

Maryland Department of Planning Report on Land Use Programs to the Maryland Commission on Climate Change

Program Description

Maryland's Greenhouse Gas Reduction Act Plan includes two programs designed to minimize greenhouse gas (GHG) emissions through the management of future land development. These include 1) Reducing Emissions through Smarter Growth and, 2) Land Use/Location Efficiency and Priority Funding Area Related Benefits. The Maryland Department of Planning (Planning) is the lead agency for these efforts, which involve the private sector and various agencies and commissions at all levels of government within the state.

Planning provides data analysis and forecasting as part of its technical assistance to local and state governments to promote smart growth and land use efficiency. The assistance utilizes a variety of data sets and analytical tools, such as Planning's parcel database, U.S. Census information, land use/land cover data, and modeling.

Planning manages or administers the following existing programs in support of this effort:

Smart Growth Subcabinet

- Makes recommendations to the Governor regarding changes in state law, regulations, and procedures needed to create, enhance, support, and revitalize Sustainable Communities across Maryland.
- Facilitates interagency coordination to ensure successful statewide community reinvestment and compact development initiatives through implementation of the recommendations from the Maryland Sustainable Commission's Reinvest Maryland 2.0 report and development of new strategies associated with the new state development plan, A Better Maryland.

Maryland Sustainable Growth Commission

- Identifies regional growth and development issues for the Governor's Smart Growth Subcabinet and advises on the local impacts of state policies and laws.
- Recommends ways to collaborate on planning between state agencies and local governments and coordinate growth and development among jurisdictions.
- Reviews statewide efforts to implement the state growth plan and the state plans for transportation and housing.
- Facilitates the review of state programs and development of tools and recommendations through its Reinvest Maryland 2.0 effort to assist Maryland's counties, towns, and communities to accelerate infill, redevelopment and revitalization.

Sustainable Communities Act of 2010

- Established the “Sustainable Communities” designation to strengthen reinvestment and revitalization.
- Simplified the framework for designated revitalization target areas in the Community Legacy and Neighborhood BusinessWorks programs.
- Requires the Maryland Department of Transportation to consider Sustainable Communities as it annually considers the Consolidated Transportation Program.

2009 Legislative Suite (HB294/SB273, HB297/SB280 and HB295/SB276)

- Incorporation of the 12 new planning visions in local comprehensive plans.
- Development of local land use goals.
- Consistency of local land use ordinances with comprehensive plans.
- Submittal of local annual reports.

Priority Funding Areas

- Maryland law directs the use of state funding for roads, water and sewer plants, economic development and other growth-related needs toward Priority Funding Areas, recognizing that these investments are the most important tool the state has available to influence smarter, more sustainable growth and development.

Program Objectives

By better managing growth, local communities can maximize the efficiency of their development patterns and contribute to a reduction in Maryland’s GHG emissions. Smart growth promotes local decision making regarding compact, mixed-use development that maximizes mobility and housing choices. It also encourages new development and redevelopment in areas with existing or planned infrastructure. This helps preserve vegetated/forested lands (which sequesters carbon) and protects agriculture, while helping to increase the economic competitiveness and fiscal performance of local communities. It should be noted that many local governments in Maryland are increasingly implementing these kinds of land use and transportation policies and programs.

Implementation Milestones

The land use programs do not include specific implementation milestones. The estimate of potential emission reductions in Maryland as a result of the programs is based upon Maryland achieving an aspirational goal of 75% “compact development” between 2011 and 2020. This annual report allows for a periodic check-in to determine if Maryland is on-track with achieving this goal. The “compact development” statistic is derived through the following calculation: $A + (B \times C \times D)$, where A, B, C and D are defined as:

A = Share of year’s multi-family housing in Maryland

B = Share of year’s single-family housing

C = Percent of year’s single-family housing on parcels within the Priority Funding Area (PFA)

D = Percent of year’s single-family housing on parcels within the PFA that are 0.25 acres or less.

Estimated Emission Reductions for CY 2016

Data through 2017 indicates that Maryland is achieving 75% “compact development” for the 2011-2020 planning period. For comparison, for the decade 2001-2010, Maryland achieved an average of 62.5% “compact development.”

Table 1. Compact Development in Maryland 2014-2017

	2014	2015	2016	2017
Multi-Family (MF) Share	35.1%	34.5%	40.4%	32.0%
Single-Family (SF) Share	64.9%	65.5%	59.6%	68.0%
Percent Res. Dev. Inside of PFA (SF & MF)	84.9%	84.6%	87.0%	84.1%
Percent Res. Dev. Inside of PFA (SF only)	76.7%	76.5%	78.3%	76.7%
Percent Res. Dev. on <=.25 acres in PFA	87.6%	85.3%	92.7%	90.2%
Percent SF Res. Dev. on <=.25 acres in PFA	85.4%	85.4%	86.4%	84.1%
Compact Development	77.6%	77.3%	80.7%	75.9%

Notes: Res. Dev. = Residential Development. Data updated through September 2018. Multi-family housing figures are derived from Census Bureau building permit estimates. The methodology for single-family share includes two changes this year: 1. the inclusion of building records to improve the acreage calculation for single-family homes; 2. limiting the record set used for analysis to parcels and buildings where there is sufficient locational accuracy with respect to PFAs. The new methodology and previous methodology both result in similar percentages of “compact development”; the new methodology provides greater confidence in the results.

Therefore, the potential emission reductions from the land use programs enhancements in 2020 are estimated to be 0.64 MMtCO₂e (million metric tons of carbon dioxide equivalent). The portion of the GHGs prevented through CY2017 is estimated to be 0.448 MMtCO₂e (seven-tenths of the planning period have elapsed with achievement of the 75% “compact development” goal, which means Maryland has made significant progress in achieving seven-tenths of the 0.64 MMtCO₂e 2020 GHG prevention goal for the Land Use Programs).

Note: The method to estimate GHG reductions from compact development is based on best practice research entitled, “CO₂ Reductions Attributable to Smart Growth in California,” Reid Ewing and Arthur C. Nelson, January 2010.

Enhancement Opportunities

Given that Maryland is achieving 75% “compact development” to date for the 2011-2020 planning period, Planning believes that the appropriate programs and tools are in place for Maryland to continue achieving success in this area.

Funding

Of the existing land use programs, Planning manages or administers four that require direct funding: in FY 2018, \$9 million was appropriated for the Maryland Heritage Structure Rehabilitation Tax Credit, \$3.1 million for the Maryland Heritage Areas Program (Maryland Heritage Authority grants), \$200,000 for Historic Preservation Non-Capital Grants, and \$600,000 for Historic Preservation Capital Grants.

Challenges

Despite implementation of the land use programs, market, economic, and other forces invariably have an impact on the location and intensity of new development. This in turn impacts how much greenhouse gases are prevented.