# TAXPAYER PARTICIPATION RATE

## The Decline in Tax Filing and its Repercussions

David Farkas

Bureau of Revenue Estimates

Comptroller of Maryland

# Analysis using Data Warehouse

- Tax data is uploaded to data warehouse
  - allowed BRE electronic access to the State's tax data
- Data matched with IRS Individual Master File by SSN
  - Allowed us to attached birthdates to SSNs
- Data was used to investigate impact of changing age demographics
  - Presented at last year's FTA – report and presentation on our website
- Data validation checks uncovered a problem
- % of the population that files a tax return each year is declining

# Maryland Median FAGI by Age Cohort, 2016 $s*



Legend:
- 2000
- 2004
- 2008
- 2012
- 2016
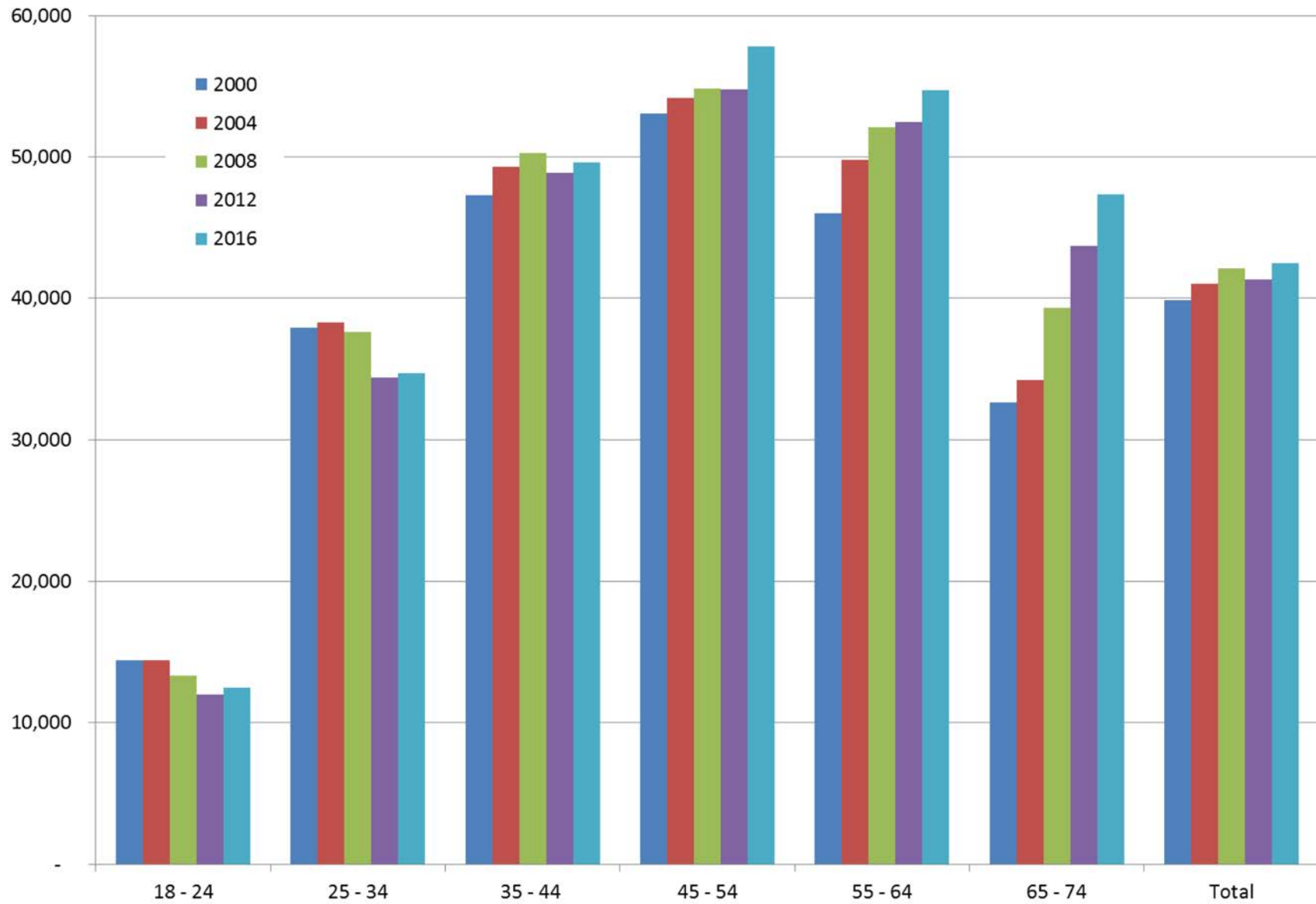
Source: MD Bureau of Revenue Estimates

*Adjusted for inflation using PCE Inflation Index

# Taxpayer Participation Rate (TPR)

- **TPR = % of the population that files a tax return**
  - Joint filers are divided into individuals, income split evenly
  - Use only timely filed returns
- For Example:
  - Number of Filers = 80
  - Population = 100
  - Therefore, TPR is 80% (80/100)

- **Essentially a measure of labor utilization**

- **Declining trend since peak in 2007**

# TPR by Age Cohort Indexed to 2007



Source: MD Bureau of Revenue Estimates

Legend:
- 18 - 24
- 25 - 44
- 45 - 64
- 65 - 74

68.2%
82.7%
77.4%
67.2%
81.1%
76.8%
80.1%
63.0%
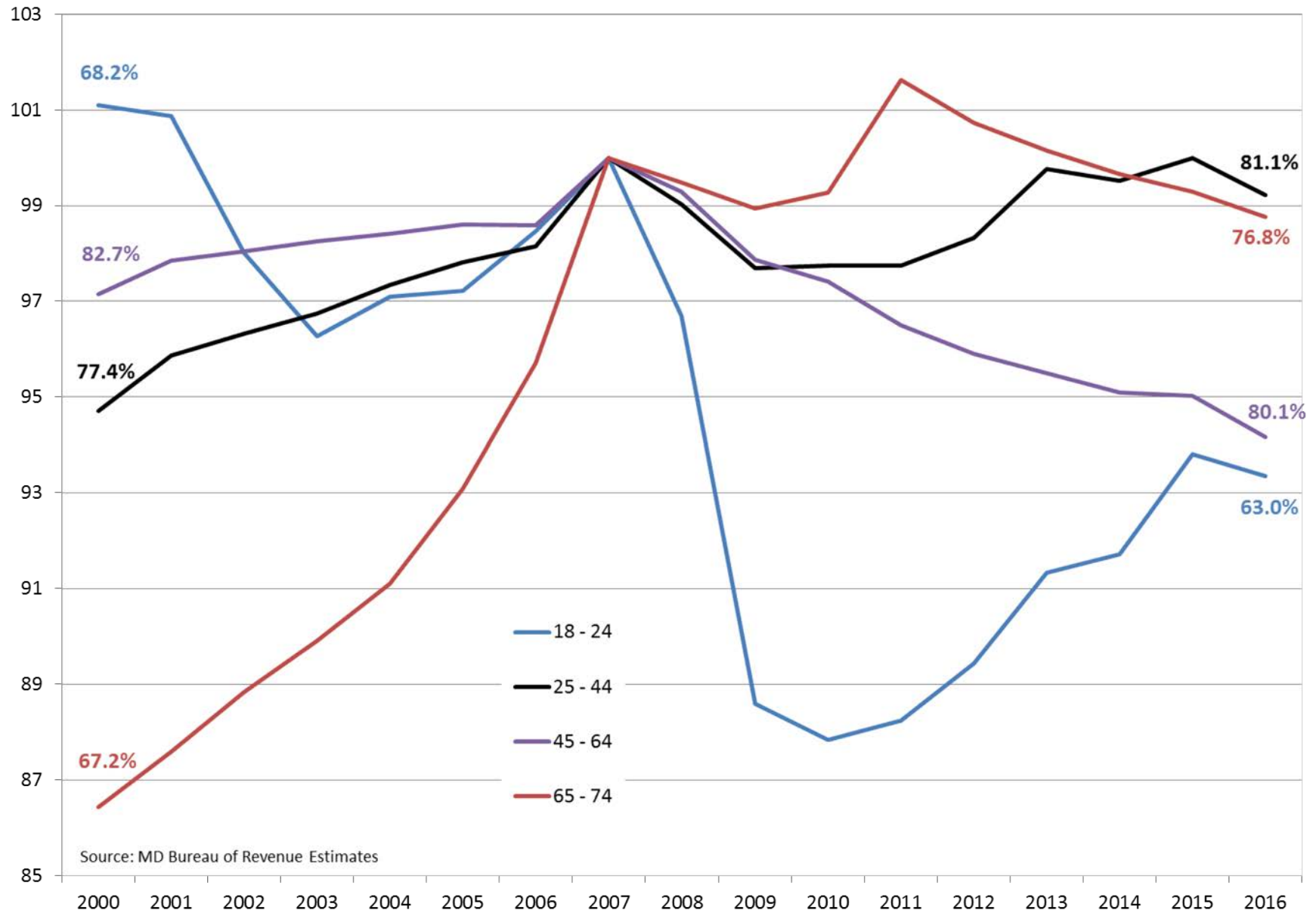
# TPR Notes

- **18 to 24 cohort**
  - Significant decrease during Great Recession
  - Partly explained by increased educational attainment

- **45 to 64 cohort**
  - Steady, persistent decline
  - Despite declining unemployment rate
  - Peak avg earnings and tax paying years – large opportunity cost

- **65 to 74 cohort**
  - Increasing participation brought to a halt

# Counterfactual Revenue Impact

- **What if TPR maintained its peak 2007 levels in other years?**

- # of additional filers called "Missing Workers"
  - Some residents file in some years but not others, called "Irregular Filers"

- Irregular filers earn ~70-75% of regular filers FAGI
  - # decreasing over time – becoming non-filers

- **Revenue impact = # of missing workers * avg. state income tax rev. from irregular filers in a given year**
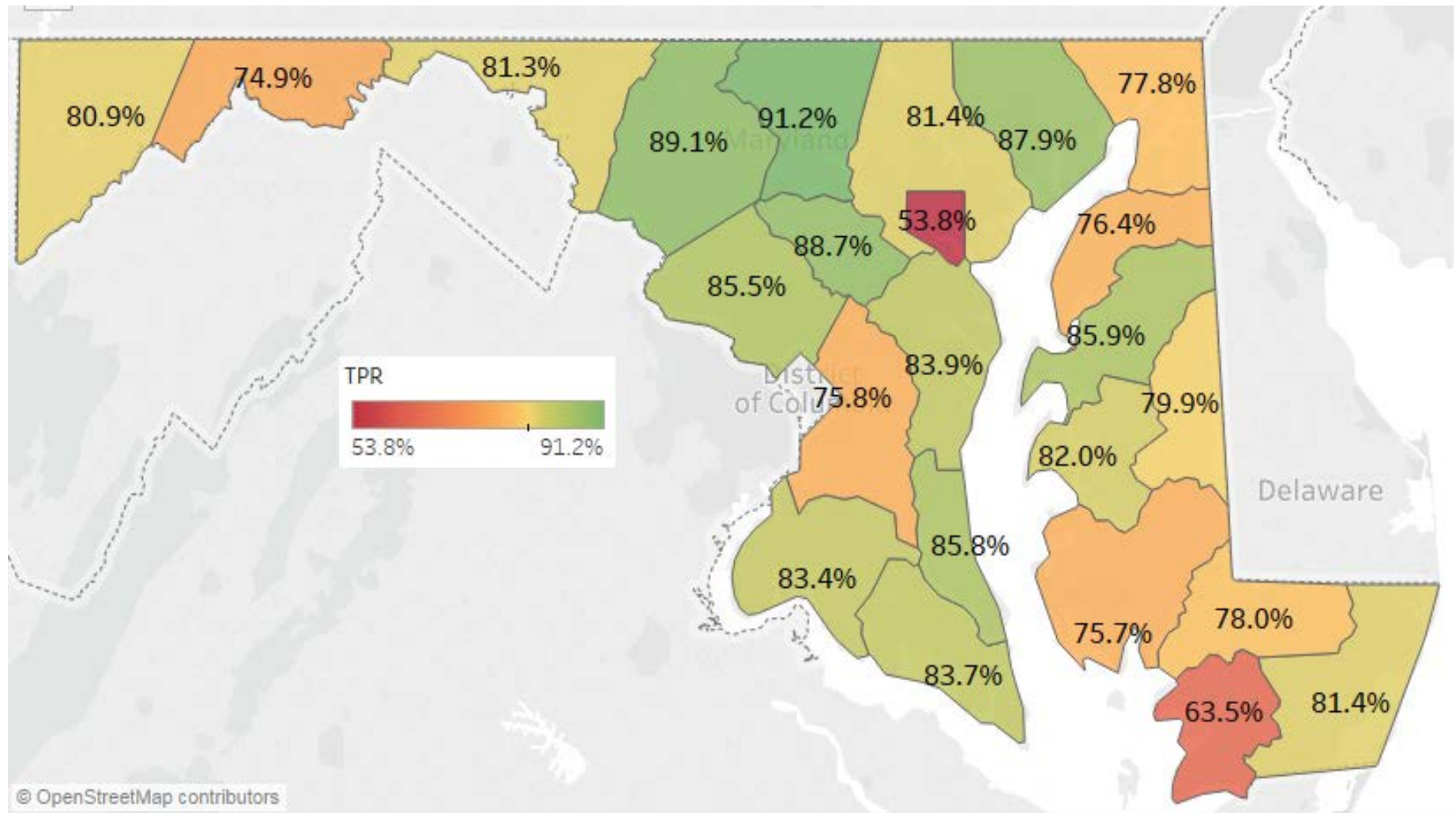
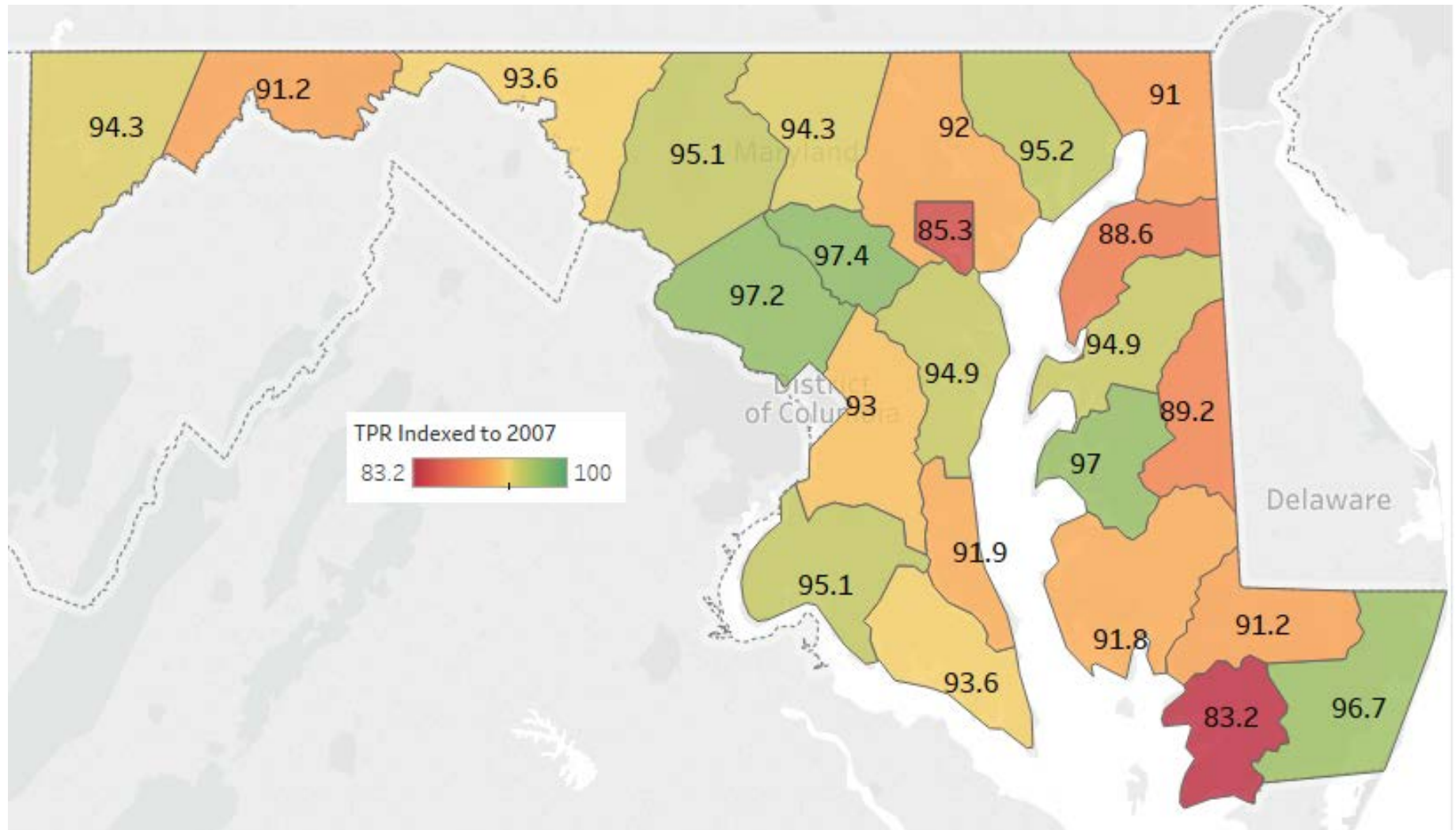Missing Workers by Age Cohort (relative to 2007's TPR)
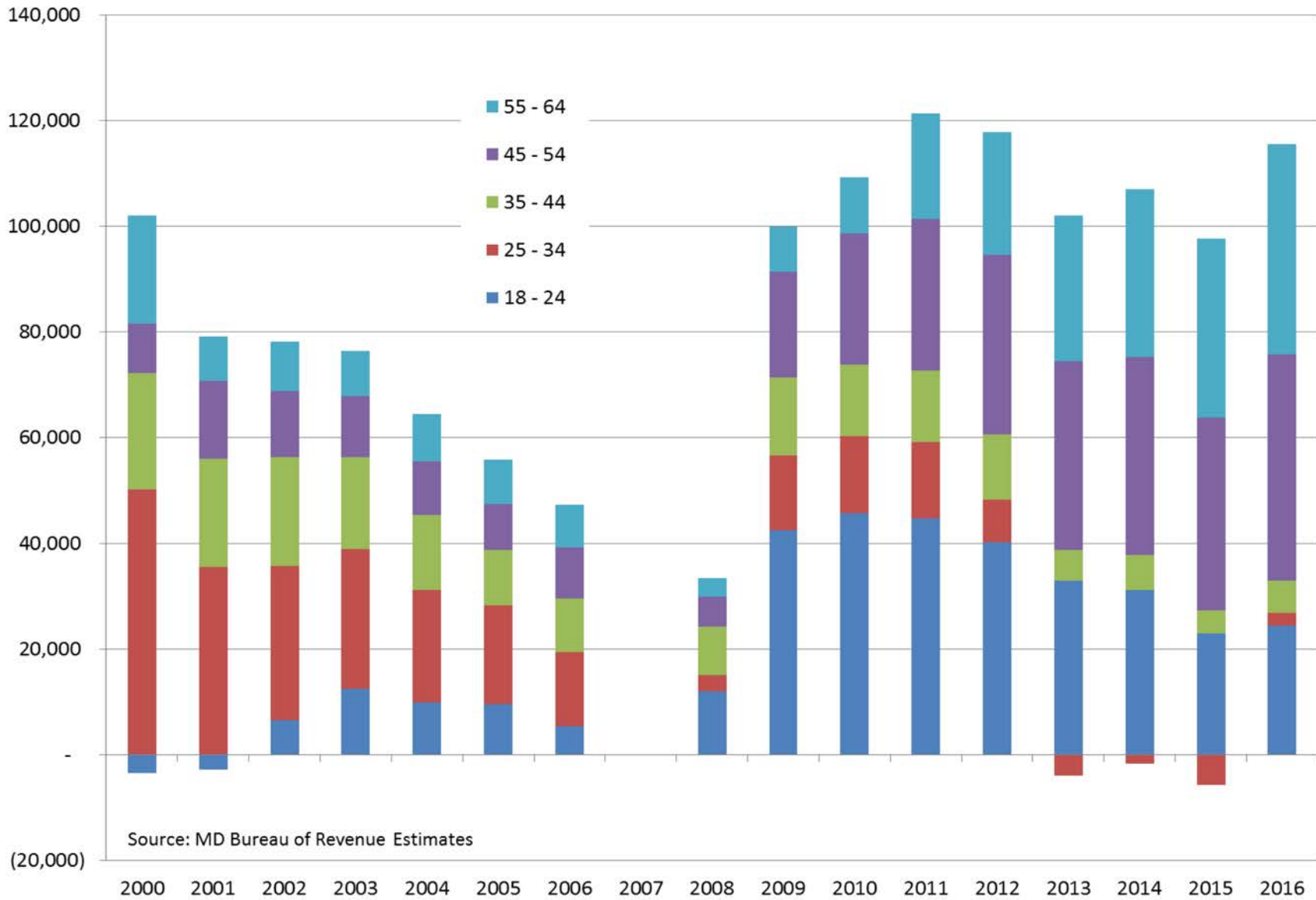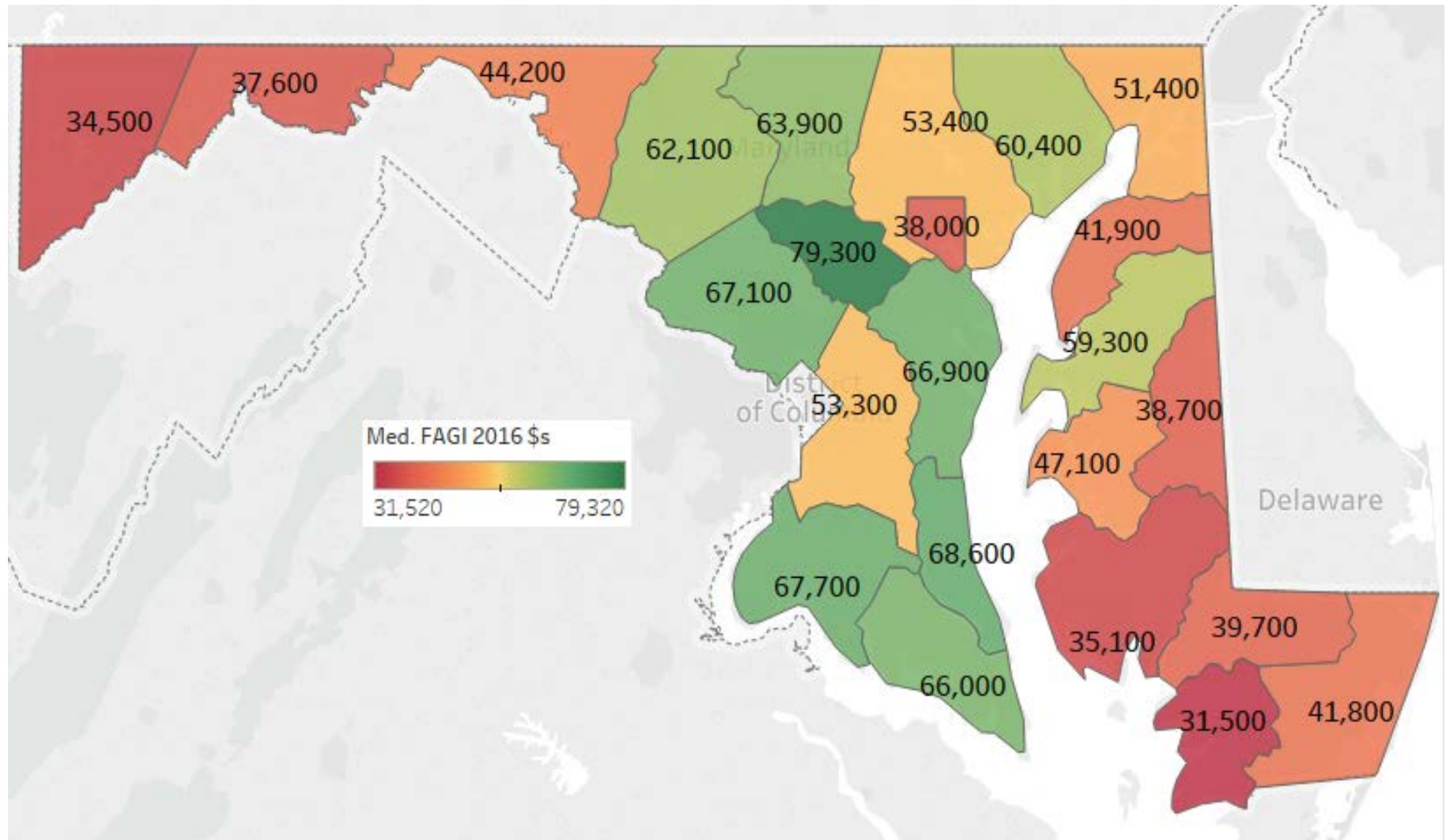
Foregone PIT Revenue by Age Cohort (Nominal $s, 000s)

Source: MD Bureau of Revenue Estimates
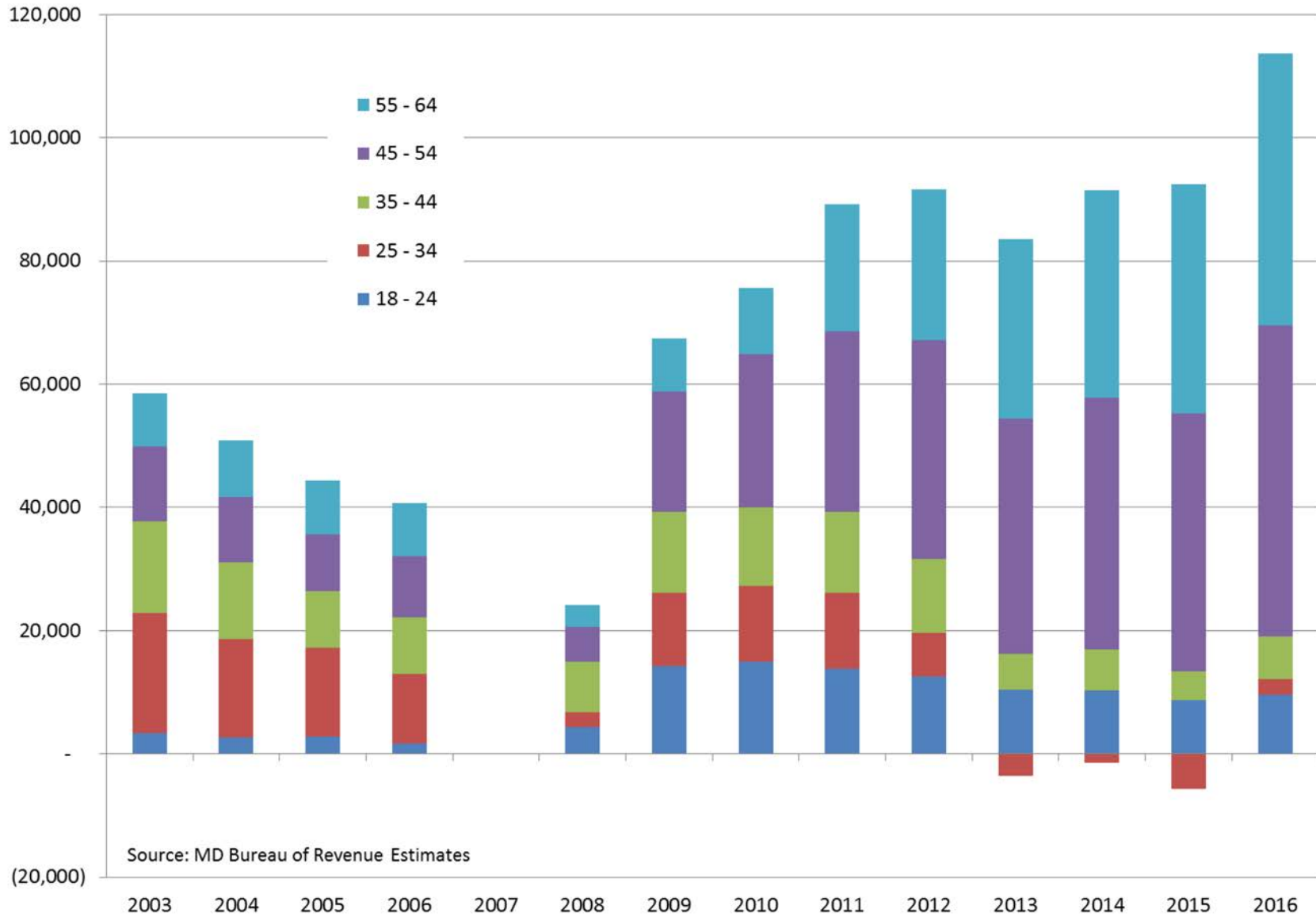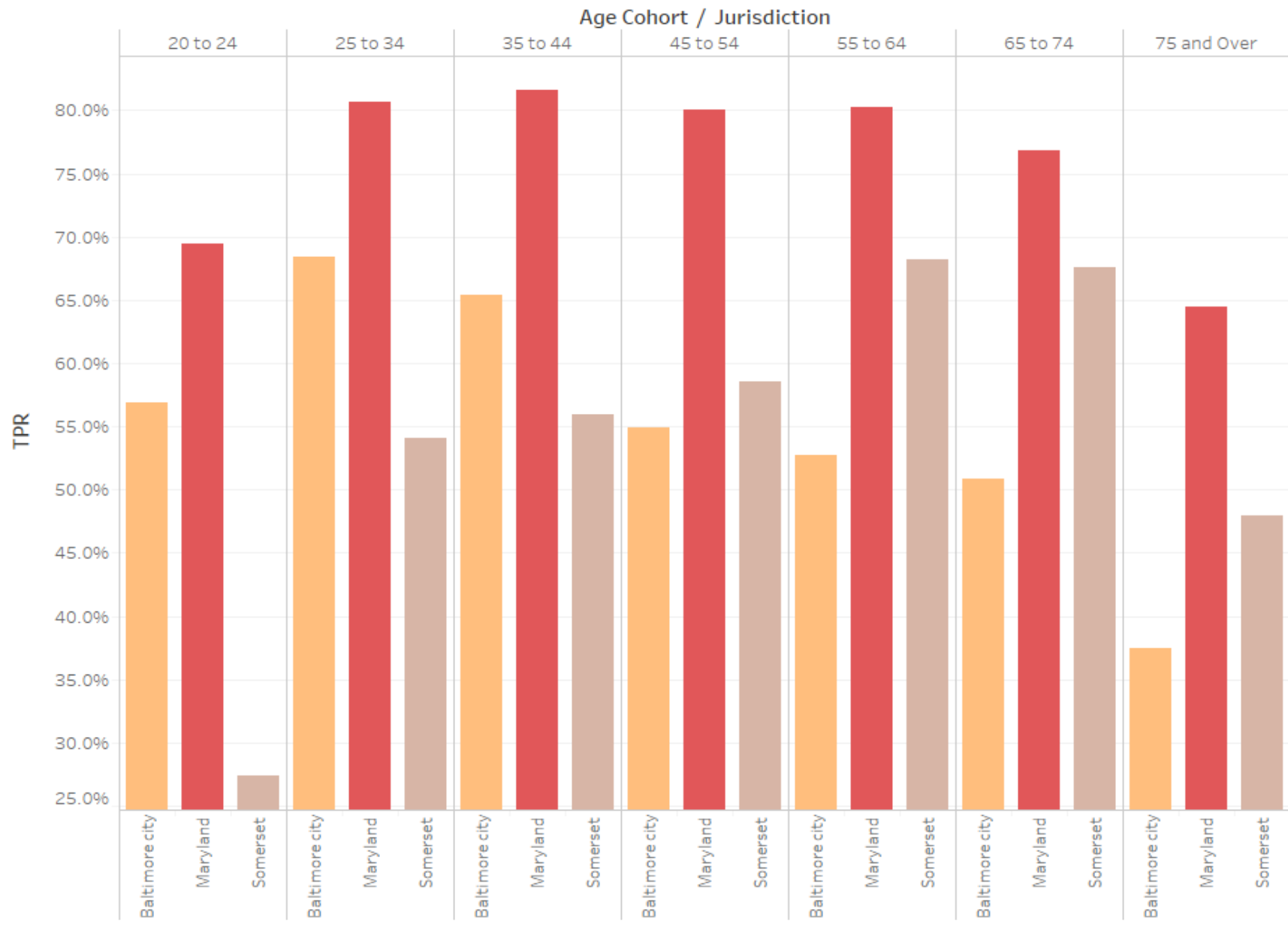
# 45 – 64 TPR by County in 2016

# TPR by County Indexed to 2007 –
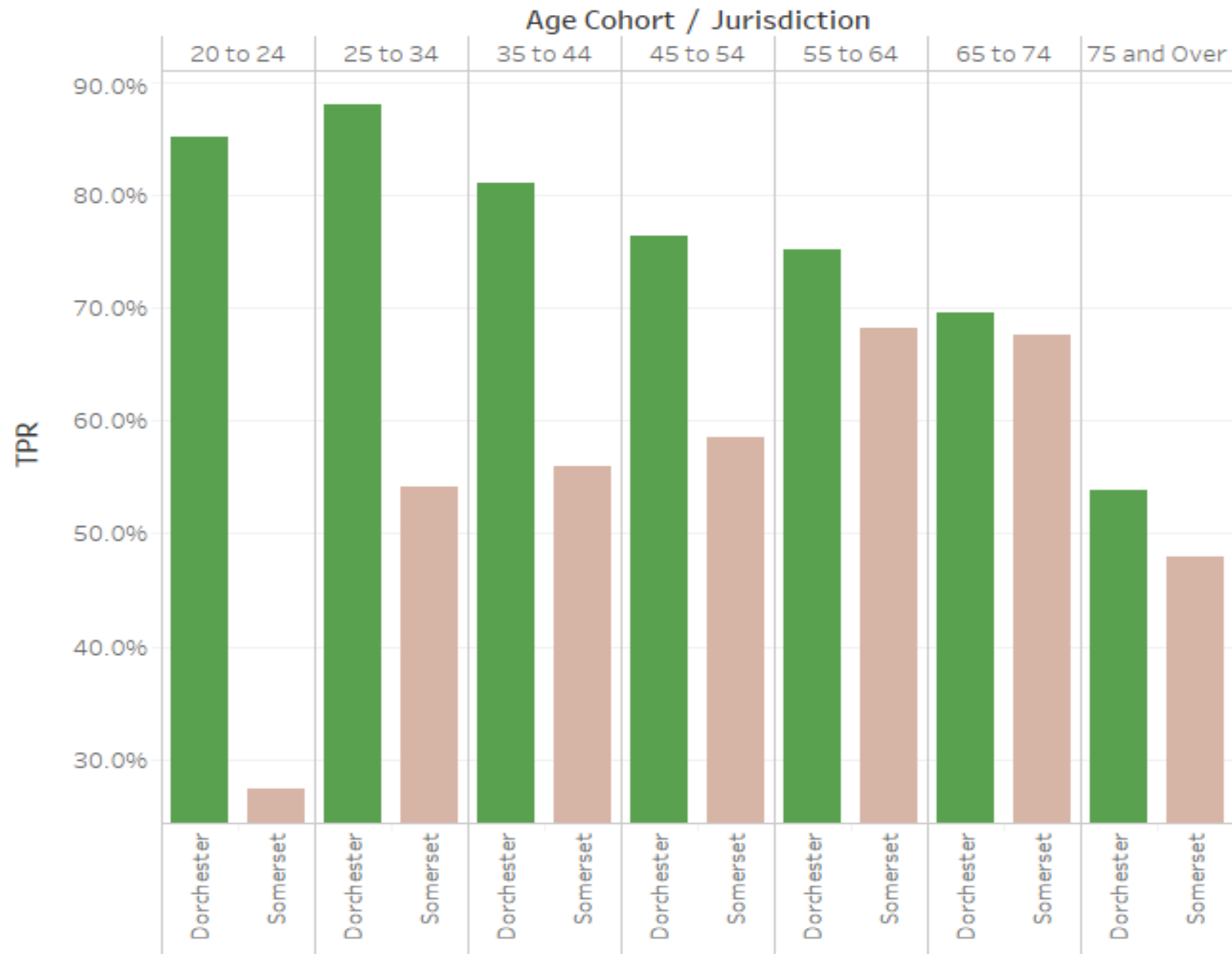# 45 to 54 Year Olds

# Median FAGI 2016 – 45 to 54 Year Olds

## TPR by Age Cohort 2016

## TPR by Age Cohort 2016

# Suspected Causes

- **Economic stress / lack of opportunity**
  - Great Recession clearly implicated
  - Skills mismatch & Technological change
    - Lack of in-demand skills among labor force
  - Age discrimination
  - Declining geographic mobility
  - Declining economic competition
  - Criminal Records
    - 1 in 3 Americans has one

# Suspected Causes (cont.)

- **Health/Disability Issues**
  - Physical & Mental
  - Significant & increasing barrier
  - Particularly among 45 to 64 cohorts
    - Among the highest bankruptcy rates, overdose rates, & suicide rates

- **Addiction in Particular (opioids)**
  - Caused ~25% of decline in LPR from 1999 to 2015

# Potential Solutions

- **Invest in better health/addiction services**
- **Invest in human capital:**
  - ex. job training and non-traditional education programs

- **Proactively target resources**
  - Tailored programs for 45 to 64 age cohort
  - Additional data could identify people sooner after a job loss
    - Pro-actively offer comprehensive resources to target population
  - De-silo separate and overlapping programs
    - Reduces barriers to participation

# What about the cost?

- **Status-quo is costly**
- **Successful programs can increase labor participation**
  - More people earning money & paying taxes
  - Fewer people using social services
- **May reduce tax non-compliance**
- **Reduce Tax Expenditures**
  - Ex. Tax credits such as Enterprise Zones
  - Often created with intent to help poor people / regions
  - Research shows they are ineffective and wasteful

# The End

- Project is ongoing

- Data on is our website – will be updated

- Any questions?