

# SCENARIOS

## *Demographics Alternatives*

*August 2, 2016*



# Background

- Simulation Tools
  - InSITE – Activity Based Model
    - Simulation of Household Activities that Require Travel
      - Long Term Choices
      - Daily Activity Patterns - Mandatory and Non-Mandatory
      - Tour Level Models
      - Trip/Stop Level Models
  - PopGen 2.0 –
    - Synthesizes Household and Person Roster Characteristics
      - Cooperative Forecast TAZ Households, Persons, Group Quarters, Workers, and Median Household Income
      - Maryland Department of Planning Age Cohort Survival Model Persons by Age and Gender



# July Joint Meeting Follow up

- Minutes from July Meeting –

Agenda Item 15. Discussion on Regional  
Transportation and Land Use Sensitivity Analysis



# Scenarios

- Howard County
  - Cooperative Forecasts
    - What if?
      - Graying but Working
      - Young Migration/Immigration and Working
      - Young Migration/Immigration and Working with Household Formation with Children
      - Migration/Immigration – Seniors Moving Out



# Graying but Working



Economic Downturn/Increased Life Expectancy/Health Retirement Will Be Delayed

- Keep County (MDP) Age/Sex Margins the Same Current 2040 Total Population
- PopGen Margin Changes
  - A. Increase in the Number of TAZ Workers
  - B. Decrease in the Number of TAZ Non-Workers
  - C. Increase TAZ Median Household Income
  - D. Change in the Number of TAZ households by workers



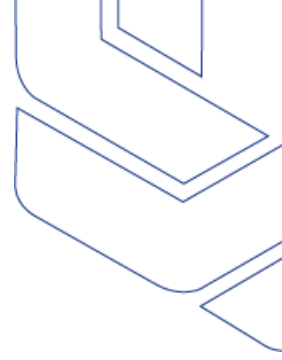
# Young Migration / Immigration and Working

## Younger Workers Migrating/Immigrating

- Increase 20-39 Year Old Population, Increase in Workers, and Increase in Households
- PopGen Margin Changes
  - A. Increase in the Number of Age/Population for 20-39 year olds
  - B. Increase in the Number of TAZ Workers
  - C. Increase in the Median Household Income
  - D. Increase in the Number of TAZ Households
  - E. Change in the Number of TAZ Households by workers and size



# Young Migration/Immigration and Working plus Household Formation with Children

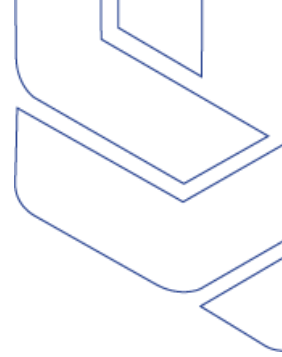


Younger Workers Migrating/Immigrating Forming New Households with Children

- Increase 20-39 year Old Population and 0-14 Year Old Population, Increase in Workers, and Increase Households
- PopGen Margin Changes
  - A. Increase in the Number of Age/Population for 20-39 year Olds & 0-14 Year Olds
  - B. Increase in the Number of TAZ Workers
  - C. Increase in the Median Household Income
  - D. Increase in the Number of TAZ Households
  - E. Change in the Number of TAZ Households by size and worker



# Migration/Immigration – Seniors Moving Out



Constraints Limit the Supply of Housing, Housing Cost Become Expensive for Retirees – Fixed Income Seniors Move Out

- PopGen Margin Changes
  - A. Increase in the Number of Age/Population for 20-39 Year Olds & 0-14 Year Olds
  - B. Increase in the Number of TAZ Workers
  - C. Decrease in the Number of Age/Population 65+
  - D. Increase in the Median Household Income
  - E. Change in the Number of TAZ Households by size and workers





# Next Steps



- Receive Technical Committee and Cooperative Forecasting Group Input and Comments
- Run Scenarios
- Summarize Results
- Brief Cooperative Forecast Group
- Update Technical Committee

