

Analysis of the Final Compromise Gaithersburg West Master Plan

In April 2010, the County Council unanimously approved a much changed master plan for the Life Sciences Center (LSC) area, the major part of the Gaithersburg West master plan. All the discussions, drafts and meetings about this plan illuminated their sharply different philosophies on growth, development, economy, environment and climate protection. At the final Council meeting on the plan, however, all the differences were erased in a compromise plan which received unanimous approval.

The final compromise plan is a chimera, a joining of incompatible parts which contradict each other. Though reduced somewhat, the plan still permits (encourages) a major urban employment center, where none has existed, and there are good reasons one should not exist. Then the Council approved a draconian staging plan which leaves the impression that they don't really believe much of the development will occur. Only a few major landowners/developers lobbied for this plan, a sharp contrast to the White Flint plan. They got the final development capacity they sought.

Even with the commercial development cap somewhat reduced, the plan would still produce one of the largest employment centers in the County, in a location that will never be really transit oriented, in an area with a housing shortage, where it is guaranteed to induce sprawl housing development and long car commutes from many directions.

The plan is so contradictory that it is impossible to foresee the outcome. The plan approves more employment than in any of the County's longstanding CBDs or Metro station areas. That includes the new sector plan for White Flint. But little development, except that already authorized, is permitted until serious progress is made on the Corridor Cities Transitway. Funding and construction of the CCT, however, becomes more and more remote. Limbo can't last forever. What will give first? Will officials accept reality and design a more reasonable plan? Or will the developers eventually get permission to go ahead without the CCT? Will the hype about the LSC jump the CCT ahead of the Purple Line?

Let us look at the final plan in greater detail.

1. Zoning and development capacity.

Full development was reduced from 20 million square feet of commercial development to 17.5 msf. That still leaves the Life Sciences Center envisioned as the largest commercial (office/R&D/quasi-industrial/retail) urban center in the County. For comparison, the capacity of the new White Flint plan is 13 msf; Bethesda CBD is slightly smaller. The development permitted on the each major subdivision of the plan was not changed from the Planning Board draft; the sum of the properties still adds up to 20 msf. There is no staging guidance in terms of which properties should develop first. The sequence is left to the private market.

- **Belward Farm.** Much of the horror the plan generated in the community focused on the level of development permitted on Belward Farm. Residents asked that the lower development

cap specifically apply to Belward. The Council didn't even discuss this possibility. Belward can still contain 4.5 msf with multiple 15 story buildings. Residents also asked for specific design guidelines that preserves a large green area and view of the farmstead from Darnestown Road and Muddy Branch Road near the intersection. The Planning Board draft plan includes such language; the adopted plan qualifies this instruction, and mentions maintaining views of the farm "as practicable". The plan also gives more flexibility about the width of buffers along Darnestown and Muddy Branch Roads. The final plan replaces the firm offer of a 300 foot buffer along Muddy Branch Rd. with a buffer "a minimum of 100 feet". The width of the buffer along Darnestown Road is also more flexible. The only remaining firm buffer is 200 feet along the edge with Mission Hills. The plan, however, acknowledges that final development plans will determine the tradeoff between amount of green space and height of buildings. The tallest buildings are still recommended around the CCT station, which is very close to the farmstead; 12 acres setting for the farmstead is replaced by "10-12 acres".

- **Will it really be a biomedical research and business center?** Most of the LSC will develop in a greatly amended LSC zone. The zone as initially rewritten allowed considerably general office development – this by the way is by far the largest user of commercial building. Only retail stores comes close. The Planning Board's first draft of the zone allowed 50% of the floor area of a building to be general offices unrelated to biomedicine. There was no specific requirement for biomedicine or research. It was quite possible for Belward Farm to become a speculative development of office buildings, quasi industry, hotels and retail. Only housing was precluded.

The Council voted to require at least 30% biomedical uses, then finally raised it to 40%. General office use was further restricted to 40% (?). Of course, biomedical institutions and business include much office space which would be part of the 40%. Consider that the NIH decision to build 500,000 sf for the National Cancer Institute at the LSC will be entirely administrative office space.

- **Jobs and Housing the Workforce.** The balance between jobs and housing for the workforce determines the impact of development on many of our key values. In an area where jobs exceed housing opportunities, any job growth will be balanced by housing growth somewhere. The question that officials can effect is where will the new housing be. If sufficient housing capacity is not provided in the local area, then housing prices go up, new more affordable housing is built at greater distances and dispersed patterns, and car commuting goes up. We see these effects in the LC plan.

For instance: Modeling of auto work trips to the LSC shows an additional 275 work trips from rural Montgomery County, if the 1990 master plan were built out (about 13.5 mf). If the new plan were built out with 17.3 msf, over 2300 auto work trips from the rural area would be added. Building out the 1990 master plan would add about 1100 work trips to I 270 from the Clarksburg area and Frederick County. Building out the new plan would add about 3500 trips from that area.

The Reasonable Plan proposed several places in LSC Central near the CCT station where land is publicly owned or owned by JHU, where more housing would be desirable. The plan does permit housing on these properties but does not encourage it. The plan now applies the CR urban mixed use zone to much of LSC North, taking advantage of the CCT station now located on the DANAC property. Division of development between commercial (C) and residential (R) is totally flexible. The plan "encourages" residential development on one property, but the zoning allows almost total commercial development.

The plan takes credit for reducing the J/H ratio compared to the 1990 plan. This is misleading since residential zoning in the old plan is so low (one of the reasons given for amending the plan). The J/H ratio goes from about 10 in the 1990 plan to about 5.9 in the new plan. The fallacy is that the J/H ratio is merely a snapshot and does not show the balance accurately when actual numbers are raised. The very high increase in job capacity, and smaller increase in housing, means the actual shortage of housing units increases.

2. Transportation.

Reducing the job capacity of the plan gave officials some confidence that traffic in the area could continue to meet the current Level of Service (LOS) standard. So they withdrew the proposal to raise the allowed congestion from LOS D to LOS F. That traffic can continue to meet the current standard is based on many assumptions about transit and car pool mode shares, as well as assumptions that hundreds of millions will be spent on road and transit improvements.

Some key requests and concerns from the MD Department of Transportation, and cities of Rockville and Gaithersburg were not fulfilled. Despite the high expenditures on the CCT, transit mode share remains low, only 12% of work trips at build out. That is lower than the current Countywide transit mode share. Car travel increases dramatically.

- Rockville and Gaithersburg officials wrote several times their doubts that roads within the cities would continue to meet the cities' LOS standards. They requested that the Planning Department model congestion on nearby city roads. This modeling was not done. The County response was simply that the model predicted that overall average LOS on all city roads would meet standards, ignoring the potential for greater impact on roads near the LSC.

- MD DOT officials reported that their own traffic modeling showed problems with excessive congestion on portions of I-270, its interchanges in the vicinity, and links of roads leading to the LSC from I-270. These issues were not addressed, except by the incremental reduction in traffic caused by the lower development cap.

- MD officials also warned against assuming a very expensive alternative for the CCT would be chosen. That is a State decision which still has not been made. In particular, the loop through the LSC did increase the cost/benefit CCT's score, but it also makes the CCT a lot more expensive. Cost/benefit is important, but the price tag itself will weigh heavily on the decision. MDOT has delayed their decision on the CCT alternative in part because of federal concern about the impact on the Belward farmstead. They are studying several alternative routes which will affect service to the LSC, and ridership.

- Even with the CCT, the LSC will remain road dependent. Modeling showed that transit ridership under the Planning Board draft plan would increase significantly, from 854 work trips in 2005 to 6345 at build out of 17.5 msf. These are significant increases, raising transit mode share from 5% to 12%. Auto work trips, however, rise from 15,684 to 42,265. Though the number of transit trips rise by about 5500, the absolute number of auto trips rises much more, by about 26,500.

- In addition to the CCT, the MDOT has heavy road building obligations under this plan. They warned that funding the road expansions and 4-5 new road interchanges was not assured, especially considering the County's requests for interchanges and busway improvements elsewhere. This was not addressed by the Council. The planners have said that even a greater reduction in job capacity (the Reasonable Plan) would not reduce the need for road expansions. Of course, this may have been overstated in order to avoid considering the Reasonable Plan.

- The “arterial” roads will set new standards for size, complexity, design speed and cost. Key West Avenue is planned as an 8-lane road, plus 2 “local lanes” for buses and right turns. Sam Eig Highway will apparently have 10 lanes, slip ramps at side roads and a full interchange at Great Seneca Highway. Great Seneca will also become a virtual freeway.

Other parts of the plan portray an entirely different world of biological diversity, health and wellness, if one picks one’s spot and doesn’t move around. The plan will “establish an environment that helps reduce stress” .

In addition, this Plan:

- “Encourages that walkways and bicycle trails be safe and attractive to encourage walking, jogging and biking.” It will even encourage people to plant community gardens!

This vision sounds more like a prescription for schizophrenia than for reducing stress!

- The carpool mode share for this area has been controversial. Park and Planning claimed that currently, 9% of workers arrived as passengers in carpools. This would be much higher than the approximately 3.5% measured by County census surveys, and much higher than in other suburbs in the Washington area. The planners ignored outcry about the artificially high carpool mode share until apparently, the Council staff tuned in and stated that the current carpool mode share is unknown. Mode share and improvement in non-auto shares will be an important staging parameter, so all are admonished to figure out how to measure them accurately.

3. Staging.

In the Planning Board draft, staging applied only to three of the five major pods in the planning area. Housing was exempt from staging as were health care facilities. The Council changed the staging plan a lot. Staging now applies to all five major pod, and to housing, though health care facilities are exempt at least in Stage 1. This was done so that hospital expansion would not be impeded by staging limits. (But “health care facilities” is defined as including all medical offices and clinics, physical therapy providers, and all the related activities that currently fill a LOT of the office space in the Shady Grove west area.) The Council delayed release of some development to a later stage, and tightened considerably the actions required to progress through the stages.

Development already approved (the pipeline) totals 3.7 msf. This can be built at any time, and includes the 1.2 msf approved plan for Belward. It also includes some expansion of the hospital and the biotech buildings in LSC Central.

- **Stage 1** allows some 400,000 sf of commercial development above the 3.7 msf with minimal preconditions. The Council did add a requirement for a biennial monitoring program, to see how development and transportation are going. The staging plan can thus evolve.

We may ask how much JHU can build on Belward Farm under current conditions. They can of course build the 1.2 million sf as planned, and plus the 400,000 sf allowed in Stage 1. There are ways they could tap into the other pipeline capacity: Probably not all the 3.7 msf will be built before its approval expires (after 12 years?). Then others can apply for it. Or JHU can shift development to Belward by purchasing it from others or transfer from their classroom property.

- **Stage 2** allows another 2.8 msf of commercial development after several major transportation hurdles are scaled. The chief hurdles are fully funding construction of the CCT to Metropolitan Grove within the 6-year CIP, and achieving an 18% non-auto-driver mode share (NADMS). The last clause is important because it requires the Planning Department to actually measure what

mode people are using in the peak hour. It replaces the Planning Board language: 5% above the disputed “baseline” (explained above).

- **Stage 3** allows another 2.3 msf, down from 2.8 msf in the planners’ draft. Before it is released, the CCT must be under construction to Metropolitan Grove, and at least 50% of construction funds be spent. This was a Council addition to respond to charges that big projects can be delayed even after their funding is initially approved. Several road enlargements and overpasses in the Planning Board draft were deleted; staging will rely more on the requirement that a non-driver mode share off 23%.

- **Stage 4** will release the final 1.8 msf of commercial development, reduced from 4.5 msf due to the lower cap of 17.5 msf instead of 20 msf. As in earlier drafts it requires that the entire CCT be operating. It deletes the specific interchanges and road expansions in earlier drafts, but specifies any other facility needs identified in the biennial review. The plan still requires evaluation before Stage 4, but deletes the 6 year timetable. Opening of Stage 4 also requires an increase in NADMS to 28%, down from an implied 30% in the Planning Board draft.

4. Sustainability: Energy use, Greenhouse Gas Impacts, Other Environmental Impacts

- **Energy/Greenhouse Gas Emissions.** This plan’s priorities are illustrated by the lack of any mention of these parameters in the index. One can find a discussion under the heading Urban Form and Open Spaces. In the Planning Board draft, this section is embarrassingly short and unspecific; the Council made it longer and added a few numerical guidelines. But it is still general enough that it amounts to wishes more than implementable goals.

The final plan addresses Sustainability, that is climate protection, mainly by describing a “sustainable community” that “integrates economic viability, environmentally conscious design, social equity, and renewable energy sources. The compact, walkable, and green community envisioned for the plan area integrates many aspects of sustainability. It accommodates new residents and businesses while reducing land consumption and vehicle miles traveled, thereby reducing the carbon footprint from new development in the County.” It takes a hopeful tone that “Urban development patterns served by transit can reduce dependence on the automobile.” Reduction in parking is a reliable way to shift travel away from SOVs, especially in a place with marginal transit service. This plan lists it as a good idea, but unlike the White Flint plan, does not actually reduce the current standards.

There is no commitment to actual goal achievement or even numerical targets. The plan’s Appendix contains a table showing growth in GHG emissions with the new plan vs. a “sprawl” location of the same amount of growth. The LSC produces about 87% as much GHG as the sprawl scenario. Both would more than double the current emission from the planning area. The Appendix *does not* “contain a carbon footprint analysis” to “show that per capita CO2 emissions will be significantly less with compact transit served development”. It tells nothing about the methods and assumptions used. Unanswered are what the sprawl scenario looked like, or where they found the “vacant land” to which development was moved. We don’t know if they accounted for induced residential development and car travel, and much more. To really examine alternatives, employment growth at the LSC should be compared to White Flint and White Oak. A balanced plan with more housing should also be analyzed.

The actions to reduce VMT concern very short local trips that could be shifted to walking and cycling, for instance driving trips to lunch could be replaced by walking if commercial development were more integrated. But this is a trivial reduction compared to the huge increase in commuting VMT. That is not mentioned. There is also reference to improved local and longer

distance bus service (in addition to the CCT). But the lack of commitment is shown by edits the Council made in the Transportation chapter: The word “develop” was changed to “explore” providing express bus service on the freeways and shuttle bus service within the LSC.

The plan expresses the goal of LEED standards for all new buildings, but of course that would apply anywhere in the County. The bottom line is that the plan dodges the obvious GHG impacts of a huge unbalanced car-dependent suburban business park. A simple admission that other goals had higher priority would have been better than setting this precedent for concealing the impacts in a way that fools no one.

- **Stormwater Management and Forest Cover.** The plan lists possible techniques for stormwater management but relies on the Environmental Site Design concept for details. There is no calculation of impervious area or goal for the amount preserved. The only numerical targets are forest cover, with Belward given the highest target of 30%.

Conclusion

The compromise solved the political problem of a divided Council vote on a controversial plan in an election year. It made small changes from the Planning Board draft on several major parameters. But the changes were not enough to resolve any of the major problems inherent in such a large unbalanced suburban development. It is, to paraphrase the late Betty Ann Krahnke, a compromise but no solution. The only way huge problems can be avoided is if the CCT is never funded or built.