

SOA Research Institute

SOA U.S. Individual Life Indexes
Longevity 21



SOA Research Institute

- Research as a core part of the Society of Actuaries mission to serve members
- Bring new actuarial analysis and information to our members, stakeholders, and the public around the world
- Objective and data-driven research



U.S. Individual Life Insurance Mortality Data Collection



Since 2018, data collection through the NAIC via VM-51



Prompted by changeover from more formulaic reserve calculations to principles-based reserve approaches



Mandatory contributions of individual life required (via state authorities) for vast majority of life insurance companies

U.S. Individual Life Insurance Mortality Data Collection



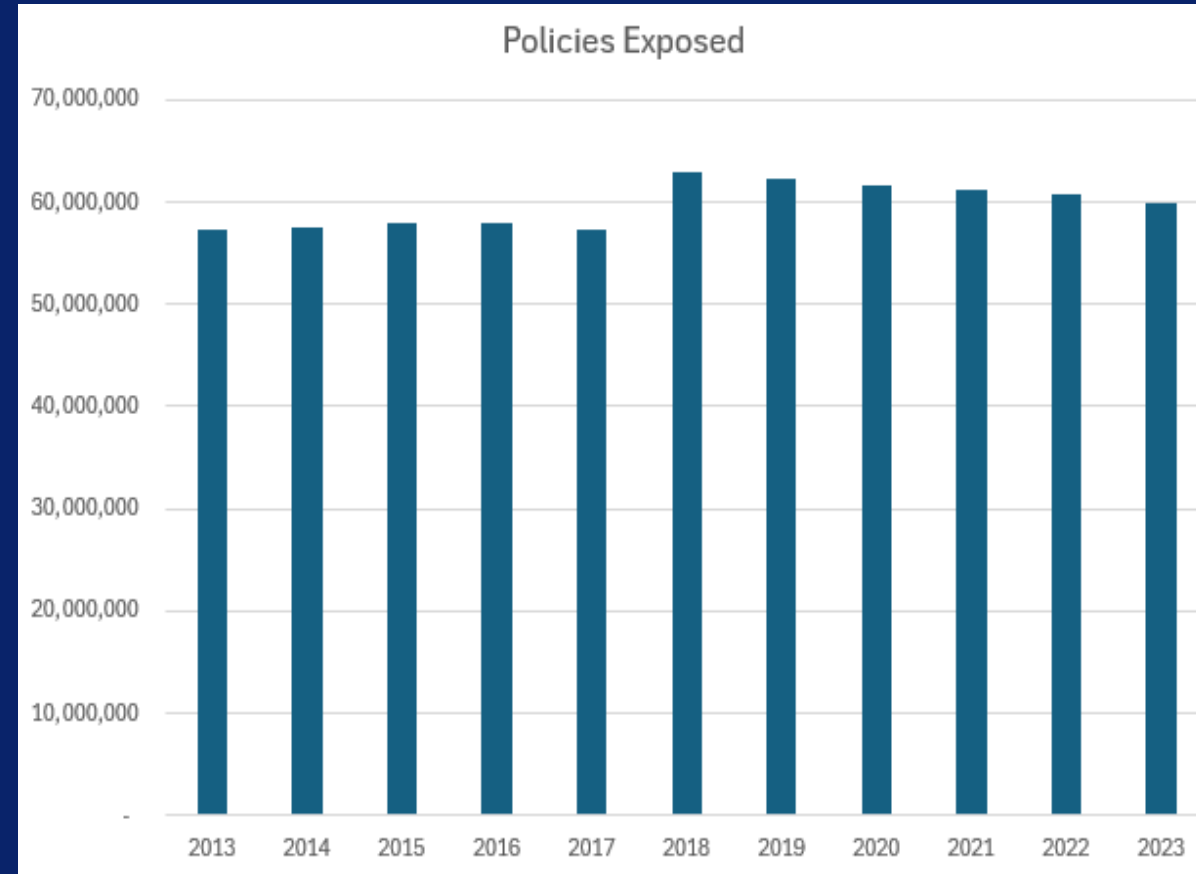
Receipt of NAIC at Kansas City offices for validation and regulatory access; SOA part of the valuation law to receive and study the data for current trends and development of future valuation standards



2013-2017 data from NY state collection with MIB as statistical agent

U.S. Individual Life Insurance Mortality Data Collection

- Full Data Set Description:
Annual Amounts
 - 550,000 – 650,000 deaths
 - 55 M to 60 M policies exposed
 - US\$30M – US\$50M in claims paid
 - US\$12T – US\$16T in face amount exposed



U.S. Individual Life Insurance Mortality Data Collection

Benefit of a Periodic
Mortality Index

Goal / Feedback:

Utility

Minimize potential
index volatility

Adjust Full Data to
maintain material
Core Data Set

U.S. Individual Life Insurance Mortality Data Collection

- Core Data Set Description
 - Duration 11+
 - Change of new underwriting
 - Regulation change
 - Product change
 - Suicide clause
 - Contested claims
 - Ages 18+
 - Stability of adult life risks and diseases
 - Remove post-level-term policies

U.S. Individual Life Insurance Mortality Data Collection

- Full Data Set Description
- 550,000 – 650,000 deaths per year
- 55 M to 60 M policies exposed per year
- US\$30M – US\$50M in claims paid per year
- US\$12T – US\$16T in face amount exposed per year

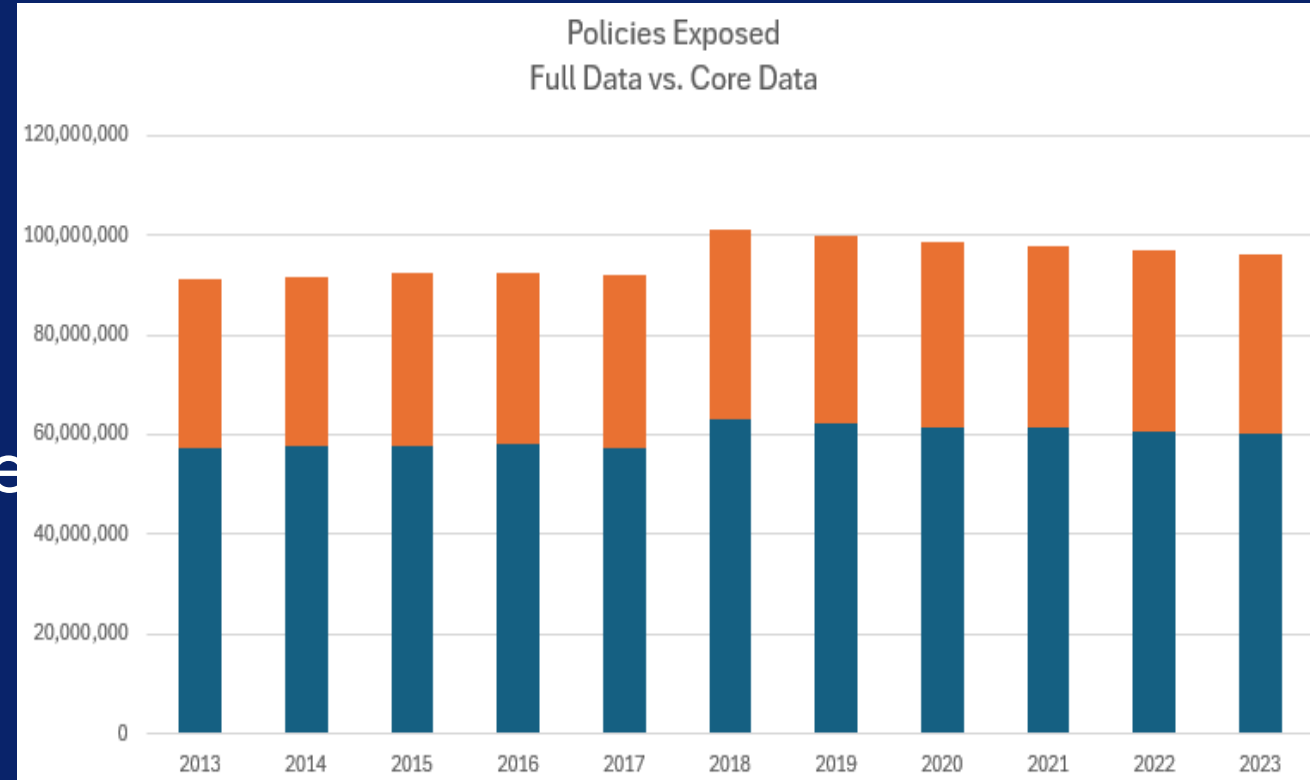
- (Change index values to graph)

U.S. Individual Life Insurance Mortality Data Collection

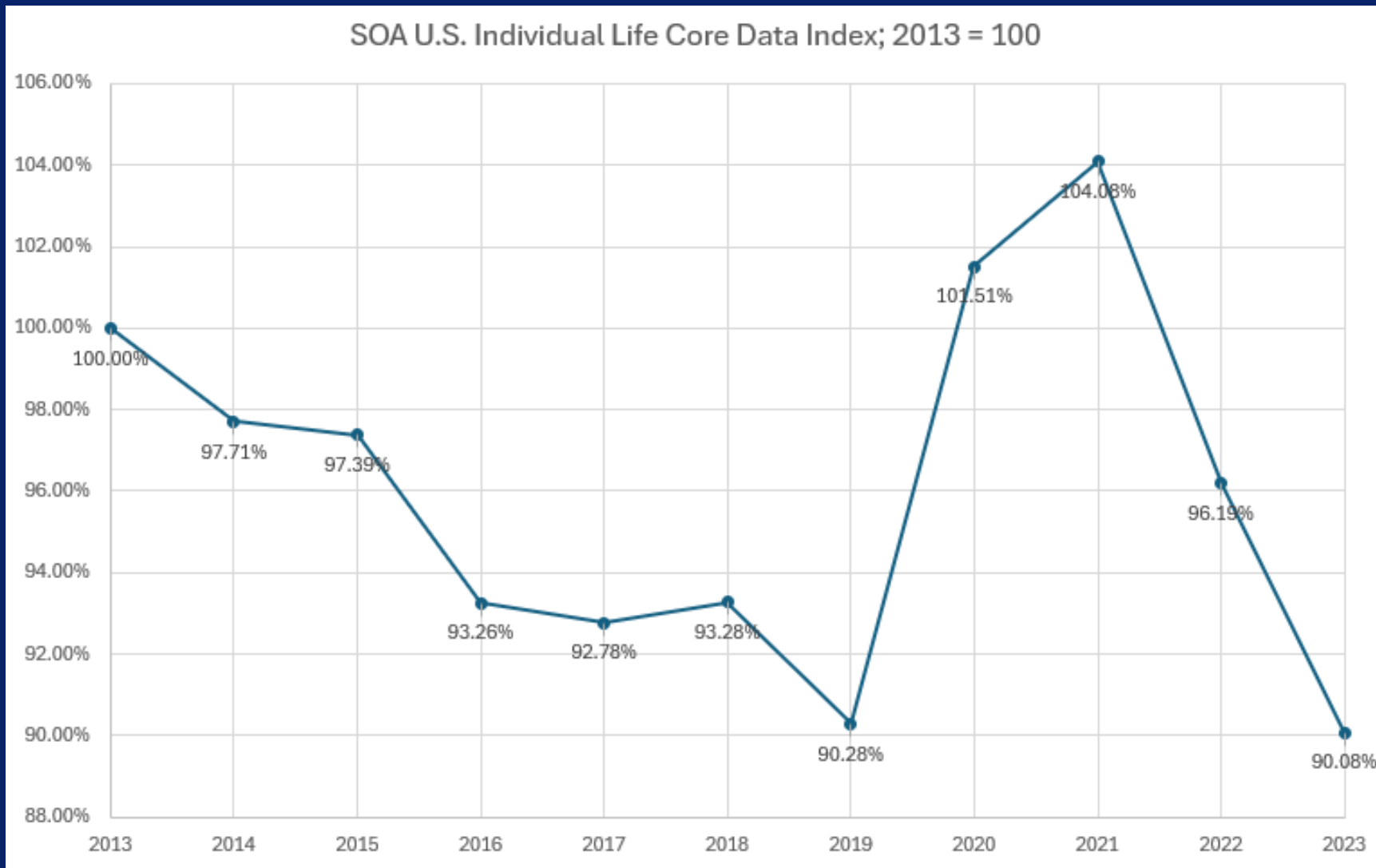
- Core Data Set Description

Annual Amounts

- 550,000 Deaths
- 35 M Policies
- \$32B Paid Claims
- \$5T Face Amount in Force



U.S. Individual Life Insurance Mortality Data Collection



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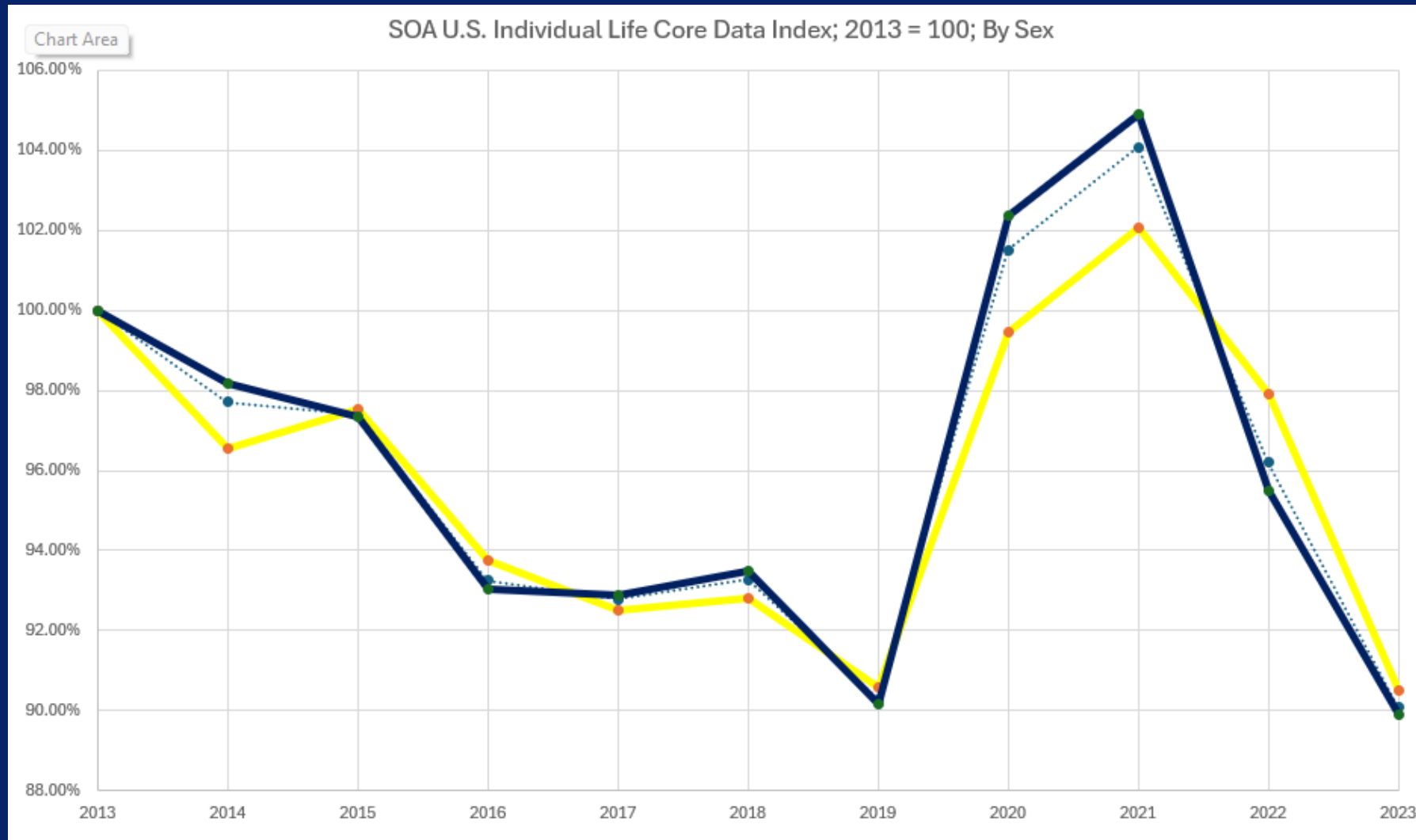
Additional
considerations

Male vs.
Female

Attained Age
Bands

Smoker vs.
Nonsmoker

U.S. Individual Life Insurance Mortality Data Collection



U.S. Individual Life Insurance Mortality Data Collection



Feedback



Utility



Capital Markets Options



Full Data vs. Core Data definitions



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