

RESOURCE LAND PROTECTION

AN ANALYSIS OF LAND USE STABILITY

Dan Baldwin

Maryland Department of Planning



Sustain^{able} ____ Attain^{able}

BASE GEOGRAPHIES FOR RURAL RESOURCE LANDS

- Natural resource lands were defined by the Maryland Department of Natural Resources as areas containing the following ecological resources:
 - Green Infrastructure
 - Rare Species Habitats
 - Aquatic Life Hot Spots
 - Forests Important for Water Quality Protection
- Other resource conservation lands were defined by counties through their zoning classifications, specifically lands that each county has designated for resource conservation and/or agricultural preservation in its zoning language.



ANALYSIS BACKGROUND

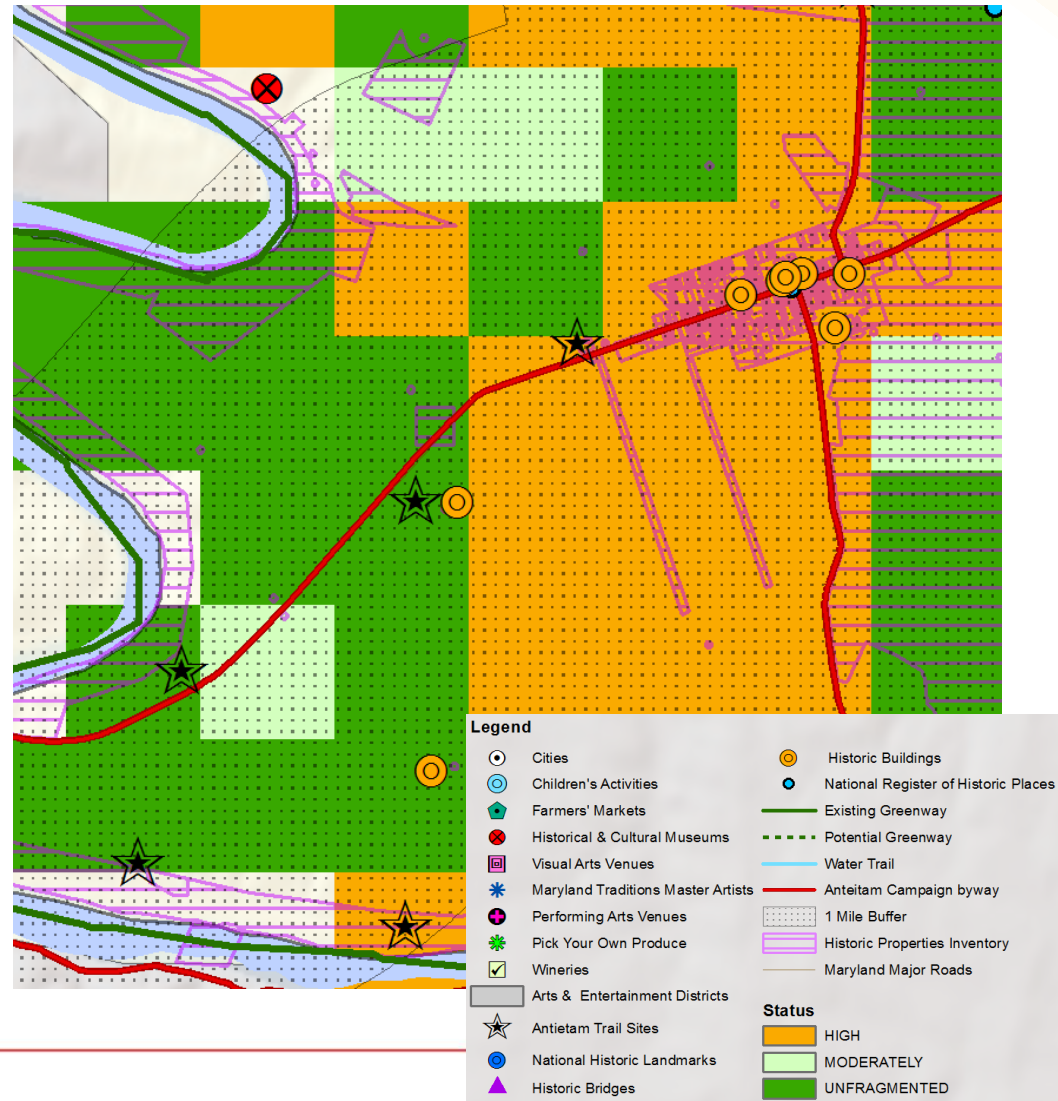
- Input Data
 - Maryland Property View 2006
 - MDP's Development Capacity Model
 - County Zoning and Sewer Service Data
 - Priority Funding Area Boundaries
 - MDP's Protected Lands Data
- Assess the stability of rural resource lands in MD & their susceptibility to development markets. This is completed through three initial analysis steps:
 - Status
 - Vulnerability
 - Development Threat
- Combination of the three of these individual analyses produces the overall Land Use Stability classification based on a 100 acre grid cells to determine overall stability of land surrounding important



LAND USE STABILITY ANALYSIS

STATUS:

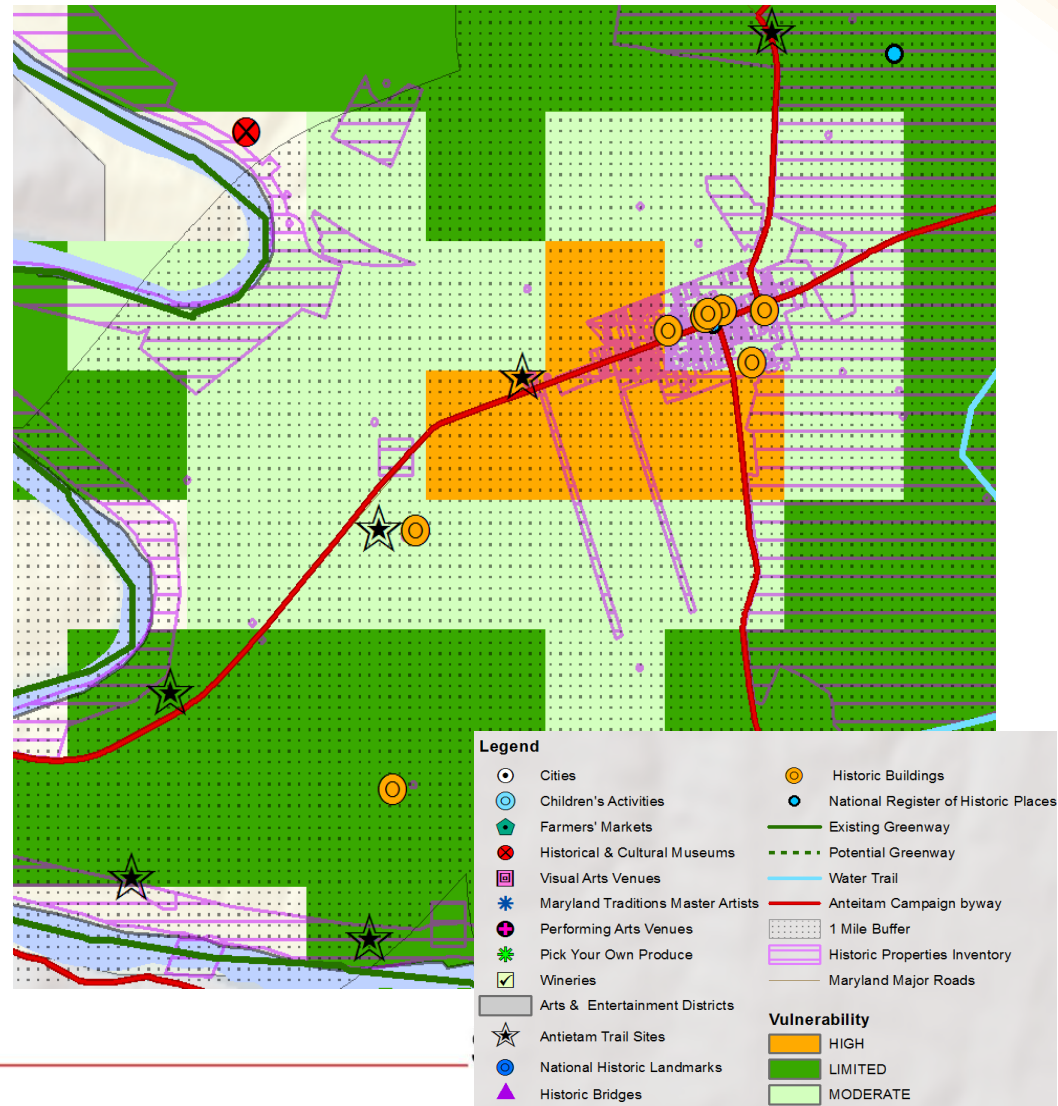
- Status, or fragmentation (as it is also referred) is a calculation of the number of residential parcels, both developed and un-developed in a 100 acre grid.
- Status is classified as:
 - Highly Fragmented - More than 5 residential lots
 - Moderately Fragmented - Between 3 and 5 residential lots
 - Largely Un-fragmented - Fewer than 3 residential lots



LAND USE STABILITY ANALYSIS

VULNERABILITY:

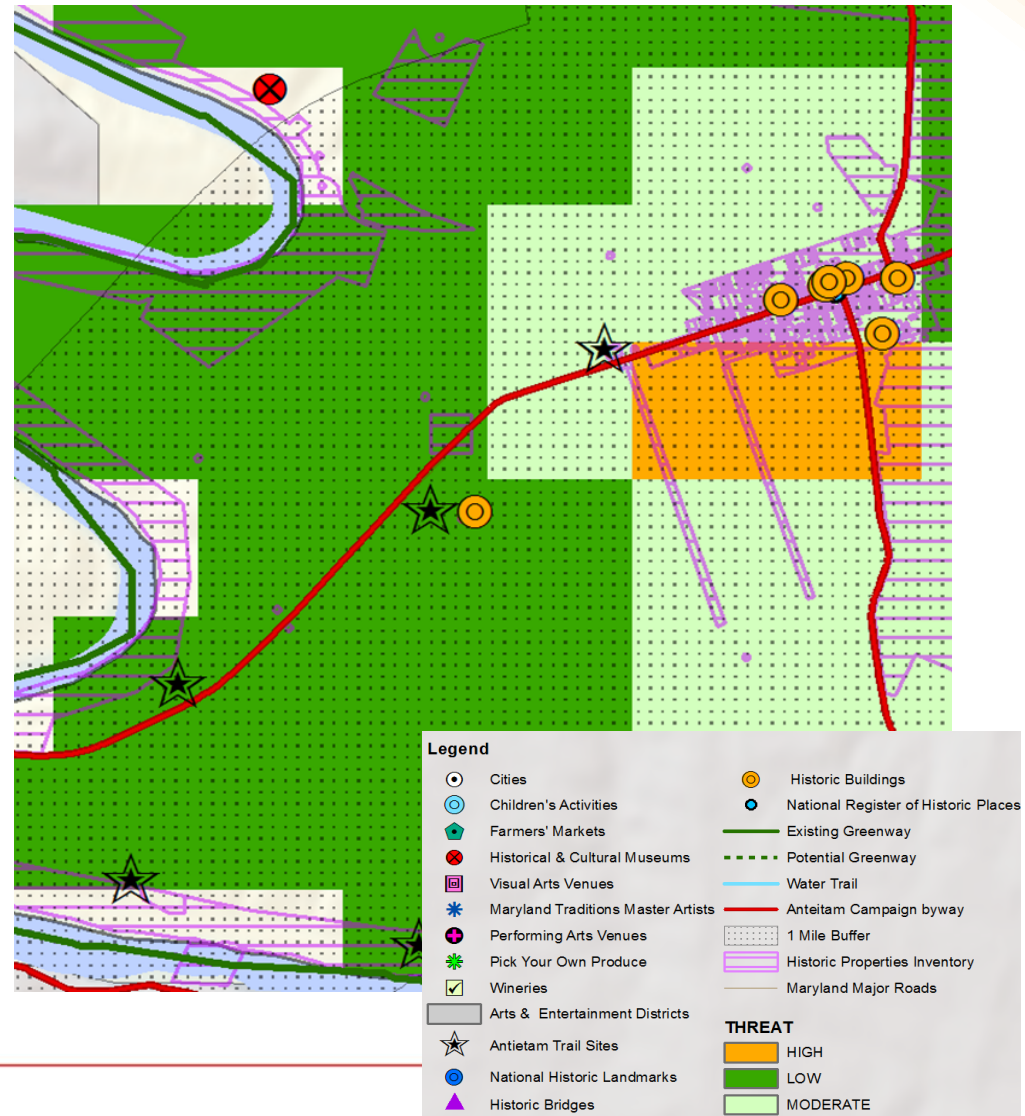
- Is a neighborhood analysis: the number of potential new residential lots per 900 acre neighborhood.
- Calculated based New Household capacity (number of potential new lots in each neighborhood).
- Vulnerability is classified in the following manner:
 - High Vulnerability - More than 45 residential lots
 - Moderate Vulnerability - 18 to 45 residential lots
 - Limited Vulnerability - Fewer than 18 residential lots



LAND USE STABILITY ANALYSIS

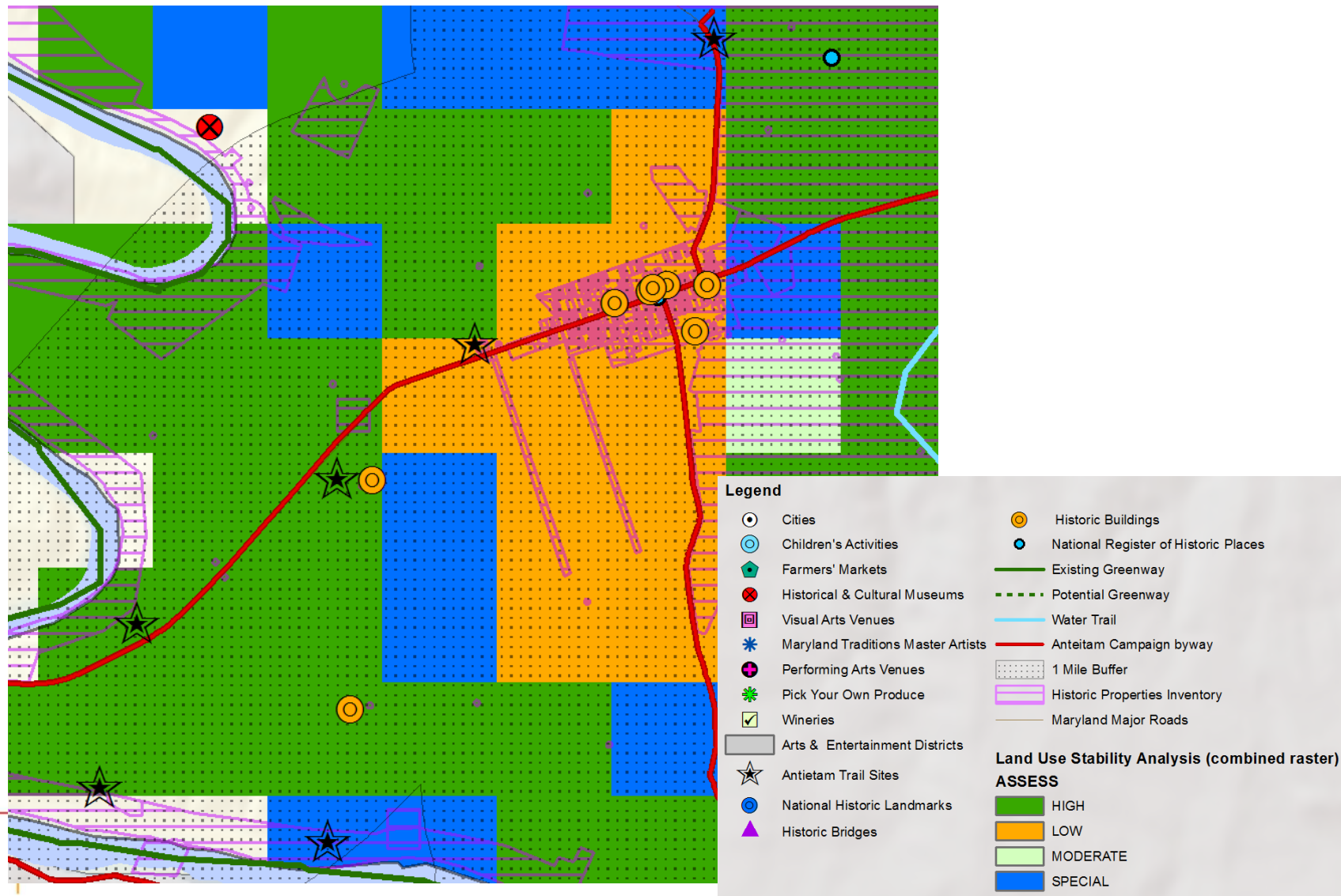
DEVELOPMENT THREAT:

- Development Threat is an estimate of the demand for new residential lots per 900 acre neighborhood
- Threat is based on an estimate of residential subdivision in recent 10-year period. 2035 county-based projections are proportionally distributed based on recent (10 year past) development.
- Development threat is classified as:
 - High Threat - Pressure for More than 45 residential lots
 - Moderate Threat - 18 and 45 residential lots
 - Limited Threat - Fewer than 18 residential lots



LAND USE STABILITY ANALYSIS

STABILITY OF RURAL RESOURCE LANDS:



ASSESSMENT OF LAND USE STABILITY

Assessment	Status	Vulnerability	Threat
High	Moderately	Limited	Medium
High	Moderately	Limited	High
High	Moderately	Moderate	Low
High	Moderately	Limited	Low
High	Unfragmented	Limited	Low
High	Unfragmented	Limited	Medium
High	Unfragmented	Limited	High
High	Unfragmented	Moderate	Low
High	Unfragmented	Moderate	Medium
Moderate	Moderately	Moderate	Medium
Moderate	Moderately	Moderate	High
Moderate	Moderately	High	Low
Moderate	Unfragmented	Moderate	High
Moderate	Unfragmented	High	Low
Moderate	Unfragmented	High	Medium
Low	Highly	Limited	Medium
Low	Highly	Limited	High
Low	Highly	Moderate	Medium
Low	Highly	Moderate	High
Low	Highly	High	Low
Low	Highly	High	Medium
Low	Highly	High	High
Low	Moderately	High	Medium
Low	Moderately	High	High
Special	Highly	Limited	Low
Special	Highly	Moderate	Low
Special	Unfragmented	High	High

Sustainable — Attainable