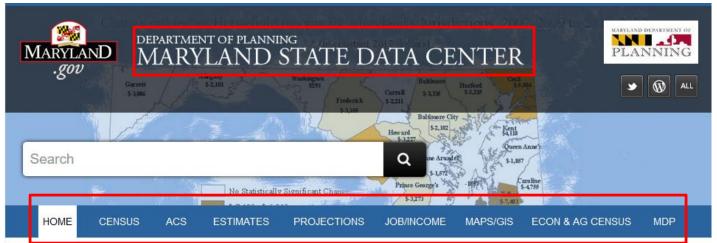
## MARYLAND STATE DATA CENTER

Alfred Sundara, AICP
Maryland Department of Planning

Presentation for Cooperative Forecasting and Data Subcommittee meeting
February 6, 2018





#### **Popular Links**

- > Sustainability Indicators
- > Zip Code Maps
- Maryland Statistical Handbook
- > Population Estimates
- Median Household Income Estimates
- > Projection Profiles
- > Parcel PFA Data
- > PFA Census Data Analysis
- > EEO Report

#### **Quick Links**

- > State Data Center Staff
- State Data Center Affiliate Meetings and Presentations
- > Building Permit Data
- > 2012 Statistical Abstract
- > 2011-2015 ACS Socioeconomic Characteristics for Maryland's Legislative



The Maryland State Data Center (SDC) is an official partner with the U.S. Census Bureau. The Maryland Department of Planning coordinates the SDC program in Maryland.

The SDC monitors development trends, analyzes social, economic and other characteristics and prepares population, housing, employment, labor force, and income projections, which provide the baseline for planning for growth and development in the State.



#### What's New?

- 2011 to 2015 Multi-Year American Community Survey 5-year Estimates for All Geographies
- 2015 Estimates by Age, Race and Gender for Maryland and it's Jurisdictions
- FHFA Home Price Index for Maryland & its Regions for 1st Quarter 2016
- 2015 Population Estimates for Maryland's Municipalities
- > IRS state-to-State Migration 2014
- 2016 New Housing Units Authorized for Construction Reports : March & First Quarter
- State Quarterly Personal Income Through The 4th Quarter of 2015
- Wage & Salary Jobs by Place of Work Through 2015
- 2015 Population Estimates for Maryland's Jurisdictions

More on What's New? >>



# **DATA SOURCES**

- Census Data
  - All Geographies
  - Population and Housing Units
  - Age, Race and Sex of population
- American Community Survey (ACS)
  - ACS Annual Data
  - ACS Five-year Data
  - Various Socioeconomic Data





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- > 2011-2013 ACS Socioeconomic Characteristics for Maryland's Jurisdictions

#### On-line Mapping



Map Application: 2011-2015 American Community Survey with Coefficient of Variation

#### American Community Survey

The American Community Survey (ACS) is an ongoing, nationwide, monthly survey covering approximately three-million households each year and is now the source for all of the socioeconomic data that was formerly obtained from the decennial census. ACS data is available for three types of releases depending on population size: annually, three-year periods and five-year periods.

Annual ACS data are available for all geographies (e.g., U.S., states, counties, municipalities, places) with a population of 65,000 or more.

Three-year period ACS estimates are available for all geographies with a population of 20,000 or more.

Five-year period ACS estimates are available for all geographies down to census tracts and block groups.

#### Data and Reports

- ▶ Comparing ACS Data to Census and to Other ACS Data
- ▶ Cautions, Documentation and Guidelines on Using ACS Data
- ACS Annual Data (population of 65,000 or more for all geographies):

2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002

ACS Three-year Data (population of 20,000 or more for all geographies):

Note: The Census Bureau has discontinued the three-year ACS data. The last three-year data release was for the 2011-2013 period. There will be no more three-year data releases.

2011-2013 | 2010-2012 | 2009-2011 | 2008-2010 | 2007-2009 | 2006-2008 | 2005-2007

Socioeconomic Characteristics for Maryland's Jurisdictions and Places:

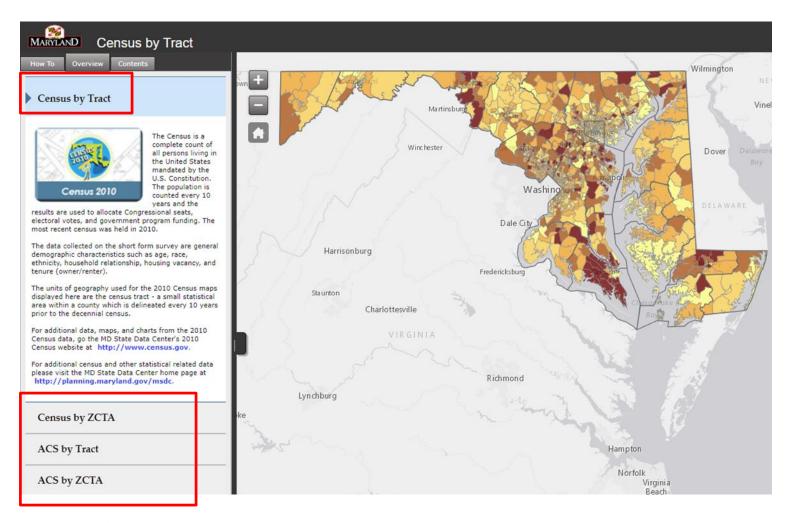
2011-2013

ACS Five-year Data (data available for all geographies down to census tracts & block groups):

2011-2015 | 2010-2014 | 2009-2013 | 2008-2012 | 2007-2011 | 2006-2010 | 2005-2009



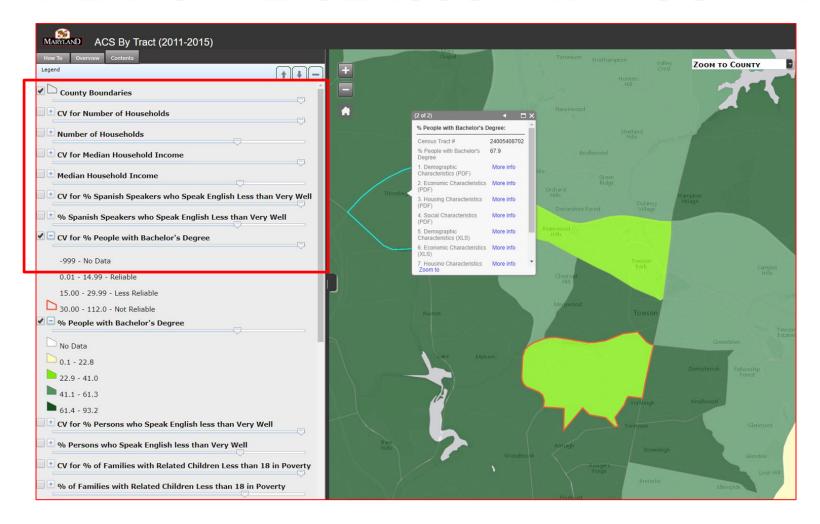
## INTERACTIVE CENSUS AND ACS MAP







# INTERACTIVE CENSUS AND ACS MAP

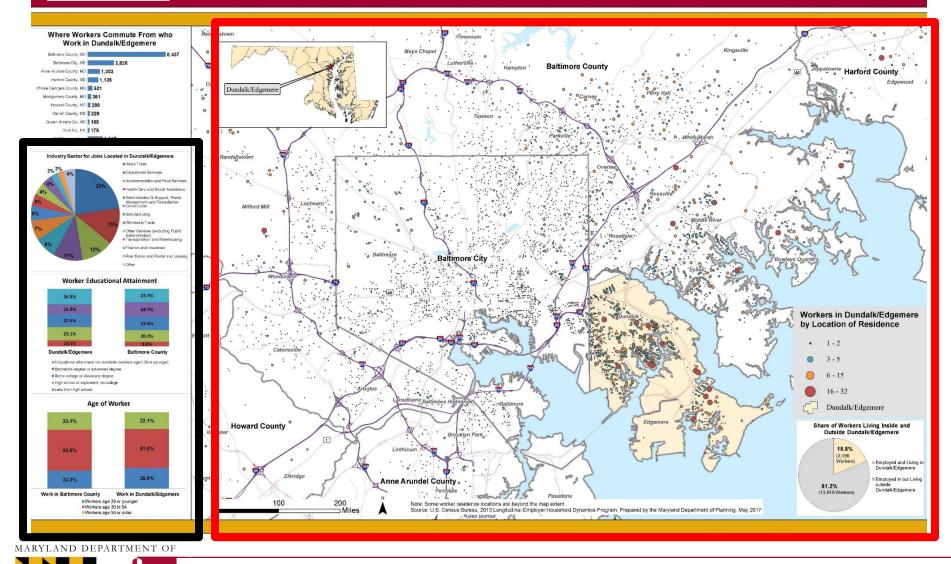






PLANNING

### Work Area Profile for Dundalk/Edgemere





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### **Public School Enrollment Projections**

#### Public School Enrollment, Historical 2016 and Projections 2017-2026

Maryland Public School Enrollment (grades K-12) by Jurisdiction, Actual (2016) and Projected (2017-2026). Click here for detail.

### Projections to 2045 Revised August 2017

The Maryland Department of Planning has completed a set of projections for total and household population, households and household size.

#### Population and Households (8/17) :

Population Projections: XLSX | PDF Household Population Projections: XLSX | PDF Household Projections: XLSX | PDF Household Size Projections: XLSX | PDF Total Population Projections by Age, Sex and Race: XLSX

Household Population Projections by Age, Sex and Race: XLSX

### Population 16 Years and Over (7/14):

XLSX: Total, Male, Female PDF: Total, Male, Female

MARYLAND DEPARTMENT OF



## Population Projections to 2045

- Total population
- Household population
- Group quarters population
  - Projections by age 5-year age groups (18)
  - Race detail (4)
  - Gender (2)



### Control totals to 2045

- Cooperative Forecasts from Metropolitan Planning Organizations (MPO) for the jurisdictions in Washington and Baltimore MPOs
  - Major forecasts every three years
  - Minor forecasts annual updates
- Remaining jurisdictions (Eastern Shore regions and Western Maryland)



## MPO Cooperative Forecasts

- Planning participates in both the MPOs process (evaluates and comments on the projections)
- Planning usually accepts what comes out of the cooperative forecasts
- May deviate if numbers are too inconsistent from the Census Bureau's estimates through the current time period



## Review of MPO Cooperative Forecasts

- Planning uses Population Cohort Model, to break out MPO population forecast into components of change
  - births, deaths and net migration
- Planning checks on the migration component to test "reasonableness" of projection



## **Cohort Component Model**

- Future year population are derived from a base population through the components of change
  - Births
  - Deaths
  - Migration

Projected Population = Initial Population + (Births - Deaths) + Net Migration



## Base year is 2010

- County specific data for
  - Household population
  - Group quarters populations



## Fertility Rates

- Historical county specific births data by age and race of mother and the gender of the child
- Fertility rates are developed based on historical data for females by cohorts for ages 10 to 59.
- These rates are developed separately by race and gender.



### Survival Rates

- Historical county specific deaths data by age, race and gender
- Survival rates are developed based on the number of deaths by cohorts
- These rates are developed separately by race and gender



## Migration Rates

- Historical jurisdictional population between two time periods and the births/deaths that happened during the same time period is used to determine the total migration
- The derived migration numbers are converted into a rate for each age cohort
- The migration rates are developed separately by race and gender



## **Group Quarters**

- In generating the fertility, survival and migration rates, persons in group quarters less than 65 years of age are excluded from each race, sex and age cohorts
- Jurisdictions are assumed to receive a share of the projected Statewide group quarters population based on the share they had in 2010 for each sex, race and age cohort



## RESOURCES

## Maryland State Data Center Website:

http://planning.maryland.gov/msdc/

## Socio-economic Projections:

http://planning.maryland.gov/msdc/S3\_Projection.shtml



## THANK YOU

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