July 2, 2012

Indicators Workgroup
Final Draft Report

Introduction

Maryland as a smart growth frontrunner needs to regularly assess its progress. The state has established its twelve visions and the ten smart growth principles are well accepted. The Maryland Department of Planning (MDP) has produced a strong argument through *PlanMaryland* that raw development trends need adjustment if the visions and principles above are to become Maryland's future. Determining whether the Maryland Department of Planning's residential growth trend maps foretell the future or reflect past policies' legacy development is however an open question. Indicators or performance measures are one tool that can meet the assessment need and answer this question.

The National Center for Smart Growth in its white paper, "Indicators of Smart Growth in Maryland" cautioned:

> "There are many limitations of any assessment based on indicators, no matter how well developed, and . . . Understanding the limitations of indicators is critical to interpreting their significance."

The work group concurs with this statement and it has been reinforced by the technical and beta testing groups who assisted the work group in its review.

Maryland has embraced indicators by way of its Baystat Program and recent legislation requiring local jurisdictions to track development. In 2009 the state adopted the *Smart, Green, and Growing-Annual Report-Smart Growth Goals, Measures, and Indicators and Implementation of Planning Visions Act*. This act among other things required local jurisdictions' annual reports to the Maryland Department of Planning to include five measures and indicators of smart growth progress by July 1, 2011. If a jurisdiction processed more than 50 new dwelling building permits, it must calculate:

1. Amount and share of growth located inside and outside priority funding areas
2. Net density of growth inside and outside priority funding areas
3. New lots and number of residential and commercial building permits issued inside and outside of priority funding areas
4. Updated development capacity analysis every three years
5. Acres of locally funded agricultural land preserved

These required indicators provide an annual snapshot of the location and intensity of development in relation to the state's identified investment areas, priority funding areas, along with remaining development potential and locally generated agricultural land preservation. While useful in assessing the location and intensity, several smart growth tenants go undetected, e.g., expanded transportation and housing choices.

The Maryland Department of Planning's analysis of the 2010 annual reports, the first year results under the Act, shows that 14 of the 23 Counties provided full reports, while six provided partial reports. Of the 23 Counties six counties had fewer than the required 50 permits required to report on indicators. Of the remaining counties, three failed to report on the indicators or goals, six reported on indicators but tabulated them based on their growth areas and not PFAs; four counties reported the indicators and goals properly using Priority Funding Area boundaries. Also, 12 of the 16 most populous municipalities (with 10,000-plus residents) produced reports. Overall, 62 of 110 municipalities produced annual reports, some with assistance from the Maryland Department of Planning staff.

County reports on the share of residential growth (new lots created) in and outside of the Priority Funding Areas demonstrated mixed results for the reporting year. This may be due in part to the unusual real estate market for the past few years. Anne Arundel, Howard and Montgomery all reported 1,500 or more residential building permits for the year. At the high end among counties, Anne Arundel reported an 89% share of growth in its Priority Funding Areas, Harford and 83% share and Carroll County 72%. At the low extreme, Frederick reported a 54% share, Charles a 50% share and Cecil County a 20% share. For all reporting entities including municipalities, 12,042 of 13,140 lots were created in PFAs for a rate of over 91%. The residential building permits reports showed that of the 9,856 residential permits reported, 7,119 were inside PFAs for a 71% share.

The *Smart, Green, and Growing – Annual Report Act* also provided:

> "the Task Force on the Future for Growth and Development. . .shall make recommendations on the efficacy of additional measures and indictors that the State, the national Center or a local jurisdiction should be required to collect in the following categories of information:
>
> 1. Housing choices, including affordability;
> 2. The impact of growth on the environment, including land, air, and water;
> 3. The fiscal cost of growth;
> 4. The job and housing balance;
> 5. The impact of transportation on growth;
> 6. The impact of growth on business, including job creation, fiscal impact, agribusiness, tourism, and forestry; and
> 7. The impact of growth on cultural and historic resources."

In the spring/summer of 2009, the Task Force formed an Indicators Workgroup to address the legislation's smart growth measures and indicators directive to the Task Force.

The workgroup evaluated the indicators literature, individual metrics and indicators for their relevance to smart growth, data availability, and the ability of local and state organizations to regularly collect and analyze them. The work group issued a list of available and potential indicators with a preliminary value assessment. In November of 2009 the Task Force on the work group's recommendation, advised the General Assembly to cautiously approach additional mandatory indicators. At that time, it was clear smart growth indicators needed more study and vetting before thoughtful legislation could be proposed. The initial list, as well as the letter that was sent to the General Assembly, is contained in Appendix 1.

In 2010, the work group with the Task Force's approval formed a technical team to "test" the potential indicators. This Technical Group refined the original indicator matrix and provided feedback on each of the proposed indicators. In December of 2010, this group presented fifteen indicators (see below) for consideration by the Task Force. The Task Force by this time had grown in size and morphed into the Maryland Sustainable Growth Commission via new state legislation. This group's final report and matrix of indicators, is included in Appendix 2.

The work group and the Commission again recommended to the General Assembly a cautious approach towards adding mandatory indicators. While the Technical Group believed that the recommended indicators could be used to assess smart growth efforts, they also believed that field testing was needed. To this end, the group recommended to the Commission beta testing with several jurisdictions.

The fifteen indicators recommended for further consideration included:

1. Housing Choices, including affordability:
    a. Housing Vacancy Rate
    b. Housing production / growth
    c. Rental and Owner Affordability
    d. Home Sales and Affordability
2. The Impact of Growth on the Environment, including Land, Air, and Water:
    a. Development on septic systems
    b. Percentage of new development served by public sewer
    c. Acres of open space in permanent protection and the means of protection
    d. The amount of forest acres cleared, conserved, and planted
    e. Wastewater treatment plant capacity and reported flow
    f. Land Use Change–loss of agricultural resource lands
3. The Job and Housing Balance:
    a. Jobs-Labor Force Ratio
4. The Impact of Transportation on Growth:

a. Mode shares of transit, walk and bike for work or non-work, telecommuting
b. Transit ridership rates
c. State major transportation investment inside or outside PFAs

d. The Impact of Growth on Cultural and Historic Resources--Number of projects reviewed for compliance with federal and State regulations

The Growth Commission concurred with the technical and work group's recommendation that beta testing would be appropriate before further action could be recommended.

Beta Testing

In July 2011 a beta testing group was formed to field test the usefulness and feasibility of the fifteen proposed indicators. The testers volunteered from four jurisdictions:

1. Kathleen Freeman (Caroline County Planning),
2. Kathleen Maher (City of Hagerstown Planning),
3. Pamela Dunn (Montgomery County Planning), and
4. Lynn Thomas (Town of Easton).

The Beta Testing group met in July of 2011 to discuss the indicators and the collection process. Each tester received the fifteen indicators and a series of questions for each indicator. The questions included data availability, source information, feasibility of collecting an indicator if not currently available, and the testers' thoughts on the usefulness of the proposed indicators. Participants were also asked to provide indicator results for their jurisdiction.

The Maryland Department of Planning staff assisted the data collection and calculation of most of the indicators. For each indicator, the beta testers responded to the questions and summarized each indicator's degree of difficulty and other caveats they could provide. Appendix 3 contains these detailed results of the Beta Testing group's work from 2011. Below the detailed results are summarized.

Beta Test Results

Housing Choices, including affordability—four indicators were reviewed in this category; they are discussed below

1. *Housing vacancy*—Beta testers agreed that Census/American Community Survey provides sufficient data at the county and municipal level. However vacancy rates are not available annually from public sources. The group recommended using Census data as a base with an update every three years using the American Community Survey.

   Testers noted that annual HUD data may be available in the future, once conflicts with United States Postal Service are resolved. Also vacancy rates are only available

at the Census Tract level which would make reporting at the municipal level difficult for some jurisdictions.

2. *Housing growth/production*—this indicator became a required part of local annual reports to the Maryland Department of Planning on July 1, 2011. All beta testers did note that this information is readily available via building permit data.
3. *Rental/owner affordability*—Participants agreed that the Census/American Community Survey are the best sources for this information. Again this indicator would therefore only be available every three years.
4. *Home sales and affordability*—the ability to collect this metric varied across the group. For municipalities there is no publicly available source for this information. At the county level, the proposed data source is acceptable. Additional comments proposed the use of MLS (Multiple Listing Service) or BLS (Bureau of Labor Statistics) data to complete the computation.

The impact of growth on the environment, including land, air and water—Five indicators were indentified that could address this issue.

1. *Development on septic systems and sewer*—Testers noted that these two indicators could be collected. The data is available from permit data or from local health department records.
2. *Acres of open space in permanent protection*—Open space data are available for all jurisdictions. Most testers noted that if collected by the local jurisdiction, they could provide the data. It was suggested that if this indicator were proposed, a specific list of land types included be outlined in detail, as the level of detail and availability varies by types of easement.
3. *Amount of forest acres cleared, conserved, and planted*—Participant responses varied for this metric. Most noted that this information is required by the state's Forest Conservation Act and is available in existing reports. However, not all jurisdictions maintain an active forestry database; therefore if historical data were needed it would be problematical.
4. *Wastewater treatment plant capacity*—this metric is available from local utilities.
5. *Loss of agricultural resource lands*—Data availability is a function of local needs and consistent records across jurisdictions is not the norm. Testers recognized the long lag time of the Agricultural Census (collected every five years), which would provide a uniform base for analysis. Therefore this indicator would only be reliably available every five years.

The job and housing balance—Most participants noted the difficulty in defining and collecting this indicator. Job and housing "sheds" cross multiple jurisdictions including states. The Technical group also found that this indicator too difficult to define in a meaningful way. The Technical Group had recommended calculating the jobs to housing ratio, but recommended not setting an "acceptable" standard for this measure as there is no currently accepted standard for this ratio.

The impact of transportation on growth—Three indicators were analyzed to address this area:

1. *Mode shares of transit, walk, bike for work and non-working*—Participants found data available and agreed with proposed data source.
2. *Transit ridership rate*—Data availability is a function of local system record keeping and data may not be available for all jurisdictions. Tester response for this metric varied; some noted that this information is available from local authorities, while for others it was unavailable. In some areas of the state, data is available from the council of governments.
3. *State and local major transportation investment by PFA*—most testers found that this is not collected at the local level. The state does collect this information, but this would need to be collated with local information to create a complete picture of transportation investment and its location. Transportation investment greatly influences development location, so tracking expenditures by location should be pursued.

The impact of growth on cultural and historic resources—The work group and technical group identified one potential indicator for this issue, which was the number of projects reviewed for compliance with Federal and State laws (Section 106). This program is administered by the Maryland Historic Trust. While it appears this data may be available at the County level, there is not currently a designation for such projects at the municipal scale.

Observations

In the overview, the work group recommends that existing required indicators for local jurisdictions should be judged on their value and usefulness before other mandatory indicators are added. After three years of work in the field of indicators, which included a literature review, examination of other jurisdictions indicator use and the work group's indicator testing, the work group can make several observations about indicators. To begin, the logic of indicators is obvious, what you measure, you can tend to manage. However, the resources needed to gather data and analyze indicators must be weighed against the value they provide.

Several indicators have an obvious relationship to smart growth, e.g., the number of dwellings located in designated and appropriate locations, the number of dwellings using public sanitary services, the acreage of agricultural land permanently preserved. Others while related to smart growth are difficult to define logically; the best example is the jobs-housing balance. Still others while providing important information about what they measure tell us little about progress toward smart growth. In this last group, economic indicators give the observer an accurate read on the unit of analysis' commercial and income generating activity, but provide little information about whether economic change relates to more livable settings (smart growth) or would have occurred regardless of the physical environment.

Some indicators have strong smart growth relationship but are collected infrequently or not at all. This lack of data at a minimum eliminates such indicators from consideration. Also current economic conditions and the resulting dearth of staff and fiscal resources would have to subside before new initiatives can be accommodated at the local level.

In addition to considering the workability and value of the indicators themselves, resource requirements must be assessed. In these times of fiscal austerity, additional required activities are simply beyond many jurisdictions' resources. For many small jurisdictions, this has always been the case, while for others recent staff and budget losses make are causing local governments to focus on core responsibilities and make meeting current obligations a challenge. For both situations, additional activities can only come at the expense of either quality or by reducing existing services.

The beta testing revealed that several of the workable indicators data resides with the Maryland Department of Planning's data center or are based on Census or the American Community Survey. Of the 15 indicators tested, six indicators were completed by jurisdictions, the Maryland Department of Planning collected six, and two were deleted because of data collection issues, and one is already required in local annual reports.

The beta testing was completed in a short period of time, which would indicates that a portion of the data and ability to produce indicators exists at the state level either at the Department of Planning or the National Smart Growth Center at the University of Maryland. That said, the collection of such data and indicators cannot and should not rest solely with the state, local data, input and review is essential in verifying indicators' usefulness as smart growth measures. For example, the Maryland Department of Planning or the Nation Center for Smart Growth would need to collect local water and sewer plan data to determine the number of dwelling units served by public sewer vs. septic, which should be followed by verification from the subject jurisdiction.

Recommendations

Tracking Maryland's smart growth progress will aid the development of local and state growth policy. Indicators are the prime candidate for assessing the direction and character of growth. The Indicators Work Group efforts over the last three years along with current resource constraints indicate that a new mandatory indicator initiative for local jurisdictions is not necessary to address the majority of the Legislator's directive to the then Task Force and now Sustainable Growth Commission. State level organizations, specifically the Department of Planning and the University of Maryland's National Smart Growth Center, in cooperation with local governments, have access to much the data and these organizations have the capacity to calculate the indicators of interest. The Center has been working for several years to develop indicators to help guide state policy.

With this in mind, the Work Groups offers the following recommendation to the Commission for their consideration:

1. There is a growing lack of local resources to take on new initiatives like this alone. The state has some ability to produce many of the proposed indicators with local cooperation and input. This leads the work group to its primary recommendation, which is: in cooperation with local jurisdictions, the state should pursue any of the reviewed

indicators it deems important for state policy through its resources. The state should work through its Department of Planning and/or the National Center for Smart Growth at the University of Maryland.

2. Local jurisdictions should commit (possibly via a memorandum of understanding) to providing base information to state agencies that will assist the agencies in developing the indicators. The local jurisdictions should also commit to reviewing indicator information that the state produces.
3. Submit recommendation(s) to the Legislature regarding the proposal of additional indicators. Specifically, that the Maryland Growth Commission does not propose any new additional mandatory indicators at this time. Local governments and the state shall work on developing a process for data collaboration to collect and verify those indicators identified throughout this process as well as new indicators that may provide meaningful smart growth indicators.
4. If additional indicators are deemed useful for state policy analysis, state agencies and local governments should work together to add this information to the Department of Planning's annual report. These should not be limited to the indicators considered by this workgroup and could be information that is more qualitative in nature.
5. The current mandatory annual report indicators local submissions should be analyzed for:
    i. The received data's value for state and local decision-making
    ii. Issues with the data received—what were they and how can they be addressed
    iii. Usefulness in judging statewide and local smart growth trends
    iv. Meaningful trends that are discernible for the state's smart growth efforts

6. State Law requires that several mandatory indicators be reported by inside and outside of the priority funding areas. In addition to this requirement, the workgroup recommends that indicators should also be reported relative to locally designated growth areas and potential *PlanMaryland* Planning areas.
7. Indicators of the impact of planning and implementation practices should be developed to assess their smart growth implications. These indicators would be designed to discern the likely smart growth effects of current local and state policies on the type and location of future development and could remove the data clutter created by legacy development.

To: Jon Laria, Growth Commission Chairman

From: Sandy Coyman and Frank Hertsch

Date: September 26, 2011

Re: Indicators Workgroup Status Report

Introduction

This document is the Indicators Work Group status report to the Maryland Sustainable Growth Commission for the Commission's September 26, 2011 meeting. Below the work group provides background on its work to date, the results of the four beta testing jurisdictions' review of the proposed indicators and the work group's findings and recommendations. The work group received results and indicator assessments from two jurisdictions, and partial results/assessments from the other two jurisdictions; the work group will continue to seek complete results.

A review of the existing required five indicators and the analyzed potential indicators ability to address the commonly accepted ten principles of smart growth and Maryland's twelve visions is attached along with a matrix of the beta testing results received to date. Although only partial results are in, the work group believes its initial recommendations can begin Commission members' thought process on this matter. Final results and final recommendations will be transmitted as they become available.

Background

In July of this year, an indicator beta testing group was formed to further "test" the usefulness and feasibility of collecting the fifteen specific indicators proposed to the Growth Commission, in December of 2010. This group is comprised of representatives from four jurisdictions: Kathleen Freeman (Caroline County Planning), Kathleen Maher (City of Hagerstown Planning), Pamela Dunn (Montgomery County Planning), and Lynn Thomas (Town of Easton).

The beta testing group met in July to discuss the indicators to be tested and the process for collection. Each representative was provided a matrix including the fifteen indicators with a series of questions about each indicator. Questions included data availability, source information, feasibility of collecting indicator if not currently available, and thoughts on

proposed indicators and potential source recommended by technical team. Participants were also asked to provide data for a number of the indicators.

To assist in the effort of data collection workgroup staff gathered data for a number of the indicators, primarily those available from Census or other Federal data sources. For each of the indicators gathered by workgroup staff prepared a summary document for each indicator with the caveats and summary data for all counties. A matrix is attached with the completed data for the four beta jurisdictions. We will make the individual summaries available to anyone interested in them.

The fifteen indicators recommended by previous work groups for consideration by the Growth Commission include:

1. Housing Choices, including affordability:
    a. Housing Vacancy Rate
    b. Housing production / growth
    c. Rental and Owner Affordability
    d. Home Sales and Affordability
2. The Impact of Growth on the Environment, including Land, Air, & Water:
    a. Development on septic systems
    b. Percentage of new development served by public sewer
    c. Acres of open space in permanent protection and the means of protection
    d. The amount of forest acres cleared, conserved, and planted
    e. Wastewater treatment plant capacity and reported flow
    f. Land Use Change - loss of agricultural resource lands
3. The Job and Housing Balance:
    a. Jobs-Labor Force Ratio
4. The Impact of Transportation on Growth:
    a. Mode shares of transit, walk and bike for work or non-work, telecommuting
    b. Transit ridership rates
    c. State major transportation investment inside or outside PFAs

5. The Impact of Growth on Cultural and Historic Resources:
    a. Number of projects reviewed for compliance with federal and State

Beta Group Findings

Housing Choices, including affordability

Four indicators were reviewed by the beta testing jurisdictions in this category. These included housing vacancy rate, housing growth/production, rental/owner affordability and home sales affordability.

1. Housing vacancy- Beta testers agreed that Census/ACS (American Community Survey) is the best data available at the County and Municipal level. However this data is not always timely, one recommendation from group is to use 2010 Census as base and update every 3 years with ACS. Testers also noted that the HUD data would be timelier and would be available in the near future, as conflicts with USPS are getting resolved. However, these data are only available at the Census Tract level which would make reporting at the municipal level difficult.
2. Housing growth/production- This indicator is already required as of July 1, 2011. All beta testers did note that this data is available through permitting process and there have not been any difficulties in gathering this information.
3. Rental/owner affordability- All participants agreed that the Census/ACS is the best source for this information. Only comment is that the data will only be updated every three years.
4. Home sales and affordability- Responses on the ability to collect this metric varied across the group. The municipal representatives noted that there is no current source for this information and it would be difficult to collect. At the County level, the proposed data source is acceptable. Additional comments proposed the use of MLS (Multiple Listing Service) or BLS (Bureau of Labor Statistics) data to complete the computation.

The impact of growth on the environment, including land, air and water

1. Development on septic systems and sewer- All participants noted that these two indicators could be collected. The data is available from permit data or health department.
2. Acres of open space in permanent protection- Data are available for all jurisdictions. Most noted that if collected they would provide the data. It was suggested that if this indicator were proposed

a specific list of types of lands to be included be outlined in detail, as the level of detail and availability varies for some types of easements.

3. Amount of forest acres cleared, conserved, & planted- Comments varied by participant for this metric. Most noted that this information is required under the Forest Conservation Act and is available in other required reports. However, not all jurisdictions currently maintain an active database of this information; therefore if historical data were needed it would involve some work.
4. Wastewater treatment plant capacity- Metric is available from local utilities.
5. Loss of agricultural resource lands- Responses varied from having their own tracking database to only collecting when part of a development project. No members suggested that the Agricultural Census (collected every 5 years) could not be a potential source of the data; however it was noted that if more timely data are available those should be used.

The job and housing balance

1. Jobs-labor force ratio- Most jurisdictions noted some type of difficulty in collecting or credibility of the data proposed for this. In addition, the data are only available at the County level.

The impact of transportation on growth

1. Mode shares of transit, walk, bike for work and non-working- Participants agreed with proposed data source, noting that is what the jurisdiction currently uses.
2. Transit ridership rate- Response for this metric varied. Some jurisdictions noted that this information is available from local authorities, while others noted it is not currently collected. It is noted that this data is available from the Council of Governments therefore it may be possible to collect this data for many jurisdictions.
3. State and local major transportation investment by PFA- Most participants note that this is not something they currently collect. While the State does collect this information, comment was made about ability to collect at local level. Only one participant noted they can provide this data from their CIP (Capital Improvement Plan).

The impact of growth on cultural and historic resources

1. Number of projects reviewed for compliance with Federal and State laws (Section 106) - Program is administered by the Maryland Historic Trust. While it appears this data may be available at the County level, there is not currently a designation of those projects at the municipal scale.

Work Group Findings and Recommendations

Findings

1. The existing required indicators coupled with the potential indicators address the ten commonly accepted smart growth principles and Maryland's twelve visions at least tangentially.
2. The existing required indicators address many of the principles and visions but not all.
3. The possible indicator of "housing production/growth" is already addressed by the existing required indicators.
4. Eight of the remaining potential indicators can be readily calculated from data available to or collected by the Maryland Department of Planning.
5. Six potential indicators rely on locally generated data. Five of which the beta testing group had data to prepare them.
6. Many local jurisdictions have modest staff resources and these resources have declined recently due to budget cuts.
7. Maryland Department of Planning and the Center for Smart Growth have the capability to gather data and calculate indicators.
8. The Maryland Department of Planning is preparing a web based tool to assist with local jurisdictions' preparation of the required local annual development activity reports. This tool should be explored for its capability to produce the potential indicators.
9. Two beta testers have provided their assessment of the potential indicators and the use of indicators in general. Their comments are below.
10. Beta testing results are not conclusive at this point. Additional experience with data gathering and indicator calculation and analysis is needed. To this end, use of the state's annual report web tool could be a useful mechanism for a program of additional testing. However, it is noted that not all jurisdictions will choose to use the annual report web tool.

Maryland Sustainable Growth Commission

Recommendations

1. Determine whether the Center for Smart Growth or MDP should be the developer of the Census and state data based indicators and provide appropriate funding. The selected organization would also collate the local based indicators. All indicators should be compiled and analyzed in an annual report.
2. The MDP web tool should be modified to collect the potential indicators. However, an alternative format will be designed for those jurisdictions that choose not to use the web tool.
3. An expanded beta testing group of sufficient size should be gathered and be committed to providing the data for the local information based indicators for a four-year test period. A core group of beta testers of sufficient size should be assembled . This group should commit to providing the local data needed to calculate the local data dependent indicators. Also other local jurisdictions may voluntarily provide this type data as part of their annual reporting. They may then use the resulting indicators to assess their smart growth progress. At the end of the period, the efficacy of the potential indicators should be assessed. Continuation of this effort and the mechanism for their expanded data collection should be determined at that time.
4. MDP should monitor the potential indicators' use and MDP may add the results to its annual report.
5. The required and potential indicators do not access jurisdictions' development guidance system (zoning, subdivision and other implementation ordinances) for their smart growth potential. Indicators addressing this shortfall should be provided.

Indicators and Smart Growth Principles

September 22, 2011

Indicator	**Applicable Smart Growth Principles** (see attached sheet for list of principles and visions; # corresponds to a principle or vision)
SB 276/HB 295 Existing Required Indicators	
1. Growth in and our of PFAs	2,4,6,7,11,13,14,15,19,20,21,22
2. Net Density of growth	1,2,4,14,17,19,20,21
Inside PFA	
Outside PFA	
3. New Lots	2,4,6,7,11,13,14,15,19,20,21,22
Inside PFA	
Outside PFA	
4. Development capacity analysis	7,13,15,16,17,21
(update on three year cycle)	
5. Preserve acres by local	6,7,11,13,18,20,21,22
preservation funding	
Potential Indicators	
1. Housing Choices, including affordability:	
1. Housing Vacancy Rate (excludes seasonal housing)	3,17,18
2. Housing production / growth - New residential building permits inside and outside PFAs	See # 1 of the required indicators above
3. RENTAL & OWNER AFFORDABILITY: Cost Burdened Households (all household types) a. Owner Costs as 25% of Household Income b. Renter Costs as 30% of Household Income	3,17,18
4. Home Sales and Affordability: Percent of housing for sale by county for households earning 60%, 80%, and 100% of AMI with sample professions representing income tiers.	3,17,18
2. The Impact of Growth on the Environment, including Land, Air, & Water:	
5. Development on septic systems	1,2,6,14,19.22
6. Percentage of new development served by public sewer (as opposed to onsite sewage disposal system, such as septic systems)	2,6,7,15,19,20,
7. **Acres of open space** in permanent protection (including parks, forests, wetlands, agricultural land) and the means of protection (easement type, fee simple ownership, donated etc.)	6,11,19,20,21,22
8. The amount of forest acres cleared, conserved, and planted	2,6,20,21
9. Wastewater treatment plant capacity and reported flow	7,13,15,18,19,22
10. Land Use Change - loss of agricultural resource lands	2,6,7,11,18,20
3. The Job and Housing Balance:	
11. Jobs-Labor Force Ratio	11,18
4. The Impact of Transportation on Growth:	
12. Mode shares of transit, walk and bike for work or non-work, telecommuting	2,4,8,14,16,22
13. Transit ridership rates	2,4,8,14,16,22
14. State or Local major transportation investment inside or outside PFAs	22
5. The Impact of Growth on Cultural and Historic Resources:	
15. Number of projects reviewed for compliance with federal and State laws (i.e. "Section 106" Reviews)	5,14,

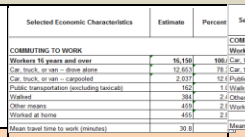
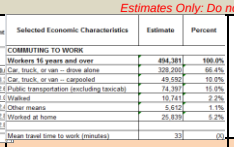
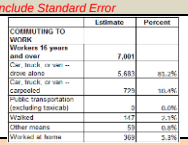
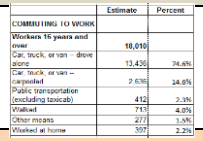
Indicators Beta Group

15-Sep-11
Data Provided by Beta Testing Jurisdictions

Indicator	Data Source	Geography of Indicator	Timeframe of Indicator	State of Maryland	Caroline County	Montgomery County	Town of Easton	City of Hagerstown
1. Housing Choices, including affordability:								
1. Housing Vacancy Rate (excludes seasonal housing)	Use HUD/USPS data for timely data that is available at the Census tract level. Use ACS data for more detailed information on housing unit breakdowns.	County and Municipality	ACS: Three-Year Average for areas 20,000 or hihger; 5-year average for smaller areas. HUD/USPS: Quarterly	2010 Census(excludes seasonal) =7.2% HUD 2008= 5.7%	2010 Census(excludes seasonal) =8.6% HUD 2008= 7.9%	2010 Census(excludes seasonal) =4.4% HUD 2008= 2.8%	2010 Census(excludes seasonal) =8.1%	2010 Census(excludes seasonal) =11.7%
2. Housing production / growth - New residential building permits inside and outside PFAs	Required as of July 1, 2011	------	------		------	------	------	------
3. RENTAL & OWNER AFFORDABILITY: Cost Burdened Households (all household types) a. Owner Costs as 25% of Household Income b. Renter Costs as 30% of Household Income	2006-2008 3 year estimate ACS tables B25091 (owner) and B25070 (renter)	State, County	2006-2008 3 year estimate ACS tables B25091 (owner) and B25070 (renter)	Owner >25%= 44% Rental >30%=45.8%	Owner >25%= 50% Rental >30%=33.9%	Owner >25%= 44% Rental >30%=48.2%	N/A	N/A
4. Home Sales and Affordability: Percent of housing for sale by county for households earning 60%, 80%, and 100% of AMI with sample professions representing income tiers.	For now use the HUD AMI income measure since is widely used for a variety of housing programs	State, County	Annual	100%AMI=47.2 80%AMI=29.3 60%AMI=15.0	100%AMI=50.6 80%AMI=21.1 60%AMI=6.6	100%AMI=36.6 80%AMI=20.2 60%AMI=8.1	N/A	N/A
2. The Impact of Growth on the Environment, including Land, Air, & Water:								
5. Development on septic systems	Data should be available through local health departments and/or via building permits. MDP also maintains an estimate of development on septics.	State, County, Municipality	Annual				557 residential; 150 non-residential	0%
6. Percentage of new development served by public sewer (as opposed to onsite sewage disposal system, such as septic systems)	Should be available from local governments and/or via building permits. MDP also could produce data set but would need to optain timely sewer service updates from local jurisdictions.	State, County, Municipality	Annual				For resid. - 92.4% on public sewer.	100%
7. Acres of open space in permanent protection (including parks, forests, wetlands, agricultural land) and the means of protection (easement type, fee simple ownership, donated etc.)	State and Local Governments. Local governments are required to report money spent on agricultural preservation beginning in July 2011.	State, County	Annual	22.4% Preserved 1,385,791 acres	24% Preserved 49,142 acres	38.6% Preserved 122,379 acres		In 2010, the following acres of open space were in permanent protection in the City of Hagerstown: 1) 630 acres of public parks, private cemeteries, and school grounds; 2) 59.17acres of forest con easement areas; 3) 0 acres of wetlands; 4) and 0 acres of agricultural land.
8. The amount of forest acres cleared, conserved, and planted	Required under the Forest Conservation Act	State, County, Municipality	Annual				For FY 2010 Cleared - 2.33 ac; conserved 0.73 ac; planted - 1.87 ac	As of September 2011, 235.31acres of "forest" were approved to be cleared, 59.17 acres of forest were conserved, 49.96 acres of forest were planted on private property, and 57.37 acres of street tree credits were approved. The City of Hagerstown planted 892 street trees between 2006-2009 using the City's Forest Conservation Fund.
9. Wastewater treatment plant capacity and reported flow	Data only available for the 67 major WWTPs (MDE/MDP).	State, County, Municipality	Annual				761,000 GPD (3,044 EDU's); Ave Daily Flow - 2,513,500 GPD	The capacity of the Hagerstown Wastewater Treatement Plant is 10.5 mgd and the annual flow in 2010 was 6.95 mgd.
10. Land Use Change - loss of agricultural resource lands	**Agricultural Transfer Tax**, Ag Census collected every 5 years. MDP's land use data is updated approximately every 5 years.	State, County	Annual	Ag Transfer Tax 2000-2010 = 152,076 acres 2011 =2,578 acres 2010=2,217 acres 2009= 3,208 acres	Ag Transfer Tax 2000-2010 = 8,876 acres 2011 =98 acres 2010= 1445 acres 2009= 11 acres	Ag Transfer Tax 2000-2010 = 23,670 acres 2011 =167 acres 2010= 87 acres 2009= 50 acres	N/A	N/A
3. The Job and Housing Balance:								
11. Jobs-Labor Force Ratio	Use with caveats, an insistence having some sort of measure between jobs and households, use U.S. BEA total jobs , less federal military employment (since labor force measure is for civilians only). The group's recommnedation is to look at trends but not to set an "ideal ratio" as a goal.	Region, County	Annual	Not Recommended by Beta Testers, many caveats	Not Recommended by Beta Testers, many caveats	Not Recommended by Beta Testers, many caveats	N/A	N/A

4. The Impact of Transportation on Growth:

Estimates Only: Do not include Standard Error

12. Mode shares of transit, walk and bike for work or non-work, telecommuting	Annual,5 year estimates if municipal	State, region	Annual, 5 year estimate ACS table					
13. Transit ridership rates	State and Local transit systems.						19,634 on two bus routes involving Easton	The County Commuter does not track ridership within the City of Hagerstown.
14. State or Local major transportation investment inside or outside PFAs	This data is being collected at the State level. It may be difficult to collect at the local level.	State	Annual		N/A	N/A	N/A	N/A

5. The Impact of Growth on Cultural and Historic

15. Number of projects reviewed for compliance with federal and State laws (i.e. "Section 106" Reviews)	Projects are broken down into "effect" categories (i.e. no effect, no adverse effect or adverse affect), so it could tell us where growth is adversely affecting historic properties.	State, County	Annual		**Caroline County**			**Montgomery County**			N/A	N/A

	federal	state	all reviews
FY2009	67	28	95
FY2010	57	34	91
FY2011	30	14	44
	154	76	230

	federal	state	all reviews
FY2009	249	142	391
FY2010	638	99	737
FY2011	484	90	574
	1371	331	1702

TO: Jon Laria, Chair, Maryland Sustainable Growth Commission

FROM: Sandy Coyman, Chair, Indicators Workgroup

SUBJECT: Indicators Technical Team Report

DATE: December 2010

I. INTRODUCTION

This report serves as the final report of the technical team of the Indicators Workgroup for the Maryland Sustainable Growth Commission (formerly Task Force on the Future of Growth and Development in Maryland). The technical team carefully considered all of the indicators recommended by the Indicators Workgroup and offers a list of recommended indicators, along with information and analysis about each indicator, for consideration by the Growth Commission.

There are 15 specific indicators that are being recommended for consideration by the Growth Commission. They include:

1. Housing Choices, including affordability:
    a. Housing Vacancy Rate
    b. Housing production / growth
    c. Rental and Owner Affordability
    d. Home Sales and Affordability
2. The Impact of Growth on the Environment, including Land, Air, & Water:
    a. Development on septic systems
    b. Percentage of new development served by public sewer
    c. Acres of open space in permanent protection and the means of protection
    d. The amount of forest acres cleared, conserved, and planted
    e. Wastewater treatment plant capacity and reported flow
    f. Land Use Change - loss of agricultural resource lands

3. The Job and Housing Balance:
    a. Jobs-Labor Force Ratio
4. The Impact of Transportation on Growth:
    a. Mode shares of transit, walk and bike for work or non-work, telecommuting
    b. Transit ridership rates
    c. State major transportation investment inside or outside PFAs
5. The Impact of Growth on Cultural and Historic Resources:
    a. Number of projects reviewed for compliance with federal and State laws

Please note that there are two broad categories where there were no indicators recommended by the workgroup and therefore nothing for the technical team to review. These include: "The fiscal cost of growth" and "The impact of growth on business, including job creation, fiscal impact, agribusiness, tourism, and forestry."

II. BACKGROUND/INDICATORS WORKGROUP

The passage of Senate Bill 276 and House Bill 295 – Smart, Green, and Growing – Annual Report – Smart Growth Goals, Measures, and Indicators and Implementation of Planning Visions in the 2009 General Assembly Session, among other things, required the Task Force to make further recommendations on additional measures and indicators.

The uncodified section of HB295 required that the Task Force for the Future of Growth and Development in Maryland make recommendations for additional indicators that the State, National Center for Smart Growth or a local jurisdiction should be required to collect in the following categories:

1. Housing choices, including affordability;
2. The impact of growth on the environment, including land, air and water;
3. The fiscal cost of growth;
4. The job and housing balance;
5. The impact of transportation on growth;
6. The impact of growth on business, including job creation, fiscal impact, agribusiness, tourism, and forestry; and
7. The impact of growth on cultural and historic resources.[1]

[1] HB 295 Enrolled Bill, page 15.

A preliminary list of indicators was presented by the Indicators Workgroup that described the indicators in the context of the following categories:

1. The proposed indicator;
2. An assessment of the indicator's data availability;
3. A suggested frequency for updating the indicator;
4. A suggested geographical coverage for the indicator;
5. A notation of whether the indicator is derived from other information or is readily measurable itself (empirical);
6. A listing of identified issues with the indicator;
7. The suggested indicator development and reporting entity; and
8. The Workgroup's final assessment of the indicator.

In the Spring/Summer of 2009, the Indicators Workgroup of the Task Force identified additional smart growth measures and indicators and reported to the full Task Force at its July and September meetings. The workgroup evaluated many indicators in terms of relevance to smart growth, availability of data, and the practical ability to collect information about the indicator on a regular basis.

A letter was sent to the General Assembly in November of 2009 recommending a cautious approach to the adoption of additional mandatory indicators. The fundamental finding of the Indicators Workgroup was that there are many potential indicators; each requiring data, which in some cases can be difficult or impossible to obtain. Further, many indicators provide very useful information about the subject they measure, but they may have only a tenuous relationship to assessing a jurisdiction's smart growth performance. Therefore, the Task Force's primary recommendation to the legislature was that potential indicators be fully studied and vetted before new indicators are legislatively imposed.

III. TECHNICAL TEAM

The work group designated a technical team to "test" the indicators presented on the "List of Potential Smart Growth Indicators." The technical team includes representatives from: the Maryland Department of Planning, the National Center for Smart Growth Research and Education at the University of Maryland, and local government representatives involved in data collection to complete an assessment of the indicators on the "List of Potential Smart Growth Indicators". Participants include Stephanie Martins (MDP), Mark Goldstein (MDP), Jim Palma (MDP), Jenny King (MDP), Rebecca Lewis and Gerrit Knaap (National Center for Smart Growth Research and Education), Dan Rooney (Harford County Planning & Zoning), Joe Adkins

(Frederick City Planning), and Sandy Coyman (Chair of the Indicators Workgroup and Director Talbot County Planning and Zoning).

This group met in April and May of 2010 and assigned group members to test specific indicators. The group then reconvened to discuss each of their findings. The "Findings" section below and attached matrix gives the group's general feedback on each indicator. The attached Appendix represents the actual data that were collected about each indicator. This is not intended to be used for analysis, but it shows, in some cases, sample information that could be collected at the statewide scale.

IV. FINDINGS

Housing choices, including affordability

Six indicators were reviewed by the technical team in this category. They include indicators related to housing vacancy rate, housing growth/production, and affordable housing. In general, all six specific indicators were found to be useful information to collect and all had some relationship with Smart Growth. There were several indicators that had specific data-related issues. Housing vacancy rates, housing production/growth (required as of July 1, 2011), rental and owner affordability (number of cost burdened households of all types), and home sales and affordability were the three indicators that the group recommended be moved forward. The other two, measuring supply and demand for affordable housing, are useful indicators but there are some data compatibility issues that need to be worked out with DHCD before moving forward.

The impact of growth on the environment, including land, air and water

The group reviewed eight potential indicators in this category. Six of these indicators were found to meet all of the criteria to be included as recommended indicators. Many of these measures are already being collected or would be relatively easy to compile. They include information on development served by wastewater treatment plants vs. on-site sewage disposal systems (septic systems), wastewater treatment plant flow and capacity for future flow, acres of permanently protected lands, and loss of resource lands (agriculture and forest).

Two indicators in this category were "Not Recommended", including "Amount of impervious surface" and "number of developed parcels using best management practices for stormwater management". These were mainly rejected due to data constraints. In the case of impervious surface, there is a wide range of ways that this information could be reported. More work needs to be done to come up with an accepted methodology to calculate percentages of impervious surface. More work also needs to be done on the presentation of such information as it relates to smart growth. In the case of the indicator related to the number of parcels using BMP's for stormwater management, providing comparable data over time and across the state is problematic. Most new development will be required to use BMP's. This data is more relevant at a project-level, not at the parcel level. BMP's may also vary considerably from site to site,

and jurisdiction to jurisdiction. It would be difficult to standardize these into one coherent indicator for the State.

The job and housing balance

Jobs-Labor Force Ratio was the indicator that was analyzed in this category. This indicator is concerned with the balance between jobs and workers to fill those jobs. Ideally, in a smart growth environment, residents would live near their work and not have to commute long distances. Given the fact that labor markets are regional in nature, there is very little utility in using this measure at a county level. Moreover, in some parts of Maryland labor markets also cross state boundaries resulting in individual counties supplying substantial portions of their resident labor force to more than one region, thus making even regional measurements in need of qualification. Also noted was the fact that there are a couple of different measures of jobs which each resulting in different ratios. The group's recommendation is to monitor trends related to this indicator, but not to set an "ideal ratio" as an achievable goal at this stage, since there is no one ratio to give the full picture of this complicated indicator.

The impact of transportation on growth;

The group analyzed three indicators in this section and recommends that two be moved forward. These include "mode shares of transit, walk and bike for work or non-work, telecommuting" and "transit ridership rates". It was indicated that there were reliable datasets for each of these indicators and that they both related to smart growth.

The third indicator, "State or Local major transportation investment inside or outside PFAs" is already collected for the State. It was felt that this would be more difficult to collect at the local level and that it may be an unfair measure to rural jurisdictions with a lot of road miles outside of their PFA.

The impact of growth on cultural and historic resources

Three indicators were evaluated in this category. One was recommended by the group to move forward. The Maryland Historic Trust (MHT) Review and Compliance Program is a regulatory program that reviews state and federal undertakings to ensure that Maryland's important historic and archeological properties will not be adversely affected or destroyed by the actions of federal and state agencies or by entities receiving assistance from those agencies. Under federal and state historic preservation laws, commonly referred to as the "Section 106" process, MHT reviews projects that are undertaken with some level of federal or state funds, permits, or licenses. These projects include a wide variety of undertakings throughout Maryland, ranging from the rehabilitation of individual houses, installation of piers and bulkheads, to major transportation and utility projects, park improvements, schools, actions at federal defense installations, and other undertakings. Through consultation with the involved agencies, project sponsors, local governments, consultants, and the interested public – MHT assists program users in fulfilling their historic preservation responsibilities and ensures the appropriate stewardship of Maryland's heritage resources. This indicator relates to smart growth in that it can help inform where growth is a threat to historic preservation activities.

The other two indicators, “Number of demolition permits issues for properties 50 years old and older” and “Number of building permits issues for properties 50 years old and older” were not recommended. Although they would provide valuable information related to smart growth, they were not recommended primarily due to data issues identified by the group. It was felt that it would be too burdensome for many (especially older) local governments to link age of structure to demolition and building permits, since the age of the structure would need to be verified.

IV. CONCLUSIONS

As was previously recommended to the General Assembly in November of 2009, the Indicators Technical Team continues to recommend that the Commission take a cautious approach towards adopting additional mandatory indicators. While the Team feels that these indicators will be useful in assessing smart growth successes and effects, and feels that collecting the data required by each indicator will not be an onerous task for those charged with completing it, their usefulness still needs to be proven “in the field.” This cautious approach is taken, in part, because under HB295 local governments are just beginning collecting the indicators which are due to be reported by July 1, 2011.

Indicators Technical Team

12/21/2010

Indicator	What does the indicator tell us? What is its relationship to Smart Growth?	Geography of the Indicator (County, Municipality, Region, State)	Issues with Indicator	Timeframe of Indicator	Technical Team Recommendation
1. Housing Choices,					
1. Housing Vacancy Rate	Smart Growth seeks to create healthy, vibrant communities. Vacancy rates measure the relative health of a community. Increasing vacancy rates can be an indicator of economic distress, while decreasing rates can signal the need for more housing units.	State, County, and municipality. Zip code or Census Tract.	Data from the ACS does not cover all jurisdictions in Maryland unless three-year averages are used. Averages over time may obscure important trends. Data from HUD and the USPS is issued quarterly on the tract level, but lacks detail describing the nature of the vacant housing units.	ACS: Three-Year Average for areas 20,000 or hihger; 5-year average for smaller areas. HUD/USPS: Quarterly	Recommended: use the HUD/USPS data for timely data that is available from the Census tract level. Use ACS data for more detailed information on housing unit breakdowns.
2. Housing production / growth - New residential building permits inside and outside PFAs	This is an indicator of where growth is happening on the ground. It is also required under the Indicators Legislation to be reported by jurisdictions by July 1, 2011.	State, County.	Overall most jurisdictions should not have a problem; Some smaller jurisdictions may have to difficulty.	Annual	Recommended (required as of July 1, 2011)
3. RENTAL & OWNER AFFORDABILITY: Cost Burdened Households (all household types) a. Owner Costs as 25% of Household Income b. Renter Costs as 30% of Household Income	Relate to housing affordability - are MD counties becoming more or less affordable over time for renters and owners?	State, County	summed to get >25% for owner and >30% for renter	2006-2008 3 year estimate ACS tables B25091 (owner) and B25070 (renter)	Recommended
4. Shortfall / Demand for Rental Housing	Identifies demand for affordable/workforce rental housing for families, seniors and disabled.	State, County	DHCD has worked on draft numbers by County for this measure. There are some longer-term data issues that would need to be worked out before this indicator would be completely useful	Annual	Not recommended: This is a good measure, but DHCD needs more time for data clean-up
5. Subsidized & Affordable Housing Inventory. Number of subsidized rental housing opportunities by county.	Indicates available supply and location (where possible) of affordable rental housing.	State, County	DHCD has worked on draft numbers by County for this measure. There are some longer-term data issues that would need to be worked out before this indicator would be completely useful	Annual	Not recommended: This is a good measure, but DHCD needs more time for data clean-up
6. Home Sales and Affordability: Percent of housing for sale by county for households earning 60%, 80%, and 100% of AMI with sample professions representing income tiers.	The percent of recent housing sales affordable using a standard income measure. Housing affordability, especially an affordability level which allows workers to live close to where they work, is one of the key goals of smart growth.	State, County.	The issue with affordability measures is what to use on the income side. The AMI income measure has both advantages and disadvantages. The advantage is that it is a generally recognized and widely used (if flawed) measure of family income. The disadvantage is that the income measures are by Region, and so, for e.g., the same median income is used for Howard County and Baltimore City (and thereby underestimating what the the median income of Howard actually is, and overstating the median income of Baltimore City. The solution may be to use individual county median income measures, but there are no annual measures available for all Maryland counties, and three-year income measures may mask affordability issues. SAIPE annual income measures have generally very large MOEs for the smaller counties Regarding income of selected "professions" the issue here is that you are sssuming that is the only income available for the household, when in all probability, you are more than likely to have a two-earnier household. If so, you are understating the affrodability by using this measure. For example, a recent masters thesis looked at housing affordability for	Annual	Recommended: For now, go with the HUD AMI income measure since is widely used for a variety of housing programs

Indicators Technical Team

12/21/2010

Indicator	What does the indicator tell us? What is its relationship to Smart Growth?	Geography of the Indicator (County, Municipality, Region, State)	Issues with Indicator	Timeframe of Indicator	Technical Team Recommendation
2. The Impact of Growth on					
7. Amount of impervious surface	This is an indicator of where new impervious surfaces are being created (linked to growth) and links can be made to water quality from this indicator.	Municipality, County, watershed	Problematic. Not all counties have the GIS layers that can accurately generate this data. If using MDP data, a methodology that could work for all counties would need to be developed with input from counties.	No set timeframe. MDP's land use data is updated approximately every 5 years.	Not recommeded at this time due to data collection issues.
8. Development on septic systems	This is an indicator that can be linked with sprawl development. In a smart growth environment, the number of new parcels on septic systems should decrease.	County	This data should be available through local health departments and/or via building permits. MDP also maintains an estimate of development on septics.	Annual	Recommended
9. Percentage of new development served by public sewer (as opposed	This is an indicator that can be linked with smart growth. In a smart growth environment, the	County	Will need updated Water & Sewer Plan updates from local jurisdictions.	Annual	Recommended
10. Acres of open space in permanent protection (including parks, forests, wetlands, agricultural land) and the means of protection (easement type, fee simple ownership, donated etc.)	It tells us how much land we are permanently preserving from development. In a smart growth environment, policies and programs would work together with land preservation to conserve the most valualbe rural resource lands. Note: local governments are required to report money spent on agricultural preservation beginning in July 2011.	State, County	State information might not be as up-to-date as what the locals have.	Annual, by fiscal year.	Recommended
11. The amount of forest acres cleared, conserved, and planted	This is an indicator of the status of forest land by jurisdiction. Forest land is often associated with	County	Most data should be easily available as is currently collected through "Forest Conservation" requirements.	Annual	Recommended, this is required under the Forest
12. Number of developed parcels using best management practices for stormwater management	This indicator would give us an indication of where stormwater BMPs were being used around the state. In a smart growth envornment, stormwater BMPs would be used in order to support growth but protect water quality.	County	Providing comparable data for this is probelmatic. Most new development will be required to use BMP's. This data is more relevant at a project-level, not parcel-specific. BMP's mau vary considerably from site to site.	Annual	Not recommeded at this time.
13. Wastewater treatment plant capacity and reported flow	It gives us information about the ability for the wastewater treatment plants to serve future growth. In a smart growth environment, most growth in Maryland would be served by sewer.	By wastewater treatement plant, could be aggregated to region.	Only available for the 67 major wastewater treatment plants	Annual	Recommended, but data only available for the 67 major WWTPs.
14. Land Use Change - loss of agricultural resource lands	This shows us how much agricultural land is being developed over time. In a smart growth environment, less agricultural land would be developed.	County	MDP data would be consistent for use on state-wide basis; Ag Census data could supplement or be used in conjunction with MDP LU data.	Ag Census collected every 5 years. MDP's land use data is updated approximately every 5 years.	Recommended
3. The Fiscal Cost of					
4. The Job and Housing					
15. Jobs-Labor Force Ratio	Balance between jobs and workers to fill those jobs. Ideally, in a smart growth environment, residents would live near their work and not have to commute long distances.	Region, County	There is very little utility in using this measure at a couny level, since labor markets are regional in nature. Moreover, in some parts of Maryland, labor markets also cross state boundaries, and individual counties can supply substantial portions of their resident labor force to more than one region, making regional measurements in need of qualification. Also, there are a couple of different measures of jobs which would give you different results. Using BEA total jobs would somewhat exaggerate the total job count for this purpose because of the large number of proprietors. To use the BEA W&S only, or the QCEW, leaves out the propietor measure althogether, and therefore understates the job count.	Annual	Recommended, with caveats: If there is an insistence on having some sort of measure between jobs and households, use U.S. BEA total jobs , less federal military employment (since labor force measure is for civilians only). The group's recommnedation is to look at trends but not to set an "ideal ratio" as a goal.

Indicators Technical Team

12/21/2010

Indicator	What does the indicator tell us? What is its relationship to Smart Growth?	Geography of the Indicator (County, Municipality, Region, State)	Issues with Indicator	Timeframe of Indicator	Technical Team Recommendation
5. The Impact of					
16. Mode shares of transit, walk and bike for work or non-work, telecommuting	Relate to transportation mix - what is mode split? Are public transport/walking/biking increasing over time?	State, region	Broke down into drove alone, carpool, public transport, bike, other, work at home	Annual, 2006-2008 3 year estimate ACS table C08301	Recommended
17. Transit ridership rates	This indicator can tell us how many people use transit by jurisdiction. In a smart growth environment, transit ridership would be high.	State, region, County	Should be easily obtained by local transit systems.	Annual	Recommended
18. State or Local major transportation investment inside or outside PFAs	This indicator can tell us where the State and local jurisdictions are investing in roads. The State already tracks this as part of the smart growth spending report.	State, County, Municipality	Could be unfair to rural jurisdictions with a lot of road miles outside of their PFA.	Annual	This data is being collected at the State level. It may be difficult to collect at the local level.
6. The Impact of Growth on Business, including Job Creation, Fiscal Impact, Agribusiness, Toursim, & Forestry:					
7. The Impact of Growth on Cultural and Historic Resources:					
19. Number of projects reviewed for compliance with federal and State laws (i.e. "Section 106" Reviews)	Projects are broken down into "effect" categories (i.e. no effect, no adverse effect or adverse affect), so it could tell us where growth is adversely affecting historic properties.	Counties and Municipalities		Annual	Recommended
20. Number of demolition permits issues for properties 50 years old and older.	This measure could be an indicator of redevelopment activity relative to historic structures.	Counties and Municipalities	Problematic. Does not identify historic properties necessarily. Would involve verifying the age of each structure somehow e.g. using Assessments & Taxation data to check "year built" field, which would be time-consuming particularly for older jurisdictions with older housing stock.	Annual	Not recommended
21. Number of building permits issues for properties 50 years old and older.	This measure could be an indicator of redevelopment activity relative to historic structures.	Counties and Municipalities	Problematic. Does not identify historic properties necessarily. Would involve verifying the age of each structure somehow e.g. using Assessments & Taxation data to check "year built" field, which would be time-consuming particularly for older jurisdictions with older housing stock.	Annual	Not recommended

November 16, 2009

The Honorable Joan Carter Conway
Chairperson
Senate Education, Health and Environmental Affairs Committee
2 West, Miller Senate Building
Annapolis, MD 21401

The Honorable Maggie McIntosh
Chairperson
House Environmental Matters Committee
Room 251, House Office Building
Annapolis, MD 21041

Dear Chairpersons Conway and McIntosh:

As Chairman of the State's Task Force on the Future for Growth and Development, I am writing to you regarding Senate Bill 276 and House Bill 295 – Smart, Green, and Growing – Annual Report – Smart Growth Goals, Measures, and Indicators and Implementation of Planning Visions. As you may recall, the bill requires local planning commissions or boards to submit annual reports on a uniform set of smart growth measures and indicators. The law also establishes for the first time a statewide land use goal with the specific intention of increasing the current percentage of growth within the PFA and decreasing the percentage of growth outside of the PFA. An uncodified section of the bill required the Task Force to make further recommendations on additional measures and indicators that the State, the National Center for Smart Growth, or a local jurisdiction should be required to collect in seven issue areas such as the impact of growth on the environment and the fiscal cost of growth. This letter serves as the Task Force's report on recommendations for this section of the law.

The Indicators Workgroup of the Task Force has worked diligently since May to identify additional smart growth measures and indicators and reported to the full Task Force at its July and September meetings. The workgroup evaluated many indicators in terms of relevance to smart growth, availability of data, and the practical ability to collect information about the indicator on a regular basis.

After long deliberation, the Task Force strongly encourages a cautious approach to the adoption of additional mandatory indicators at this time. The fundamental finding of the Indicators Workgroup is that there are many potential indicators; each requiring data, which in some cases can be difficult or impossible to obtain. Further, many indicators provide very useful information about the subject they measures, but they may have only a tenuous relationship to assessing a jurisdiction's smart growth performance. Therefore, the Task Force's primary recommendation to the legislature is that potential indicators be fully studied and vetted before new indicators are legislatively imposed. Indicators should be a tool for community assessment and policy development, and generally rely

on readily available data. Indicator development will take time and probably several iterations of the initial list of indicators provided by the Workgroup.

Given this finding, the Task Force is pursuing a process to "test" the indicators presented on the Workgroup's "List of Potential Smart Growth Indicators" (attachment). These indicators were approved by the Task Force as meeting the criteria described above. The Task Force will enlist the help of the Maryland Department of Planning, the National Center for Smart Growth Research and Education at the University of Maryland, and local government representatives involved in data collection to complete an assessment of the indicators on the "List of Potential Smart Growth Indicators". This work will do several things including: collect and report information for each indicator, highlight any issues with data collection, presentation, and interpretation associated with each indicator, and relate each indicator smart growth progress. In short this technical review group will answer the question: do the proposed indicators answer whether Maryland is successfully achieving its smart growth objectives? If not, how can indicators be used to determine what is preventing the achievement of statewide visions and goals?

The technical review group will give a progress report to the Task Force in May, 2010. At a minimum, a status report listing progress to-date, including identification of major issues and hurdles encountered, will be presented. By September 30, 2010, the group will produce a final report to the Task Force, which will make any additional recommendations to the General Assembly at that time.

Please contact me if you have any questions or concerns about the smart growth indicator recommendations or the continued work of the Task Force.

Sincerely,

Jon M. Laria, Chair
Task Force on the Future for Growth & Development

cc: Richard E. Hall, Secretary

Potential Smart Growth Indicators

DRAFT September, 2009

Indicator	Availability of Data/Information	Frequency of Updates	Geography of the Indicator (County, Municipality, Region, State)	Empirical Data vs. Derived Analysis	What does the indicator tell us? What Goal is it Accomplishing?	Issues with Indicator	Who is responsible for Reporting?	Workgroup Recommendation
1. Housing Choices, including affordability:								
1. Housing Vacancy Rate	Census, ACS Data for some counties, and USPS	Decennial, quarterly and yearly where possible (ACS)	State and County. Zip code or Census Tract if possible.	Empirical	Identifies housing revitalization needs and opportunities in particular jurisdictions.	1. The 2005-2007 averages from ACS is not available for Kent County. 2. Year by year ACS data is only available for 16 Maryland counties. It should also be noted that year to year data is not supposed to be compared to each other because of the methodology used to collect the data. 3. No issues with using decennial census data or USPS data	DHCD	OK
2. Housing production / growth - New residential building permits inside and outside PFAs	Residential permit data in and out of the PFA required by House Bill 295.	Annual	State, County.	Empirical	Identifies extent and location of new residential construction activities.		Local Governments	OK
3. RENTAL & OWNER AFFORDABILITY: Cost Burdened Households (all household types) a. Owner Costs as 25% of Household Income b. Renter Costs as 30% of Household Income	American Community Survey / CHAS	Annual	State, County	Empirical and Derived	Identifies extent of households that have a cost burden (paying too much for housing) for renters, owners, and elderly.		DHCD	OK
4. Shortfall / Demand for Rental Housing	Data is currently produced by DHCD	Annual	State, County	Derived Analysis	Identifies demand for affordable/workforce rental housing for families, seniors and disabled.		DHCD	OK
5. Subsidized & Affordable Housing Inventory. Number of subsidized rental housing opportunities by county.	DHCD survey/research of HUD, Housing Authorities, & Local Governments.	Annual/Every 5 Years	State, County, zip code.	Empirical	Indicates available supply and location (where possible) of affordable rental housing.	DHCD commits to updating and expanding the list moving forward. DHCD already reports this inventory to HUD as part of the 5 year Consolidated Plan.	DHCD	OK

Indicator	Availability of Data/Information	Frequency of Updates	Geography of the Indicator (County, Municipality, Region, State)	Empirical Data vs. Derived Analysis	What does the indicator tell us? What Goal is it Accomplishing?	Issues with Indicator	Who is responsible for Reporting?	Workgroup Recommendation
6. Home Sales and Affordability: Percent of housing for sale by county for households earning 60%, 80%, and 100% of AMI with sample professions representing income tiers.	MRIS and MDP	Monthly and Yearly	State, County.	Empirical data	Identifies the market supply of affordable/workforce for sale housing. A central indicator to identify local affordability.	Data is collected and available by price point rather than AMI. It could include picking additional price points.	DHCD	OK
2. The Impact of Growth on the Environment, including Land, Air, & Water:								
7. Amount of impervious surface	Would have to be generated. MDP's land use layer could be the base for this. Explore using building permit data to capture this information.	Every 5 years	Municipality, County, watershed	MDP derived the impervious cover from land use classifications. If building permit data, would be empirical.	The percent impervious surface in a watershed correlates with the health of aquatic resources. The watersheds with the highest values for this indicator offer the greatest potential for implementation of best management practices whose objective is to filter runoff and moderate runoff peak velocities. GOAL: Environmental Protection.	If using MDP data, this would be a generalized estimate of impervious surface. Building permits do not uniformly capture this information.	MDP/Local Governments	OK, further study to explore site level data through building permits.
8. Development on septic systems	Available from MDE/MDP	Annual	County	Number of septic systems is empirical; pounds of nitrogen released could be derived	The increase in the number of septic systems is an indication of the number of buildings constructed in areas not served by public systems. GOAL: Environmental Protection	Data is collected at the local and state level. Further study on this would determine the best way to collect the information.	MDE/Local Governments/MDP	OK, further study to explore possibility of capturing data through building permits
9. Percentage of new development served by public sewer (as opposed to onsite sewage disposal system, such as septic systems)	MDP has a method to collect this information using the County Master Water and Sewer Plans Many local governments have this information	Annual	County	Empirical	Public sewer generally correlates with denser development and development closer to existing communities. GOAL: Environmental Protection.	This indicator depends on accurate Water and Sewer plan data. MDP collects this but many Water and Sewer plans are outdated and the maps may not accurately reflect where sewer service actually exists.	Local Governments/MDP	OK
10. Acres of open space in permanent protection (including parks, forests, wetlands, agricultural land) and the means of protection (easement type, fee simple ownership, donated etc.)	Available from DNR/MDA/Counties/MDP	Annual	State, County	Empirical	Indicator of where tracts of resource lands are being permanently preserved across the State. GOAL: Resource land conservation	May be difficult to capture all the data. For example, MDE sometimes imposes permanent protection of wetlands and buffers in permits. (Remember HB 754 from 2009?)	DNR	OK
11. The amount of forest acres	This indicator should be tied to Forest Conservation Act implementation: acres of forest conserved on-site, planted on and off site, and fee-in-lieu activities.	Annual	County	Derived	It is not environmentally beneficial to clear forest; conservation of forest is generally good;	The indicator tells us little about the quality of the forest, e.g., the size of the contiguous tracts or the	DNR is required to report annually. See Nat. Res.	OK, further study to consider alternative indicators for this related to development

Indicator	Availability of Data/Information	Frequency of Updates	Geography of the Indicator (County, Municipality, Region, State)	Empirical Data vs. Derived Analysis	What does the indicator tell us? What Goal is it Accomplishing?	Issues with Indicator	Who is responsible for Reporting?	Workgroup Recommendation
cleared, conserved, and planted	DNR is working on using NAIP aerial photography to track this indicator				establishing new forests has many environmental benefits. GOAL: Resource Conservation	habitat value.	Code Section 5-1613.	(Example: forest lost per residential unit or developed acre)
12. Number of developed parcels using best management practices for stormwater management	Available from MDE for jurisdictions covered by MS4 permits	Annual	County	Empirical	A great deal of development occurred before the stormwater programs began. Retrofitting is (or is going to be) required in Municipal Separate Storm Sewer System Permits (MS4 Permits). GOAL: Environmental Protection	This indicator is not directly related to growth, but it does represent investment in land management to restore the environment. It may not be available in all jurisdictions.	MDE	OK
13. Wastewater treatment plant capacity and reported flow	MDE	Annual	By wastewater treatement plant, could be aggregated to region.	Empirical	Increases in capacity result from investment in infrastructure to serve relatively compact growth. The difference between capacity and flow usually indicates whether there is a potential for growth.	Capacity rarely changes for a specific WWTP. If tracked by construction permits, data will not reflect when the plant comes on line or when it will use all the capacity.	MDE	OK
14. Land Use Change - loss of agricultural resource lands	MDP land use/land cover layer and parcel information	Updated every 5 years (parcels updated annually)	County	Empirical	Estimate of acres of land lost to development over time	Frequency of updates, data compatibility over time	MDP/local government	OK, further study to consider using Ag Census for this measure.
3. The Fiscal Cost of Growth:								
4. The Job and Housing Balance:								
15. Jobs-Labor Force Ratio	BLS and DLLR for labor force data	Annual	Region, County	Empirical	Can inform as to the basic relationship between demand and supply of labor at the County level, but should NOT be used to set a particular "ideal" ratio. A ratio is also more relevant at the region level, where the component counties are all in the same job market/labor force shed.	Will have different measures of jobs (BEA/BLS) which would yield different results. Use of households or housing unit data, while the more common measure, will neglect to take into account different demographics of populations and ultimately different labor force characteristics.	MDP	OK
5. The Impact of Transportation on Growth:								
16. Mode shares of transit, walk and bike for work or non-work, telecommuting	American Community Survey (Census Bureau)	1 year and three and/or five-year averages depending on population size	State, region	Survey	Indicates the percentage of people who use transit, bike, walk, or other non-SOV travel. Goals: to increase transportation choices; investment in transit and other alternative transportation; maximize transportation system connectivity, walkability.		MDOT	OK
17. Transit ridership rates	MTA, local transit systems	annual	State, region, County		Indicates the increase/decrease of transit usages. Goal: encourage transit usages		MTA/Local transit system	OK

Indicator	Availability of Data/Information	Frequency of Updates	Geography of the Indicator (County, Municipality, Region, State)	Empirical Data vs. Derived Analysis	What does the indicator tell us? What Goal is it Accomplishing?	Issues with Indicator	Who is responsible for Reporting?	Workgroup Recommendation
18. State or Local major transportation investment inside or outside PFAs	State: CTP; Local: CIP	annual	State, County, Municipality	Derived Analysis	Indicates where major state and local transportation improvements are implemented and how they may affect growth. Goal: invest major transportation facility improvements to support growth inside PFAs	Transportation projects are linear in nature and often located partially within PFAs, which creates ambiguousness for defining whether a project is outside or inside PFAs. The 1997 Priority Funding Areas law restricts the use of State funds to only fund major transportation projects that are located within PFAs. The law does not provide clear guidance for a project that is partially within and partially outside of a PFA. To address this issue, in 2002, COMAR 11.04.13 Smart Growth established criteria to determine whether a State transportation will be considered as locating inside PFAs. Generally speaking, a transportation project deems to be located inside PFAs if each segment of the project is less than 5% of the total lane miles of the project, or necessary for access management purposes, and if the total length of these small segments of the project is less than 20% of the total lane miles of the project.	MDOT/MDP for state projects; County/municipality for local projects	OK
6. The Impact of Growth on Business, including Job Creation, Fiscal Impact, Agribusiness, Toursim, & Forestry:								
7. The Impact of Growth on Cultural and Historic Resources:								
19. Number of projects reviewed for compliance with federal and State laws (i.e. "Section 106" Reviews)	Data currently maintained by MD Historic Trust (MHT) staff	Annually	Counties and Municipalities	Empirical	Projects are broken down into "effect" categories (i.e. no effect, no adverse effect or adverse affect), so it could tell us where growth is adversely affecting historic properties.	Section 106 reviews are only completed for projects requiring State or federal funding, permits or licenses. Privately funded or county/municipal-funded projects not requiring licenses or permits would not be counted.	MHT	OK
20. Number of demolition permits issues for properties 50 years old and older.	Most jurisdictions track demolition permits. Adjustments may need to be made to track the date of the building.	Annually	Counties and Municipalities	Empirical	It tells us the number of potentially historic properties demolished.	It may be hard to tell if the demolition was completed to allow new development on the property or if it was demolished just to be demolished. It would be ideal if we could capture this information in the permit process, (i.e. demolition for redevelopment, threats to un-insure by insurance company, or condemnation by local authorities.	Local Governments	OK
21. Number of building permits issues for properties 50 years old and older.	Most jurisdictions track building permits. Adjustments may need to be made to track the date of the building.	Annually	Counties and Municipalities	Empirical	It tells us the number of potentially historic properties rehabilitated.		Local Governments	OK