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HPRC Health Policy Assessment of the Consultant’s Comprehensive Review Draft and Recommendations Report

The Health Policy Research Consortium (HPRC) is delighted that Prince George’s County is rewriting the jurisdiction’s zoning ordinance and subdivision regulations. From a health perspective, this is an exceptionally valuable opportunity to proactively address serious health challenges facing the county’s residents. Of particular importance to HPRC are the implications of zoning for addressing our federal mandate: identify policy avenues for reducing racial and ethnic disparities in health in Prince George’s County and throughout Region III. As a transdisciplinary research consortium, we believe that the role of zoning in improving health is well-supported by science.

Zoning is one of the most widespread urban planning tools in the United States, and it has important implications for health equity and public health. Fundamentally, zoning policies affect key social determinants of health, including where people live, work, learn, worship, and play. It impacts their commutes, exercise habits, economic prospects, access to health care, diet, and the amount of crime and blight in their neighborhoods. A plethora of research has linked zoning to health behaviors and outcomes such as physical activity, obesity, and nutrition and the disproportionate burden the associated health risks place on communities of color.^{1, 2, 3, 4} Importantly, the literature shows that environmental vulnerabilities and resources are not equitably distributed by race or ethnicity.^{5, 6}

Health Challenges and Disparities in Prince George’s County

While all communities can potentially benefit from a healthy zoning model, regardless of race, ethnicity or income, Prince George’s County is especially well-suited for a health-oriented approach to zoning. Despite its unique demographic status as the wealthiest predominantly African American county in the United States, Prince George’s County still faces serious health challenges. The health profile below shows key aspects of these health challenges, many of which can be meaningfully abated through healthy zoning.

Prince George's County Health Profile

- There are 1,837 residents for every primary care physician (PCP) in the county. In Maryland, the ratio of PCP to resident is 1,153:1. Nationally, the ratio is 1,067:1.
- Two-thirds of adult residents are overweight or obese.
- Heart disease is the #1 cause of death and disability in the county, followed by cancer.
- More than 60% of the deaths in the County are due to chronic disease such as heart disease, stroke, and diabetes.
- Between 2009 and 2013, the death rate due to cancer was 172.7 per 100,000 compared to 147.4 in Maryland.
- Prince George's County residents die from diabetes at much higher rates compared to State residents overall (28 vs 19 deaths per 100,000 respectively).
- The asthma Emergency Department visit rate was approximately 4.9 times higher among Black residents compared to White residents.⁷

The County's chronic disease burden signals the need for intentional health disparities intervention, including policy efforts to promote a healthier built environment. While we believe this draft signals the County's intent to take positive steps toward creating a healthier built environment for Prince George's County residents, we also believe this draft could be strengthened by incorporating some suggested practices. Our comments outline areas where we believe this draft is taking positive steps, as well as some areas for improvement.

Potential for Positive Impact on Health Outcomes

1. *An Emphasis on Creating Mixed-use Spaces*

Mixed-use developments foster a more equitable use of space that leads to an increase in physical activity,⁸ reductions in obesity,⁹ and less time spent in cars, as residents are more likely to walk for both transport and recreation.¹⁰ The transit oriented/activity center base zones should lead to an increase in physical activity. Walking to and from public transit is linked to an increase in daily exercise, particularly among low-income and minority subgroups,¹¹ and bringing retail, occupational, and public transportation opportunities into a walkable built environment could result in less time spent in cars, and more time walking to destinations in and around such developments in the County.

2. Improved Access to Fresh Fruits and Vegetables

Zoning can be an important tool for increasing access to fresh fruits and vegetables. Efforts to improve access are important for Prince George's County as nearly 16 percent of residents are food insecure¹², and within some census tracts, more than 25 percent are food insecure.¹³

The zoning rewrite takes some good first steps toward increasing access by allowing community gardens in all zones, expanding the number of areas where urban farming is allowed, and also allowing permanent farmers' markets. Community gardens, and access to farmers' markets, have been linked to an increase fruit and vegetable consumption.^{14,15} Commercial urban farming may also have the potential to bring healthy food to areas where access is currently limited.

While these steps are a good start, we do believe they can be improved. Suggestions for increasing access further can be found in the next section of our comments.

3. Pedestrian and Bicycle Friendly Developments

The requirements for new developments to establish sidewalks and bike lanes, and meet minimum pedestrian and bicycle connectivity standards, should lead to increased physical activity for people who live, work, and shop in these developments. Multiple studies have shown that when built environments are walking and biking friendly residents are more likely to be active.^{16, 17, 18} Additionally, research highlights that neighborhood walkability can lead to a decrease in BMI¹⁹ regardless of income,²⁰ and can be even more important for reducing BMI than simply living in a mixed-use area.²¹ When implemented in mixed-use areas, these targeted efforts should have a positive impact, and result in an increase in residents' level of physical activity.

Additionally, traffic calming measures required for residential developments could also have a positive impact on the health of residents in those neighborhoods. Studies have shown that some traffic calming measures lead to increased traffic safety, as well as an increase in physical activity.²²

4. Open Space Set-Aside Standards

We believe the requirements for new developments to dedicate a portion of land as open space will also benefit Prince George's County residents, as open spaces have been correlated with better health. The prioritization of natural landscape and parks in particular should have a positive effect as green spaces have been linked to improved mental health,^{23, 24} and parks have been linked to increased levels of walking and bicycling.²⁵ The literature regarding green spaces has also demonstrated positive environmental impacts, as they are associated with better air quality,²⁶ decreased temperatures during the summer,²⁷ and natural storm-water management.²⁸

5. Green Building Standards

The establishment of a green building standards points system, and incentives to motivate builders to add additional green features should also have a positive impact on the health of PG County residents. The new standards should help reduce the amount of air pollutants in buildings, preserve natural landscape, and add to quality of life through community gardens. Living in green buildings has been associated with improved air quality,²⁹ and a reduction in asthma symptoms among children.³⁰ Studies show that working in such buildings has been linked to reduced absenteeism from work attributed to asthma, respiratory allergies, depression, and stress, as well as self-reported improvements in productivity.³¹

6. Community Involvement

We believe the improvements to community notification and public comment requirement for new developments may foster increased community participation during the approval process. Some residents have reported that it is difficult to participate in the existing process^{32, 33}, but the requirements outlined in the comprehensive draft have the potential to result in increased communication between developers and communities. Specifically, we believe the following recommendations have the potential to create a more inclusive process: 1) a clear schedule of community notifications for hearings regarding each type of development, 2) a requirement that the technical staff application report include a

summary of citizen comments, 3) a requirement that civic organizations be given the opportunity to register and receive notification when an application is submitted or a hearing is scheduled for a development in their geographic area of influence, and 4) pre-application meetings which could create communication between developers and the community before construction begins. These notifications and meeting requirements should provide citizens with opportunities to have their voices heard, including the opportunity to express any health concerns regarding new developments.

The notification requirements are however overly reliant on mail, posted signs on development properties, and newspapers. These activities could be strengthened by using newer technologies, such as social media, a website, or email. Additionally, we would encourage the county to consider notification requirements that consider basic literacy levels, the needs of non-English speakers, and the use of translators or other instruments that would facilitate participation during community meetings.

Limitations of the County's Rewrite Effort

Lack of attention to established neighborhoods

Although the County's rewrite plans encompass multiple health-focused elements, our analysis highlights important areas where the efforts could be improved to include a more significant healthy zoning approach. One significant limitation of the proposed zoning rewrite is that it predominately affects new developments; residents living in established neighborhoods may not benefit from the same health advantages as those who move to newly developed areas. While it is likely all residents would benefit from additional green space, or shopping centers that encourage walking, the rewrite would not address connectivity and transportation issues that already plague existing neighborhoods. Although the addition of commercial neighborhood zones may incorporate walkable commerce into these neighborhoods, they would still need to be retrofitted with sidewalks and safer bicycle access like the provisions planned for new developments. Retrofitting is equity-oriented but will likely require additional County resources. Nonetheless, it will help ensure that all residents have an equitable opportunity to enjoy the greater benefits of healthy zoning.

Health Equity in all Policies Safeguard Mechanism

A Health Equity in all Policies (HEIAP) Safeguard Mechanism is a policy device designed to ensure that human health always trumps the competing priority whenever a conflict arises between a development and public health. Although the proposed rewrite establishes the process for project applications and approvals, which significantly strengthens the community notifications and involvement, incorporating this intentionality safeguard is warranted to ensure that the health of County residents is never threatened by a new development – even when residents are not at the table during real-time decision-making processes. The city of College Park, Maryland has established such a safeguard which could serve as a model for the Prince George's County.³⁴

Improving Access to Healthy Food

While we believe the rewrite takes initial steps toward increasing access to healthy food, we also believe those steps could be strengthened to meet the expectations of Plan Prince George's County (PPGC) 2035, that called for the County to begin reducing obstacles to healthy food.

The proposed zoning rewrite emphasizes an increase in mixed-use development, which would likely lead to an increase in walk-able retail options, but there are no policies that would incent and encourage the development of grocery stores in food deserts. Many jurisdictions have attempted to create such incentives through local tax codes, while others have adopted incentives through zoning ordinances. New York City, for instance, instituted the New York Food Retail Expansion to Support Health (FRESH) program using zoning incentives in combination with financial incentives to encourage grocery store development in areas with limited access to healthy food.³⁵

Nearly three quarters of Prince George’s County restaurants are considered fast food establishments. This is a public health concern as high density of fast food outlets has been linked to an increased risk for obesity.³⁶ PPGC 2035 specifically mentions the use of zoning to restrict the number of fast food restaurants and the location of fast food outlets in the County,³⁷ but this is not included in the proposed rewrite, marking a disconnect between the County’s established health goals and the zoning rewrite effort. If the County were to adopt such restrictions, it would join a growing number of jurisdictions throughout the country who have taken similar steps. While some jurisdictions have gone so far as banning fast food restaurants, many have taken a more measured approach by establishing quotas, regulating density, and restricting location to prevent proximity to schools and other public facilities.³⁸

The Importance of Health Impact Assessments

Part of PPGC 2035’s objectives were to ensure that the County “reevaluate and enhance the existing Health Impact Assessment (HIA) process to improve its effectiveness and consider whether revisions should be made to address specific health impacts”. An HIA can play a key role in providing urban planners with evidence-based information needed to comprehensively understand the health implications of a planning project. A growing number of communities are beginning to use project specific HIAs including Baltimore, which undertook an HIA for their recent zoning rewrite. Researchers from Johns Hopkins University who were commissioned to conduct the HIA found that it helped explain how proposed zoning changes could impact city residents.³⁹

While current county law requires HIAs for specific projects, we believe available evidence suggests that a pointed healthy zoning approach that makes use of an HIA for the entire zoning rewrite could have a positive impact on the health of Prince George’s County residents.⁴⁰ HIAs have been found to improve collaboration among stakeholders, increase awareness of health issues among policy makers, increase interagency collaboration, and provide communities an opportunity for increased input in community decisions.⁴¹ Although the literature is inconclusive about linking HIAs to specific health outcomes, the benefits provided by this process - increased collaboration and consideration of the potential health impacts of decisions – could improve the County’s ability to make decisions that positively impact the health of residents.

Moreover, given that a one-size-fits-all approach to health policy may not be adequate in addressing health disparities, some planners and researchers have adopted health equity-focused policy tools such as Health Equity Impact Assessments (HEIAs) and Equity Focused Health Impact Assessment Frameworks,^{42,43}. The HEIA framework more intentionally places the objective of health equity at the forefront of policy impact analysis, by identifying unintended potential consequences a policy, program, or initiative may have on vulnerable or marginalized groups. Although this approach is not widely used in the United States, it could help the County illuminate its most urgent health needs and identify how the zoning rewrite could be explicitly used to have an ameliorating impact on health disparities.

If the County decides to pursue an HIA, it will be important for county officials to examine the potential benefits, and decide their own definition of success. Achievable goals could include increased community participation, intentional consideration of the ways in which decisions could impact health disparities, or simply awareness of health issues.

A Mechanism to Determine Future Health Impacts of Zoning

Finally, we recommend the implementation of a mechanism to ensure that health continues to be a core component of zoning in the County after implementation of the rewrite in 2018. One way this could be achieved is to include a section in the County code that requires a health assessment of the zoning ordinance every 10 years or another timespan deemed appropriate. This should allow for policy makers to examine data and gain needed insight for evaluating health impact.

Conclusion

In summation, we believe the comprehensive draft will incorporate important, evidence based, zoning tools that will help create a healthier Prince George's County. We do however, hope that the County will consider our suggestions for strengthening the rewrite, and improving the health of County residents.

¹ Maantay J. Zoning, equity, and public health. *American Journal of Public Health*. 2001; 91(7): 1033–1041.

² Casagrande SS, Whitt-Glover MC, Lancaster KJ, Odoms Young AM, Gary TL. Built environment and health behaviors among African Americans: a systematic review. *American Journal of Preventive Medicine*. 2009; 36(2): 174–181.

³ Frank LD, Saelens BE, Powell KE, Chapman JE. Stepping towards causation: do built environments or neighborhood and travel preferences explain physical activity, driving, and obesity? *Social Science & Medicine*. 2007; 65(9):1898-914.

⁴ Rossen LM, Pollack KM. Making the connection between zoning and health disparities. *Environmental Justice*. 2012;5(3):119-27.

⁵ Abercrombie LC, Sallis JF, Conway TL, Frank LD, Saelens BE, Chapman JE. Income and racial disparities in access to public parks and private recreation facilities. *American journal of preventive medicine*. 2008;34(1):9-15.

⁶ Block JP, Scribner RA, DeSalvo KB. Fast food, race/ethnicity, and income: a geographic analysis. *American Journal of Preventive Medicine*. 2004 Oct 31;27(3):211-7.

⁷ Prince George's County Health Department. PGC health zone. Available from:

<http://www.pgchealthzone.org/index.php?moduledashboard&alias=alldata&localeId=1260>

⁸ Frank LD, Schmid TL, Sallis JK, Chapman J, Saelens BE. Linking objectively measured physical activity with objectively measured urban form: findings from SMARTRAQ. *American Journal of Preventative Medicine*. 2005; 28(2):117-25.

⁹ Mumford KG, Contant CK, Weissman J, Wolf J, Glanz K. Changes in physical activity and travel behaviors in residents of a mixed-use development. *American Journal of Preventative Medicine*. 2011;41(5):504-7.

¹⁰ Frank LD, Andresen MA, Schmid TL., Obesity relationships with community design, physical activity, and time spent in cars. *American Journal of Preventative Medicine*. 2004;27(2):87-96.

¹¹ Besser LM, Dannenberg AL. Walking to public transit: steps to help meet physical activity recommendations. *American Journal of Preventative Medicine* 2005;29(4):273-80.

¹² The Capital Area Food Bank. The Capital Area Food Bank in Prince George's County. <http://www.capitalareafoodbank.org/wp-content/uploads/2011/01/PG-Fact-Sheet.pdf>. Accessed December 12, 2017.

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- ¹³ Capital Area Food Bank. CAFB Hunger Heat Map. <http://cafb.maps.arcgis.com/apps/MapJournal/index.html?appid=b4906ac11bf74cd781c5567124be9364>. Accessed December 12, 2017.
- ¹⁴ Alaimo K, et. al, Fruit and vegetable intake among urban community gardeners. *Journal of Nutrition Education and Behavior* 2008 Mar-Apr;40(2):94-101. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/18314085>
- ¹⁵ Pitts, Jilcot, Q, Wu, et. al. Associations between access to farmers' markets and supermarkets, shopping patterns, fruit and vegetable consumption and health indicators among women of reproductive age in eastern North Carolina, U.S.A. *Public Health Nutrition*. 2013 Nov;16(11):1944-52. <https://www.ncbi.nlm.nih.gov/pubmed/23701901>
- ¹⁶ Berke E, Koepsell T, Moudon A, Hoskins R, Larson E. Association of the built environment with physical activity and obesity in older persons. *American Journal of Preventative Medicine*. 2007; 97(3): 486-492.
- ¹⁷ Noyes P, Fung L, Lee KK, Grimshaw VE, Karpati A, DiGrande L. Cycling in the city: an in-depth examination of bicycle lane use in a low-income urban neighborhood. *Journal of Physical Activity and Health*. 2014;11(1):1-9.
- ¹⁸ Freeman L, Neckerman K, Schwartz-Soicher O, Quinn J, Richards C, Bader M et al. Neighborhood walkability and active travel (walking and cycling) in New York City. *Journal of Urban Health*. 2013; 90(4): 575-585.
- ¹⁹ Smith KR, Brown BB, Yamada I, Kowaleski-Jones L, Zick CD, Fan JX. Walkability and body mass index density, design, and new diversity measures. *American Journal of Preventative Medicine*. 2008;35(3):237-44.
- ²⁰ Sallis J, Saelens B, Frank L, Conway T, Slymen D, Cain K et al. Neighborhood built environment and income: examining multiple health outcomes. *Social Science and Medicine*. 2009; 68(7): 1285-1293.
- ²¹ Brown BB, Yamada I, Smith KR, Zick CD, Kowaleski-Jones L, Fan JX. Mixed land use and walkability: variations in land use measures and relationships with BMI, overweight, and obesity. *Health and Place*. 2009;15(4):1130-41.
- ²² Morrison DS, Thomson H, Petticrew M. Evaluation of the health effects of a neighbourhood traffic calming scheme. *Journal of Epidemiology & Community Health* 2004;58:837-840.
- ²³ Sturm R, Cohen D. Proximity to urban parks and mental health. *The Journal of Mental Health Policy and Economics*. 2014; 17(1): 19-24.
- ²⁴ Zhang Y, Van Dijk T, Tang J, Van Den Berg AE. Green space attachment and health: a comparative study in two urban neighborhoods. *International Journal of Environmental Research and Public Health*. 2015; 12(11): 14342-63.
- ²⁵ Zlot AI, Schmid TL. Relationships among community characteristics and walking and bicycling for transportation or recreation. *American Journal of Health Promotion*. 2005;19(4):314-7.
- ²⁶ Selmi W, Weber C, Rivière E, Blond N, Mehdi L, Nowak D. Air pollution removal by trees in public green spaces in Strasbourg city, France. *Urban Forestry & Urban Greening*. 2016; 17: 192-201.
- ²⁷ Reduce Urban Heat Island Effect. United States Environmental Protection Agency. Available from: <https://www.epa.gov/green-infrastructure/reduce-urban-heat-island-effect>
- ²⁸ Green Scaping: The Easy Way to a Greener, Healthier Yard. United States Environmental Protection Agency. Available from: https://www.epa.gov/sites/production/files/2014-04/documents/greenscaping_-_the_easy_way_to_a_greener_healthier_yard.pdf
- ²⁹ Coombs KC, Chew GL, Schaffer C, Ryan PH, Brokamp C, Grinshpun SA et al. Indoor air quality in green-renovated vs. non-green low-income homes of children living in a temperate region of US (Ohio). *Science of the Total Environment*. 2016;554-555:178-85.
- ³⁰ Colton MD, Laurent JG, MacNaughton P, Kane J, Bennett-Fripp M, Spengler J et al, Health benefits of green public housing: associations with asthma morbidity and building-related symptoms. *American Journal of Public Health*. 2015;105(12):2482-9.
- ³¹ Singh A, Syal M, Grady SC, Korkmaz S. Effects of green buildings on employee health and productivity. *American Journal of Public Health*. 2010;100(9):1665-8.
- ³² Maryland-National Capital Park and Planning Commission, Evaluation and Recommendations Report: Countywide Listening Sessions. January, 28-29, and February 10, 2015. Available from: <http://zoningpgc.pgplanning.com/wp-content/uploads/2014/11/PGC-Listening-Session-Notes-FINAL-2-26-15.pdf>
- ³³ Prince George's County Zoning Rewrite: Listening Session Notes. Mitchellville, MD. June 3, 2014. Available from: http://zoningpgc.pgplanning.com/wp-content/uploads/2014/11/June_3-PG_Zoning_Listening_Session_Summary.pdf

³⁴ College Park, Maryland, Municipal Code § 87-21

³⁵ Food Retail Expansion to Support Health, NYC Resources 2013. Available from:
<http://www.nyc.gov/html/misc/html/2009/fresh.shtml>

³⁶ Li F, Harmer P, Cardinal BJ, Bosworth M, Johnson- Shelton D. Obesity and the built environment: does the density of neighborhood fast-food outlets matter? *American Journal of Health Promotion*. 2009;23(3):203-9.

³⁷ Plan Prince George's 2035 Approved General Plan. The Maryland-National Capital Park and Planning Commission, May 6, 2014. Available from:
http://www.pgplanning.org/Resources/Publications/Plan_Prince_George_s_2035.htm

³⁸ Mair JS, Pierce MW, Teret SP. The Use of Zoning to Restrict Fast Food Outlets: A Potential Strategy to Combat Obesity, The Center for Law and the Public's Health at Johns Hopkins & Georgetown Universities. October, 2005. Available from: <http://www.publichealthlaw.net/Zoning%20Fast%20Food%20Outlets.pdf>

³⁹ Thornton RL, Greiner A, Fichtenberg CM, Feingold BJ, Ellen JM, Jennings JM. Achieving a healthy zoning policy in Baltimore: results of a health impact assessment of the transform Baltimore zoning code rewrite. *Public Health Reports*. 2013; 128(6_suppl3): 87–103.

⁴⁰ Dannenberg A. Effectiveness of health impact assessments: a synthesis of data from five impact evaluation reports. Centers for Disease Control and Prevention. 2016. Available from:
https://www.cdc.gov/pcd/issues/2016/15_0559.htm

⁴² Harris-Roxas B, Maxwell M, Thornell M, Peters S, Harris P. From description to action: using health impact assessment to address the social determinants of health. *Determining the future: a fair go & health for all*. Melbourne: Connor Court Publishing. 2011:119-30.

⁴³ Mahoney M, Simpson S, Harris E, Aldrich R, and Stewart Williams J. (2004). Equity Focused Health Impact Assessment Framework. The Australasian Collaboration for Health Equity Impact Assessment (ACHEIA). 2004. Available from: http://hiaconnect.edu.au/old/files/EFHIA_Framework.pdf