

# SSA/Trustees Reports Fertility Projections

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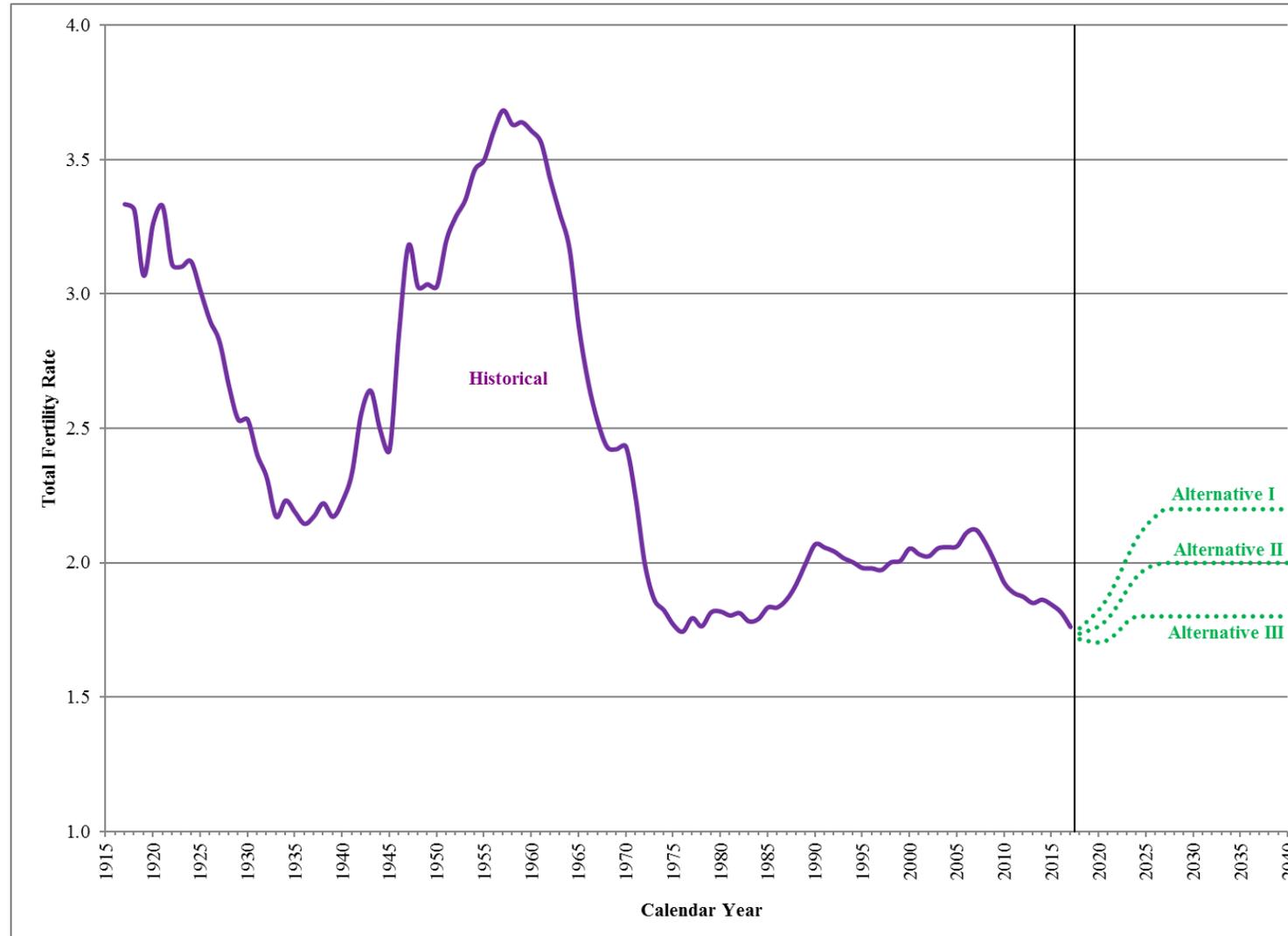
# Overview of SSA/Trustees Report Projections

- Objective: assess the actuarial status of the Trust Funds as required by law
  - Ability to pay scheduled benefits with scheduled revenue
  - Shortfall, if any, over the long-range (75 years) and after reserve depletion
  - Baseline is current law
- Actuarial model reflecting the population in the Social Security coverage area
  - U.S. population and workforce, authorized and unauthorized, and abroad
  - Earnings in the economy, and those covered and taxable
  - Workers insured for benefit coverage, and numbers becoming entitled
  - Average benefit levels by type of benefit and duration since becoming entitled
  - Accumulation of starting reserves, income, and outgo for trust fund reserve status
- Demographic assumptions shape the age distribution for the future
  - Birth rates are most critical factor for age distribution

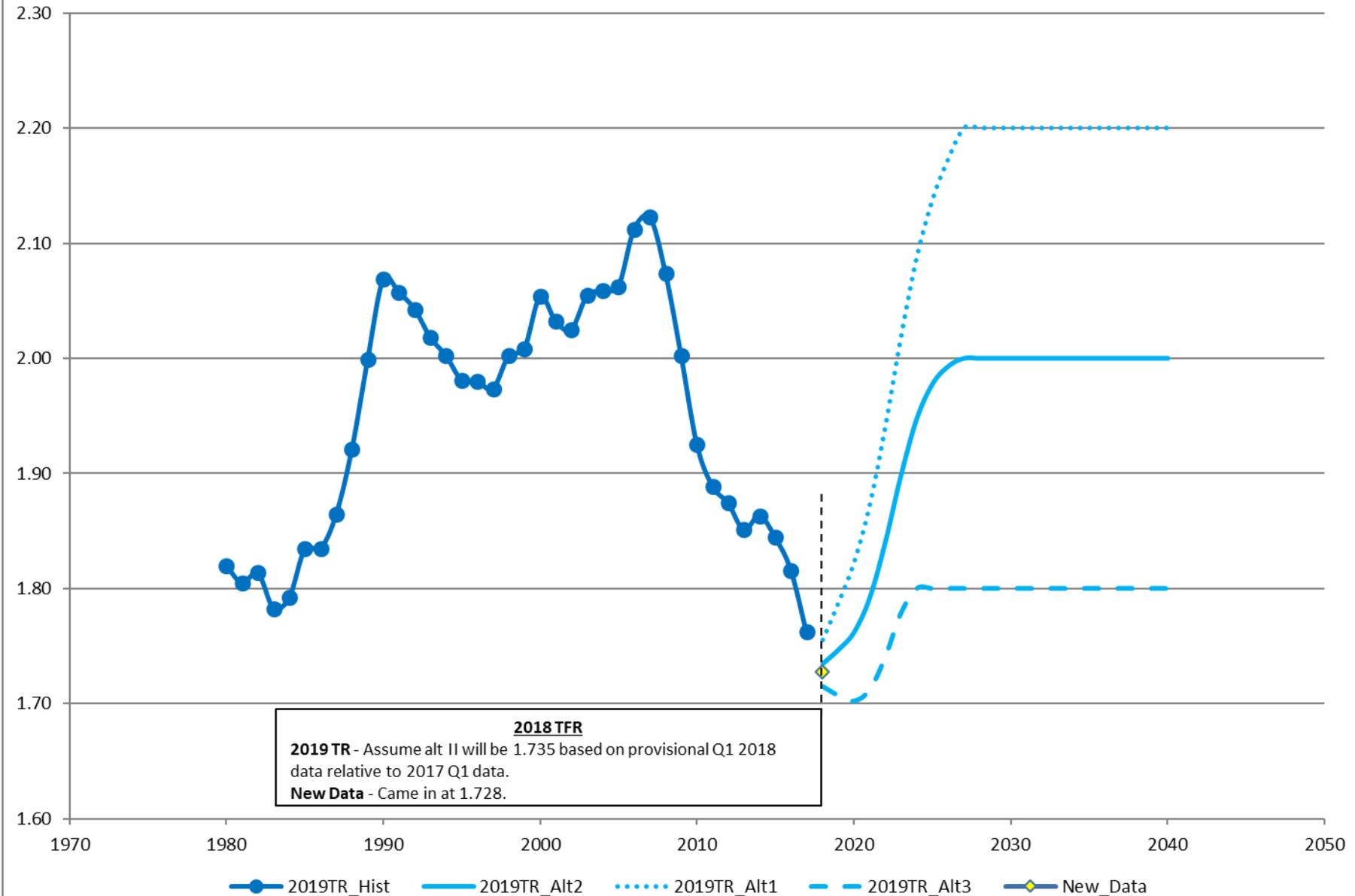
# Birth Data Background

- Age-specific central birth rates
  - Births during the year to mothers at the specified age divided by the midyear female population at that age
  - Births from National Center for Health Statistics
  - Resident population from Census Bureau
- Total fertility rate (TFR)
  - Sum of the age-specific central birth rates during the year
  - Can be interpreted as the average number of children that would be born to a woman if she were to experience, at each age of her life, the birth rate observed in, or assumed for, a specified year, and if she were to survive the entire childbearing period

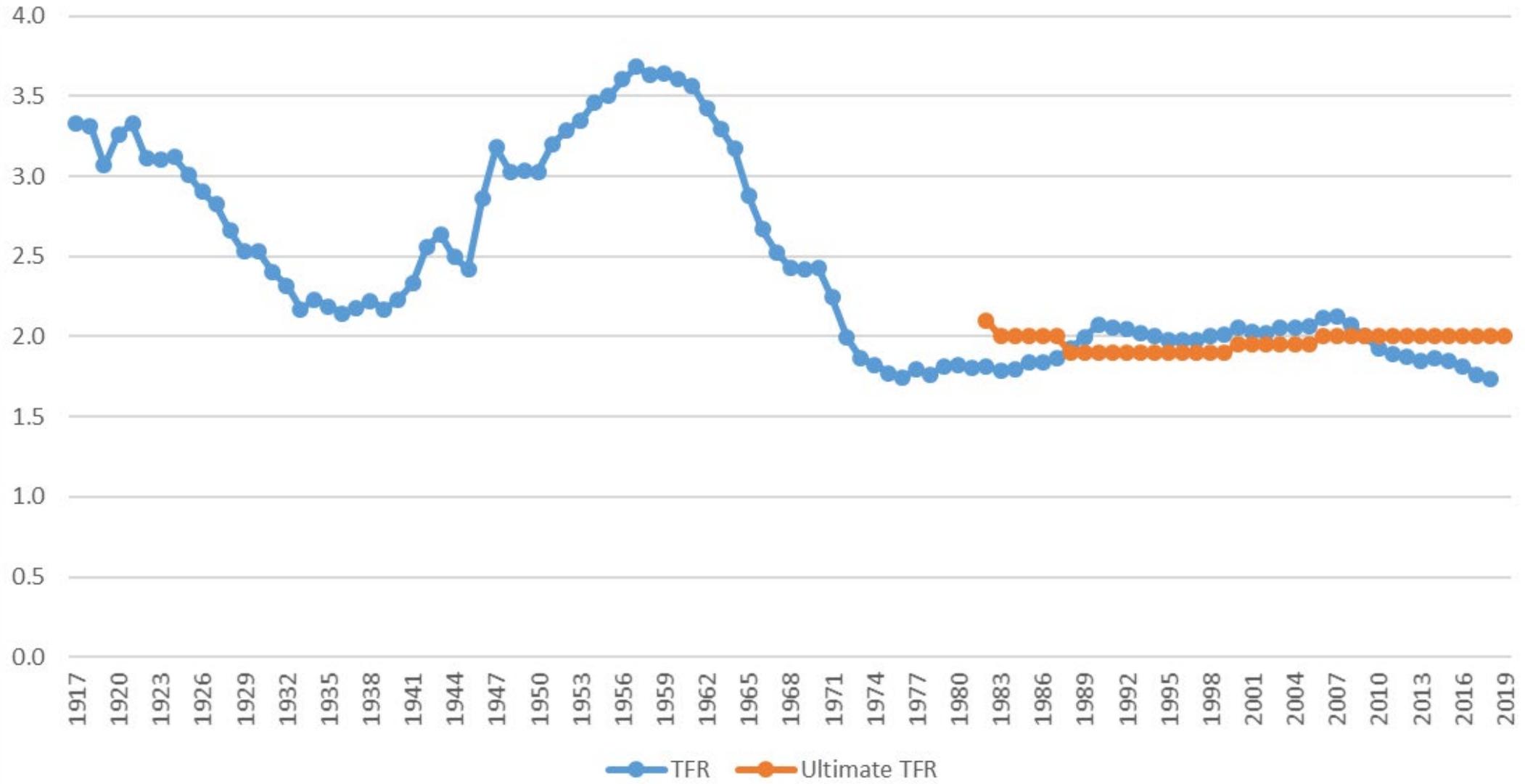
# Total Fertility Rate, Historical and Projected, 2019 Trustees Report (TR)



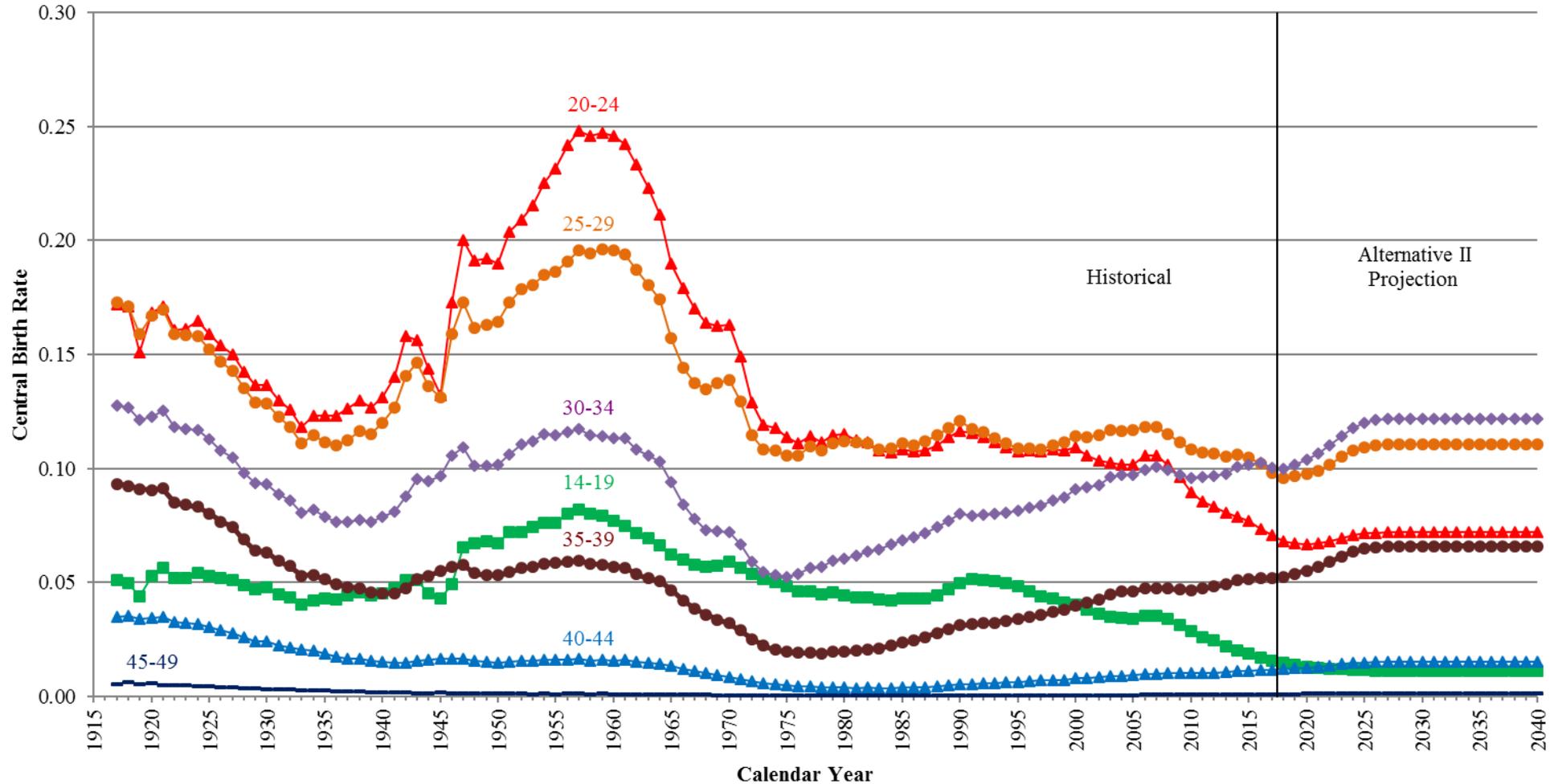
# Total Fertility Rates for the 2019 TR



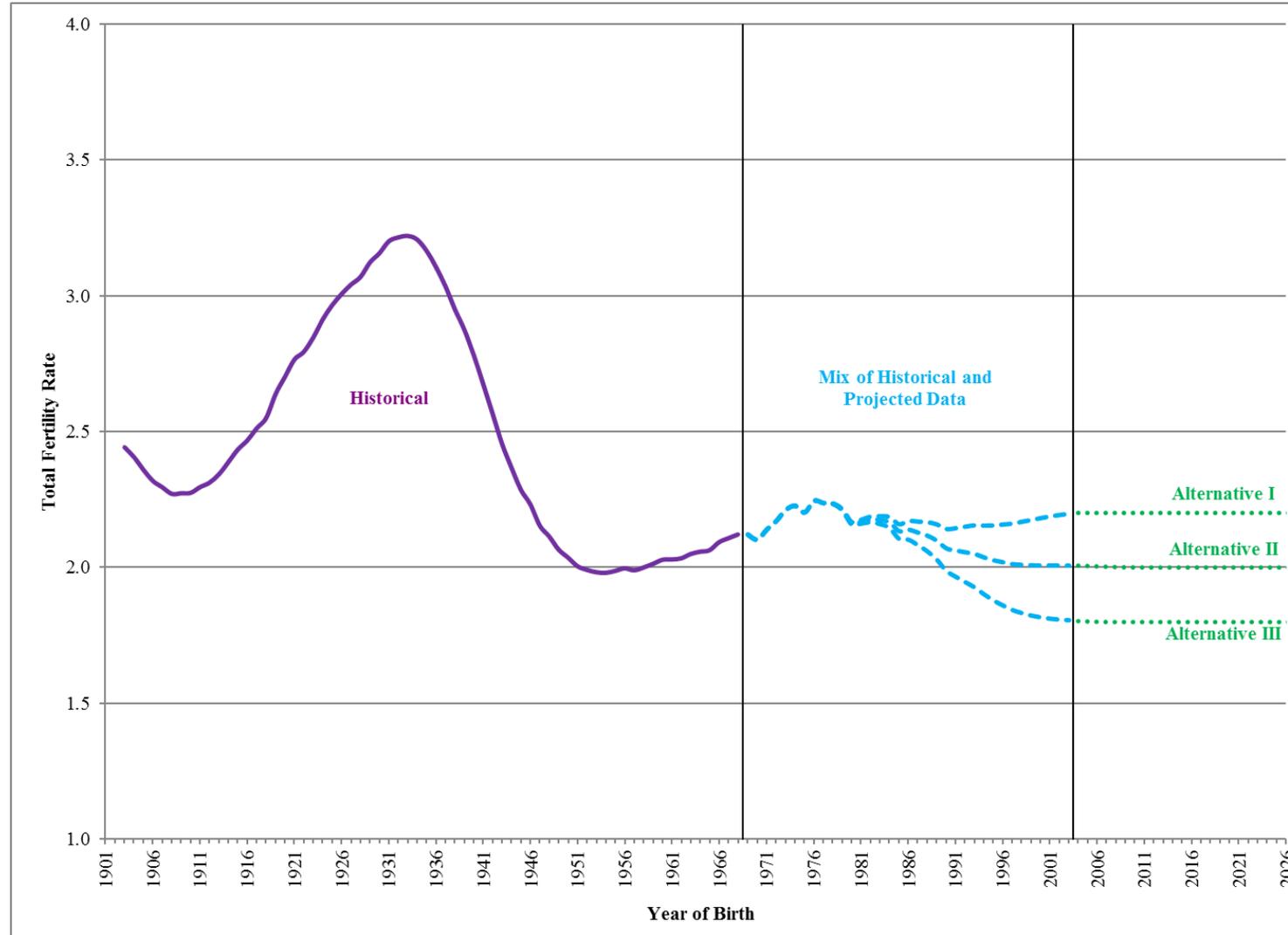
### Ultimate Total Fertility Rate (TFR), by Trustees Report, and Historical TFRs



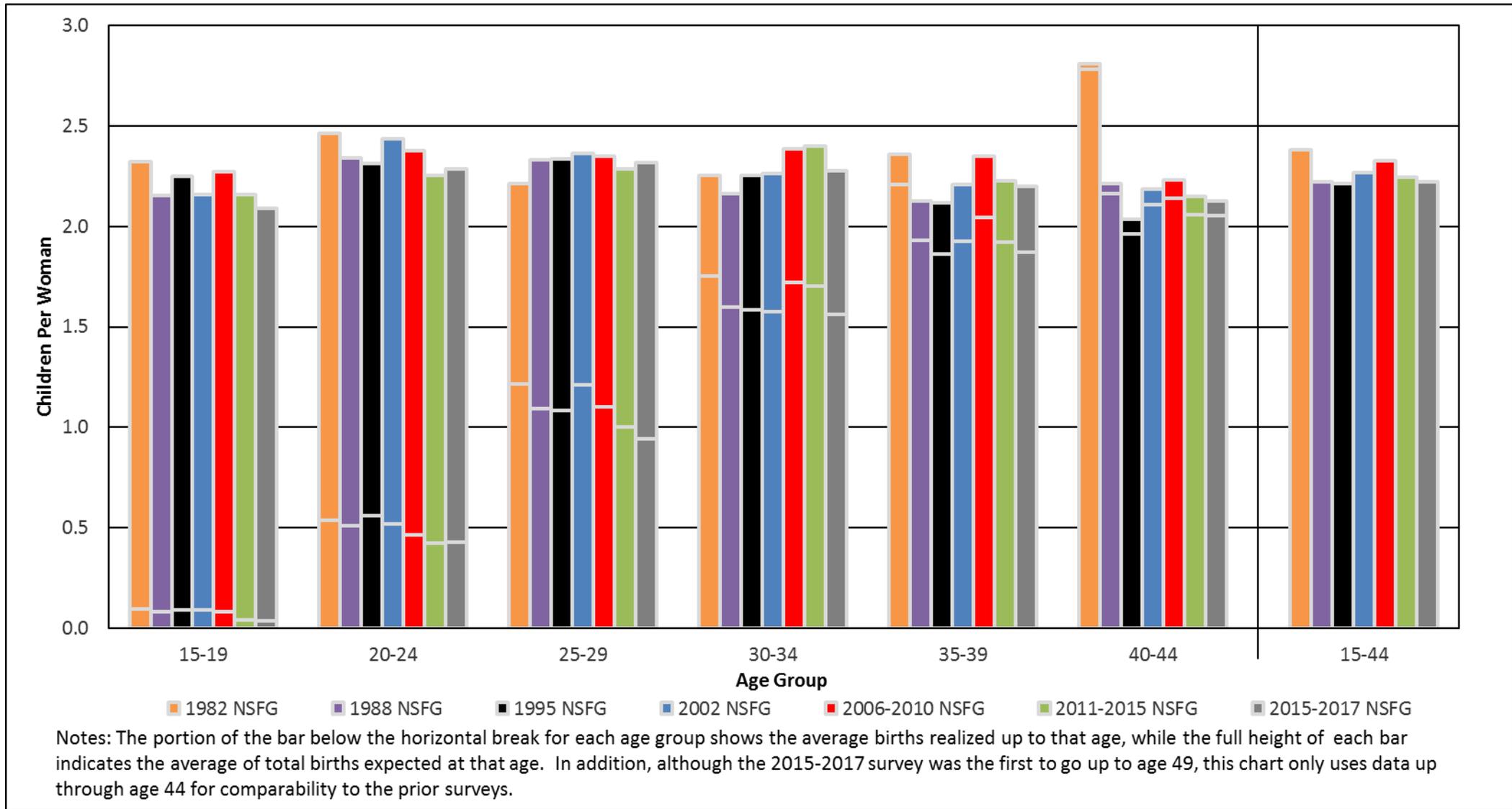
# Central Birth Rates, 5-Year Age Groups, 2019 TR



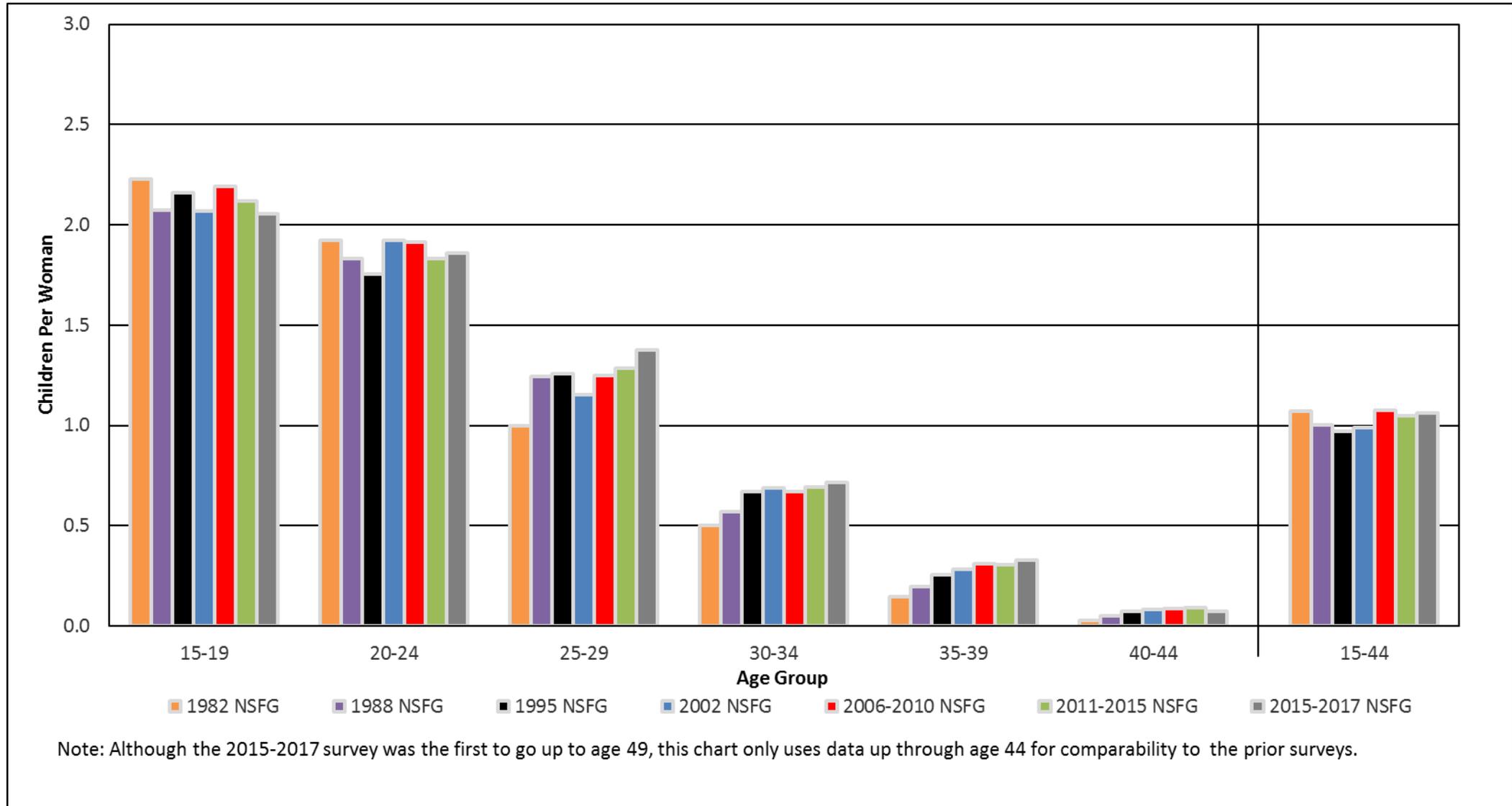
# Cohort Total Fertility Rate, Historical and Projected, 2019 TR



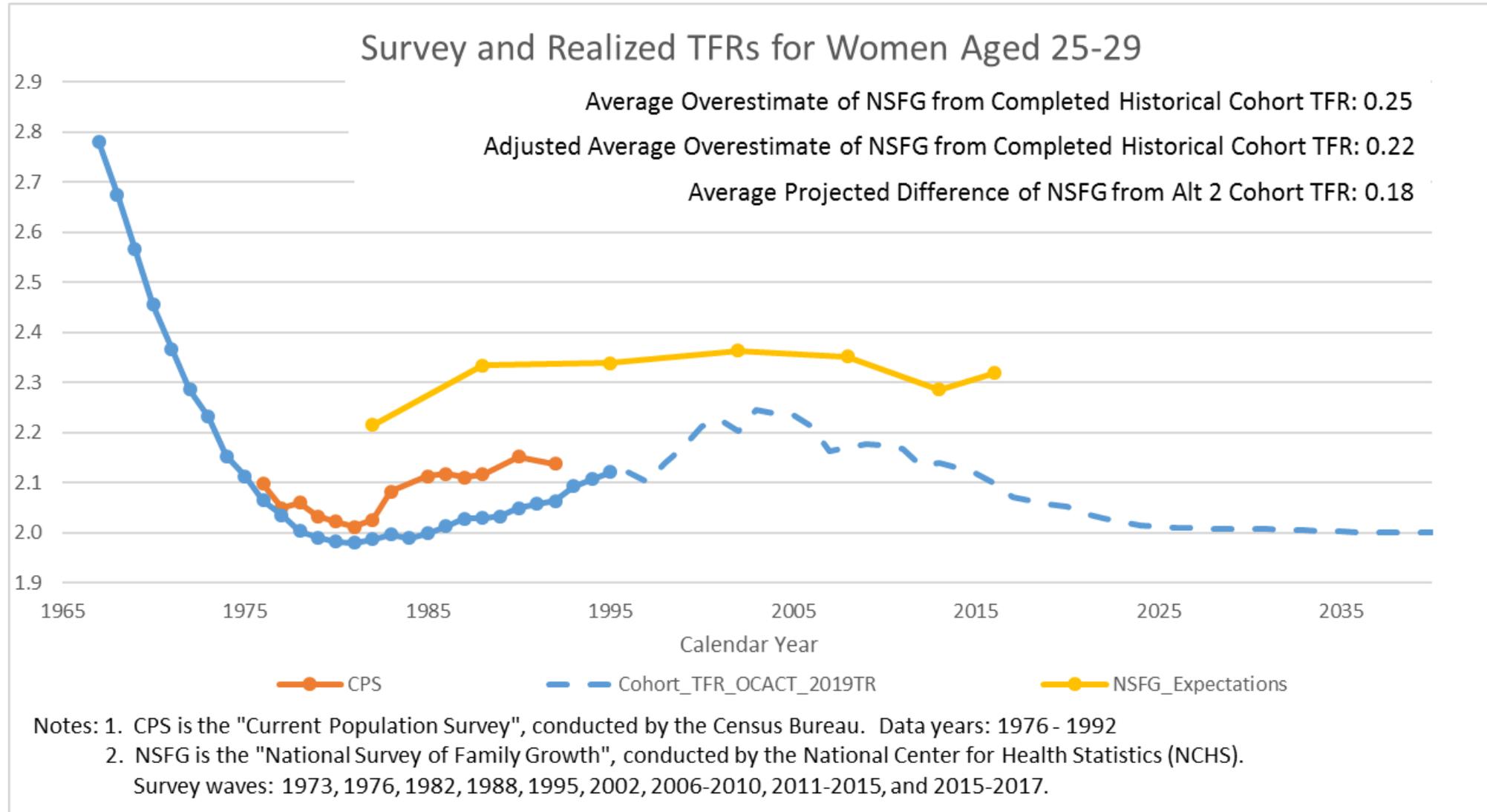
# Fertility Expectations



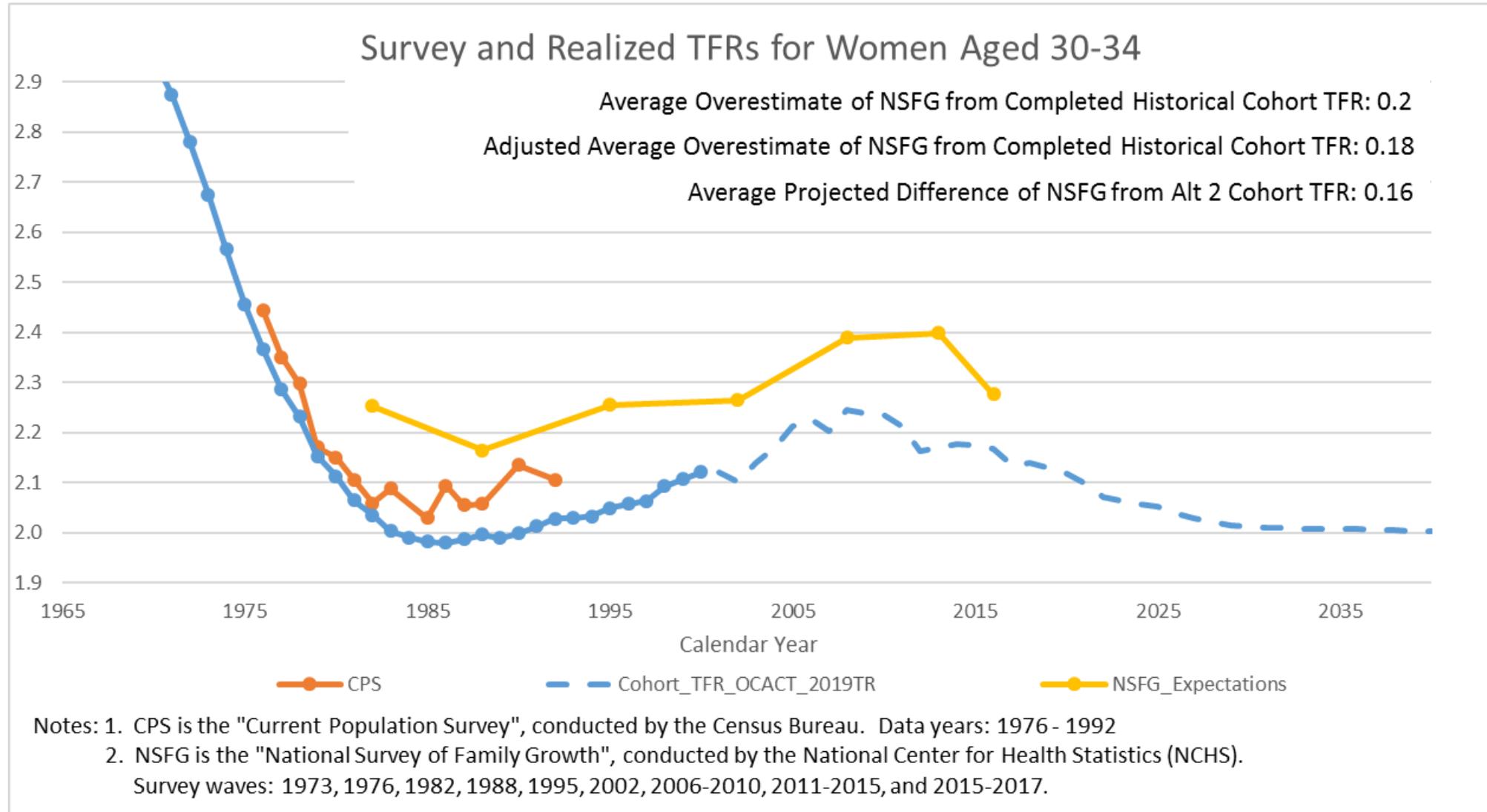
# Future Expected Additional Births Only



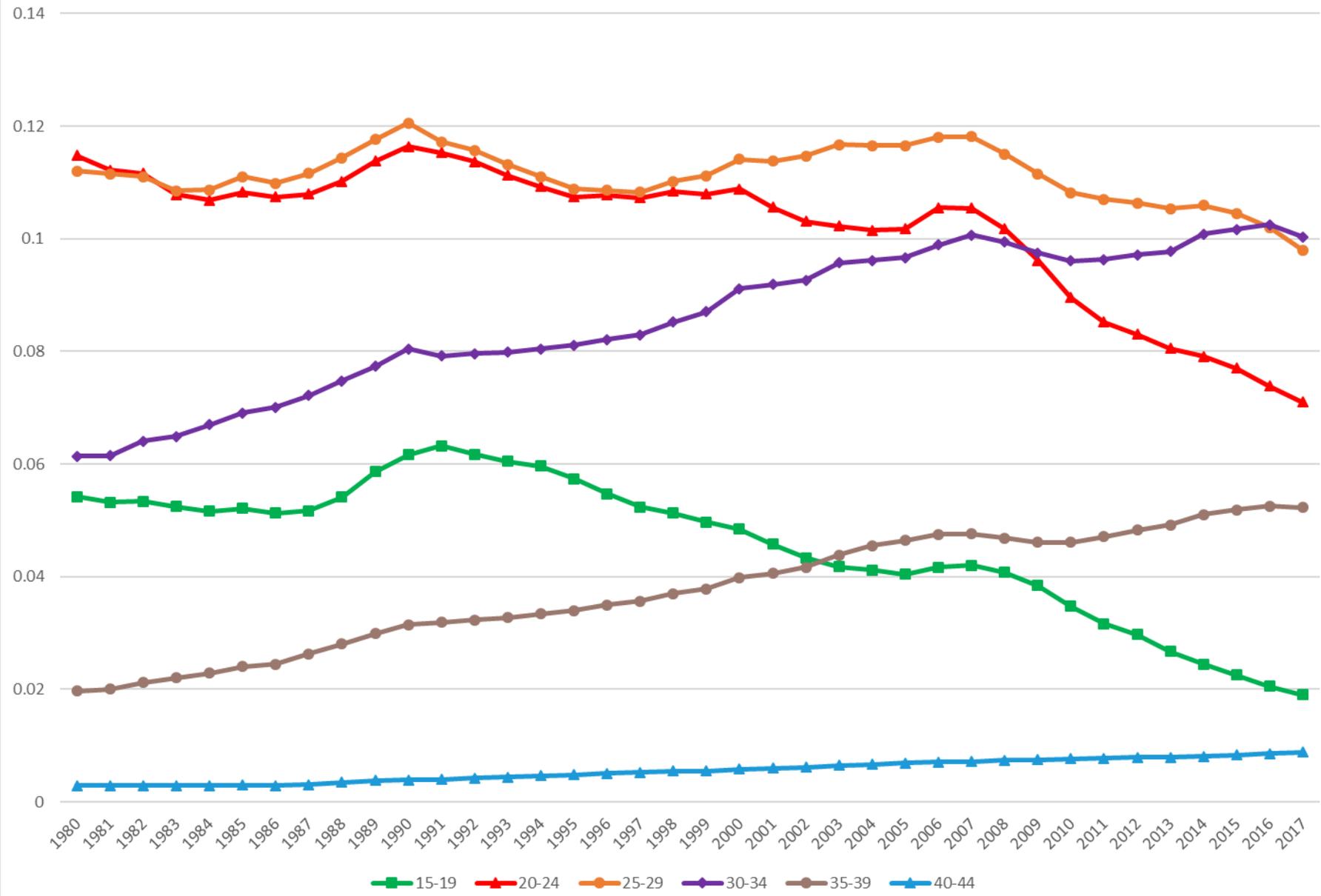
# Compare to Cohort TFR (25-29)



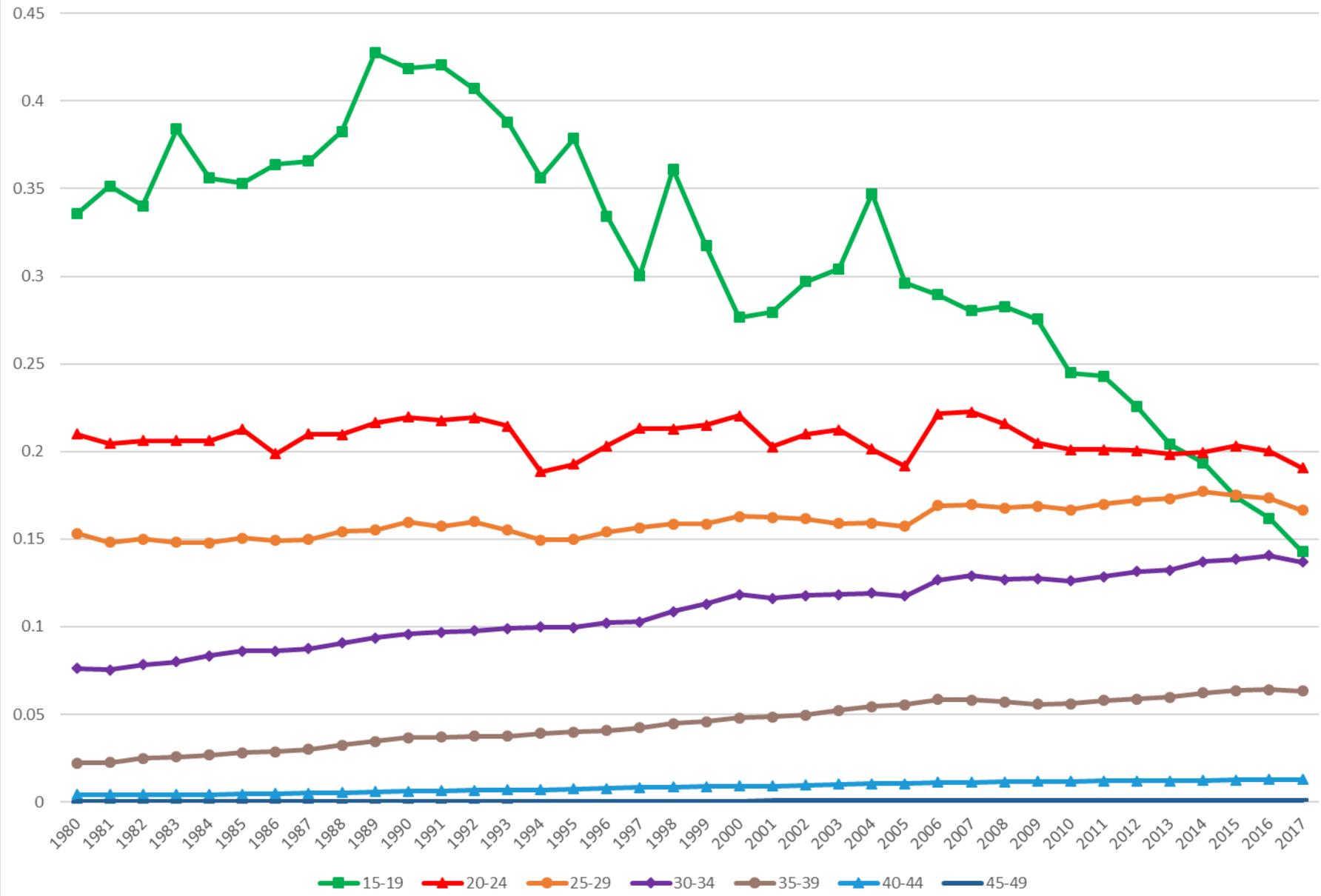
# Compare to Cohort TFR (30-34)



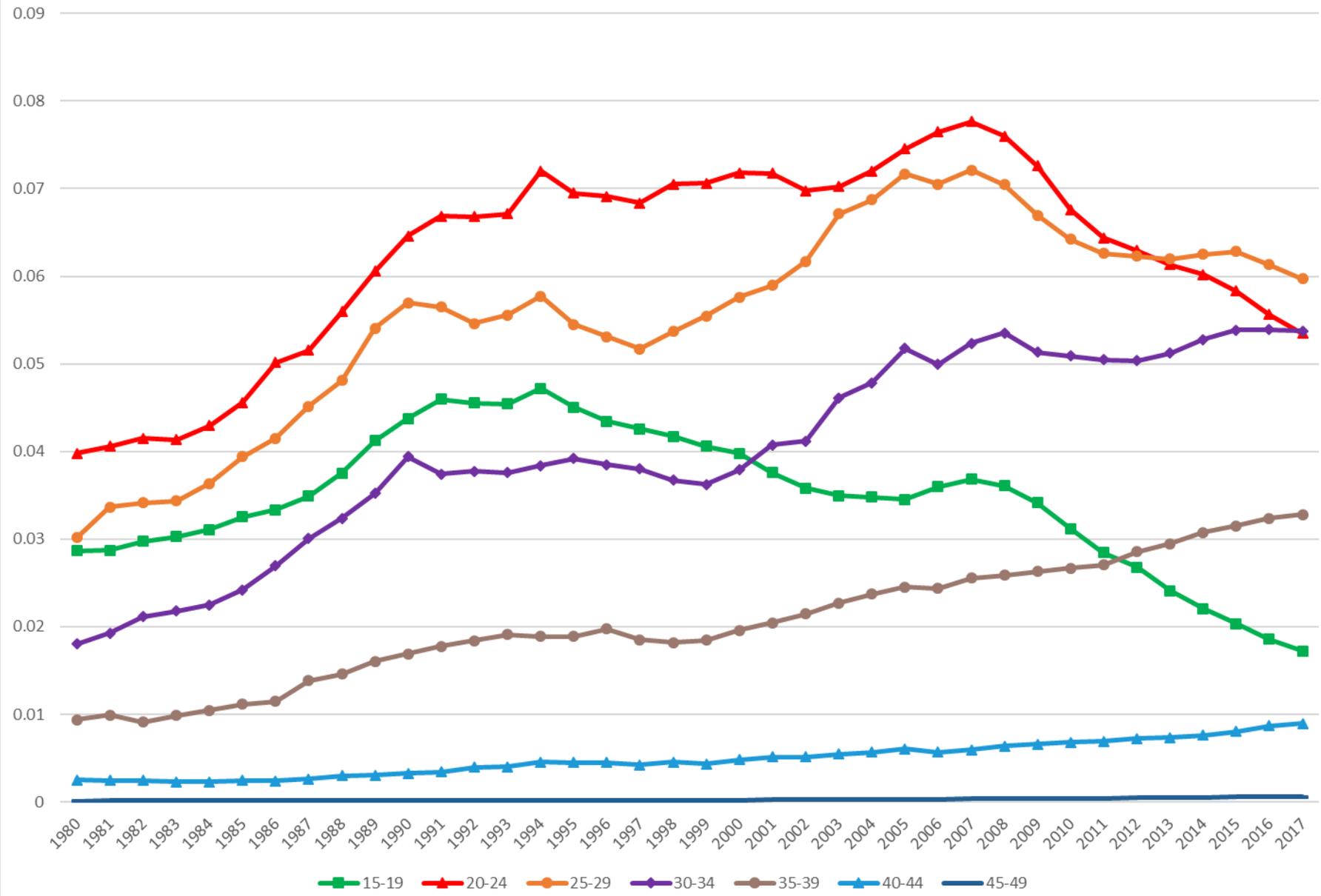
Central Birth Rates for Five-Year Age Groups: Total



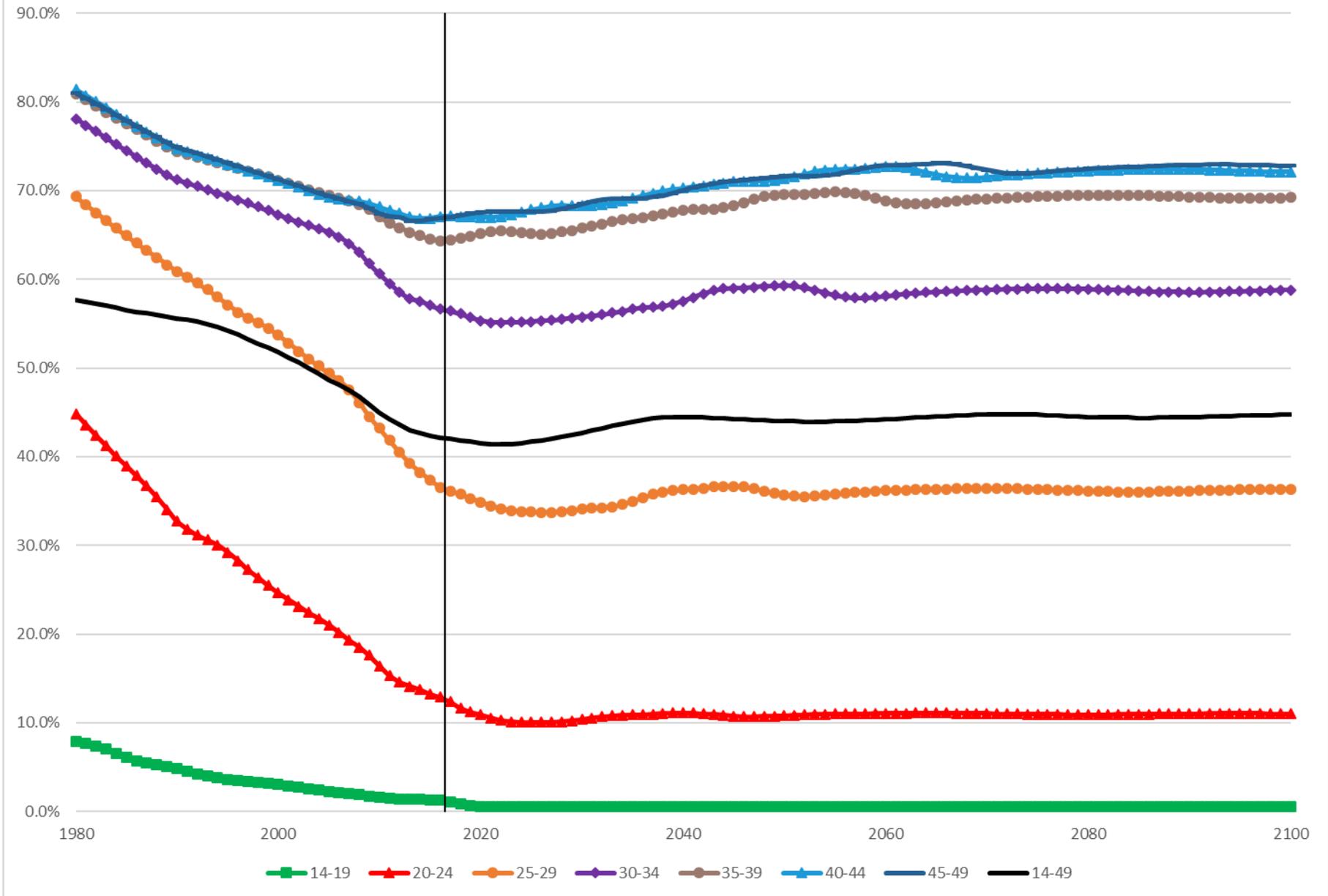
Central Birth Rates for Five-Year Age Groups: Married Only



Central Birth Rates for Five-Year Age Groups: **Unmarried Only**



Percentage of Females Currently Married, by Age Group, 2019 TR

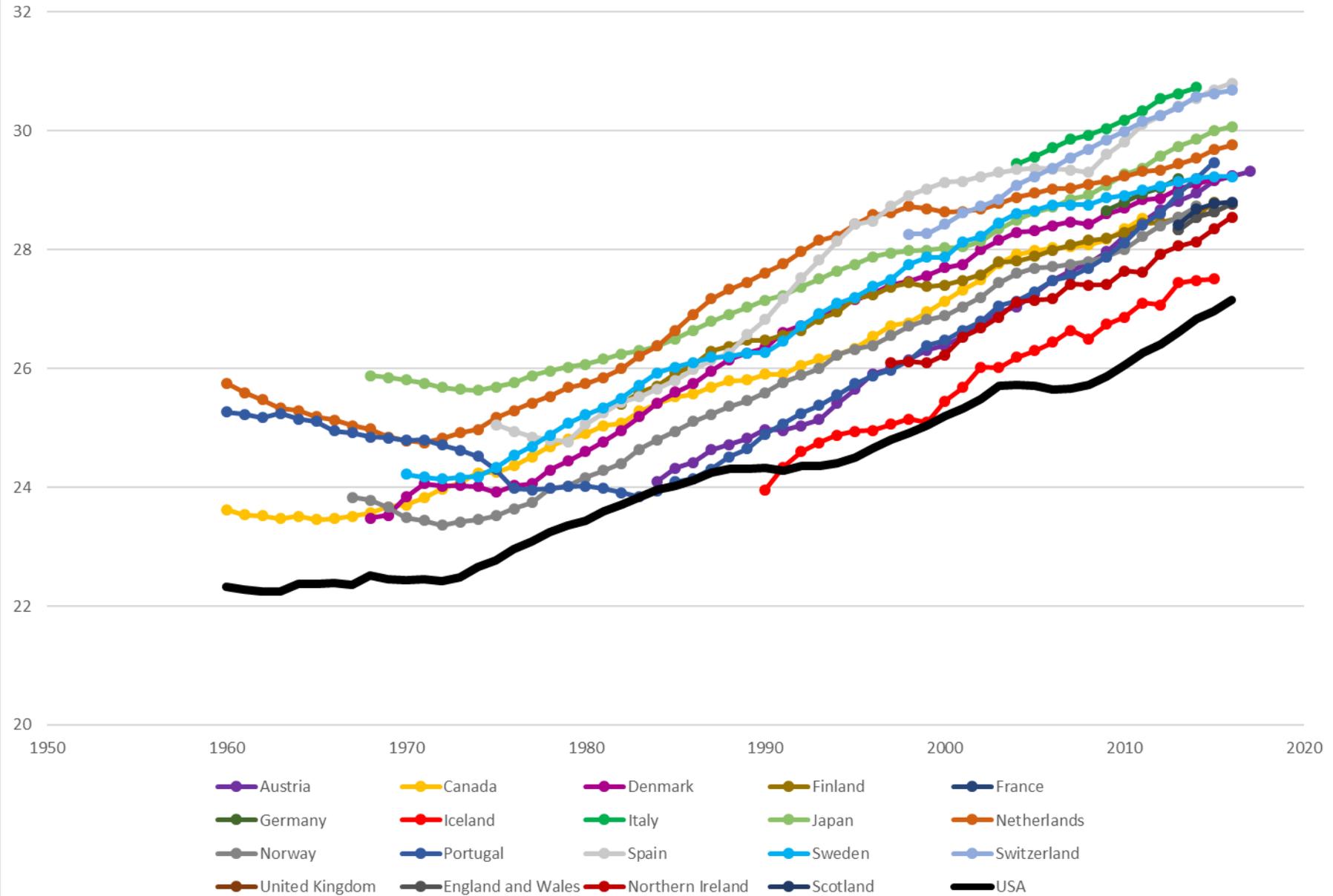


# Historical Total Fertility Rates, by Country

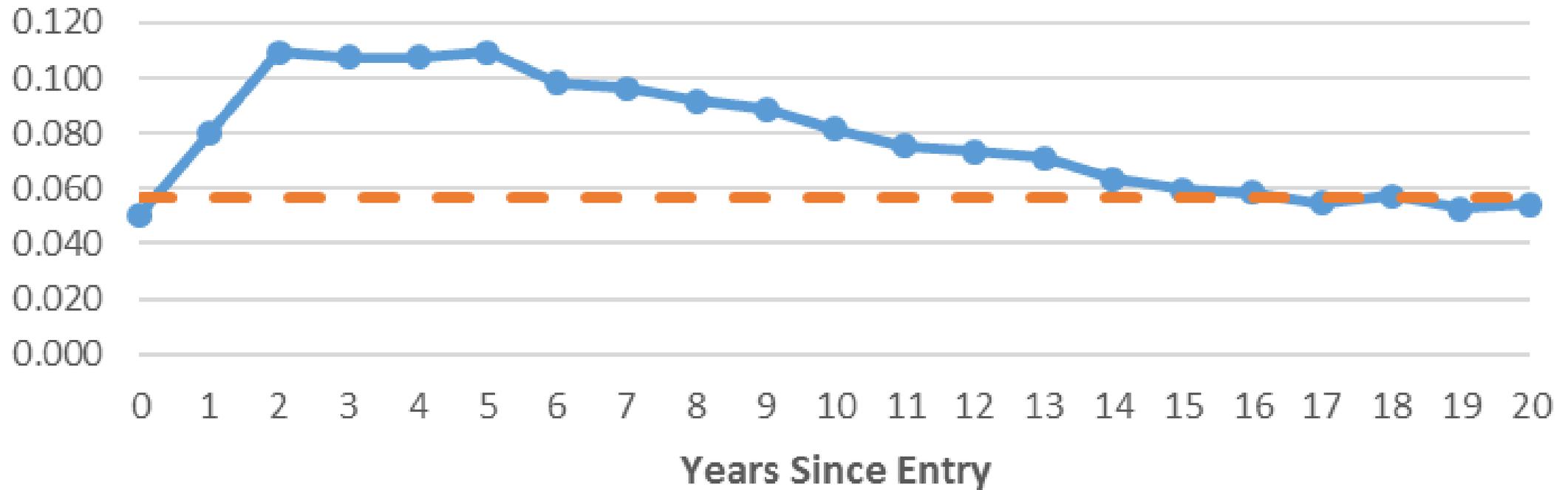
Country	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Most Recent TFR	Latest 10-Year Change
Australia	1.9	1.9	1.9	1.8	1.8	1.8	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	-0.1
Austria	1.7	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	0.1
Belgium	1.7	1.5	1.6	1.5	1.6	1.7	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	-0.1
Canada	1.7	1.6	1.7	1.6	1.5	1.5	1.6	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	-0.1
China	2.6	2.7	2.4	1.6	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0
Denmark	1.5	1.4	1.7	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.9	1.8	1.7	1.7	1.7	1.7	1.8	1.8	0.0
Finland	1.6	1.6	1.8	1.8	1.7	1.8	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.6	1.6	-0.2
France	1.9	1.8	1.8	1.7	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	-0.1
Germany	1.6	1.4	1.5	1.2	1.4	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.6	0.3
Greece	2.2	1.7	1.4	1.3	1.3	1.3	1.4	1.4	1.5	1.5	1.5	1.4	1.3	1.3	1.3	1.3	1.4	1.4	0.0
India	4.8	4.5	4.0	3.7	3.3	3.0	2.9	2.8	2.7	2.7	2.6	2.5	2.5	2.4	2.4	2.4	2.3	2.3	-0.6
Ireland	3.2	2.5	2.1	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	0.0
Italy	1.7	1.4	1.4	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	-0.1
Japan	1.8	1.8	1.5	1.4	1.4	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.4	1.4	0.1
Mexico	4.7	3.9	3.4	3.0	2.6	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	-0.2
Netherlands	1.6	1.5	1.6	1.5	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	0.0
New Zealand	2.0	1.9	2.2	2.0	2.0	2.0	2.0	2.2	2.2	2.1	2.2	2.1	2.1	2.0	1.9	2.0	1.9	1.9	-0.1
Norway	1.7	1.7	1.9	1.9	1.9	1.8	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.7	1.7	1.7	-0.2
Portugal	2.2	1.7	1.6	1.4	1.6	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.2	1.2	1.3	1.4	1.4	0.0
Spain	2.2	1.6	1.4	1.2	1.2	1.3	1.4	1.4	1.5	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	-0.1
Sweden	1.7	1.7	2.1	1.7	1.5	1.8	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.0
Switzerland	1.6	1.5	1.6	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.1
United Kingdom	1.9	1.8	1.8	1.7	1.6	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	0.0
United States	1.8	1.8	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	-0.3

Source: United States: Social Security Administration Office of the Chief Actuary calculations based on data from the National Center for Health Statistics and the Census Bureau  
 Other countries: Organisation for Economic Co-operation and Development website at: <https://data.oecd.org/pop/fertility-rates.htm>

Mean Age of Mother at First Birth



## Birth Rates for Foreign-Born Women Aged 14-49 by Years Since Entry (2000 - 2017 ACS)



— The rate for women that are native born, or are foreign born and have entered over 20 years ago

Total Fertility Rates, by Country of Birth and Number of Years Since Entry, in the 2000-2017 ACS

