



Blueprint for the Future of Maryland

National Center for Smart Growth
Research and Education



Project Partners

Partner	Role
1000 Friends of Maryland	Reality Check <i>Plus</i> leadership
Urban Land Institute	Reality Check <i>Plus</i> leadership
More than 140 organizations, businesses and foundations	Reality Check <i>Plus</i> support
Nearly 850 Maryland residents	Reality Check <i>Plus</i> participants
Partnership for Land Use Success	Outreach and implementation
Scenario Advisory Group members	Scenario development
Maryland Department of Planning	Project support and data
State Highway Administration	Statewide transportation model
INFORUM	Econometric model
PB PlaceMaking	Project support

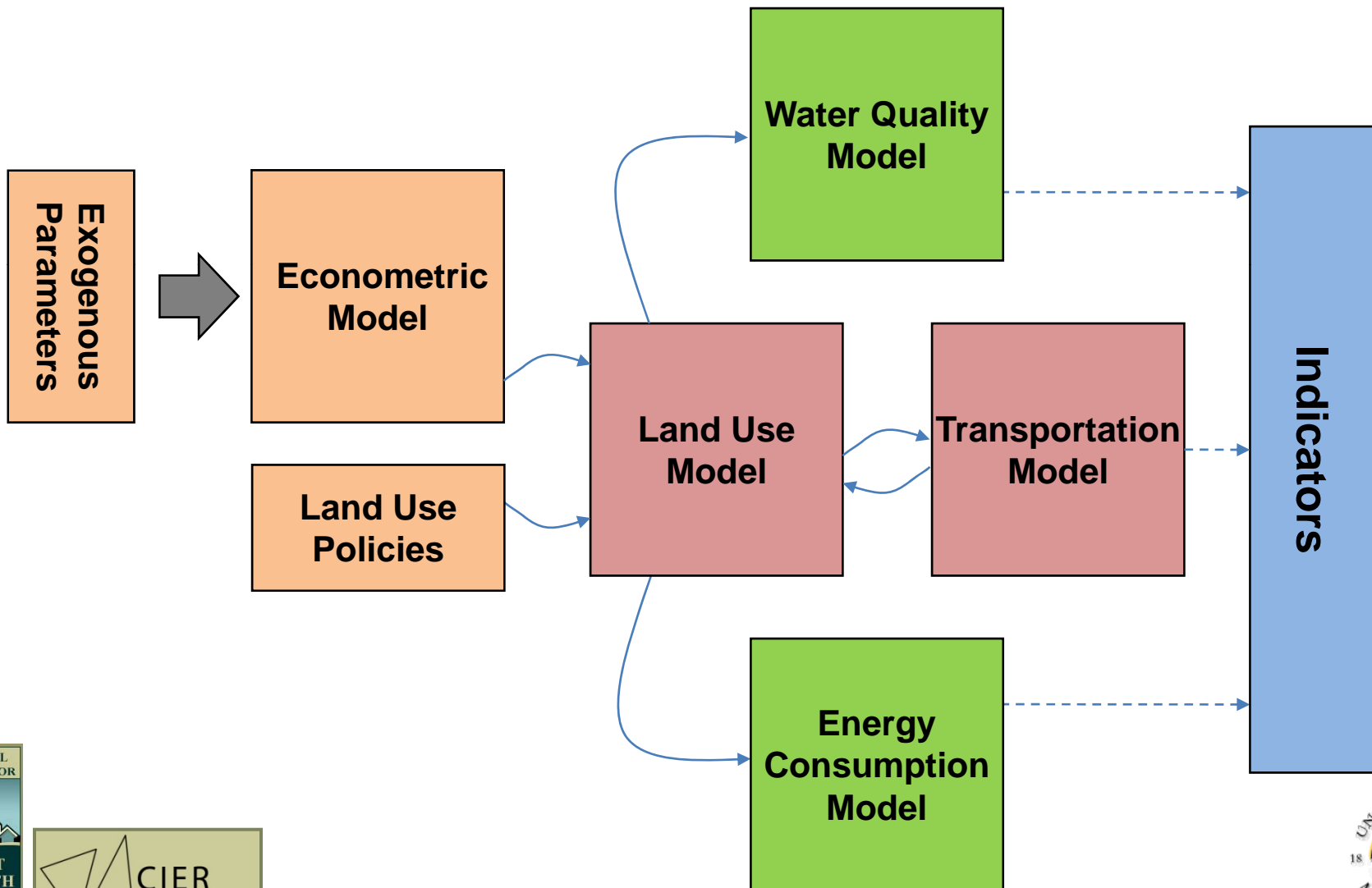


Supporting Sustainability

- Creating and evaluating the impacts of several growth scenarios
- Evaluating policy implications
- Incorporating energy and stream quality impacts
- Analysis includes typical indicators – transportation, land use, infrastructure, and economic



Modeling Framework



Lessons Learned Thus Far

Water Quality Modeling

- Future development leads to mixed changes (positive and negative) at the county level depending on source land use converted
- Land use change effect is small ($1/10^{\text{th}}$) relative to reductions that can be realized through BMP implementation

Energy Consumption Modeling

- Local climate and dispersion of the population within and across counties have notable impacts on residential electricity consumption
- A 1% increase in population dispersion leads to a 1.29% increase in per capita energy use (assuming everything else equal)

Challenges

- How do we resolve differences in the spatial and temporal resolution of land use, water, energy and climate information?
- How do we reconcile multi-dimensional social, economic and environmental criteria for land use planning and policy making?
- How would the water quality findings vary if the perspective changed from “loadings as delivered to the nearest stream” to “loadings as delivered to the Chesapeake Bay?”
- What is the most appropriate way to weight (value) the different components of runoff to recognize the differences of land use conversion from ag to urban, with respect to water quantity and other pollutants?
- The tributary strategy (TS) findings suggest that we can mitigate ourselves out of the negative consequences of both agricultural and urban land uses. Is this realistic? Are the pollutant removal efficiencies accurate? Does the TS analysis paint an overly-optimistic picture of what BMPs can accomplish?