Projection Models Used by the Office of the Chief Actuary:
Perspective on MINT and Microsimulation

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OCACT Cost Projection Models

- Generally mixed macro/micro models for current-law projections
  - Make best use of available data exploiting comparative model strengths
  - Macro models for basic projections of population and economy
  - Micro models where changing distributional factors can be modeled
    - Particularly changing worker earnings histories affecting insured status and benefit level
- "Polisim" used in limited cases for policy proposals
  - One of many "side models" needed to cover a wide range of proposals
  - Expansive full microsimulation model based on vast transitional probabilities
  - Highly complex getting reasonable results given interactions among factors
  - Need for feedback from macro models to benchmark projections
  - Useful in considering some proposals, like child-care credit and drop-out years
    - Makes use of simulated family structures

MINT – Collaborative Relationship

- MINT provides insight into important distributional effects
  - Particularly poverty, as MINT simulates income and assets in addition to earnings
  - Highly useful for exploring family-based effects at micro level
    - Example: retirement earnings test
  - Micro models where changing distributional factors can be modeled
    - Particularly changing worker earnings histories affecting insured status and benefit level

- MINT scaled to Trustees' projections developed by OCACT
  - Allows for close coordination and collaboration with OCACT cost estimates
  - Provides distributional analysis consistent with Trustees Report projections
  - Provides important additional understanding of proposal effects for policymakers