



Briefing to WashCOG Planning Directors

January 16, 2015

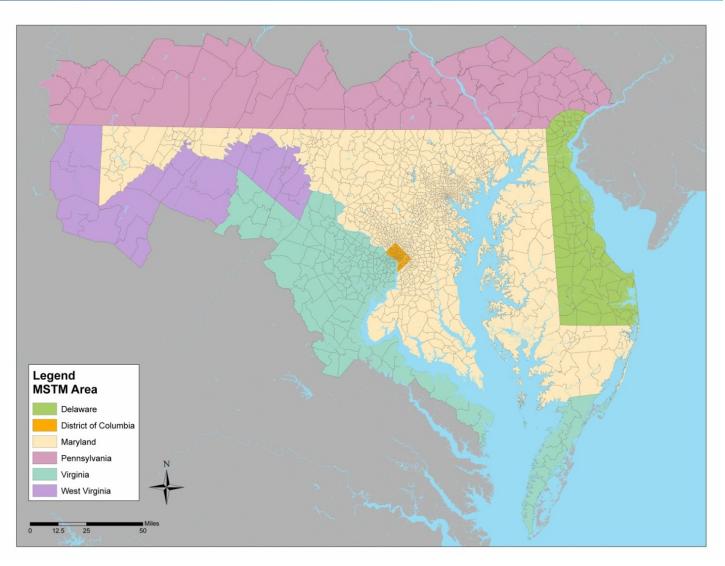
**Uri Avin FAICP** 





## NCSG Travel and Land Use Modeling Geography

- Incorporates both MPO models
- Use CLRP for baseline
- Statewide modeling but focusing on the Balto-Wash region
- Development capacity data gaps for Va.

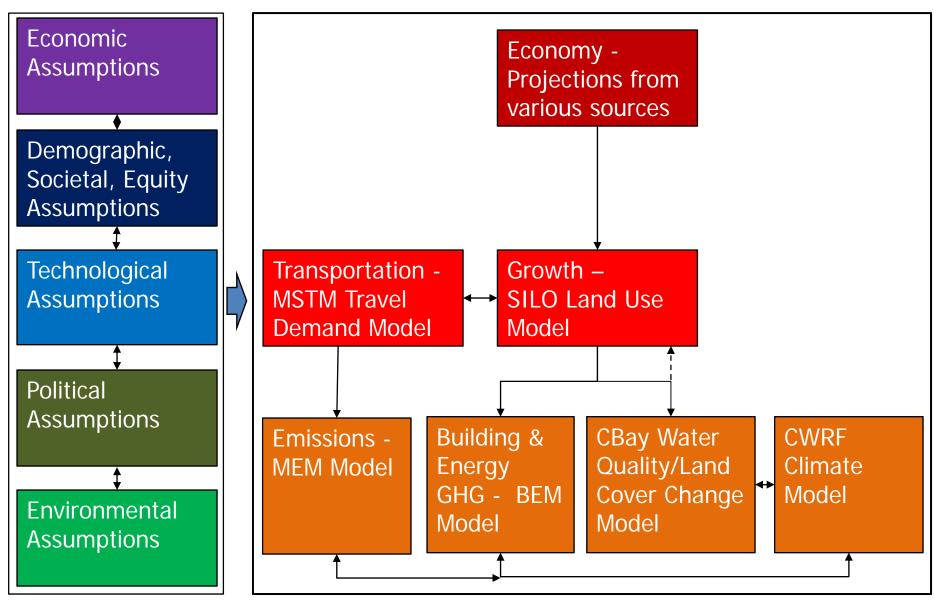




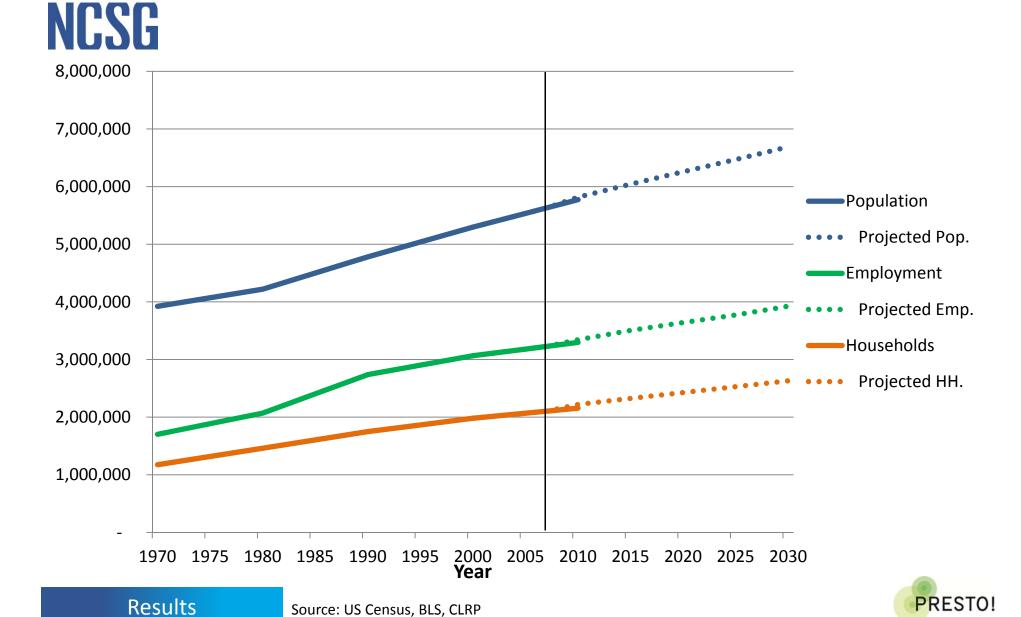
#### Scenario Drivers and Modeling Framework

#### Scenario Drivers

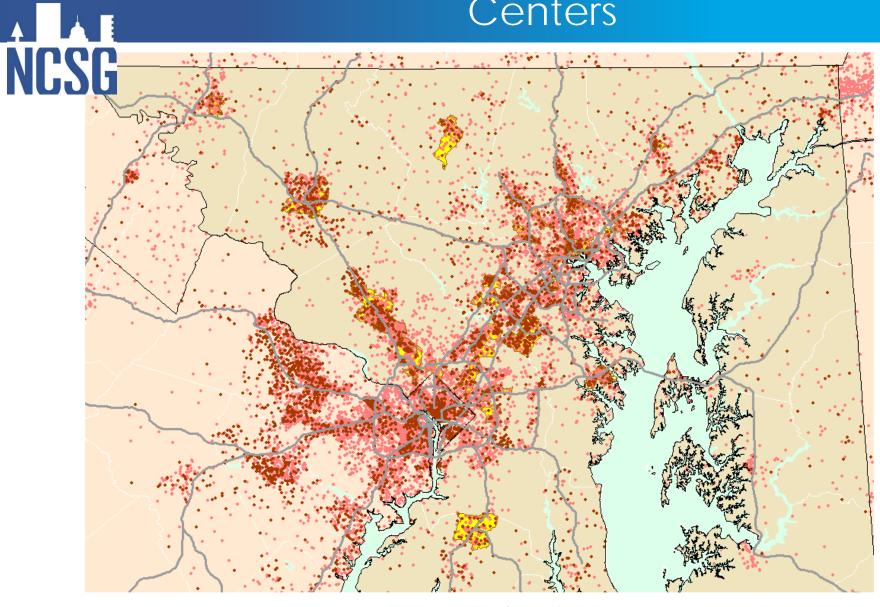
#### Scenario Models



### Job, Household, Population Growth Remains Steady



### Employment Grows In and Near Job Centers





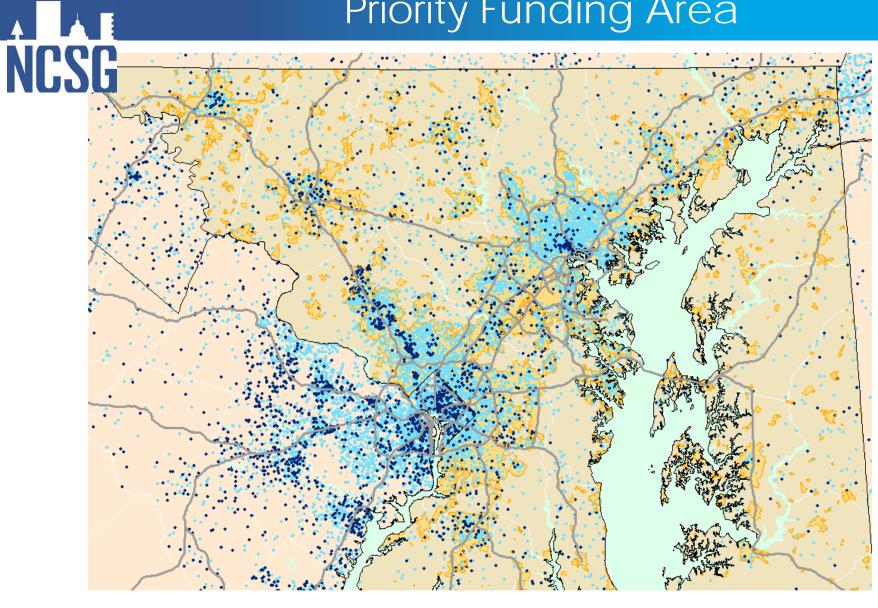
• 1 Dot = 300 New New Employment in 2030

Employment Centers





## New Households Locate Primarily Within Priority Funding Area





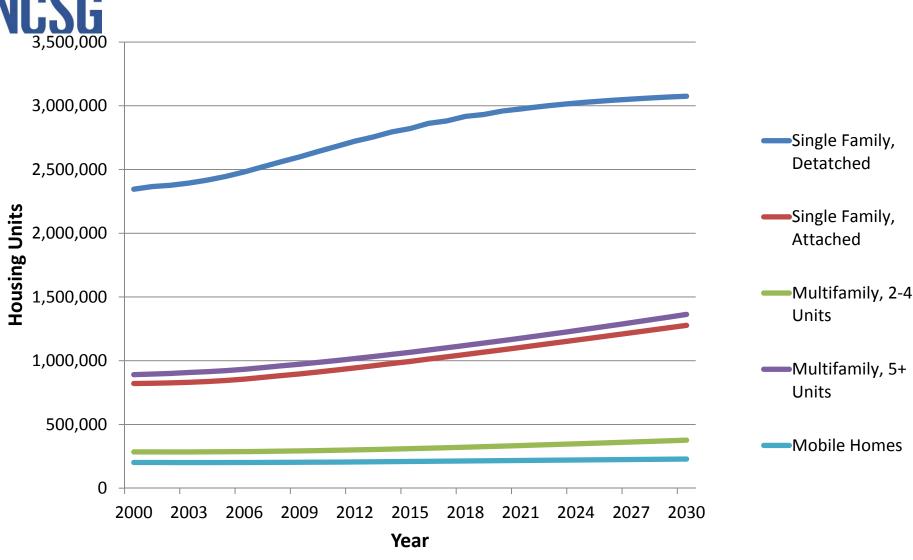
● 1 Dot = 300 New Households in 2030

Priority Funding Area





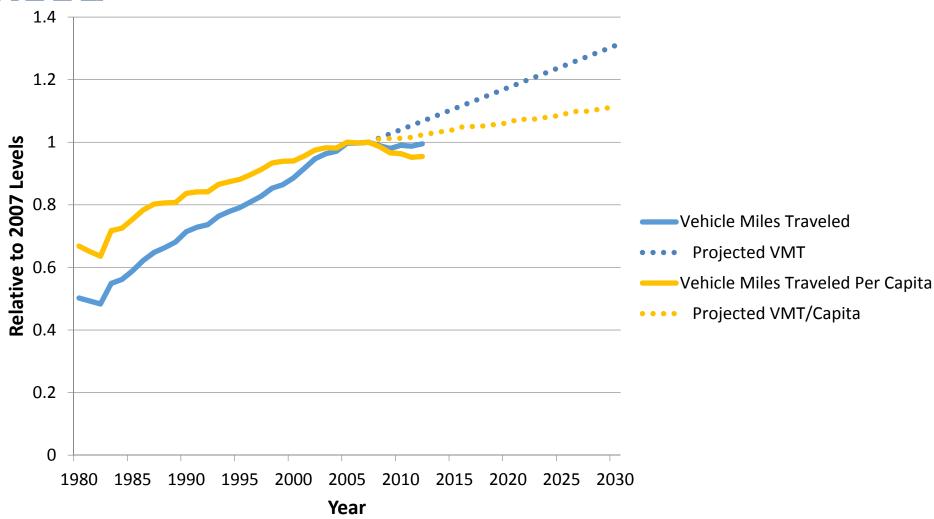
### Single Family Homes Remains Dominant Housing Choice





#### Model Projects Increased Driving

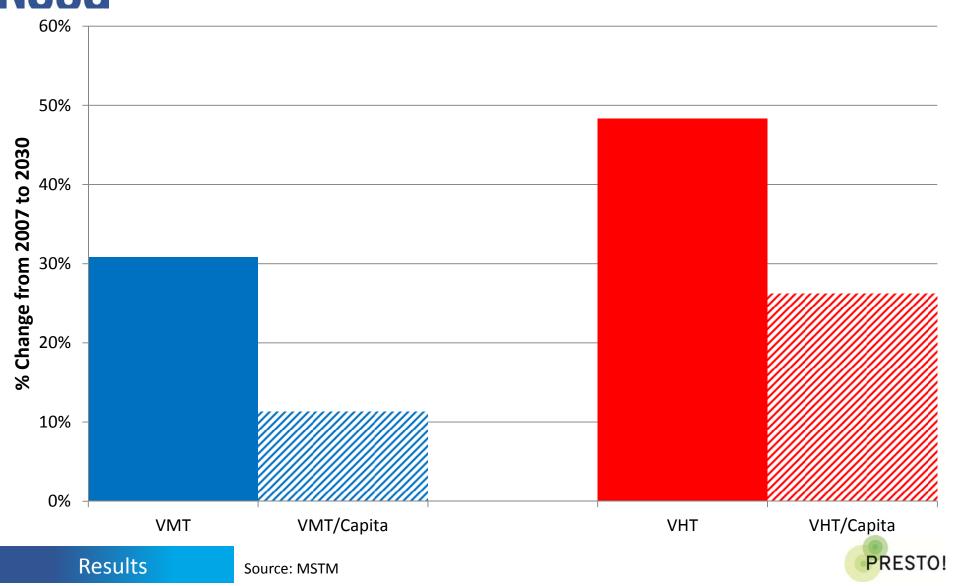




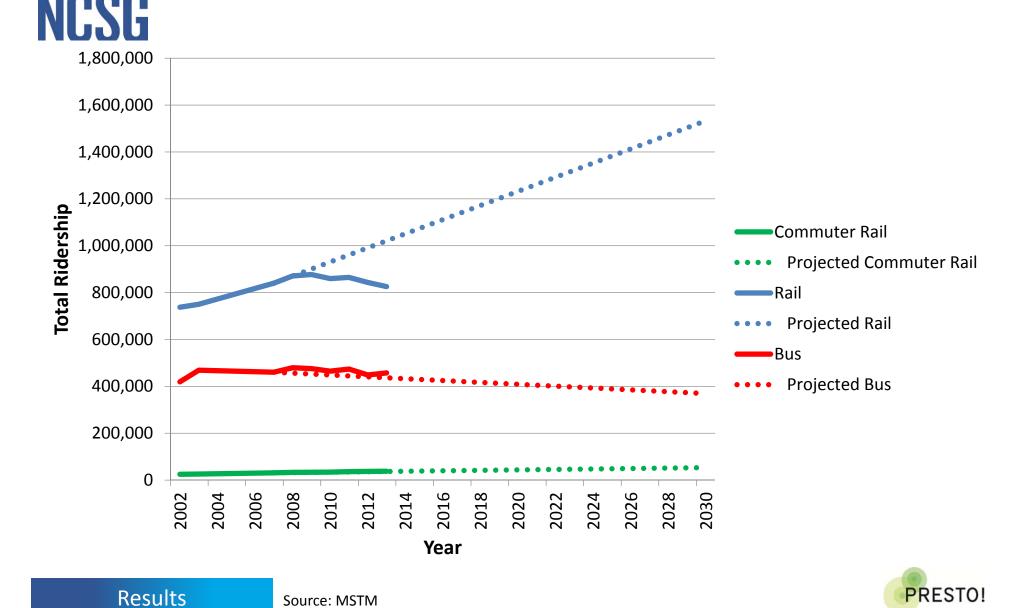
PRESTO!

### Congestion Worsens Almost Everywhere NCSG Total traffic volumes 150000 75000 37500 Congested links 150000 75000 0 5 10 37500 Miles Results PRESTO! Source: MSTM

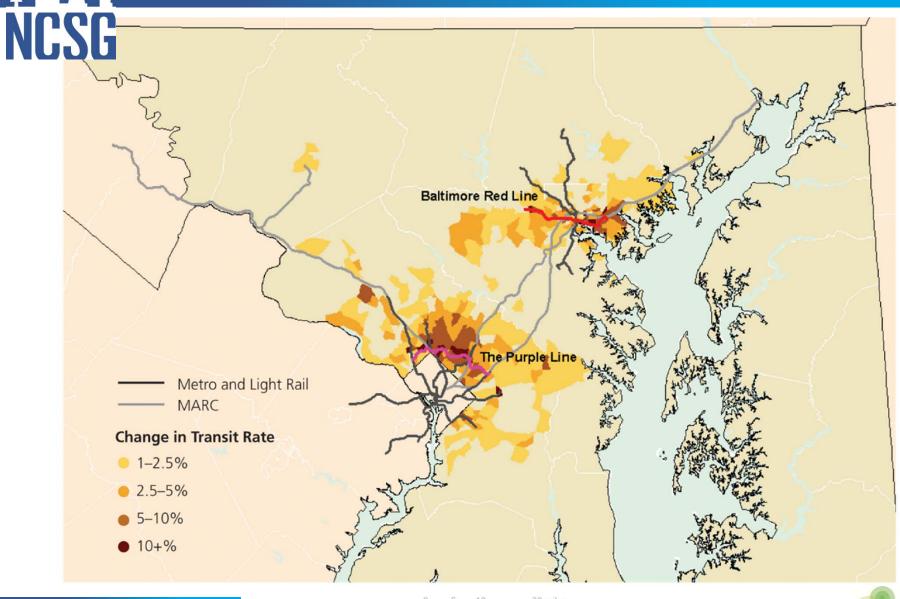
#### A Few More Miles for Each Driver; Much More Time Spent Driving



#### Metro and Light Rail Demand Double

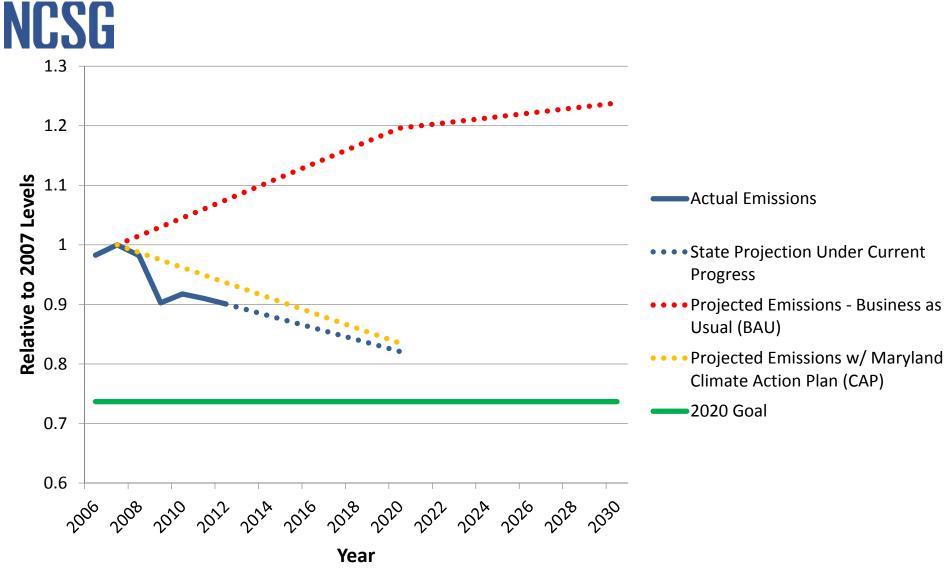


### Transit Use Increases Near Red and Purple Line



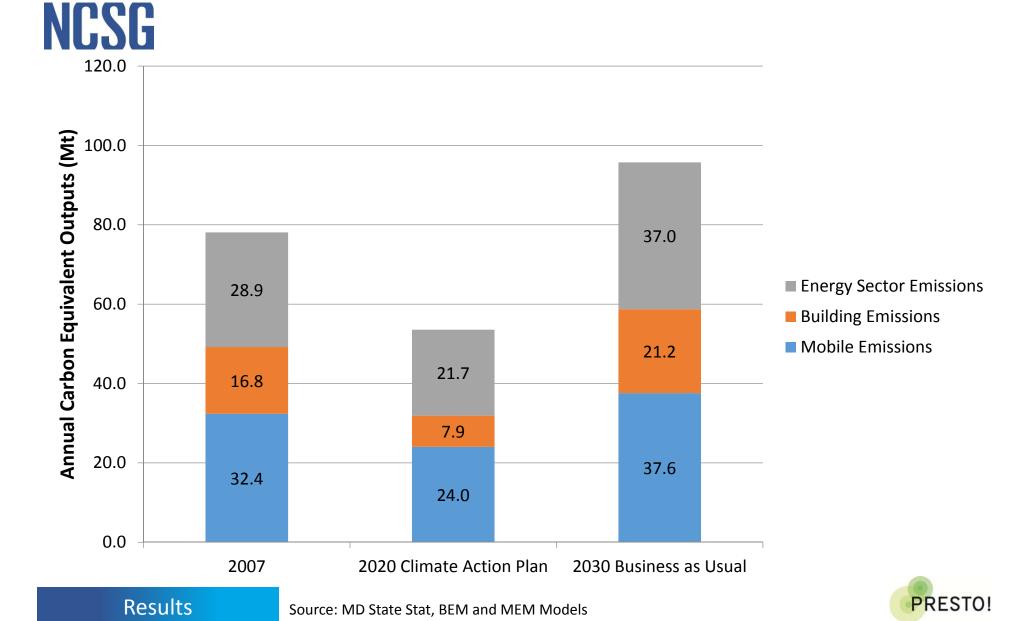


### Future GHG Emissions Very Policy Dependent



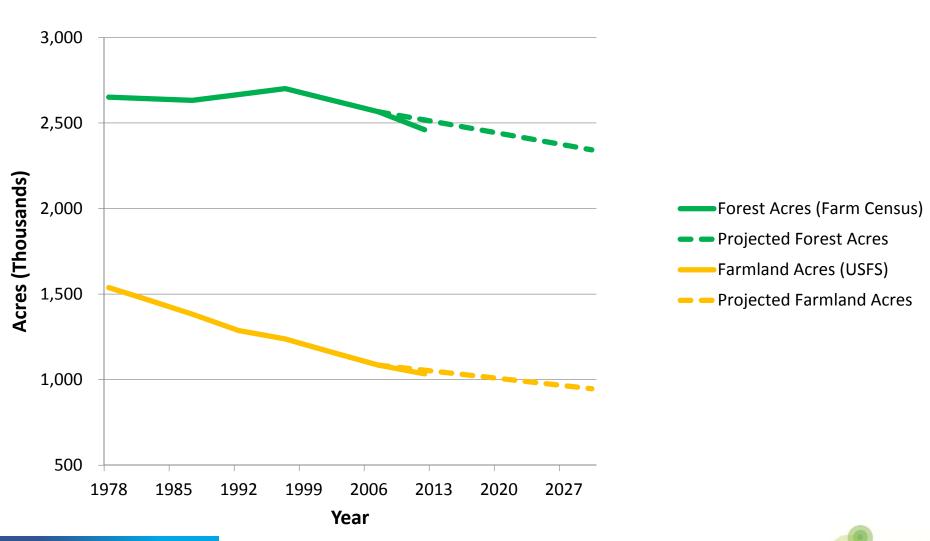


## Reduction in From All Sectors Necessary to Approach GHG Targets



Results

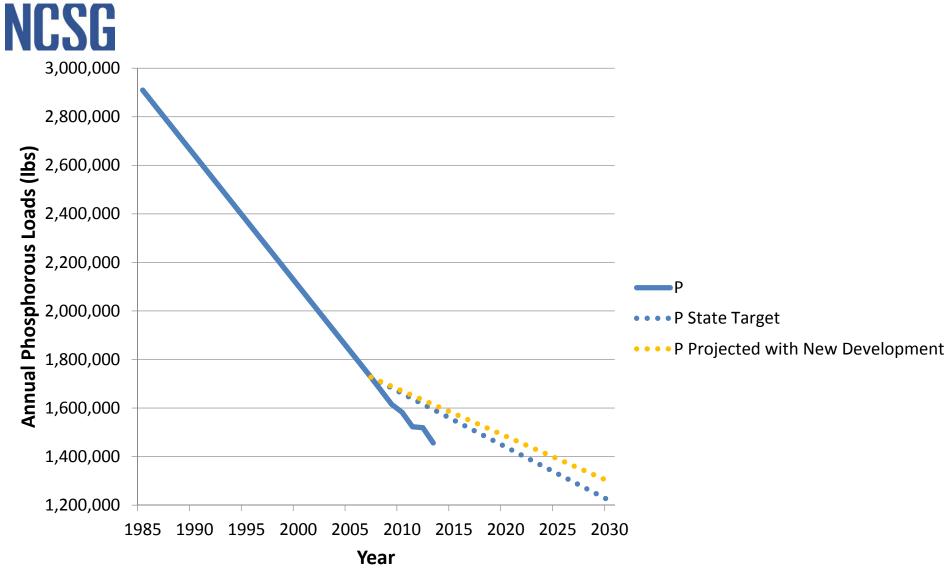
#### Forests and Farms Continue to Decline



Source: USFS, BEM and MEM Models

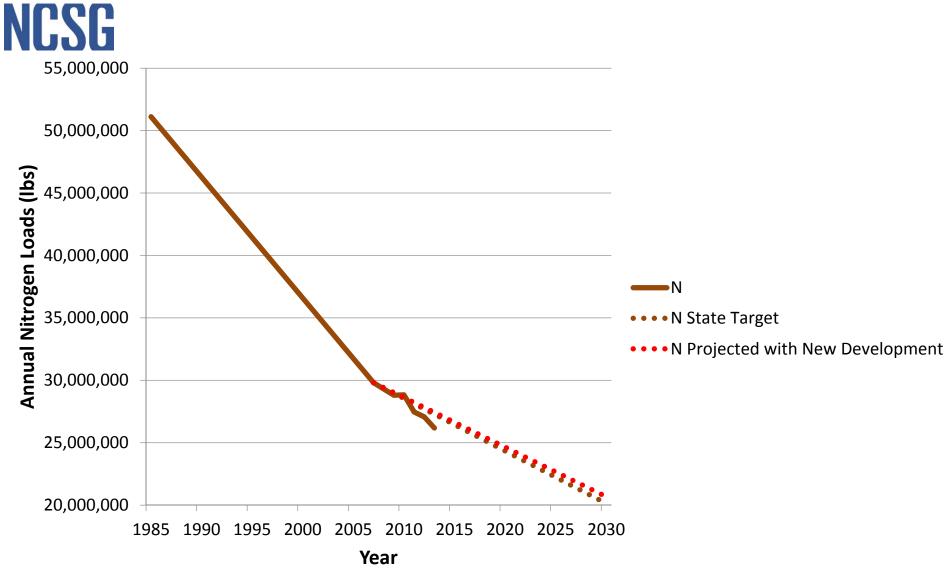
PRESTO!

#### Development Adds New Phosphorous Loads; Achieving Targets More Challenging



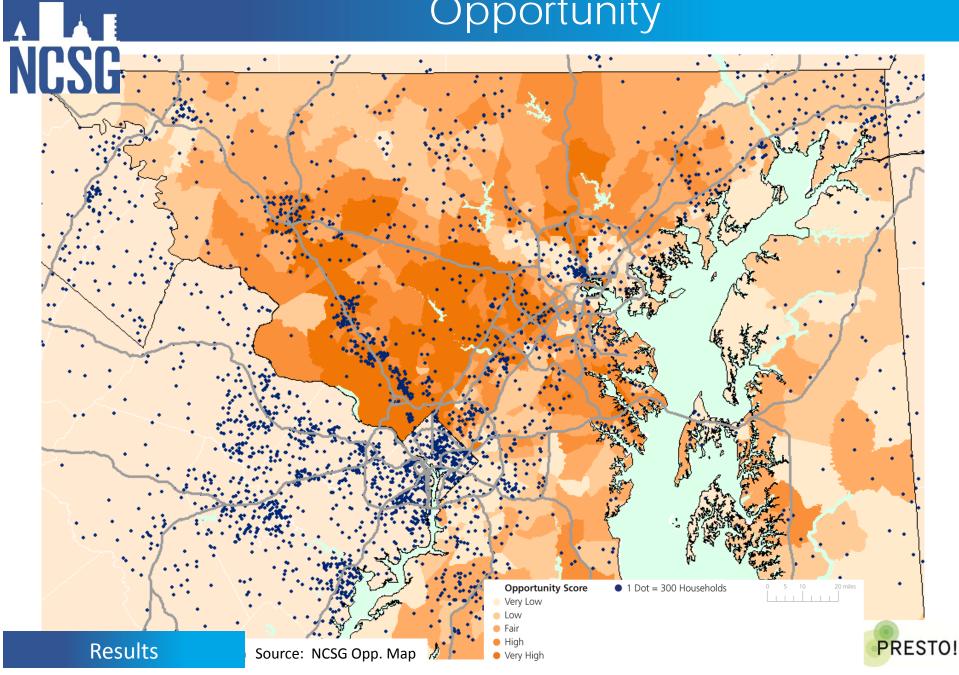


## New Development Less Impactful on Nitrogen Loads

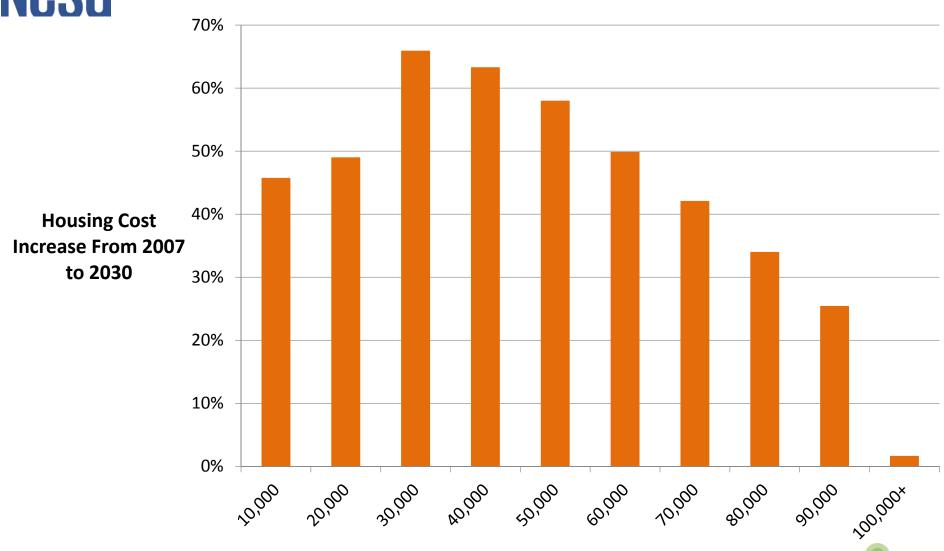




### New Families Move to All Levels of Opportunity



### Middle Income Household Particularly Burdened



Results

Source: SILO Model

**Income Level** 



### Development Capacity Data Needed for Northern Virginia

- Dev. Cap. = analysis of how much development can be absorbed, based on current zoning/plans at buildout (NOT projections)
- Needed for
  - Fairfax Co
  - Loudoun Co
  - PW Co
  - Arlington Co (Redvpt?)
  - Alexandria (Redvpt?)







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January , 2015

College Park, MD



