



HOWARD COUNTY ENVIRONMENTAL SUSTAINABILITY BOARD
3430 Court House Drive ■ Ellicott City, Maryland 21043 ■

Ned Tillman, Chair

http://www.howardcountymd.gov/OES/OES_Board.htm

2012 Annual Report of the Howard County Environmental Sustainability Board

To the Howard County Executive and County Council:

It is my privilege to submit to you the 2012 Annual Report of the **Howard County Environmental Sustainability Board**. It includes a summary of our activities as well as the highlights of the **Office of Environmental Sustainability** which is a separate but closely intertwined organization that reports directly to the Executive.

We believe that the county has developed an effective process for pursuing the goals of the 2007 Howard County Commission on the Environment and Sustainability. Howard County has clearly made progress in the area of becoming more sustainable. The Board commends you for your leadership in this area. We believe that in addition to the high-profile projects that the county has taken that there is a culture of sustainability that is growing throughout the rank and file of county employees. This is encouraging because we still have a long and very important way to go. We appreciate and strongly encourage your ongoing leadership and support in helping all aspects of our community to embed good sustainability practices into everything we do.

This year, the Board took on added responsibilities when the County Council passed Resolution No. 79-2011 which requires the board to review the environmental assessment or impact statement developed through the NEPA process for the CSX Intermodal facility.

We welcome the opportunity to meet with you collectively and individually to discuss this report and our ongoing role in advising you over the next year on the major issues facing the county in the future. Please select a time to meet and discuss the report and our plans for the future. We will continue to meet on the second Thursday of the month at the Robinson Nature Center and certainly welcome your participation if you would like to join us.

Sincerely,

Ned Tillman, Chair
Environmental Sustainability Board
Of Howard County



HOWARD COUNTY OFFICE OF ENVIRONMENTAL SUSTAINABILITY
3430 Court House Drive ■ Ellicott City, Maryland 21043 ■

Joshua Feldmark, Director

<http://www.livegreenhoward.com>

2012 Annual Report of the Howard County Office of Environmental Sustainability

To the Howard County Executive and County Council:

For the past three years now, as part of the Environmental Sustainability Board's Annual Report, the Office of Environmental Sustainability has included our own report highlighting the accomplishments over the previous year.

With this report we are again continuing that practice to relay the message that the missions of the Office and the Sustainability Board are closely intertwined. Both are working every day to create a culture of sustainability throughout Howard County and focus all areas of County government on the many facets of sustainability. Combining the two reports gives the clearest vision of the work of both institutions, which while separate entities are part of the same whole.

Should you have any questions or comments, I would welcome the opportunity to discuss the activities of the Board and Office.

Sincerely,

A handwritten signature in black ink that reads "Joshua Feldmark".

Joshua Feldmark
Director

The Howard County Environmental Sustainability Board

2012 Annual Report to the Executive and County Council

A. Introduction

The Environmental Sustainability Board (the Board) was created in 2008 and currently consists of the following members:

Ned Tillman, Chair	Sherman Howell	Sandi Olek
Cathy Hudson	Zack Shariff	Chein-Chi Chang
Betsy Singer	Georgia Eacker	Christina Mudd
Mark Southerland	Naureen Elahi, Student	

Josh Feldmark, Director of the Office of Environmental Sustainability, is the Executive Secretary of the Board. Other ex-officio members include Jim Caldwell, Lindsay DeMarzo, Susan Overstreet, Elissa Reineck, and Laura Miller. The board also met with other members of the administration (e.g., Jim Irvin, Marsha McLaughlin, John Byrd, Evelyn Tomlin, Howard Salzman, Kathy Zimmerman as appropriate) and the community (CA, LWV, PATCH, MDOT, MDNR) to ensure we are in contact with the key people on relevant topics of interest.

The primary responsibility of the Board is to advise the Executive and County Council on matters related to environmental sustainability and track the county's progress towards goals initially established in 2007 by the Commission on Environmental Sustainability. As part of that duty, the board is submitting this 2012 Annual Report of our past year's activities through April of 2011 and the county's progress relative to sustainability initiatives. This document will be distributed to you and the public at large.

This report is in 3 parts:

- Summary of Activities of the Board
 - a. Introduction
 - b. The *Year of Stormwater* in Howard County
 - c. Energy Efficiency and Conservation
 - d. Green Infrastructure Network
 - e. Howard County Healthy Communities Task Force
 - f. CSX County Council Resolution
 - g. Genuine Progress Indicators
 - h. Board Governance Policy
- Key County Sustainability Initiatives compiled by the Office of Environmental Sustainability
- Appendices
 - 1. DPZ letter on SW waivers
 - 2. ESB Resolution – Model Stormwater Neighborhoods
 - 3. ESB Resolution – Green Infrastructure Network

4. Testimony of Healthy Community Indicators
5. County Council Resolution on CSX
6. ESB Governance Policy

B. The Year of Stormwater in Howard County

Stormwater is the polluted runoff that occurs when rain falls on impervious surfaces (such as buildings, parking lots, streets, and compacted lawns) and is piped directly into our streams and lakes, without the chance for it to seep into the soil as it would naturally. When water seeps into the soil, pollutants are filtered out, the water recharges the groundwater table, and then it slowly feeds the streams throughout the year supporting a normal ecological system. When this does not happen all the pollutants and a great deal of silt and top soil are scoured from stream banks and dumped into our water bodies damaging our water supplies and the life in the streams and lakes.

Creating a comprehensive watershed restoration strategy that manages stormwater was a primary recommendation of the 2007 Commission on Environmental Sustainability. In 2009, the ESB worked closely with the HC Department of Planning and Zoning as they prepared a Water Resources Element (WRE) of the Comprehensive Plan that adequately considered stormwater. In 2010, the ESB advised the HC DPZ on the new state stormwater regulations for new development and the proper consideration of waivers for grandfathered projects. In 2011, the ESB agreed to focus on stormwater as the primary board activity for the year.

In many ways, 2011 could be considered the “year of stormwater” as governmental and public attention was focused on this issue as a result of the new U.S. EPA and Maryland Department of the Environment (MDE) requirements for managing stormwater in the total maximum daily load (TMDL or “diet”) process for restoring the Chesapeake Bay. This TMDL includes numeric targets for reducing the amounts of nitrogen, phosphorus, and sediment being delivered by our stormwater. For the first time, these TMDL targets are being incorporated into the new (currently draft) stormwater permit that HC must comply with as part of the Clean Water Act. This new permit represents a great challenge for Howard County both structurally and financially. There is a great deal of community based work necessary as well as funds that must be identified to meet the challenge. Because of the new urgency to meet strict stormwater permit requirements and the greater visibility of the issue with the public, the ESB undertook the following stormwater activities in 2011:

1. Green Screen student video contest on stormwater. At GreenFest on April 2, 2011, the ESB sponsored its second environmental video contest for county students. This year all entries addressed stormwater . Two winners each received a cash award: one for a 30-second Public Service Announcement and the other for a 3-minute Information Video.
2. People Acting Together in Howard (PATH) meeting on stormwater. In 2011, ESB sponsored a public educational meeting with PATH to discuss the interaction of stormwater solutions and green jobs for our youth. PATH is a multi-racial, multi-faith, strictly non-partisan, County-wide citizens’ organization, rooted in local congregations and other non-profit associations.
3. League of Women Voters forum called “Slow the Flow.” On October 18, 2011, ESB sponsored a “Slow the Flow” forum on stormwater that included speakers from Howard County, Columbia Association,

and other community initiatives.

4. Department of Planning and Zoning (DPZ) update on stormwater waivers. In 2011, DPZ met with the ESB for the second time to update the approvals and denials of new development applying for waivers of the current stormwater regulations. These new regulations require Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP), but may be waived for development applications that were received prior to promulgation of the state regulations in May 2010. Their letter report is in the Appendix.
5. Department of Public Works briefing on floodplain mapping. Howard Saltzman, director of the Stormwater Management Division of DPW, briefed the ESB on the recently completed update to floodplain maps for Howard County.
6. New stormwater manager for Howard County. In October 2011, the Office of Environmental Sustainability with the encouragement of the board, hired a stormwater manager to supplement current stormwater efforts and facilitate coordination throughout county government. In this position, Jim Caldwell, regularly meets with the ESB and receives their advice on stormwater issues. (ESB testified in support of the stormwater manager position earlier in the year during budget hearings.)
7. ESB resolution on model stormwater management neighborhoods. In December 2011, Jim Irvin, Director of DPW, met with the ESB and outlined his concept of creating one or more model neighborhoods where the widest range of stormwater management practices are implemented in conjunction with other infrastructure repairs needed in the communities. The goal of this effort would be to effect a culture change in established Howard County neighborhoods that were constructed without concern for stormwater management. The ESB agreed to a resolution in support of this concept (see Appendix).
8. Feasibility study for “utility fee” to fund stormwater management. In its 2009 retreat with the County Executive, the ESB introduced the concept of a user fee on stormwater runoff from residential and commercial properties, as the most effective means of complying with the new stormwater regulations. In late 2011, Howard County government initiated a feasibility study of this concept.

The board will continue to focus on stormwater issues as one of the most important activities that our community can do on a county level.

C. Energy Efficiency and Conservation

The ESB continues to monitor progress toward the recommendations and goals established by the 2007 Commission on Environment and Sustainability and those recommendations provided by the 2009 Energy Task Force of the ESB. The table below summarizes the recommendations of the Task Force and provides an update and status report. In addition to the continued support for county energy efficient initiatives, the ESB worked with the County Energy Manager to help develop a strategy for improved planning to facilitate energy efficiency and sustainability in county facilities.

Recommendation	Action	Status	Target Completion Date
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	Taken		
1. Green Central Station Energy Content to link to other federal, state, and local resources	Yes	Project Complete.	No further action
2. Community-wide Residential Energy Efficiency and Renewable Energy Pilot Projects	Yes	Proposal submitted to the State for funding was not accepted. However, separate funding for residential energy audits was identified and the program was initiated in 2011.	No further action
3. Create financing for residential, non-profit, and commercial energy saving improvements.	Yes	Charter for Howard County does not allow the County to establish revolving loan programs on its own. The county is supporting State-Level initiatives.	No further action
4. Super Energy Savers - Property Tax Incentive	No	Due to the current budget scenario, the Task Force recommended that this action be deferred until FY 2011	Deferred
5. Commercial Sector Sustainability and Energy Forum and Partnership, including networking and training opportunities.	Yes	Howard County Green Business Council was formed in 2009 and is now up and running.	Ongoing
6. Install solar PV systems and encourage the use of a diverse selection of renewable technologies on HCPSS and County facilities	Yes	County is moving ahead with landfill gas to energy project at Alpha Ridge and has completed a solar project on the site of the former New Cut landfill, adjacent to Worthington ES.	Ongoing
7. Government Facilities and School System Energy Efficiency – Performance Contracts and Facility Management, includes development of a formal policy for EPCs and ongoing energy management.	Yes	An Energy Performance Contract was established for a number of facilities. Additional opportunities identified by the county energy manager were presented to various Department Heads for consideration.	Ongoing
8. Integrate Howard County commuter and	No		

<p>local bus systems into the Washington Smart Trip system. Also consider participating in the Washington Council of Government transportation planning discussions.</p>			
<p>9. Establish a strategy for influencing national legislation on transportation priorities and funding. Work with Maryland Congressional Leaders to identify critical transportation and transit programs.</p>	<p>Yes</p>	<p>County Executive has taken a leadership role in the Baltimore Metropolitan Council's Regional Sustainability Committee</p>	<p>Ongoing</p>
<p>10. County telecommuting programs: lead by example, and partnership. The county would institute a business partnership (possibly led by the Green Business Council) on telecommuting, where they ask businesses to commit to specific telecommuting policies</p>	<p>No</p>		
<p>11. Consider developing grid-to-vehicle, or vehicle-to-grid pilot project at high visibility locations, Columbia Mall, or Howard Community College</p>	<p>Yes</p>	<p>Howard County has installed five Semaconnect EV charging stations with funds provided under the Maryland Energy Administration and ARRA-funded electric vehicle infrastructure program (EVIP).</p>	<p>Ongoing</p>
<p>12. Develop additional alternative fueling stations in Howard County. Specifically consider biodiesel as a priority and Ethanol-85.</p>	<p>No</p>		

D. Green Infrastructure Network

A Green Infrastructure Network is an interconnected network of waterways, wetlands, woodlands, wildlife habitats and other natural areas; greenways, parks, open space and other conservation lands; and working farms and forests that support native species, maintain natural ecological processes, sustain air and water resources, and contribute to the health and quality of life for communities and people.

As a community's green infrastructure is an important component of being a sustainable community and because a community has limited resources to protect such land, in early 2010 Howard County's Department of Planning and Zoning embarked on a project to map out the important hubs (large acres of open space with contiguous blocks of interior forest being an essential component) and the corridors of linear woody buffers or stream corridors that connect the hubs to each other.

The ESB was asked to provide an advisory committee who provided input and recommendations throughout the plan's development. Representatives of CA and the Howard County Conservancy were also added. Over the last 2 two years this committee worked with the county planning team to define and refine what our Green Infrastructure Network Plan would look like. This effort culminated in the ESB co-sponsoring with the county a workshop on January 12, 2012, introducing the plan and obtaining feedback from the public.

The GIN Plan will enable all members of our community in Howard County to consider important natural resources when preparing the General Plan, transportation plans, watershed plans and community plans; making decisions about zoning and development proposals; acquiring land for parks and public facilities; and obtaining agricultural, environmental and other land preservation easements. More information about this plan, including an interactive mapping tool, can be found at <http://livegreenhoward.com/land/green-infrastructure/>.

After the ESB reviewed the plan, the board passed a resolution in support of it (see Appendix).

E. Howard County Healthy Communities Task Force

The Howard County Healthy Communities Task Force was created by and works under the auspices of the Howard County Environmental Sustainability Board. The mission of Task Force is to develop an approach for incorporating health considerations into land-use planning decisions in Howard County. Health can be included in planning decisions through various approaches, such as by:

- Identifying specific visions, goals, or activities related to health in general and master plan documents:
- Reviewing and evaluating specific proposed projects or plans for their impacts on health;
- Cross-training agency staff in Howard County in health impact assessment; and
- Monitoring community health data to understand key health needs and concerns that could be addressed through systematic and strategic planning decisions.

Task Force members include staff from the Howard County Department of Planning and Zoning, Healthy Howard, Inc., the National Center for Healthy Housing, the Local Initiatives Support Corporation (LISC); and a Howard County resident who is the former director of the National Children's Study at the National Institutes of Health.

In 2010 and 2011, the Task Force worked to incorporate health as a core vision element in the Howard County General Plan by participating on the General Plan Task Force (see Attachment A for testimony presented to the County Planning Board). Additionally, the Task Force began an assessment of the extent to which the county is already considering health during its planning and permitting efforts, and identifying opportunities for strengthening the emphasis on the health impacts of planning.

In 2012, Task Force members will serve as partners to the National Center for Healthy Housing in its health impact assessment (HIA) of the Baltimore-Washington Rail Intermodal. The potential impacts of siting the facility at each of the alternate sites will be assessed under the environmental impact assessment process mandated by the National Environmental Policy Act (NEPA). With a grant from the Health Impact Project, NCHH will conduct the HIA in parallel with the NEPA process, and will aim to use the findings and recommendations of the HIA to improve both the consideration of health and the implementation of specific mitigation measures to protect health in the final project decisions.

F. County Council CSX Resolution

The HC County Council passed Resolution No. 79-2011 (in Appendix) in the Spring of 2011 requiring that the ESB review the work of the Maryland DOT and CSX in their pursuit of selecting a site for the Intermodal facility that they plan to build in or near Howard County. Members of the ESB have attended public meetings and we have had several ESB meetings where representatives from these organizations briefed us on their plans and progress. The ESB wants to better understand how CSX is planning to conduct their environmental study and we have asked them for their “impact assessment methodology” and NEPA/EIS documents from other projects that they have performed.

G. Genuine Progress Indicators

The ESB invited the State of Maryland Office for a Sustainable Future, MD-DNR in to present their progress on predicting trends and impacts with a Genuine Progress Indicator approach v traditional GDP approach. This approach takes into account a wider variety of impacts and includes Natural Capital as well as Built Capital items. It is a more complete way to monitor impacts and is a better way to track many of the issues related to long term sustainability of our community. ESB recommended that the county should look into this approach as well and DPZ is pursuing an evaluation of how this could be done with county data.

H. Board Governance Policy

ESB drafted a Governance Policy in conjunction with the Office of Law. A copy of this document is in the Appendix.

PART II

Key County Sustainability Initiatives Office of Environmental Sustainability

More than four years ago, on the recommendation of the Commission on the Environment and Sustainability, County Executive Ulman created an Office of Environmental Sustainability. By design, the Office facilitates a culture of sustainability throughout County Government. While many activities originate within the Office, many more originate throughout government and throughout the community. The most fundamental role of the Office is to give sustainability the logistical, financial and political support needed to make it a high priority. Therefore, everything from recycling to fleet management to strategic land preservation have seen heightened attention and support through the work of both the Office and the Sustainability Board.

Though not an exhaustive inventory of our environmental sustainability activities, we have selected a broad cross section that represents initiatives of the Office of Environmental Sustainability.

CLIMATE ACTION PLAN



Our Climate Action Plan was completed in April of 2010 and since then we have worked systematically to reduce our carbon footprint and save the County money along the way. We have spent the later part of this year compiling the data to assess our progress since the Climate Action Plan. The plan committed us to achieving a 7% reduction of greenhouse gas emissions by 2012. While it is still too early to say definitively, we are confident that by next annual report we will be able to show achievement of the goal

Energy Efficiency – As reported in last year’s annual report, Howard County received an Energy Efficiency Block Grant of \$2.6 million from the US Department of Energy for a variety of energy efficiency projects. The projects in this program include the hiring of an energy manager, high efficiency field lighting at Cedar Lane Park, efficient lighting at park and library facilities, two electric vehicles, a sub-metering and energy dashboard for county facilities, and a home energy audit program for County residents.

Phase I of the energy audit program has been completed. We were able to offer free home energy audits to over 1,200 Howard County homeowners providing them with valuable information and resources for energy saving potential within their homes. Phase II will begin soon and in this phase we will work to analyze the data from all of the energy audits performed so that we may be able to produce lists of best management practices down to specific home type and locations and in order to help guide future policy

Finally, energy team with representatives from throughout County government has been meeting regularly to do site audits and "treasure hunts" to identify energy saving strategies. The team has worked in the Gateway building, Recreation & Parks Headquarters and is preparing to work at Florence Bain Senior Center.

LAND & WATER

Green Infrastructure Network Plan - As discussed previously, a green infrastructure network plan was not only a key recommendation of the Commission, but also a



desired outcome identified at the Board/Executive retreat. Green Infrastructure is an inter-connected network of: waterways, wetlands, woodlands, wildlife habitats and other natural areas; greenways, parks, open space and other conservation lands; and working farms and forests that support native species, maintain natural ecological processes, sustain air and water resources, and contribute to the health and quality of life for people and communities.

We are pleased to report that the complete green infrastructure map is completed. You can check it out [here](#) and see all of the criteria we used as well as see what hubs and corridors are near your home or office.

Plant(it)Green - As you will recall from last year's report, the Plant(it)Green program began by bringing together our primary tree planting initiatives on non-public property. This included the Private Forest Conservation Establishment (PFCE) program and Stream (Re)Leaf.

20 Minute Cleanup - In the grand scheme of environmental issues confronted by our community, litter can seem like a minor problem. However, litter is often the first thing residents and visitors assess when determining the quality of life in the community. If a place has trash strewn



throughout roadways and open spaces, that community is seen as "dirty". The Office of Environmental Sustainability has worked with Public Works, Recreation & Parks and the Department of Corrections to support existing litter pick up programs such as adopt-a-road, community clean-up days, and minimum security inmate litter pick-ups. Last year, we added the 20 Minute Cleanup. Based on a Toronto program, we picked a designated day in

the spring and asked people to gather folks within their community, office, school, senior center, or religious congregation, and spend 20 minutes that day picking up trash nearby. The concept is relatively simple but gives people an entryway into volunteering to help beautify and protect our quality of life in Howard County. 2010 was our first year running the program and we had about 30 different groups with just over 1,000 people participated. In 2012 20 Minute Cleanup, had 40 groups with nearly 2,000 people participating.

EDUCATION & OUTREACH



Howard County Green Business Council (HCGBC) - HCGBC was established in the Spring of

2009 by County Executive Ken Ulman to support green sector businesses throughout Howard County. HCGBC established itself as a non-profit 501(c)6 founded by a group of green sector business executives. A representative from the Office of Environmental Sustainability and the Economic Development Authority serve on the organizational board.

The HCGBC mission is to encourage and facilitate environmental social and economic business practices in Howard County through education, outreach, networking and advocacy. HCGBC strives to support existing green sector companies located in the community, to develop an environment that will draw new green sector companies to Howard County, and to help raise the level of sustainable business practices used by its members and others within the community.

It is the hope of HCGBC that by joining together, the green businesses of Howard County can become a recognized center for green goods and services. The Office continues to work as an active partner in this effort.

GreenFest - Howard County's fifth annual GreenFest was once again a huge success. This year saw nearly 100 vendors and nearly 3,000 people circulating and learning the many ways to live more sustainably. This year the event focused on minimizing waste, learning to compost, reusing and donating items, alternative energy, rainwater collection and reuse, and organic and local food.

Green Central Station - Green Central Station (www.livegreenhoward.com) has continued to thrive and grow. Of particular note are the social media components including regular blog posts, Facebook/Twitter, and a constant contact newsletter which has recruited volunteers for everything from a stream clean-up to participation in Stream (Re)Leaf. Green Central Station now averages approximately two hundred hits per day and continues to be a resource for everyone from residents and businesses looking to incorporate green practices into their daily activities, to local environmentalists looking to connect with others. We have begun the process of enhancing green central station and look forward to unveiling an even better site next year.

Appendices

1. ESB Resolution – Model Stormwater Neighborhoods
2. ESB Resolution – Green Infrastructure Network
3. Testimony of Healthy Community Indicators
4. County Council Resolution on CSX
5. ESB Governance Policy

1. ESB Resolution - Model Stormwater Management Neighborhoods Resolution

The Howard County Environmental Sustainability Board hereby resolves that:

- There is an urgent need for innovative approaches to stormwater management to meet the challenging requirements of the County's new NPDES MS4 (stormwater) permit and Chesapeake Bay TMDL WIP (watershed implementation plan). These requirements include unprecedented levels of treatment of impervious surfaces and reductions in nutrient and sediment loadings to downstream waters.
- The County should undertake an initiative to create one or more model neighborhoods where the widest range of stormwater management practices are implemented in conjunction with other infrastructure repairs needed in the communities. Specifically, the County should identify one or more communities that agree to implement a comprehensive suite of stormwater practices, including Environmental Site Design features (e.g., pesticide and fertilizer source reduction, downspout disconnection, cisterns, dry wells, raingardens, grassy swales, and pervious pavement). Ideally, this initiative should involve the landscaping business community which may be integral to implementing stormwater practices on private property.
- The goal of this effort is to effect a culture change in established Howard County neighborhoods that were constructed without concern for stormwater management. Creating one or more model stormwater management neighborhoods will "show what it looks like" and demonstrate that such practices can be acceptable and successful elsewhere in the County.

2. ESB Resolution - Green Infrastructure Network

The Howard County Environmental Sustainability Board hereby resolves that:

- There is significant merit in mapping out the Tier Three Hub areas and the 500 ft Corridors as a means to inform all the residents of Howard County of the important resources which are the basis of our current and future economic and human health. These areas need to be protected to ensure the protection of our air, groundwater, surface waters, topsoil, forests and wildlife that are all important to the health of current and future generations.
- The County focus their resources on the most significant parts of this interconnected network and do their best to inform the landowners of the importance of their voluntary stewardship efforts. We recommend that easements be used as much as possible to protect the greatest amount of acreage. We also encourage you to provide incentives for landowners to preserve as much of this fragile network as possible. We believe that significant public and private actions and cooperation is necessary now to achieve a Green Infrastructure Network that will help support our health and our economy now and in the future.

3. Testimony of Healthy Community Indicators

TESTIMONY FOR THE HOWARD COUNTY PLANNING BOARD ON BEHALF OF THE HOWARD COUNTY ENVIRONMENTAL SUSTAINABILITY BOARD

A Recommendation for the Howard County General Plan Update

May 12, 2011

Howard County has a strong commitment to improving environmental quality and quality of life for residents. Health is a critical element in these efforts, and must be considered from the outset of all planning decisions. Data from the 2009 Howard County Community Health Assessment indicate that health disparities and disparities in access to recreational and other facilities persist across Howard County. Incorporating health considerations into the County's planning efforts will ensure that we maximize the value of planning decisions and minimize unintended consequences for Howard County residents.

Background: Neighborhoods can influence health in many ways. First—and perhaps most obvious—is through the physical characteristics of neighborhoods. For example, health can be adversely affected by poor air and water quality or proximity to facilities that produce or store hazardous substances. Individuals living within 30 meters from highways are exposed to higher levels of air pollutants than individuals living at least 200 meters away from highways.¹ Children living within 75 meters of a highway or arterial road are 1.5 times likelier to suffer from asthma and 1.40 times likelier to experience wheezing.² The current research on cardiac health and lung cancer development suggests that exposure to elevated levels of particulate matter is associated with cardiac mortality and lung cancer rates.^{3,4} The existing literature supports policies that place a buffer zone between freeways and new residences, schools, daycares, and other areas where children spend much time.

The availability of services and opportunities in neighborhoods is another general pathway through which neighborhoods can influence health. For example, proximity to supermarkets (which typically sell fresh produce) has been linked with less obesity, while proximity to small convenience stores (which generally do not sell fresh produce) has been linked with more obesity⁵ and smoking.⁶ People are more likely to be physically active when they live in neighborhoods with better resources for exercise, such as parks and walking or jogging trails; with less litter, vandalism and graffiti; and with street patterns that present fewer pedestrian obstacles.^{7,8}

Adults living in walkable neighborhoods—defined as neighborhoods where residents can walk to essential services such as grocery stores and other common destinations—are likelier to meet national physical activity guidelines than those adults living in the least walkable neighborhoods.⁹ In addition, individuals living in mixed-use neighborhoods with easy walking access to shops and other services have a 35% lower risk of obesity,¹⁰ and children are likelier to be physically active when sidewalks are present and destinations are easily accessible.¹¹

Recommendation: The current draft vision statements and guidelines follow the State of Maryland's 12 Smart Growth Planning Visions. These vision statements focus predominantly on environmental quality, and while elements of the visions relate to public health, none of these vision statements directly address health as a key component of the general plan. A separate vision statement that directly

addresses health is the strongest way to ensure health is incorporated and addressed in Howard County's General Plan.

The Board recommends that the Planning Board incorporate a vision statement specifically addressing health in the Howard County General Plan. There is a growing understanding that land use and planning decisions can play a major role in promoting health within communities by increasing access to transportation, healthy foods, and recreational opportunities through neighborhood design. Access to essential services such as grocery stores, health care facilities, and recreational facilities can promote health and positive health behaviors among residents. Although land use planning decisions can result in substantial health impacts, health is typically not considered during general planning processes. The Board encourages the Planning Board to incorporate health into the General Plan in order to ensure long-term commitment to land use planning decisions that positively impact the health and health behaviors of Howard County residents.

Specifically, the Board recommends the Planning Board adopt the following vision statement on health in the Howard County General Plan Update:

“Howard County residents live in healthy, safe communities with clean air and water and equal access to the amenities and services needed to lead a healthy lifestyle. These include access to recreational facilities and safe public spaces, healthy foods, viable transportation options, health services, healthy affordable housing, and educational and employment opportunities.”

The Board also recommends the Planning Board consider strengthening existing vision statements and draft guidelines by incorporating health into the following areas:

- Vision 1 – Quality of Life and Sustainability
 - Amend the vision statement to include health: “A high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable, **healthy** communities and protection of the environment.”
 - Amend Guideline E to include health: “Identify means of improving the quality of life **and health** of special populations.”
- Vision 3 – Growth Areas
 - Include health as one of the benefits of compact development that is communicated with the public (Guideline B).
- Vision 4 – Community Design
 - Incorporate health into the vision statement: “Compact, mixed-use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources, **enhancement of public health**, and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources.”
 - Add a guideline to identify priority health issues that can be addressed through community design, and consider health in the design and implementation of community planning efforts.
- Vision 6 – Transportation
 - Amend Guideline A to include awareness of public health: “Increase public awareness of the relationship between personal vehicle miles traveled and highway congestion, air quality, greenhouse gases, energy independence, **and negative health outcomes**, as

well as how more compact growth patterns and alternate modes of travel can help achieve a more environmentally healthy balance **and improve public health.**

- Vision 7 – Housing
 - Add a guideline to identify policies to ensure housing is safe and healthy for residents.

Conclusion: The County has an opportunity to ensure that its land use decisions positively impact the health and health behaviors of Howard County residents. We recommend that the Planning Board incorporate a health vision statement and embed health within numerous existing vision statements and guidelines to ensure health is a prime consideration in the county’s planning efforts. Members of the Environmental Sustainability Board’s Healthy Communities Task Force are available to assist the Planning Board if additional information is needed. Please contact Rebecca Morley at rmorley@nchh.org or 443-539-4159.

¹ Brugge D, Durant JL, Rioux C. Near-highway pollutants in motor vehicle exhaust: a review of epidemiologic evidence of cardiac and pulmonary health risks. *Environmental Health*. 2007;6.

² McConnell R, Berhane K, Yao L, et al. Traffic, susceptibility, and childhood asthma. *Environ Health Perspect*. 2006;114(5):766–772.

³ Brugge D, Durant JL, Rioux C. Near-highway pollutants in motor vehicle exhaust: a review of epidemiologic evidence of cardiac and pulmonary health risks. *Environmental Health*. 2007;6.

⁴ Holguin F, Tellez-Rojo MM, Hernandez M, et al. Air pollution and heart rate variability among the elderly in Mexico City. *Epidemiology*. 2003;14(5):521–527.

⁵ Morland K, Diez Roux AV, Wing S. Supermarkets, other food stores, and obesity: The Atherosclerosis Risk in Communities Study. *Am J Prev Med*. 2006;30(4):333-339.

⁶ Chuang Y, Cubbin C, Ahn D, Winkleby MA. Effects of neighbourhood socioeconomic status and convenience store concentration on individual level smoking. *Tob Control*. 2005;14(5):337.

⁷ Heinrich K, Lee R, Suminski R, et al. Associations between the built environment and physical activity in public housing residents. *Int J Behav Nutr Phys Act*. 2007;4(1):56.

⁸ Giles-Corti B, Donovan RJ. The relative influence of individual, social and physical environment determinants of physical activity. *Soc Sci Med*. 2002;54(12):1793-1812.

⁹ Frank LD, Schmid TL, Sallis JF, Chapman J, Saelens BE. Linking objectively measured physical activity with objectively measured urban form - Findings from SMARTRAQ. *Am J Prev Med*. 2005;28(2):117–125.

¹⁰ Frank LD, Andresen MA, Schmid TL. Obesity relationships with community design, physical activity, and time spent in cars. *Am J Prev Med*. 2004;27(2):87–96.

¹¹ Davidson KK, Lawson CT. Do attributes in the physical environment influence children's physical activity? A review of the literature. *Int J Behav Nutr Phys Act*. 2006;3:19–35.

4. County Council Resolution on CSX

County Council of Howard County, Maryland

RESOLUTION NO. 79 -2011

Introduced by: Courtney Watson

Co-sponsored by: Calvin Ball and Jennifer Terrasa

A RESOLUTION requiring the Howard County Environmental Sustainability Board to review the potential environmental impacts of the CSX Intermodal facility being proposed at two sites in Howard County and to make a certain report by a certain date and requesting the County Executive to provide appropriate county resources to support this effort.

WHEREAS, The CSX Corporation is seeking to build an Intermodal facility south of Baltimore; and

WHEREAS, Two of the four proposed sites lie within Howard County; and

WHEREAS, The proposed Intermodal facility would necessarily have an impact on the environment; and

WHEREAS, Environmental protection and stewardship are guiding principles and are among the primary aims of the Howard County government; and

WHEREAS, Section 302 of the Howard County Charter provides that the County Executive shall present to the Council information concerning the business and affairs of the 9 County as the Council by resolution may request, and to recommend such measures for legislative action as he may deem to be in the best interest of the County and to perform such other executive duties as may be required by resolution of the Council; and

WHEREAS, Section 6.600 of the Howard County Code requires the Environmental Sustainability Board, by resolution of the County Council, to review and make recommendations on any matter related to environmental protection, preservation, or sustainability in Howard County.

NOW, THEREFORE, BE IT RESOLVED by the County Council of Howard County, Maryland this day of , 2011 that the County Council requests that the County Executive direct appropriate agencies of County government to assist the Environmental Sustainability Board in reviewing the possible impacts on the adjacent environment of the proposed CSX Intermodal facility at the two sites now under consideration in Howard County;

AND FURTHER BE IT RESOLVED, By the County Council of Howard County, Maryland, that the Environmental Sustainability Board shall report in writing to the County Council on or before September 1, 2011, on the measures the County should take to ensure the environment is protected. The report should delineate possible environmental impacts the County should be aware of, and make recommendations as to how the County can best protect the environment should the Intermodal facility be located in Howard County.

Amendment to Council Resolution No. 79 -2011 BY: Chairperson at the request Legislative Day No. 7 of the County Executive Date: June 6, 2011 Amendment No. 1 *(This amendment specifies which assessment the Environmental Sustainability Board will be reviewing, requests certain presentations to the Board, amends the timing for certain reports to the Council, and clarifies the contents of the report.)*

In the title, in the second line, strike “potential environmental impacts of” and substitute “environmental assessment or impact statement developed through the NEPA process for” and, in the third sentence, strike “by a certain date”. 34 On page 1, in line 20, before “reviewing” insert “monitoring and”. On page 1, strike beginning with “possible” in line 20 down through, and including, “CSX” in line 21 and substitute “environmental assessment or impact statement developed by CSX and/or the Maryland Department of Transportation for the”. On page 1, in line 23, after “that” insert “we request CSX and/or the Maryland Department of Transportation present the findings of the NEPA process to”. On page 1, in line 23, after “Board” insert “and the Board”. On page 1, strike beginning with “in” in line 23 down through, and including, “2011,” in line 24 and substitute “to the Council within a reasonable time after the presentation”. On page 1, strike beginning with “delineate” in line 25 down through, and including, “County.” in line 27 and substitute “prioritize findings of the assessment or impact statement and identify any 20 deficiencies, as well as make any other recommendations or comments that the Board feels is appropriate.”

5. ESB Governance Policy

The Howard County Environmental Sustainability Board Rules of Procedure – Draft 5/15/12

1.00 General

These rules are adopted pursuant to the authority of the Howard County Code, Title II “Administrative Procedures,” Subtitle I “Administrative Procedures Act.”

1.01 *Purpose.* The Howard County Environmental Sustainability Board (ESB) was established in 2008 by the County Council and the members were appointed by the County Executive. The ESB advises the county executive and the county council on sustainability issues and prepares an annual report to the County Executive and County Council.

2.00 Members and Duties

2.01 *Number, Qualifications and Term Limits.* The ESB shall consist of twelve (12) members and one (1) student representative. All members shall be residents of Howard County. The student representative shall be at least 15 years old and serve a one (1) year term. A member shall serve a term of five (5) years.

2.02 *Elections.* The ESB will elect a Chair and a Vice Chair to a single 3-year term. At the end of that term, the Chair and the Vice Chair will step down and a nominating committee will recommend a new slate to be voted on by the ESB. The Vice Chair can stand for election as Chair. The Chair cannot serve two consecutive terms. The nominating committee will consist of the Chair, the Executive Secretary, and one member of the ESB chosen by the ESB. The nominating committee will propose a slate at the April Meeting. A vote will be taken at the May meeting, with a simple majority prevailing. If a majority vote is against the slate, nominations from the floor will be received and another vote will be taken.

2.03 *Chairperson.* The Chairperson shall preside over all meetings of the ESB.

2.04 *Vice Chairperson.* The Vice Chairperson shall have all powers and responsibilities of the Chairperson in his or her absence.

2.05 *Executive Secretary.* The ESB is supported by the Director of the Office of Environmental Sustainability (OES) acting as its Executive Secretary.

2.06 *Quorum; Voting.* A quorum of the ESB shall be present to conduct a meeting. Six ESB members shall constitute a quorum. The vote of the majority present shall be necessary for a decision.

3.00 Meetings

3.01 *Time and Location.* The ESB meets on the second Thursday of the month from 7 to 9. Meetings will be held at the George Howard Building, the Gateway building, the Robinson Nature Center, or at other locations chosen and booked by the Executive Secretary at the direction of the ESB.

3.02 *Notice of Meetings.* The Executive Secretary will publish an agenda prior to the meeting and will post minutes of each meeting on the ESB's website. All meetings are open to the public.

3.03 *Purpose of Meetings.* The ESB will discuss opportunities and concerns raised by the County Executive, the County Council, the Director of OES, and by the members of the ESB. Ad Hoc committees will be set up from time to time to further the mission of the ESB.

If time is of the essence, the Chair will send out the request for a vote by email. Members are requested to respond within 48 hours. Once a majority of votes has been cast in favor or against the request, the chair will share the outcome with the ESB and confirm or deny the request as per the outcome of the vote. The topic and vote will be on the agenda and the outcome summarized at the next meeting.

4.00 Amendments to the Rules of Procedure

4.01 *Amendments.* The ESB or any person may petition for amendments to the Rules of Procedure.

4.02 *Public Hearing and Notice.* The amendments shall be considered at a public hearing or during any meeting separately as a public hearing. Notice of the proposed changes shall be published in two newspapers of general circulation in Howard County at least 30 days prior to the public hearing and shall advertise the date, time, and place of the public hearing, as well as a brief statement sufficient to inform the public of the content of the proposed amendments as required by the "Howard County Administrative Procedure Act," Title II, Subtitle I of the Howard County Code.

4.03 *Opportunity for Public Comment.* Any interested person may provide written or oral comments on the proposed amendments at the public hearing.