



National Center for Healthy Housing

National Center for Healthy Housing
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Planning, Right-of-Way, Environment and Civil Rights
Team Leader
Federal Highway Administration, DelMar Division
U.S. Department of Transportation
300 South New Street, Suite 2101
Dover, DE 19904

Dear Ms. Price,

The purpose of this letter is to outline priority health concerns identified by the National Center for Healthy Housing (NCHH), agency partners, and community members related to the proposed Baltimore-Washington Rail Intermodal Facility. NCHH, a nonprofit corporation based in Columbia, Maryland, is conducting a health impact assessment (HIA) of the proposed facility. HIA is an emerging practice used to inform public policy decisions in various sectors and promote the conditions required for optimal health.^{1,2} The health concerns outlined in this letter emerged as part of the scoping process of the HIA. As part of this scoping process, NCHH hosted three community forums in Jessup, Beltsville, and Elkridge and presented at two additional community meetings. In total, nearly 150 residents and interested stakeholders attended these forums and meetings and provided input on how the proposed facility may affect health.

As you work with the Maryland Department of Transportation and the CSX Corporation on next steps with regard to the National Environmental Policy Act (NEPA) process for the facility, we encourage you to incorporate core health elements into your assessment of the alternative site locations. Typically, environmental analyses conducted as part of the NEPA process already examine the potential impacts of a proposed project on several environmental and social factors with indirect effects on human health. However, available and established health forecasting methods and qualitative methods are only rarely utilized in NEPA practice to examine the impacts of a proposed project on health outcomes. The Council on Environmental Quality (CEQ) explicitly defines health as one of the types of effects that must be considered in an Environmental Impact Statement or Environmental Assessment. The CEQ regulations state that “effects includes ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative,”³ and also instruct agencies to consider “the degree to which the proposed action affects public health or safety” in determining significance.⁴ The use of HIAs to identify health

¹ For more information on Health Impact Assessment, visit <http://www.humanimpact.org/hia>.

² Improving Health in the United States: the Role of Health Impact Assessment. National Academies of Science. 2011

³ 40 C.F.R. 1508.8

⁴ 40 C.F.R. 1508.27

disparities has also been identified a tool for enhancing environmental justice considerations in the NEPA process.⁵

There are a number of opportunities to examine population health status and potential health impacts of the proposed facility through the NEPA process in order to respond to public concerns. First, it is possible to look at the current health status of the potentially affected communities prior to the introduction of the facility, which can help establish a common framework to understand the potential impacts. Some of the indicators that might be examined include overall mortality, key health status indicators such as asthma and heart disease rates, and socioeconomic indicators to examine potential population vulnerabilities. Second, it is possible to use forecasting methods to examine the potential impacts of the facility on health. For example, an air quality analysis for the proposed intermodal facility could include an assessment of changes in PM_{2.5} levels resulting from facility operations and related changes in traffic volumes. Using this exposure data, risk assessment analytic tools and methods routinely used in HIA could estimate a range for health outcomes such as premature mortality attributable to PM_{2.5} resulting from the facility's development and operation. Similar approaches could be used to evaluate changes in health risks such as noise-related sleep disturbance and traffic safety.

In addition to these quantitative existing conditions and forecasting methods, HIA uses qualitative existing conditions data and qualitative forecasting methods to provide valuable data regarding community concerns. The table below outlines the priority health concerns identified by residents and interested stakeholders during our HIA scoping phase and the opportunities for analysis as part of the NEPA process.

Health Determinant	Potential Health Impacts	Opportunities for Analysis
Air Quality	<ul style="list-style-type: none"> ■ Asthma ■ Respiratory Disease ■ Cardiovascular Disease ■ Cancer ■ Premature Mortality 	<ul style="list-style-type: none"> ■ Use established exposure-response functions to predict vehicle- and truck-attributable PM_{2.5} mortality ■ Use established exposure-response functions to predict vehicle- and truck-attributable asthma hospitalizations and emergency department visit rates
Employment	<ul style="list-style-type: none"> ■ Premature Mortality ■ Low Birth Weight ■ Chronic Disease ■ Cardiovascular Disease ■ Mental Health 	<ul style="list-style-type: none"> ■ Conduct quantitative analysis of effects on employment and job quality ■ Use empirical research to qualitatively translate employment effects into health effects
Neighborhood Resources	<ul style="list-style-type: none"> ■ Wealth Creation ■ Access to Community Services and Assets ■ Chronic Disease ■ Physical Activity and Obesity ■ Mental Health ■ Housing Tenure and Displacement 	<ul style="list-style-type: none"> ■ Identify neighborhood infrastructure and other health resources and qualitatively predict effects on the utilization and quality of those resources ■ Use qualitative methods to translate expected changes on neighborhood resources into health effects
Noise	<ul style="list-style-type: none"> ■ Sleep Disturbance ■ Mental Health ■ Chronic Hearing Loss ■ Perceived High Annoyance 	<ul style="list-style-type: none"> ■ Use integrated noise modeling and established exposure-response functions to predict noise-related sleep disturbance and perceived high annoyance

⁵ U.S. Environmental Protection Agency. Environmental Justice Considerations in the NEPA Process. <http://www.epa.gov/compliance/nepa/nepaej/index.html>.

Health Determinant	Potential Health Impacts	Opportunities for Analysis
Traffic Safety	<ul style="list-style-type: none"> ■ Morbidity and Mortality ■ Mental Health ■ Physical Activity and Obesity 	<ul style="list-style-type: none"> ■ Apply summary effect measures relating to changes in traffic to changes in vehicle, pedestrian, and cyclist injury frequency based on a meta-analysis of international studies
Water Quality	<ul style="list-style-type: none"> ■ Flooding and Associated Health Outcomes (e.g. mold and mildew exposure, housing dislocation, and economic burden) ■ Toxin Exposure ■ Cancer ■ Physical Activity and Recreational Water Use 	<ul style="list-style-type: none"> ■ Examine quantitative data related to water quality impacts and qualitatively translate these impacts into health effects

We believe that the inclusion of health as a value in the decision-making process and the NEPA analysis will result in an improved decision with regard to the facility location and site design, as well as an improved public participation process. Incorporating health into the NEPA analysis and decision-making process can help ensure that potential concerns about the project are identified and addressed early on, rather than waiting for them to be raised later in the process when they could be more contentious. Additionally, doing so will help avoid potentially unexpected health consequences and promote project elements that can improve health.

If FHWA makes a determination of significant impact and moves forward with a full Environmental Impact Statement for the proposed intermodal facility, we recommend that you:

1. Include potential direct, indirect, and cumulative health concerns in the scoping phase.
2. Assess any prioritized health concerns identified during scoping, by:
 - a. Conducting new analyses where appropriate;
 - b. Extending existing analyses (e.g., use data on projected vehicle and truck volumes to predict impacts on traffic injuries); and
 - c. Identifying mitigation measures to address any significant health impacts.
3. Include health analyses and potential mitigation measures in the draft Environmental Impact Statement available for public comment.
4. Consider monitoring of future environmental or health outcomes as a mitigation measure where appropriate.

Thank you for your commitment to protecting and promoting health in the decision-making process for the Baltimore-Washington Rail Intermodal Facility. We are prepared to work with you to assist with analytic methods and to identify how our existing efforts in our HIA process can be aligned with the NEPA analysis. Please feel free to contact me at rmorley@nchh.org or 443-539-4159.

Sincerely,



Rebecca Morley
Executive Director
National Center for Healthy Housing

Cc: Brad Smith and Dominic Wicker, Maryland Department of Transportation
Clifford Mitchell and Madeleine Shea, Maryland Department of Health and Mental Hygiene