<p>The analysis includes County costs and County revenues. The State interchange and CCT information was included for information and does not include operational costs. The CCT will be federally and/or State funded.</p> <p>The draft plan actually makes the CCT more affordable. Given that the Germantown Master Plan and Clarksburg Master Plans were approved based upon the CCT and the transportation system in the County, the Gaithersburg West Master Plan ridership optimizes the ridership for the CCT which is very positive for the County.</p> <p>Estimates of net revenues to the State was not undertaken for this plan, nor for any other master plan that the Council has considered. It would be appropriate to factor costs of the CCT into a net fiscal impact analysis of State costs and revenues.</p> <p>Typically only costs are provided on draft master plans, costs are presented only on County infrastructure and not on State or federal infrastructure or facilities. Similarly, we have not estimated the revenues to the State that would be anticipated to result from the draft Plan.</p> <p>We do not agree with the conclusion that a significant portion of the CCT's cost would be attributable to Gaithersburg West. To the contrary, the increased ridership that would be generated by the proposed plan actually brings down the overall cost per rider and enhances the competitiveness of the CCT as clearly stated by</p>

Question	Response
<p>Department of Transportation sent a letter to me in my capacity as president of the Council at the time that estimated the price for the interchanges and the realignment of the CCT through the Life Sciences Center to be approximately \$1.3 billion. The letter went on to say that “we suggest that a financial feasibility analysis be added as part of this document to fully demonstrate the viability of the proposed development program.” Has the Executive Branch sent the State a copy of the Muncap fiscal analysis of the draft Gaithersburg West Master Plan for their review and comment? If so, has there been any response? If it has not been sent to the State, why not?</p>	<p>MTA officials in public sessions with the Council in the Fall and in letters, copies of which are attached.</p> <p>We have not sent a copy of the MuniCap analysis to MTA. It has no information on State revenues. The CCT should be evaluated in the context of all of the master plans already approved by the Council that are predicated upon the Corridor Cities Transitway. The costs, the revenues to the State and the ridership would be some of the considerations for all stops and all planning areas.</p>
<p>12. Jobs assumptions</p> <p>What is the assumption regarding the percent of jobs in the Life Sciences Center that would be filled by people who already live and work in the County? For example, the consolidation of the National Cancer Institute at the Johns Hopkins Montgomery campus is a consolidation and relocation within the County as opposed to new jobs...</p>	<p>The fiscal impact analysis evaluated the direct impact of the plan, not changes throughout the county that might result from the plan. Changes in the county that result from the plan would depend on many factors beyond the scope of most fiscal impact studies, and these changes would vary significantly over the time period included in the study.</p> <p>An analysis of the National Cancer Institute relocation to JHU’s Montgomery County Campus was prepared by the Sage Policy Group. This analysis concluded that due to synergies with research companies at the Life Sciences Center <i>the relocation of the existing 2100 jobs will result in an estimated 700 to 2700 net new private sector jobs with an estimated baseline of 1700 net new jobs over time.</i> Sage estimates that using its mid-case scenario this would mean new revenues of nearly \$3.4 million per annum to the County and \$7 million to the State.</p>
<p>13. Inflation adjustment for Interchanges</p>	<p>The costs of proposed interchanges will be paid by the State and not the County. Estimates of revenues to the State were not</p>

Question	Response
<p>Is there an inflation adjustment for the estimated costs for the interchanges in the out years?</p>	<p>undertaken and therefore we did not calculate the fiscal impact to the State. Information provided is capital costs in current dollars.</p>
<p>14. Transmittal of the FIA</p> <p>Why was the MuniCap fiscal analysis not sent to the Council prior to February? A fiscal analysis was provided for White Flint with the Committee packets, but all that appeared in a PHED Committee packet was a projected net revenue figure from the fiscal analysis.</p>	<p>Complete information was transmitted with the County Executive's comments on September 10, 2009 including 19 different fiscal impact tables and projections reflecting detailed analyses at both the 20 msf and the 18 msf.</p> <p>This question disregards the fact that while the Executive Branch is given the limited time of 60 days within which to provide a fiscal impact analysis, the County Executive abbreviated his time for review to ensure that the fiscal impact analysis conclusions and comments were available for the public <i>before</i> the September 15 Council hearing on the Plan (which was issued on July 31, 2009).</p> <p>The backup was provided upon request.</p>

Prepared by Planning Department Staff

Replace text on page 24-25 beginning with Sustainability and ending with fitness:

Recommendations

Sustainability

In the Gaithersburg West Master Plan, the overarching environmental goal is to create a sustainable neighborhood that will attract nationwide interest for design and materials that minimize carbon emissions, maximize energy conservation, and preserve water and air quality. Sustainability is widely defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainability integrates the broad categories of water quality, air quality, wildlife habitat and biological diversity, human health and quality of life, and climate protection.

Sustainable communities, based on Smart Growth principles, fit comfortably within their natural settings and have a compact development pattern that allows residents, workers, and visitors to accomplish daily activities via short commutes offering alternatives to a private car. In many cases, the compact, mixed used development pattern accomplishes multiple sustainability goals. Recommendations for energy conservation and renewable energy use are especially important to achieve the County's goal to reduce its carbon footprint substantially over the next 20 years. While new development itself means adding to the carbon footprint in the immediate area, it reduces the County's overall carbon footprint that would result if the development were accommodated in a sprawl pattern. Designing and constructing sustainable communities begins with an awareness of existing resources. Through careful and sensitive environmental site design, existing natural resources can be identified and incorporated into the planning phase of development. In this way, a development can preserve as many of the existing resources as possible, take advantage of the inherent benefits of the resources, protect the resources through clustering, sensitive road design and application of appropriate buffers, and enhance the resources where appropriate through forest planting and creative landscaping.

Resource Protection and Enhancement

New development and redevelopment in the Life Sciences Center (LSC) should create compact clusters, building up instead of out and sparing the loss of additional forests and open spaces associated with traditional suburban development. Redevelopment of existing developed areas takes advantage of existing infrastructure, rather than adding new infrastructure and its associated environmental damage.

The existing streams, stream buffers and forest areas in the LSC provide environmental functions such as filtering and infiltrating stormwater, filtering air, producing oxygen, providing habitat, and ameliorating urban heat island effect. Existing resources and their functions should be preserved throughout the Plan area and integrated as natural features of the LSC Loop. The local street grid pattern shown in the Plan for LSC Central and LSC West avoids most of these resources and facility plans for any new roads should minimize impacts to these areas.

Implementation of the LSC Loop connects existing stream buffers and forested areas. The concept is to incorporate as many environmental functions as possible into the design of the LSC Loop. Where forest planting or stream restoration is required of development, it should occur in degraded areas of open space or along the LSC Loop.

Imperviousness

Increasing levels of imperviousness have been linked to declines in water quality. Studies indicate that stream water quality indicators will begin to decline when watershed imperviousness exceeds about 10 percent. Watershed imperviousness levels above 25 percent are associated with severe levels of stream water quality degradation. Existing levels of imperviousness were analyzed within the boundaries of the LSC as well as the entire Gaithersburg West Master Plan. Most of the increase in imperviousness in the LSC will occur in the areas of the Belward campus of Johns Hopkins University and on the property currently occupied by the Public Safety Training Academy (PSTA). These two properties drain to two subwatersheds of the Muddy Branch.

Forest Cover

Though not as strongly correlated with water quality as percent impervious cover, the amount of a watershed maintained in forest has also been shown to have a complimentary effect on stream water quality. In a study of Montgomery County, streams with excellent water quality typically had an average forest cover of greater than 50 percent, while poor water quality streams had an average forest cover of less than 30 percent (Goetz et al., 2003). Forest cover tends to decrease as imperviousness increases.

Table 1. Imperviousness and Forest Cover in Key Gaithersburg West Subwatersheds

CSPS Subwatershed Station #	Current Imperviousness	Projected Imperviousness	Existing Forest Cover	CSPS Water Quality Rating
MBMB207	32%	45%	9%	Fair
MBMB305	31.5%	34.5%	7%	Fair
GSMS415	17.5%	25%	39%	Good

Water Quality

New development and redevelopment in the LSC should focus first on minimizing impervious surfaces. This includes creating compact development, preserving existing open space, and incorporating additional opportunities to catch, detain, evaporate, transpire, and infiltrate stormwater runoff wherever possible. Stormwater treatment techniques should consider opportunities provided by a more vertical urbanized environment, including vegetated rooftops and walls, tree canopy, planting beds, infiltration trenches and bioswales, and below ground storage and treatment. Many of these techniques are included in the Environmental Site Design (ESD) stormwater treatment approaches now required by State and local laws and regulations. Additional approaches should include water conservation features and techniques that capture stormwater for reuse in non-potable water uses. Landscape plans using native plant materials that do not require extensive watering or fertilizing aids water conservation and water quality protection. All of these approaches must be designed into site and building designs from the outset.

Portions of the Life Sciences Center area are included in the Piney Branch Special Protection Area. In addition to requiring a water quality plan detailing advanced and redundant stormwater treatment measures, increases in impervious surfaces should be minimized. Most of the Special Protection Area is in the LSC South District, where this Plan recommends that development be restricted to existing and already approved development, with the exception of the Rickman Property, which should minimize new impervious surfaces. A small portion of the SPA extends north of Darnestown Road into the southern portion of the LSC Central District. Most of this area is already developed. Future redevelopment in this area should similarly strive to minimize imperviousness in their site designs.

Some development is planned for headwater stream areas in Muddy Branch where groundwater hydrology will change through land disturbance and land use changes. Undisturbed land filters and stores groundwater for release over time through springs and seeps at a stream headwaters. If this ground is disturbed through cut and fill activities, stream flow from groundwater will be reduced and stormwater runoff into the headwater stream increases. Essentially the stream will have a less steady flow between storms and a flashier storm runoff rate. The Plan recommends reduction of long-term impacts through the use of Environmental site Design (ESD), including techniques that maximize groundwater recharge and minimize runoff.

Air Quality

Air quality should be protected by reducing the number of automobile vehicle miles travelled, reducing energy consumption, and increasing vegetation. Approaches for reducing vehicle miles travelled must include creating communities that incorporate a variety of land uses, creating a condition where people don't have to drive to get from their office to their home or to access basic retail services. Alternatives to automobile travel must be provided. In the LSC, completion of the Corridor Cities Transitway is essential; it is required before substantial

amounts of additional development can proceed. Further alternatives to automobile travel include the provision of a system of walking and biking trails to enable people to move safely and pleasantly through the community. This includes the trail system in the LSC Loop, plus additional connections within and between districts in the LSC. Vegetation helps filter pollutants from the air and produces oxygen; layers of vegetation should be created through use of street trees and landscaping and vegetated roofs and walls.

Health and Wellness

Health and wellness should be promoted by encouraging an active lifestyle that includes walking, jogging and biking. The LSC Loop, bicycle network and other pathways provide facilities to enjoy these activities. Public open spaces should be inviting destinations within the community that draw in pedestrians and bicyclists. Some rooftops and open spaces may include areas for community gardening to encourage consumption of locally-grown seasonal fruits and vegetables. A "green" environment that features trees and landscaping has been shown to improve mental well-being in addition to improving air and water quality.

Habitat Protection

While an urban environment cannot typically support highly diverse plant and wildlife populations, much can be done to improve conditions for native plants and animals. First, existing habitat areas should be preserved wherever possible. This is another goal of the creation of the LSC Loop. Extending the LSC Loop into and through the Life Sciences Center provides additional opportunities to incorporate native trees and other plants that may attract birds, plus pollinator insect species. Vertical urban environments can include habitat layers, including planting beds and landscaping, tree canopies, and vegetated roofs and walls. Other habitat features that can be blended into the urban environment may be considered, including butterfly gardens, birdhouses and rooftop beehives.

Carbon Footprint

Reducing carbon emissions in the LSC starts with providing a community design that enables people to conserve energy. Providing a mixture of land uses minimizes the need to drive to fulfill basic needs. Providing alternative transportation choices, such as the CCT and an extensive trail system including a bicycle network, enables people to choose non-automobile travel options. Without this framework, people have no ability to change their behavior in order to save energy. Community design is a second key component. Compact design makes more efficient use of building materials. Redevelopment of existing developed areas takes advantage of existing infrastructure rather than building whole new systems; it also builds on previously disturbed, and often paved, surfaces, rather than disturbing and paving green space.

Montgomery County law requires new commercial buildings greater than 10,000 square feet to be at least LEED certified or equivalent. New public buildings must be at least LEED Silver or equivalent. This Plan encourages that as many points as possible toward certification be obtained from approaches that reduce carbon emissions. These approaches include consideration of solar orientation in site design to maximize the potential for use of passive solar energy for heating and lighting, as well as positioning buildings to optimize the use of photovoltaic energy systems. Appropriate shading features and passive ventilation should be included in building design to reduce cooling requirements in summer. Buildings should use high efficiency lighting, heating and cooling systems and appliances, as well as water saving plumbing fixtures. Building deconstruction techniques should be incorporated during redevelopment to salvage usable building materials. Construction should employ locally produced materials and labor, recycled materials, and adaptive re-use of existing buildings where possible.

Energy conservation should strive to reach the following goals:

- New buildings should meet the minimum energy efficiency standards of 17.5% below the calculated baseline performance or meet the appropriate ASHRAE advanced energy design guide.

- Renovated buildings should meet a 705% energy efficiency standard below the calculated baseline performance or meet the appropriate ASHRAE advanced energy design guide.

Wherever possible, use of renewable energy should be incorporated, including geothermal heating and cooling, and the use of solar and wind energy for provision of some energy needs.

Finally, cooling requirements can be significantly reduced by using techniques that reduce urban heat island effect. These approaches include maximizing tree canopy and landscaping and using green roofs and walls. Where green roofs cannot be used, light-reflecting roof surfaces should be employed. Specific tree canopy coverage recommendations for this Plan reflect goals that combine recommendations of the non-profit group American Forests with the requirements of Montgomery County's Forest conservation Law and the zoning recommendations for each district and enclave.

Tree Canopy Coverage Goals

Predominantly commercial mixed-use areas: 15 - 20 % minimum canopy coverage

Predominantly residential mixed-use areas: 20-25 % minimum canopy coverage

The Belward Campus, with its specialized institutional use and protection of existing natural resources, should have a minimum canopy coverage of 30%.

These goals should be met by combining forest conservation requirements with street tree plantings and landscaping plantings. Public and private open space areas should strive for a minimum of 25% canopy coverage. Surface parking areas should also meet or exceed this goal.

Carbon Emissions

Modeling projects at higher levels of development in Gaithersburg West show that carbon emissions will substantially increase over existing levels. The model assumes that development and associated transportation emissions will release the same amount of carbon in the future as they do today, although many improvements in design and regulation are continuing. It is anticipated that these improvements in building and site design, materials, lighting, heating and cooling systems will reduce the overall energy demand compared to buildings built over the past 20 years. In addition, improvements in automotive fuel economy, including the proliferation of hybrid and plug-in vehicle technologies, will reduce automotive emissions. Never the less, no scenario has been modeled that suggests that this area can absorb projected increases in population without increases in emissions.

The Smart Growth approach results in higher emissions in the Plan area, but should result in lower countywide emissions when compared to traditional greenfield suburban development. In addition, the compact pattern preserves more trees and forests that sequester carbon. The remaining challenge is to make the Smart Growth areas as carbon-neutral as possible through the use of the approaches detailed above.

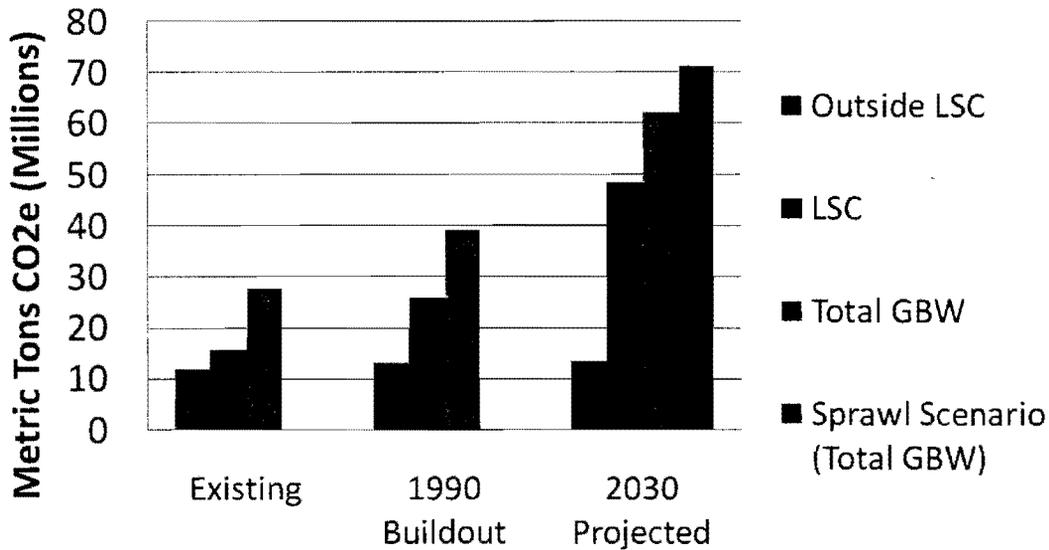
Carbon modeling approach and results

The model only deals with emissions; no calculations are included to estimate potential carbon offsets from improvements to technology or substitution of alternative energy sources. Many of these parameters are changing constantly, so input parameters are a moving target.

Modeling results and sprawl scenario estimates are shown below. Results are given for the LSC, the rest of the Master Plan area (outside of the LSC), as well as a total for the entire Plan area.

The first grouping of outputs shows existing emissions based on 2005 data; these data are a baseline for

Gaithersburg West Potential Increase in Carbon Emissions



comparison. The second grouping shows estimated emissions if the area built out completely under zoning that exists in the 1990 Master Plan. The third grouping presents estimated emissions assuming full buildout under the proposed plan, including an estimate of the additional carbon that would be generated if the area built out in a sprawl scenario. Sprawl scenario estimates are made by assuming that growth beyond buildout of the 1990 Master Plan would have occurred in a sprawl pattern, causing the emission of 40 percent more carbon than if it were built in a Smart Growth pattern.

In keeping with the Smart Growth approach to development recommended in this Plan, most of the growth projected in this Master Plan is concentrated in the LSC. Although per capita emissions should be reduced by creating compact, mixed-use, transit-served development, overall emissions will still increase in this area due to the increase in population anticipated in the LSC.

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Urban Form and Open Spaces

The LSC districts will be connected through a refined street network, transit, and trails. The highest density and building height will be concentrated at the proposed CCT stations. People may live and work in the same district, but interact with colleagues in another district. Overall, mobility will be enhanced through options other than cars, and shorter trips.

The streets, buildings, and open spaces will create a physical environment that supports the research community and enhances opportunities for people to interact. Design guidelines for the LSC, in a separate document, provide detail to guide new development and implement the urban form recommendations in this Plan. The Plan's urban design recommendations set the scale and character for the LSC.

- Circulation on a pedestrian-oriented street grid that creates pedestrian and bicycle connections to transit and between uses and districts.
- Buildings that define the public spaces, streets, plazas, parks, and views.
- A system of public open spaces that provides a setting for community activity and also preserves natural resources.
- A standard for sustainability that reflects the LSC's cutting edge science.

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Public Open Spaces

A comprehensive system of public open spaces for collaboration, recreation, and other community activities will preserve important resources including streams, forests, and historic properties. This open space system will also provide the setbacks and green spaces that contribute to compatibility with the adjacent neighborhoods.

- Public open spaces at each CCT station
- Stream valley parks
- Transitional green areas

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~~Community Facilities and Amenities~~, Open Spaces, and Connectivity

Community facilities, services, and amenities contribute to making great places to live, work, and play. The LSC's proposed redevelopment offers an opportunity to enhance public facilities, amenities, and recreational options. An interconnected pedestrian and bike system will link neighborhoods—both existing and future—to each other, parks, transit, and other destinations. This Plan recommends using urban design, parks, and trails to create an open space network for the LSC that will provide a range of experiences and a sense of place, integrating the built and natural environments and passive and active spaces. **Where possible, connections to existing neighborhoods surrounding the LSC should be created or enhanced.**

This Plan provides a site for a future elementary school in the LSC West District, should it be needed to accommodate students that could be generated from build-out of the potential residential densities. In addition, a future high school site has been reserved on the Crown Farm in the City of Gaithersburg.

A fire station is needed in this area and the northwest corner of Shady Grove Road and Darnestown Road is under consideration.

A new community center, the North Potomac Recreation Center, is planned on Travilah Road adjacent to Big Pines Local Park, as recommended in the 2002 *Potomac Subregion Master Plan*.

As the LSC grows into a major hub for life sciences research and development, a library specializing in science and medical research may be desirable. A high technology library could provide an inspiring environment for innovation and entrepreneurship, a place where students of all ages can rub shoulders with the industry's best minds. A publically accessible library could be funded through private sector development contributions to an amenity fund. The Plan recommends Belward or the JHU-MCC site in LSC Central for a specialized library.

Open Spaces

Thriving places rely on a high quality public realm. Parks and open spaces offer community gathering places, foster a sense of place and civic pride, and encourage environmental stewardship; essential components of community life. The best communities incorporate substantial green elements and open spaces that provide opportunities for recreation, outdoor socializing, collaborating, and connecting to nature. This Plan recommends that parks, publically accessible open spaces, civic gathering places, and trails be designed as part of a comprehensive system that contributes to a sustainable community. To achieve this goal, an interconnected pedestrian and bike path system should link new and existing neighborhoods to parks and other destinations.

Additional parks and open spaces (described more fully in each District) will be created to provide recreational opportunities that support and enhance the vision of the LSC. The future open space system will support a vibrant and sustainable work life community by creating open spaces that will be easily accessible by walking or transit and will provide a range of experiences for a variety of people.

This Plan recommends a series of open spaces provided through a combination of public and private efforts. Both residential and commercial development projects should provide recreational facilities, open spaces, and trail connections that shape the public realm, help implement the Plan recommendations, and serve existing and future employees and residents.

The open space system will include:

- **An extensive open space network on the Belward property with a variety of passive, active, and cultural experiences.**
- **Completion of the Muddy Branch Trail Corridor along the western edge of the Belward property.**
- **Civic greens at each CCT station.**
- **A shared park/school site in LSC West as well as a public civic green**
- **Development of Traville Local Park in LSC South**
- **Green corridors between and through major blocks linked by the LSC Loop to connect destinations and integrate passive and active spaces.**
- **An additional active use Local Park in the Quince Orchard area (outside the LSC; see page 49).**

Community Connectivity and the LSC Loop

The organizing element of the LSC open space plan is a 3.5-mile multi-use path loop connecting the districts and destinations with extensions from the core loop that link to the surrounding communities, including the cities of Gaithersburg and Rockville (see the map on page 26). Connectivity between the LSC Districts and adjacent neighborhoods is described more fully in the following District section. The LSC Loop will run alongside existing

streets, such as Medical Center Drive and Omega Drive, and be completed on new streets in LSC West. It will incorporate the proposed multi-use path next to the CCT through LSC West and onto the Belward property.

The LSC Loop will link activity centers and community facilities, including the planned high school on the Crown Farm (in the City of Gaithersburg), the historic Belward Farm, and the civic green and retail center on LSC West. CCT stations along the Loop include the Crown Farm, Belward, and LSC West. From the Loop, paths will connect with other destinations and activities in the area, including Falls Grove and Traville. Traville Local Park, in LSC South, is proposed to include a small rectangular field, half-court basketball, older children's playground, and a tot lot, and should be accessible from **an extension of the LSC Loop**.

The LSC's existing stream buffer areas should be integrated with the Loop, offering passive outdoor experiences. The on-road hard surface portion of the Muddy Branch Trail Corridor intersects the Plan area at the southwest corner of the Belward property, and should connect to the rest of the Countywide trail system.

Not all open space can or should be publicly owned and managed. Public amenity spaces in new developments will provide recreation and open space. Public parks and publicly accessible facilities and open spaces should complement each other and be seamlessly integrated to create a cohesive pattern of open space.

The LSC Loop will:

- create a primary recreational feature that connects the districts, destinations, and open spaces throughout the area
- provide connections to area amenities, including the historic Belward Farm, retail destinations, the proposed high school and elementary school, and the natural path system through the stream buffer areas
- connect destinations by paths, including stream valley park trails such as Muddy Branch
- integrate regulated green spaces such as wetlands, streams, and forest conservation easements to provide passive recreational experiences
- provide connections to Traville Local Park in LSC South.
- **Create extensions (from the main loop) that connect surrounding neighborhoods with the LSC, providing residents of these communities with access to the transit stations, activities, amenities, and open spaces in the LSC Districts.**

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LSC West: A New Residential Community

Most of this 75-acre district is the County's Public Safety Training Academy (PSTA), on 52 acres. The PSTA has been at this site, bordered by Key West Avenue, Great Seneca Highway, and Darnestown Road, since 1973 when the area was mostly farmland. Since the 1980s, when the County decided to create the LSC, the uses around the PSTA have changed dramatically.

This training facility for firefighters, police officers, and operators of large vehicles is next to the County's Innovation Center (Incubator), which provides space for biotech start-up businesses. On the north side of Darnestown Road are a small retail center, medical office buildings, and several single-family homes that have been assembled and are proposed for townhouse development (RT-8 Zone).

While the PSTA is an important public facility, it has no relationship to the LSC. The County recognizes that all of the PSTA's needs cannot be satisfied at this location with its limited expansion capability and has identified a site where the PSTA could be relocated.

The Plan supports relocating the PSTA and redeveloping the site with a residential community that includes amenities and services, bringing housing opportunities within walking distance of jobs in the LSC. The corner of Great Seneca Highway and Darnestown Road has the potential to become a signature site. The Innovation Center could remain at this location or, ideally, be incorporated into redevelopment of the PSTA or elsewhere in the LSC.

Creating a new community on publically-owned land in the LSC West District provides an opportunity for the County to engage outstanding practitioners of sustainable town planning, layout, and design to help implement this Plan's vision. Located between LSC Central and Belward, the new LSC West community will be a hub of activity that draws people from the other LSC Districts as well as surrounding neighborhoods. Residents of the new high density housing in this District will enliven and activate the retail uses and open spaces. An interconnected street grid will create walkable blocks with a synergistic mix of uses, including ground-floor retail and wide sidewalks to accommodate outdoor cafes. The central, civic green at the CCT station should be framed by buildings and large enough for major outdoor activities and gatherings, such as a summer concert series.

The Plan recommends the Commercial Residential (CR) Zone with a 1.0 FAR that could yield 2,000 dwelling units with supporting retail, services, **open spaces**, and community uses. The CR Zone is recommended for the PSTA and PEPCO parcels (currently zoned R-90/TDR), the Innovation Center (LSC Zone), and the small retail center (C-3) and medical office buildings (O-M) at the intersection of Darnestown Road and Key West Avenue. The following CR components will promote development of the new residential community that the Plan envisions for LSC West: CR 1.0, C 0.5, R 1.0, H 150. The Plan recommends that the two special exception uses (at 10109 and 10111 Darnestown Road) be rezoned from R-90/TDR to C-T (Commercial, Transition) and confirms the RT-8 Zone for the remainder of parcels along Darnestown Road.

Residential buildings with the most density and height should be adjacent to the CCT station and the new LSC West community should include retail, civic spaces, and, if needed, a new public elementary school. If a new elementary school is needed, it could be combined with a local park on the northern portion of LSC West. If the school is needed and if the northern area is chosen, the proposed local street (B-5 on the LSC Circulation Map) should be eliminated to create adequate space for a park/school site. If the school is not needed, a local public park for active recreation should be provided. **This park should be large enough to accommodate a regulation size rectangular field.** In addition to the park/school site, development should be accompanied by a new public urban park to serve as the central, **civic** open space for the residential community. This public green space should be near the CCT station and one-half to one acre in size to create a gathering place and focal point for the community.

The Plan recommends that impacts to the forested area at the corner of Great Seneca Highway and Key West Avenue be minimized. Since rare, threatened, or endangered species information has never been gathered for this site, a Natural Resources Inventory should be prepared when the site is redeveloped.

Future development or redevelopment of the Darnestown Road side of LSC West should be compatible with the existing residential community of Hunting Hill Woods to the south (in the 2002 Potomac Subregion Master Plan). A proposed townhouse development (on the RT-8 parcels) in LSC West along the north side of Darnestown Road addresses land use compatibility and design (with a maximum building height limit of 35 feet). If there is future redevelopment of the existing retail and office uses at the corner of Darnestown Road and Key West Avenue (zoned C-3 and O-M; recommended for CR), compatibility with Hunting Hill Woods must be addressed.

This Plan encourages improved connectivity from the residential neighborhoods south of Darnestown Road to the LSC West District. As the core of the District develops into a new community with retail, open spaces, and a CCT station, adjacent communities should have access to these amenities. The Plan recommends a Dual

Bikeway/Shared Use Path along Darnestown Road (DB-16) and there is an existing off-road shared-use path along Travilah Road (SP-57) that is recommended to extend into LSC West (LB-5). In addition, an LSC Loop extension is recommended from LSC West into LSC South (see map on page 26).

Opportunities to create new connections are limited by to the character of existing neighborhoods to the south, which are inward-facing with numerous cul-de-sacs, rear yards along Darnestown, and only one access point at Yearling Drive. As shown on the XX map, an extension of Yearling Drive (which is aligned with the access driveway to the existing office uses on the north side of Darnestown Road) may provide the best future opportunity for improved access to the LSC West District. Opportunities for a public easement through the proposed townhouse development could also be explored.

Recommendations

Land Use and Zoning

- Relocate the PSTA and create a new residential community on the site with supporting retail, open space, transit, and community facilities
- Rezone the PSTA and PEPCO parcels from R-90/TDR to the CR Zone
- Rezone the County's Innovation Center site from the LSC Zone to the CR Zone
- Rezone the C-3 and O-M parcels to the CR Zone
- Properties rezoned to CR have the following components: C 0.5, R 1.0, H 150
- Rezone 10109 and 10111 Darnestown Road (special exception uses) from R-90/TDR to C-T (Commercial, transitional) to reflect the existing uses
- Require a Concept Plan for LSC West with the first Preliminary Plan application to address the CCT location, the placement of highest densities and building height at transit, creation of a local street network, public open spaces, and the LSC Loop
- Locate highest density housing and retail uses and the tallest buildings (150 feet) closest to the CCT station to provide convenience and activity
- **Building heights along Darnestown Road should be limited to 50 feet. The building height for the RT-8 property is a maximum of 35 feet.**
- Minimize impacts to the forest at the corner of Key West Avenue and Great Seneca Highway
- Accommodate a new public elementary school combined with a local park, and a central public open space near the proposed CCT station

Urban Form and Open Spaces

- Extend the LSC Loop along Medical Center Drive to connect pedestrians to other transit centers, the network of natural pathways along the stream buffers, and the open spaces
- Locate a multi-story elementary school, if needed
- Provide facilities for active recreation on the park/school site
- Provide at least 15 percent of the net tract area as public use space
- Integrate the following public open spaces:
 - LSC Loop
 - Stream buffers
 - Forest area along Great Seneca Highway and Key West Avenue
 - Civic green at the CCT Station

- Urban promenade to connect between buildings and public spaces
- Use the visible corner at Darnestown Road and Great Seneca as a signature site for a significant building

Mobility

- Locate a CCT station along Medical Center Drive extended near the center of the LSC West site
- Create a grid of streets on LSC West as part of the new residential community

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LSC Belward: A New Science and Research Community

The Belward property, owned by JHU, is surrounded by major roads and residential neighborhoods on three sides. The 1990 *Shady Grove Study Area Master Plan* designated Belward as part of the greater Life Sciences Center and recommended it be developed as a research campus with a limited amount of employee housing. JHU received Preliminary Plan approval in 1996 for 1.8 million square feet on 138 acres, a density of 0.3 FAR in the R&D Zone. The eastern portion of the property, with access from Key West Avenue, was sold and developed. The remaining 107 acres is undeveloped.

This Plan recommends increased density on the Belward property (1.0 FAR), served and supported by a CCT transit station. The Plan recommends that both the 107-acre undeveloped Belward property as well as the developed, eastern portion, be rezoned from the R&D Zone to the revised LSC Zone to allow ~~a mix of uses and~~ higher densities **and height** focused ~~on~~ at the CCT station. Development on the Belward property may include housing for the employees and/or visiting researchers. **Plan recommendations allow a concentrated and compact form of development for Belward that is centered around transit. This denser building pattern (with structured parking) creates opportunities for an extensive open space system. Previous plans for Belward were a conventional suburban office park model with sprawling, low-density, auto-dependent development, vast amounts of surface parking lots, and few community amenities intended for use by residents or workers not on the Belward campus.**

The design and layout of Belward should be sensitive to the residential neighborhoods that surround the site. To create appropriate transitions and minimize impacts, the Plan recommends substantial open spaces, particularly on the three sides of Belward that are adjacent to neighborhoods. Development around the north, west, and south perimeters -- adjacent to the Mission Hills buffer, the Muddy Branch Road park, and Darnestown Road -- should be compatible with surrounding neighborhoods in terms of bulk, scale, and building height. Heights should transition from the highest (150 feet maximum) in the blocks immediately surrounding the CCT station to lowest at the edges of the property (50 feet maximum) and around the historic area (60 feet maximum). Rear walls and service areas should not face the surrounding neighborhoods. Generally, parking should be located in garages that are placed in the center of blocks and surrounded by buildings.

The property's historic Belward Farm includes the 1891 farmhouse, barns, and outbuildings. A 6.98-acre environmental setting was established for the historic properties by the 1996 Preliminary Plan approval, and includes the driveway from Darnestown Road to preserve views of the site.

Due to the proposed increase in development recommended for Belward, this Plan recommends expanding the historic farmstead's environmental setting to between 10 and 12 acres. New development adjacent to and near the farmstead must be compatible in scale and graduated in height (**no higher than 60 feet**) to be sensitive to the historic resource. Views of the farmstead from Darnestown Road, as well as other vantage points within Belward

should be incorporated into future site planning and design. Reuse of the Belward Farm offers opportunities for community-serving uses such as a cultural, recreational, or educational center that could become a destination on the CCT and the LSC Loop.

The open space system for the Belward District includes an extensive network of passive and active recreation linked by an internal path system with connections to the LSC Loop and the surrounding communities. By concentrating density in a compact form (with a limited amount of taller buildings and parking garages), substantial amounts of open space can be created. Placing parks and buffers around the edges of Belward provides compatible transitions and buffers for the adjacent single-family neighborhoods are critical. From natural, passive areas with trails next to streams to an activated urban square at the CCT station, a range of outdoor experiences are planned. As outlined below and shown on map XX, the Plan recommends nearly 50 acres of open space:

- **Muddy Branch Park will consist of a minimum of 12 acres (with a width of 300 feet along Muddy Branch Road) for active and passive recreation, including informal and organized playing fields, and tree-lined edges at the perimeter. The landmark tree in this area should be a focal point in the design of the park and open space. The Muddy Branch Trail Corridor and a countywide bikeway connection (DB-24; dual bikeway/shared use path) must be completed on the Belward side of Muddy Branch Road.**
- **Mission Hills Preserve will create a 200-foot wide buffer between the rear property line of the nearest Mission Hills homes and any buildings on the northern side of Belward. In addition, 200-foot wide stream buffers will be created around two tributaries of the Muddy Branch, limiting development in this portion of the property. Mission Hills Preserve, combined with the two stream buffers, will create a 20-acre area for reforestation and passive recreation that should include natural surface trails that connect with the other open spaces on the site.**
- **Darnestown Promenade will include a three-acre landscaped buffer (60-foot wide) along Darnestown Road that maintains vistas to the historic farmstead, includes the landmark sign, and creates a tree-lined pedestrian path that connects to the on-site path system as well as the LSC Loop. In addition, a countywide bikeway (DB-16) must be completed along Darnestown Road.**
- **Belward Commons and Historic Farmstead will include 10 to 12 acres of open space surrounding and including the historic farmstead buildings. Views of the farmstead from Darnestown Road, as well as other vantage points within the site, should be preserved. Reuse of the historic buildings offers opportunities for community-serving uses that could include active indoor recreation or cultural activities. A weekend farmers market could be established here.**
- **Urban Square at the CCT Station is envisioned as a hub of daily activity with space for special events and gatherings and some community retail for the convenience of CCT riders, workers, and area residents.**

Development in accordance with this Plan should add value and enhance the quality of life in the area by creating substantial amenities, recreational opportunities, and phasing new development with the provision of transit and infrastructure to support it. This Plan recommends that connections be created so that residents from surrounding neighborhoods have access to these amenities. Residents should be engaged throughout all phases of the Belward development review process to provide comments and suggestions on issues such as connectivity, plans for open space, and other amenities. As shown on the XX Map, the Plan recommends new streets on Belward, including one aligned with Midsummer Drive that can provide access from the Washingtonian Woods neighborhood. The bikeway and trail connections mentioned above will improve access.

Options for more direct links from the surrounding communities to Belward should be explored as development proceeds.

To meet the recreation needs of this area, as well as provide facilities for those working on-site at Belward, areas should be reserved for both active and passive recreation. Two rectangular fields for active recreation should be provided within the designated buffer areas along Muddy Branch and Darnestown Roads.

Recommendations

Land Use and Zoning

- Rezone the Belward property from R&D to the LSC Zone and allow up to 1.0 FAR
- Require a Belward Concept Plan with the first Preliminary Plan application to address the Plan's guidelines, including the CCT location, the highest densities and height at transit, preservation of the historic property, creation of a local street network and the LSC Loop, neighborhood buffers, **and connections.**
- Maintain Belward as an open campus development
- Provide a network of active and passive open spaces

Historic Belward Farm

- Preserve views of the farmstead from Darnestown Road, looking north, east, and west as well as other vantage points within the larger Belward site
- Step new buildings down to 60 feet (four stories) adjacent to the Belward Farm
- Use the site, including the house and barns, for recreational, educational, social, or cultural uses that complement the community and new development
- Preserve open space and mature trees surrounding the farmstead. Retain an environmental setting large enough to convey the agricultural character of the historic resource, between 10 and 12 acres

Urban Form and Open Spaces

- Engage residents throughout all phases of the Belward development review process to provide input on issues such as connectivity, plans for open space, and other amenities.
- Concentrate the highest density and building heights (150 feet) near the CCT station
- Organize the significant roads to provide views of the historic Belward Farm
- Complete the Muddy Branch Trail Corridor from Dufief Mill Road and Darnestown Road to Great Seneca Highway along the Belward property on the east side of Muddy Branch Road
- Create the LSC Loop along Medical Center Drive and Decoverly Drive to connect pedestrians with other transit centers, the network of natural pathways along the stream buffers, and the open spaces
- Preserve the landmark tree on the Muddy Branch Road side of the property
- Include the following public open spaces:
 - - LSC Loop
 - - Stream buffers that may include natural surface trails
 - - Belward Farm environmental setting
 - - Urban square at the CCT station
 - - Urban promenade connecting buildings and public spaces.
- Provide at least ~~15~~ **20** percent of the net tract areas as public use space

- Create a ~~300-foot buffer~~ **park** along Muddy Branch Road and a 60-foot **landscaped** buffer along Darnestown Road
- Provide two rectangular fields for active recreation in these buffer areas, with permitting by the Parks Department
- Preserve and augment the trees along the northern boundary as a transition to the existing single-family houses in Mission Hills
- Provide a 200-foot buffer along the property's northern edge, adjacent to Mission Hills, between the property line of the single-family homes and any buildings on Belward
- Provide a 100-foot wide stream buffer **on either side of** ~~around~~ the two tributaries of the Muddy Branch

LSC South: Mixed-Use Center

This 245-acre district south of Darnestown Road includes the Traville community's retail and residential uses, Human Genome Sciences (HGS), and the Universities at Shady Grove, an innovative academic center that is part of the University System of Maryland.

LSC South is in the Watts Branch Watershed and is part of the Piney Branch sub-watershed, which was designated a Special Protection Area (SPA) due to its fragile ecosystem, unusually good water quality, and susceptibility to development pressures. SPAs require approval of a water quality plan demonstrating a high level of stormwater control and treatment. Accordingly, this Plan recommends minimal additional development.

The retail and residential developments at Traville are built-out, with approximately 100,000 square feet of retail and 750 dwelling units, 230 of which are senior housing. The HGS site is approximately half built-out. The Universities at Shady Grove have produced a master land use plan for their site, which is approximately half built-out.

Only the 13-acre Rickman property on Travilah Road (zoned R&D) is undeveloped. The Plan supports R&D uses on this site, but housing would also be compatible with surrounding properties. The Plan recommends the Planned Development option (PD-22) for the Rickman property and supports a waiver of the percentage requirements for dwelling unit types to encourage a compact design that respects this environmentally sensitive area. The property owner can initiate the rezoning by filing a Local Map Amendment. A Development Plan and Site Plan are required in the PD Zone.

The Piney Branch SPA bisects the Rickman Property. A key to protecting water quality in the SPA is limiting impervious surfaces. Development within this SPA requires a Water Quality Plan that details how stormwater runoff will be managed to prevent further degradation to water quality in the SPA. The Water Quality Plan is prepared by the developer and reviewed and approved during the development review process. Guidelines for the development of the Rickman property are provided below. In addition, a population of state endangered *Krigia dandelion* is located on the east side of the property along Shady Grove Road. The road was specifically aligned to avoid disturbance of this plant. Further development in this area should avoid disturbance of this population and provide a buffer area from new uses.

This Plan encourages the physical and visual integration of LSC South with the areas north of Darnestown Road, through building design and massing, street character and improved connections across Darnestown Road, and access to the CCT stations at LSC Central and West. These stations are between one-half to three-quarters of a mile

(a 10-15 minute walk) from LSC South destinations. With higher density development around the CCT stations, the transit locations will become more visible and recognizable as landmark features.

HGS and USG, along the south side of Darnestown Road, have developed as campus-style, inward-focused designs with parking lots adjacent to Darnestown Road. Future development at these sites should create a building edge along Darnestown Road near Great Seneca Highway. On the north side of Darnestown Road, redevelopment of the PSTA site will also create opportunities for new buildings to address the street edge, especially the corner of Darnestown Road and Great Seneca Highway.

Extending Great Seneca Highway as a local business district street south of Darnestown Road provides an additional, signalized access point for LSC South. This proposed improvement should be coordinated with HGS's and USG's future plans, including their internal street network. A major benefit of improving the intersection of Great Seneca Highway and Darnestown Road would be to provide direct access, particularly for pedestrians and bicyclists, between LSC South and the proposed CCT station at LSC West.

Recommendations

- Protect the Piney Branch sub-watershed and support the SPA by limiting development in LSC South beyond existing and approved projects to only the undeveloped Rickman parcels on Travilah Road.
- Extend Great Seneca Highway as a business district street south of Darnestown Road.
- Improve pedestrian connections between LSC South and areas to the north—LSC West and LSC Central—emphasizing pedestrian access to the future transit stations.
- Construct Traville Local Park and provide connections to the LSC Loop.
- Maintain the R&D Zone on the Rickman site, but recommend rezoning to PD-22 by a Local Map Amendment to encourage residential development.
 - **Minimize impacts to the SPA by orienting buildings and parking nearer Travilah Road, outside the SPA boundary**
 - **Ensure proper sediment control during construction**
 - **Consider parking underneath buildings (ground-level) for multi-family units, compact development design, and other techniques to minimize impervious surfaces**
 - **Consider placing recreation facilities that are not noise-sensitive closer to Shady Grove Road**
 - **Consider meeting afforestation requirements in the area adjacent to the existing protective strip along Shady Grove Road to enhance protection of the Krigia dandelion population**

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LSC North: Residential and Office

The 195-acre LSC North District is developed with several office parks, including DANAC, the National Association of Securities Dealers, Shady Grove Executive Center, and the Bureau of National Affairs. These properties are zoned I-3, O-M, and C-2. LSC North also includes the residential communities of Decoverly, with 1,144 townhouse and multifamily units along Diamondback Drive west of Decoverly Drive.

The current CCT alignment includes a station on the north side of the DANAC property. The DANAC station should be relocated to the east side of the property as part of the CCT alignment through the LSC. The Plan recommends that the DANAC property be rezoned from the I-3 Zone to a CR Zone. Rezoning DANAC to a mixed use zone with higher density will take better advantage of this transit station location. The parcel on the southeast corner of Key West Avenue and Diamondback Drive (Lot 7) is largely undeveloped and is adjacent to the proposed CCT station on the east side of the property. The recommended Zone for this parcel (Lot 7) is: CR 2, C 1.5, R 1.5, H 150. The

remainder of the DANAC property should be zoned CR 1.0, C 0.5, R 0.5, H 80. Building height along Decoverly Drive adjacent to the residential community to the north is limited to 50 feet within 100 feet of the **Decoverly Drive** right-of-way **(not including the 50-foot transit right-of-way)**.

Each of the other office parks in LSC North has some remaining development capacity. Current zones for several of the office parks allow relatively high density for the area (1.5 FAR) and the Plan does not recommend increases because the objective is to concentrate additional density at the proposed CCT stations and achieve an overall balance between land use and transportation infrastructure.

~~The possibility of residential as an infill use on remaining developable sites in LSC North would increase the amount of housing near the jobs in the greater LSC. To create a sense of community, the Plan encourages clustering any housing to create a residential neighborhood rather than isolated housing sites in scattered office parks. The Plan recommends the Planned Development (PD) Zone option for the 6.9-acre site in the Shady Grove Executive Center and for the 11.34-acre Bureau of National Affairs (BNA) site. These sites would be appropriate for urban, high-density housing and the zoning can be requested through a Local Map Amendment. Pedestrian-oriented local retail facilities that are compatible with and provide convenience for residents are encouraged. Community-serving amenities should be provided, including the LSC Loop along Omega Drive as well as pedestrian connections to CCT stations at DANAC and Crown Farm.~~

The Plan does not recommend any zoning change to the National Association of Securities Dealers site. The Plan encourages mixed-use infill on the portion of the LSC North that is east of Omega Drive (Shady Grove Executive Center District and BNA sites). To implement the mixed-use vision, the Plan recommends CR 1.5, C 1.5, R 1.5, H 100. Residential uses are encouraged, as are pedestrian-oriented local retail facilities that are compatible with and provide convenience for residents. Public benefits that improve connectivity and mobility or add to the diversity of uses and activity are encouraged. These should include the LSC Loop along Omega Drive as well as pedestrian connections to CCT stations at DANAC and Crown Farm.

- Extend Decoverly Drive north from its current terminus, into and through the Crown Farm to Fields Road
- Extend Diamondback Road north from its current terminus into and through the Crown Farm to Fields Road
- Rezone DANAC from the I-3 Zone to the CR Zone
- **Rezone the area east of Omega Drive (Shady Grove Executive Center District and BNA District) from the O-M, H-M and C-2 zones to the CR zone**
- Provide for the LSC Loop, to be accompanied with the CCT from Fields Road to Diamondback Drive, and then along Decoverly Drive and across Great Seneca to the Belward site