Maryland State Commission on Environmental Justice and Sustainable Communities

2004 Annual Report

PART I

BACKGROUND

Governor Robert Ehrlich statutorily established the Commission on Environmental Justice and Sustainable Communities, by signing it into law on May 22, 2003. It was previously established by Executive Order on January 1, 2001. The Commission is tasked to examine environmental justice and sustainable communities' issues that may be associated with creating healthy, safe, economically vibrant, environmentally sound communities for all Marylanders in a manner that allows for democratic processes and community involvement. Maryland's approach to Environmental Justice (E.J.) is consistent with the approach advocated by the United States Environmental Protection Agency (EPA). EPA calls for States to address Environmental Justice issues as appropriate and for improvements in efficiency and sustainability in the use of resources and production processes. EPA defines E.J. as,

> *"The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." Fair treatment means that no group of people including a racial, ethnic, or socio-economic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.*

Additionally, Maryland's definition, which builds on EPA's definition, specifically notes that all citizens of the State should expect (1) to be protected from public health hazards and (2) to have access to the socio-economic resources necessary to address concerns about their livelihood and health.

COMMISSION'S ACTIVITIES

During the past three years, the commission has investigated community concerns as they relate to environmental justice and sustainability through meetings, workgroup sessions, public dialogues, hearings and citizens' feedback. Findings of environmental justice concerns within the state of Maryland as well as recommendations for mitigating them were outlined in the commission's 2003 and 2004 Annual Reports to the Governor and Legislature.

One community concern previously expressed to the Commission was the lack of appropriate resources and existing data to assess whether communities in the State may be experiencing environmental justice issues. In an effort to address this concern, the Commission, during the last 18 months, focused its work on research and development of a community profile tool. The tool could potentially be used by stakeholders—community residents, state planners, environmental officials, potential investors, and others to aid in environmental protection and community planning.

At its present stage of development, the community profile tool represents a template of indicators and characteristics still in progress and in the need for extensive peer review, community and other stakeholder input, modifications, and pilot testing, before it can be a fully functional tool. Recommendations for next steps in the development process are outlined in the Commission's Community Profile Tool Development Report contained in Part II of this annual report.

The Commission's Community Profile Tool Development Report documents the work of the Commission in developing a community profile tool to assist with addressing environmental justice and sustainability issues in Maryland. The report outlines the purpose of this effort, methodology used, proposed benefits, concerns, limitations, and recommendations for actions in reaching a final user-friendly product.

COMMISION'S ACTION ITEMS FOR 2005

The major activities of focus for the commission in the upcoming year will be to:

- Provide recommendations to the Governor for new commissioners to replace current members whose terms have expired and show no interest in continuing on as commissioners. Appointment of new commissioners is welcomed and would stimulate the work of the commission.

- Enhance its relations with Maryland communities through project engagement, outreach measures, and flexible meeting times.

- Coordinate with other states EJ groups to facilitate information sharing— lessons learned and best practices in EJ and sustainability.

- Continue to seek support and input from a variety of stakeholders to further the development of a community profile tool.

- Promote the concept and implementation of Environmental Benefits Districts such that it becomes known and embraced by communities as a strategic redevelopment opportunity.

- Establish the Commission as a body to which communities may relay concerns about EJ, sustainability, and quality of life and as a body serving as a thought leader to the Administration and General Assembly on pending 2005 legislation that might have EJ implications.

- Begin an examination of sustainable communities— what are their characteristics and how can they be attained?

COMMISSION'S RECOMMENDATIONS

Funds for implementing EJ efforts. The Commission recommends consideration of project funding for the development of a Community Profile Tool either by appropriations or by seeking grant opportunities to further the endeavor. The value of developing a community profile tool is to provide a reference point for various stakeholders, including: the community, state planners, environmental officials, investors, and others to consider when working to address disparate environmental impacts and revitalizing communities. The community profile tool will assist agencies with prioritizing communities in need of assistance and for enhancing a community's ability to access data about the environmental quality of its neighborhoods for planning purposes. However, developing such a tool requires time and money.

Statewide prioritizing system to remedy marginalized communities. The Commission recommends that all state agencies develop a prioritizing system for their programs to help mitigate the environmental and health impacts in disadvantaged communities. This system would ideally help leverage resources in targeted areas within the state that have been identified as being or face the threat of becoming marginalized. The Maryland Department of the Environment (MDE) is working on implementing Environmental Benefits Districts (EBDs), places were government and other stakeholders can optimize their resources to benefit communities in a proactive way. MDE has identified EBD zip codes in Central and Western Prince George's County and in East Baltimore as pilots. Maryland Department of Planning is implementing the State's Priority Places framework to enable sound land use practices, economic growth, environmental protection, and community revitalization.

Renewed Commitment
The Commission recommends that each state agency demonstrate full commitment to the Environmental Justice and Sustainable Communities initiative by allocating dedicated staff to the cause. Dedicated staff will be responsible for fostering collaboration within their home agency, among other state agencies, and with the Commission on Environmental Justice and Sustainable Communities, to assist communities in need. Dedicated staff will strive to effect change in communities by proactively listening to community concerns; reviewing their agency's programs and policies that may help address community concerns; and implementing strategies that promote environmental health and economic vitality in disadvantaged communities.

Expansion of Commission membership The commission recommends the expansion of state agency appointments to the commission. These should include but not be limited to the Department of Housing, Department of Business and Economic Development, and Department of Transportation. Currently, the agencies appointed to the commission are the Department of Environment, Department of Health and Mental Hygiene, and Department of Planning. In order to address EJ issues from a holistic standpoint, it will require a collaborative strategy crafted through the involvement of all state agencies because EJ issues are crosscutting in nature and fall under the purview of multiple state agencies as well as the various levels of government.

The Commission looks forward in 2005 and beyond to carrying out its mission and very important work with renewed vigor as it welcomes new commissioners and partners in the charge to collaboratively achieve environmental justice and sustainable communities in Maryland.

PART II

COMMUNITY PROFILE TOOL DEVELOPMENT REPORT

EXECUTIVE SUMMARY

The mission of the Community Health and Protection Working Group of the Commission on Environmental Justice and Sustainable Communities (CEJSC) was twofold: (1) to recommend to the CEJSC a series of useful environmental and health indicators related to community environmental concerns that could be used by stakeholders in environmental protection and community planning; and (2) to recommend a means of presenting the indicators that would be useful to various potential stakeholders, including the community, state planners, environmental officials, potential investors, and others.

The working group met regularly over 18 months, and considered a range of proposals. The group's final recommendations to the CEJSC include:

1. Solicit opinions from a broad range of potential users and stakeholders regarding the plans for a community profile (both the type of data and presentation format)
2. Refine the indicators and the profile format, based on solicited comments
3. Pilot test the community profiles among a broad range of potential stakeholders in selected communities
4. Determine what kind of resources and collaborations would be required to maintain the profiles.
5. Decide whether to support the implementation of a full set of community profiles in the state at the zip code level.
6. Further study, assess and refine the means of communicating the profiles to a diverse audience to ensure their usefulness
7. Coordinate with other efforts in the state to develop a "next generation" of health and environmental quality tracking indicators.

These proposed activities are a means of building a better communication bridge between neighborhoods, businesses, regulatory agencies, and policy makers on matters of community well-being and environment. The foundations of this bridge are standardized, objective, and comprehensible data about the health and environmental conditions in a community, and an approach for conveying this information that promotes constructive dialogue.

INTRODUCTION AND BACKGROUND

The main purpose of this draft document is to present proposed indicators and a format for their presentation (the community profile) related to community environmental concerns for use by stakeholders in environmental protection and community planning. These indicators deal with community, health, and environmental characteristics that could be useful in an environmental justice tool kit. Among the many stakeholders involved in this process – state agencies, communities, business interests, academic researchers, and others – the ultimate responsibility for the development and implementation of these indicators rests with the Maryland Commission on Environmental Justice and Sustainable Communities (CEJSC). These indicators have been developed over the past year and half, but are not yet final. Input needs to be received from stakeholders, including local governments, state and Federal agencies, the public, and many other public and private interests.

Community indicators have been under discussion at the Commission for Environmental Justice and Sustainable Communities (CEJSC) for approximately three years. Three work groups – the original Community Index Workgroup, the JHU-led project in Little Washington in Prince George's County, and, most recently, the current Community Health and Protection Working Group – have worked under the direction of the Commission to develop community indicators and means to implement them.

The Community Health and Protection Working Group of the CEJSC began meeting on March 10, 2003. The group's mission, developed over the first several meetings, was twofold: (1) to recommend to the CEJSC a series of indicators of health and environmental health in local communities; and (2) to recommend a means of presenting the indicators in a manner that would be useful to various potential users, including the community, state planners and environmental officials, and others. Participants in the working group included academic health experts and representatives from state government agencies, along with occasional input from local Baltimore community members and representatives from environmental advocacy groups and local agencies.

The working group wanted to ensure that its final recommendations would help to:

- Provide an easy-to-use tool that would allow communities, agencies, and organizations to understand and respond to local health and environmental conditions and concerns
- Make it easier for communities and others to identify and assess community capacity (such as income resources, population, education, and other community characteristics), potential opportunities and barriers related to health and environmental quality
- Present indicators of health, environment, and equity in a non-judgmental fashion that would enhance and inform public discussions of these issues.

The working group could not anticipate all of the potential uses of the community profiles, but some of the possible applications might be:

- Community groups and regulatory agencies could use the information in responding to potential facility siting and permitting questions. This could be particularly useful for community groups, who now have to go to many different sources to find even basic information about their community.
- Community leaders could use the information to inform deliberations over health and environmental priorities, and to set benchmarks or goals for improvements in health or environmental quality.
- Community residents could use the information to answer their questions about local health and environmental conditions, or to raise public awareness.
- Community members and businesses could use the information to establish dialogues about local business development and community revitalization.

There is a challenge in conveying information to such diverse groups of people. This project presumes that there is a need for a better communication bridge between neighborhoods, businesses, regulatory agencies, and policy makers. Community profiles are part of that bridge because they provide a common starting point for the discussion of community issues. Profiles alone are not enough, however. The real value appears when the profiles, the data, are presented and explained in a way that helps interested parties put the facts into perspective, determine where more information is needed, and find a constructive path for the future. The success of community profiles therefore depends, in part, upon how they are perceived and understood. Thus, there is a need to study and plan for how these community-level data will be presented to diverse audiences.

The community profile is meant to give a snapshot of a community, to offer a picture of the current health and environmental quality of a community, and to offer some guidance to planners and community members about the potential impacts of, for example, new facilities on environmental quality. It could also be used by a community to discuss how to set priorities for development or amelioration of environmental damage.

While community health and environmental profiles have the potential to serve many uses, they are a challenge to create. In an ideal world, our data resources would be highly relevant, accurate, and easy to obtain. This community profile project is an invaluable step in moving us in that direction. Today, to create a community profile, one needs a measure of luck for the data to exist in the first place. Beyond that, one needs permission to obtain the data and assistance – real staff time from different agencies – to extract, organize, and deliver the requested data, and additional resources to analyze the data and record the findings.

It is also important to understand that the profile represents the status of a community at a given point in time, or over a relatively short period of time. Thus it has limitations for examination of long-term hazards or effects, unless the information is periodically updated.

In effect, this project is demonstrating how to make existing data resources more effective for community issues. The mechanics of finding and using community-level data throughout Maryland can be made more streamlined and efficient through this effort.

Some of this information is already available in user-friendly tools. The EPA's "Enviromapper" now offers an Environmental Justice component, but it does not contain health data. Baltimore Neighborhood Indicators Alliance has developed an extensive interactive web site with many useful indicators for quality of life, but these are limited to Baltimore City. "Scorecard", a project of Environmental Defense, combines nationwide environmental information but does not contain health data specific to Maryland. In short, no existing application meets all the Commission's needs for presenting environmental, health, quality of life and other useful information all in one place.

SELECTION OF HEALTH INDICATORS

The first activity of the working group was the selection of health indicators for use in the community profiles. This involved review of literature on environmental health indicators, discussions with other groups involved in similar efforts across the country, and extensive deliberations within the working group.

The questions that framed the discussion of health indicators included the following:

1. What indicators are most commonly used to describe the *overall health* of a community?
2. What health indicators are most closely or directly associated in the scientific literature with *acute or immediate effects* from environmental exposures?
3. What health indicators are most closely identified in the scientific literature with *chronic or long-term* health effects from environmental exposures?
4. What are some of the more speculative relationships between environmental exposures and either acute or chronic health effects, for which data might not be available currently, but which should be at least considered in the creation of a community profile?

The working group identified some critical issues:

- *Our current ability to relate environmental exposures to any specific health outcomes or population health is limited, especially when exposure data are not available at an individual level. Many if not most of the determinants of population health are related to a broad array of genetic, socioeconomic, and demographic variables. The relative contribution of environmental factors is poorly understood for many diseases.*
- *Current environmental quality may not accurately reflect past conditions and their contribution to present health status.*
- *In addition, the ambient measurement of environmental pollutants does not necessarily indicate the actual dose to an individual or population. The true individual dose, which is more relevant to individual health risk, is in most cases difficult or impossible to determine.*
- *Therefore one should not look at current indicators of environmental quality and health as being causally related. In general, community health and environmental indicators are not yet reliable indicators of environmental health risk, although they can be useful in identifying potential problems.*
- *Direct comparison between different communities may not be meaningful, because of differences in other determinants of health besides environmental exposures. Nevertheless, some benchmarks may be useful.*

Because of these constraints, the Community Health and Protection working group decided to develop a set of general health indicators with some emphasis on environmental health that communities and regulatory bodies can use to assess the status of a community, compared with other locations (*e.g.*, county, state), and set priorities. The process began with a review

of existing surveys and tools at the local, state, and national level and collaboration with the Community Index Working group. The Community Index Working group developed and tested a set of demographic and environmental indicators in one community in Maryland to see what data were available and how useful it was to the decision-making process1. Among the conclusions and recommendations of the Community Index Working group were:

> **Overall, we found assessment of the Maryland Commission's Framework to be a useful tool in assessing Central Prince George's County. However, the assessment was difficult and very time consuming. A period of three months was not sufficient time to adequately address all aspects of the Framework.**
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> ***************************
>
> **The Framework, as it now stands, is somewhat cumbersome and will not benefit communities without significant assistance. Some suggestions for how to assist communities:**
>
> - **Compile a list of resources that community members can use to perform an assessment,**
> - **Provide technical support and assistance, perhaps through a University,**
> - **Consider variables not included in our study that could be important or problematic such as health, change in property values and voting,**
> - **Undertake a pilot study with community members doing the research,**
> - **Follow through with the CPGC project because the landfills do impact the community members2.**

The Community Health and Protection Working group also sought out other Environmental Justice Commissions and organizations across the country to share ideas and lessons learned, including New Jersey, New York, and the Center for Health, Environment, and Justice in Falls Church, VA.

Early in its deliberations the working group decided to attempt as much as possible to organize, analyze, and present data at the zip code level. An advantage of zip codes compared to county level information is that the results could be more useful to specific communities. However, much environmental and health data are not collected at the zip code level, and for less common health outcomes there might be too few cases for meaningful analysis or adequate protection of confidentiality. Thus, the working group recognized that there might be limitations in the data at this level.

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1 *Community Assessment for Central Prince George's County. A Report Based on the "Framework for Evaluating Environmental Justice Issues" in the 2001 report of the Maryland State Commission for Environmental Justice and Sustainable Communities.* Baltimore: Johns Hopkins University Program in Environmental Sciences and Policy. 2003.
2 Ibid, p. 46.

The working group struggled to suggest a set of desirable health indicators, and evaluated them according to two criteria: (1) Do they represent a basic picture of the overall health of the community; or (2) Do they correspond to known or suspected indicators that have been linked to environmental exposures? This was a difficult task. Many of the indicators have been suggested as possibly related to environmental exposures, but the relationships are complex and multi-factorial in most cases. It was complicated further by the fact that many potential indicators were not currently collected systematically by any agency or organization.

Eventually, the working group suggested a list of possible indicators on the basis of the criteria above: indicators of general community health; the strength of their relationship to environmental conditions; and the quality and availability of the corresponding data. The suggested criteria are listed in Table 1.

Table 1. Potential Health Indicators

General Health Indicators Thought To Be Currently Available With Relatively Little Difficulty

• All cause mortality adjusted for the age and sex distribution of the population
• Age distribution of population
• Cancer mortality (overall and for specific types of cancers)
• Infant mortality
  o Fetal
  o Neonatal
  o Infant
• Top 10 causes of morbidity for community
• Low birth weight rate
• Blood lead levels

Possible Community Health Indicators

• Asthma rates
  o ER visits
  o Asthma mortality rate
  o Asthma treatment rates in hospitals and schools
  o Medicaid encounters for adult population
  o Asthma hospitalizations and emergency room admissions
• Birth defects rate
• Diabetes
• Disabilities (SSDI claims rate)
• Autoimmune disease
  o Lupus
  o Multiple Sclerosis
  o Sarcoidosis
• Neurological
  o Learning disabilities (percentage of students in special education classes)
  o Mental retardation
  o ADHD
  o Autism
• Mental Health
  o Depression
  o Anxiety
  o Substance abuse
• Chemical poisonings
• Obesity
• Blood levels of mercury, PCB's and other important environmental contaminants.

We broke the indicators into two categories. The first included indicators that the working group felt would be relatively easy to collect and analyze with currently available data, and would also have sufficient quality to be useful and valid. These included general indicators of community health (such as mortality) and currently available environmental indicators (blood lead levels). Category 2 indicators were thought by the working group to be of interest because of their *possible* relationship to environmental exposures or because they were indicative of stressed communities, but were more exploratory in nature. Category 2 indicators are less easily available (and in some cases are not available at all).

SELECTION OF ENVIRONMENTAL INDICATORS

The working group then turned its attention to environmental indicators. Here the issues related again to the availability of data and how to display the data in a concise and meaningful way. The goal was to present a picture of the community's environmental quality, rather than an exhaustive inventory of each environmental factor.

One of the challenges was that much environmental data is aggregated over a large area. For example, air quality data is measured at relatively few locations in the state, and estimated down to the census tract level. Therefore describing the air quality for each zip code is not possible. In other cases, such as drinking water quality, systematic data are not available for drinking water from private wells.

The working group ultimately proposed a number of indicators for each medium (air, water, land) and also tried to select some non-regulatory indicators that would provide a more complete picture of the environment. The group struggled with whether there was some simple aggregate index that would reflect the overall environmental quality of an area. For several reasons, we decided not to adopt that approach. An aggregate index requires value judgments about the relative importance of separate environmental factors; we elected not to make those value judgments. We also felt that an aggregate index would more likely be interpreted as a "score" that could be used to rank communities, and this was contrary to our stated goal of avoiding a comparison of one community against another.

We recognize that our proposed indicators are only a few of the many indicators that could be included in such a profile. Other indicators might be more useful to certain parties in particular situations. As in the case of the health indicators, though, we wanted a range of indicators that could be used to suggest the overall state of the environment of the community.

There is no such thing as a "perfect" indicator. Development of health and environmental indicators is an ongoing process, and the best set of indicators may change as our understanding changes. Other groups are developing the next generation of environmental health indicators. These new indicators should be considered in future profiles as they become available.

Table 2. Potential Environmental Indicators

Possible Land Quality Indicators
• Number of waste management permits • Percentage of waste management Permits with significant violations • Are abandoned industrial sites present? • Number of national priority list and state master list sites • Toxic release inventory releases • Airport, rail line, interstate highway, military base
Possible Air Quality Indicators
• Number of MDE air quality permits • Incinerators in community • Percentage of air quality permits with significant violations • Number of facilities reporting TRI air emissions • Meets Clean Air Act Standards? • Exceedances for criteria pollutants (by pollutant and number)
Possible Water Quality Indicators
• *Number of MDE water management permits* • Percentage of water management permits with significant violations • Sewage treatment plants in community • Total TRI surface water discharge (pounds) • Safe rinking Water Standards consistently achieved • Number of MCL exceedances in past year (by pollutant and number of exceedances) • Percentage population on a community water system (name of water system) • Percentage population on private wells • Percentage population on septic systems • Impaired water bodies (§303(d) of Water Quality Act) • Number of surface water advisories/closures

SELECTION OF COMMUNITY CHARACTERISTICS

Although the principal goal of the working group was to identify health and environmental indicators, there was general agreement in the working group that certain demographic and socioeconomic characteristics of the community were desirable in understanding both the unique features and the health status of the community. These characteristics play an important role in determining the community's health, both literally and figuratively. They influence and are also influenced by the health status of the population. As measures of the composition of a community, they can be helpful in determining if an environmental inequity exists. A community can use them to identify priorities for improvement. And they can

provide useful measures to developers for identifying potential investment sites and nearby sources of labor, as they move to bring in new businesses and create jobs.

Table 3 is a table of community characteristics that might be useful. Data for some are obtained more easily than for others. Some indicators that might be desirable, but for which data may not be readily available, are also listed in the table.

Table 3. Potential Community Characteristics

General characteristics that are relatively easy to obtain at the zip code level
CHARACTERISTIC
• Population density (Persons per square mile) • Per capita income • Percentage of minorities • Percentage of population with <12 years education • Percentage of population with high school diploma • Percentage of population with some college • Percentage of population who are college graduates • Median age • Percentage <18 years of age • Percentage >65 years of age • Percentage below poverty • Percentage of Housing Built before 1950 • Average market value of housing • Percentage of units that are owner occupied • Percent Speaking English < Well • Urban vs. Rural vs. suburban • In Economic Benefits District? • Percentage Zoned industrial • Percentage Forested • Percentage Residential • Commercial investment activity indicator • Retail sales
Possible community characteristics that may not be currently available at the zip code level
• Unemployment rate • Percentage Housing Vacant • Others

DEVELOPMENT OF THE COMMUNITY PROFILE

The working group attempted to develop a concise tool that would display the selected indicators in a user-friendly fashion, taking advantage of current information technology. Appendix A shows an example of the "community profile" for one community. This information could be presented on a web site. The web site would ideally permit the user to find a particular location either through a graphical interface (such as clicking on a map) or by entering a zip code or place name. The page would then display the information for that zip code. Similar information could be presented at the county and/or state level for comparison. The data should also be available in electronic tabular form to allow easy transfer for presenting the data in other formats.

The working group felt strongly that the community profiles should meet the following requirements:

- They should be easy to navigate, so that anyone of moderate computer sophistication could find the desired information.
- The basic profile should contain just a page of the basic indicators, with the capability to "drill down" for additional details by clicking on particular indicators.
- The indicators should contain some benchmarks such as county- and state-level data for comparison.
- The profiles should not present conclusions of "good" or "bad", as these may oversimplify and prejudge community conditions.
- The data should not be over-interpreted. The profile must clearly communicate that causal inferences about the relationship between environmental indicators and health indicators cannot be drawn from this information.
- The health indicator data must be robust and respect confidentiality requirements, particularly for indicators that might involve only a few cases in any particular geographic location each year.

The question of generating "real-time" or static profiles was considered. A real-time system may not be feasible at this time. The best approach is probably a system that is periodically updated with new information. This will be especially advantageous for health data, which for reasons of security and confidentiality can probably not be linked directly to external databases. Annual updates would be a reasonable time frame, and would correspond to the frequency of updates for much of the raw data. Determination of the feasibility of producing community profiles for every zip code in the state, and any update schedule, would need to be determined by the Commission.

CHALLENGES TO BE ADDRESSED

The working group has attempted to pilot this process with one location (zip code 21230). Members of the working group contacted various agencies and requested data to construct the profile. Generally, the agencies were helpful in meeting the requests, but a number of challenges were apparent:

1. Acquiring the electronic data sets and developing the data for these community profiles is laborious with current data collection and information systems. Methods can be developed to streamline the process of data transfer and analysis. In fact, development of this streamlining process would be one of the benefits of the project.

2. There are likely to be many "empty cells," that is, many instances where the small number of events (particularly health events) in a small location will result in no data for a given location. For health data, the working group intends to use 5-year rolling averages to make the rate estimates more robust and ensure confidentiality. Five-year rolling averages will reduce but not eliminate the problem of small numbers.

3. Resources and the inter-agency collaborations need to be developed. Memoranda of Understanding (MOU's) between certain state departments would need to be implemented to facilitate sharing and streamlining of data. These MOU's can be laborious and time-consuming, but can result in optimizing limited resources of personnel, equipment and time.

4. Effective communication of the profiles: Developing new ways of training, outreach and education which are effective for the various stakeholders, and are not sources of potential discrimination themselves, is an especially challenging task. Many citizens in at-risk communities may not have ready access to the Internet. Language for reports needs to be culturally sensitive and easy to understand. At the same time, it needs to communicate information that can be difficult to understand regardless of one's educational, cultural or economic background.

RECOMMENDATIONS

Thus far the working group's deliberations have produced a community profile template for environmental and health indicators and community characteristics, but much work remains. The most important next step is to have the concept and structure of the community profiles evaluated by a broad range of potential users and stakeholders, including (but not limited to): community interests; state and local agencies; advocacy groups; public health and environmental interests; commercial interests; and others.

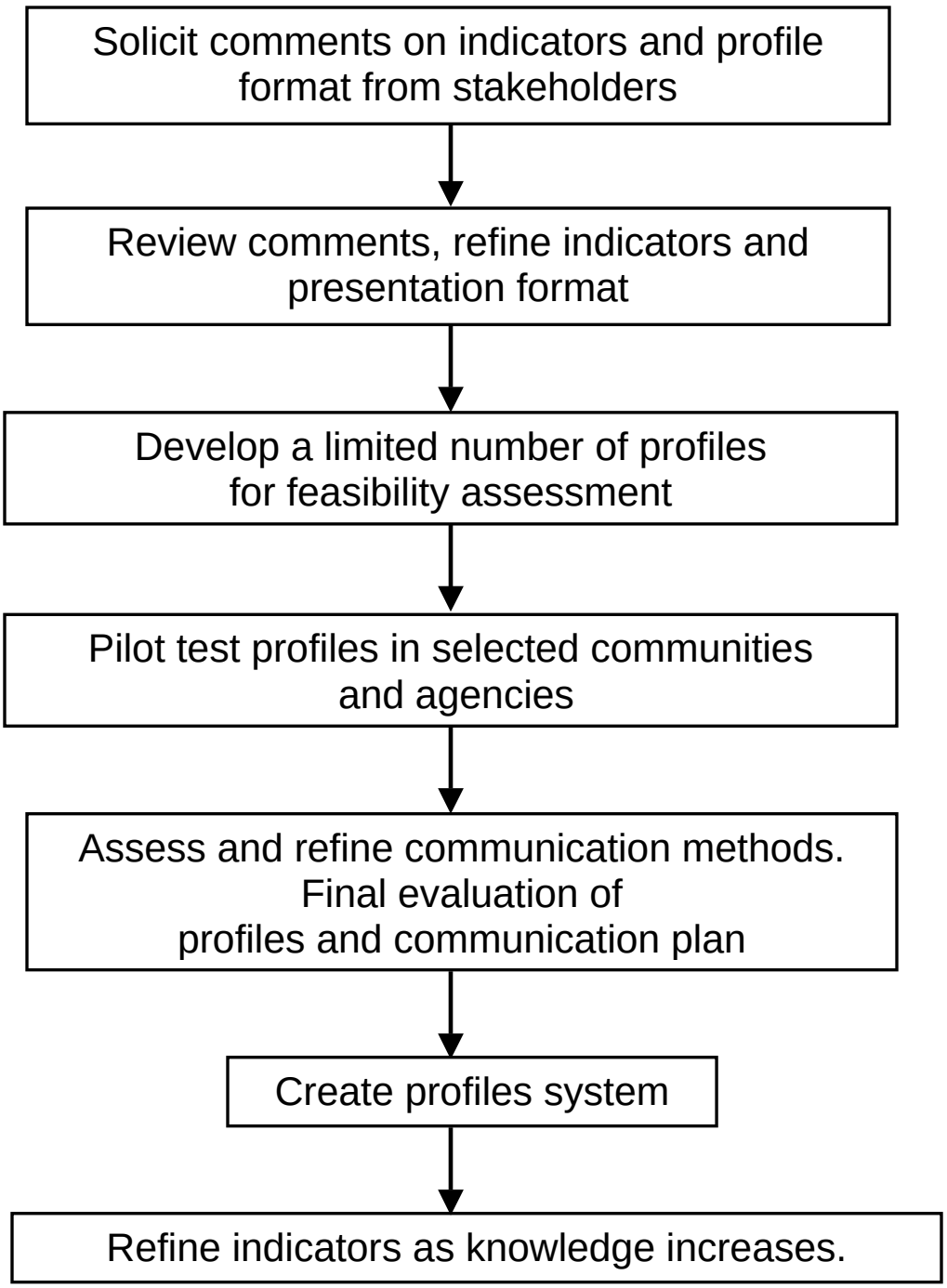
If there is a consensus in favor of further development, it will be of paramount importance to accurately gauge the resources necessary to create and maintain the community profiles. There may well be federal or other funding that could be used to help create the profiles, which would be somewhat unique in their scope and potential application.

Given the activities of other agencies (such as the Departments of Health and Mental Hygiene and of Environment) and other environmental justice programs at the state and federal level that are developing other indicators for environmental health, it will be important to consider the potential application of additional indicators to the community profiles as they become available. The community profiles could also be used to evaluate the value and effectiveness of its indicators through usage tracking or surveys incorporated into the web site.

These recommendations are summarized below. Based on their potential utility to many interests and applicability to communities, the working group recommends that the Commission should (Figure 1):

1. Solicit opinions from a broad range of potential users and stakeholders regarding the plans for a community profile (both the type of data and presentation format)
2. Refine the indicators and the profile format, based on solicited comments
3. Pilot test the community profiles among a broad range of potential stakeholders in selected communities
4. Determine what kind of resources and collaborations would be required to maintain the profiles.
5. Decide whether to support the implementation of a full set of community profiles in the state at the zip code level.
6. Further study, assess and refine the means of communicating the profiles to a diverse audience to ensure their usefulness
7. Coordinate with other efforts in the state to develop a "next generation" of health and environmental quality tracking indicators.

Figure 1
Development of a Community Profile System



Although not specifically part of our mandate, the working group recognizes that resources will need to be identified in order to support full implementation of the community profiles project.

Concurrent with the piloting of the indicator tools, planning for its implementation and long-term sustainability is essential. Developing a 5-year and 10-year vision for the tool would be useful. Even more importantly, it would be productive to communicate with groups involved in the Environmental Public Health Tracking initiative in the state and to coordinate future activities with them.

APPENDIX A – SAMPLE COMMUNITY PROFILE

Maryland Community Health and Environmental Profiles

This is the Maryland Community Health and Environmental Profile web site. It is operated and maintained by the State of Maryland for use by communities, agencies, organizations, and individuals as a tool to assist in planning and assessment. It is NOT a regulatory or enforcement activity, and is intended SOLELY to provide guidance and assistance.

HOW TO USE THE PROFILE

To use the tool, enter the zip code or designation of the community in question. Note that community designations may include several zip codes; when that occurs, the search will return all of the applicable zip codes. Alternatively, you can click on an area of the map and examine a particular zip code through the graphic interface.

HOW TO READ THE PROFILE

I. COMMUNITY CHARACTERISTICS. This section gives a brief description of who lives in the community and what kind of community it is. ***Population*** describes the people, based primarily on census data. ***Land Use*** describes the soil and built environment.

II. HEALTH INDICATORS. This section is a snapshot of the overall health of the community. Sources of data are noted in the table. Note that IT IS NOT POSSIBLE TO SAY, FROM THE INFORMATION PROVIDED, WHAT INFLUENCED PARTICULAR HEALTH INDICATORS. Many factors influence the health of a population – age, health history, race, socioeconomic factors, access to health care, environment - and many other potential factors. Some of these factors, such as age, race, etc. cannot be changed.

III. ENVIRONMENTAL INDICATORS. In this section are some critical environmental indicators. Most come from reporting activities required by law, at only a few locations. In order to estimate the magnitude of the indicators within each zip code, certain assumptions have been made. These and other limitations of the data may be obtained by clicking on the particular indicator. .

Community Health and Environmental Profile
Community: Washington Village/Pigtown
Zip Code: 21230

	Community 21230	Jurisdiction Baltimore City	State Maryland
I. COMMUNITY CHARACTERISTICS			
Population			
Total population	76,167	638,614	4,458,137
Population density	Urban	Urban	--
Median age			
Percentage minority populations	60.6%	68.4%	36.0%
Percentage persons below the poverty level	23.1%	22.9%	8.5%
Percentage unemployment			
Education: Percentage with HS diploma/GED)	27.5%	31.6%	16.2%
Percentage Elderly (age 65+)	12.3%	14.6%	11.3%
Percentage Children (age <18)	25.7%	23.6%	25.6%
Land Use			
Urban vs. Rural			
Acres of land use			
Percentage zoned industrial			
Percentage forested			
Percentage low density			
Proposed: Percentage vacant housing	11.44%		

SAMPLE COMMUNITY PROFILE – *data and indicators are for illustration only*

	Community 21230	Jurisdiction Baltimore City	State Maryland
II. HEALTH INDICATORS			
All cause age- and sex-adjusted death rate (per 100,000 persons)	1259.9		
Cancer incidence rate (adjusted for age and sex) (per 100,000 persons)	505.8		
Asthma hospitalization rate (per 100,000 persons?)	TBD		
Emergency room visits for asthma (per 100,000 persons?)	TBD		
Propose: Birth rate/1,000 women	TBD		
Propose: Fetal death rate (per 1,000 live births)	TBD	(9,046 #?)	
Infant mortality rate/1,000 live births (< 28 days)	TBD		
Post-neonatal mortality rate/1,000 live births (28 days –11 months)	TBD		
Birth defects rate (per 1,000 live births)	TBD		
Proposed: Percentage pregnancies ≤ 19 yrs	TBD		

Percentage of children <3 years/age screened for lead
Percentage of children tested with ≥10μg/Dl

SAMPLE COMMUNITY PROFILE – *data and indicators are for illustration only*

	Community 21230	Jurisdiction Baltimore City	State Maryland
III. ENVIRONMENTAL INDICATORS			
Land Quality Indicators			
Number of MDE Land Management Permits			
Percentage of Land Permits with Significant Violations			
Are abandoned industrial sites present?	Y/N		
Number of sites on MDE Master List of abandoned industrial sites	0		
TRI releases to land (pounds)	Y/N		
Airport, rail line, interstate hwy, military base?			
Air Quality Indicators			
Number of MDE Air Quality Permits			
Percentage of Air Quality Permits with significant Violations			
Total TRI air emissions (pounds)	137,237		
Meets Clean Air Act Standards?			
Any exceedances for criteria pollutants?			
If so, list pollutant, no. of exceedances			
Water Quality Indicators			

SAMPLE COMMUNITY PROFILE – *data and indicators are for illustration only*

Number of MDE Water Management Permits	
Percentage of Water Permits with significant violations	
Sewage treatment plant in community	No
Total TRI surface water discharge (pounds)	5
Meets Safe Drinking Water Standards?	Y/N
No. MCL exceedances in past year	
If yes, list pollutant(s), no of exceedances	
Percentage Population on a community water system	
Name of water system(s):	
Percentage Population on septic systems	
Any impaired waterbodies present? (§303(d) of Water Quality Act)	
Number of surface water advisories/closures	

APPENDIX B – WORKING GROUP MEMBERS

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APPENDIX C – OTHER CONTRIBUTORS AND PARTICIPANTS

The following individuals are acknowledged and thanked for their contributions to the working group process.

The Community Index Workgroup
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APPENDIX D – SUMMARY OF COMMENTS FROM PRELIMINARY REVIEWS

The first draft of this report was presented to the CEJSC on September 29, 2004. Subsequently, a number of individuals provided comments to the Working Group. Some of those comments have been incorporated in the current draft version of the report. Below are some additional comments, which reflect concerns, questions, or suggestions. These are not attributed to any particular individual, and were selected primarily to illustrate the types of concerns or questions raised:

> *Data collection and analysis..[are]... big task[s] since the data are spread out, arrangements for data sharing must be made, data quality will vary and affect the reliability of the results. A sustainable project will require certain IT fixes and staff resources/expertise for analysis. This set of issues is a good example of what environmental public health tracking is trying to address.*
>
> *The messages [to communities] must be easy to understand, more or less relevant, point to solutions, and encourage productive discussion. How? The content, format, mode of delivery, mechanisms for follow up, etc. should not be left to chance. The communication should be designed with input from the end users, and should be tested. A health educator or other professional needs to be involved…*
>
> *I agree that the indicator tool would be useful to help communities assess their health stress level so to speak. An issue wll arise, however, from an MDE permitting perspective in that if many indicators or several key indicators point out that a community is at capacity and is unable to absorb anything else that would negatively affect their health, the expectation or the demand will be that MDE should take such information into account when deliberating whether to issue permits to facilities within or neighboring the community. Unfortunately, MDE's regulatory structure doesn't allow us to take into account the factors used in the indicator tool to decide the fate of a permit…*
>
> *…[N]o matter how much anyone tries to say that adverse health effects or poor indicator status should not be linked to specific industrial activities, the link will nonetheless be made. It is made now, and citizens have no data on which to base their decision. The indicator tool will give people the ammunition they think they need to strengthen the link that already exists in their minds.*

Probably the most frequently raised concern was some version of the last comment above. More than one person raised the possibility that simply putting various indicators together in one table could lead to public "linkage" of the indicators, even though the actual science associating them might be limited or non-existent.

In addition, there were comments regarding the selection of particular indicators. Some reviewers questioned why certain indicators, particularly environmental indicators and community characteristics, were included or omitted in the profiles. The working group acknowledges that these indicators may not be the final indicators in the community profiles;

they need to be modified and endorsed by many of the stakeholders who will participate in the development process.

Other commenters noted that it might be difficult to incorporate information from the community profiles into the regulatory process, which is set by existing state and Federal law.