

Tax Reform

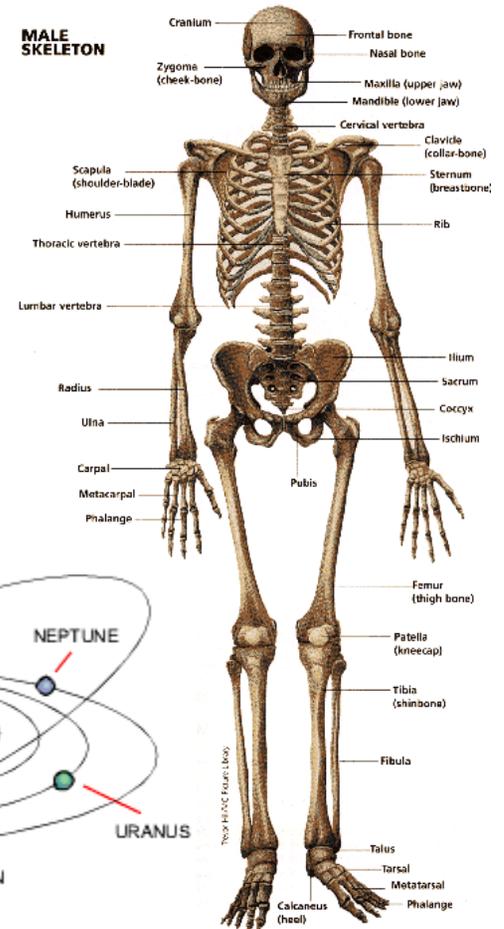
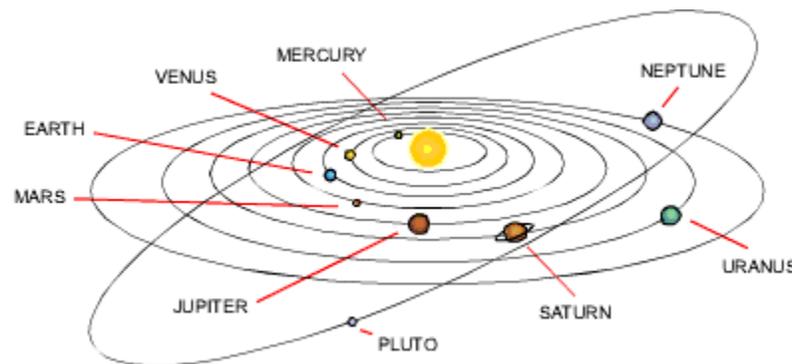
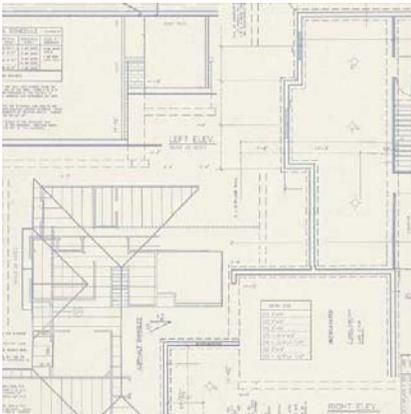
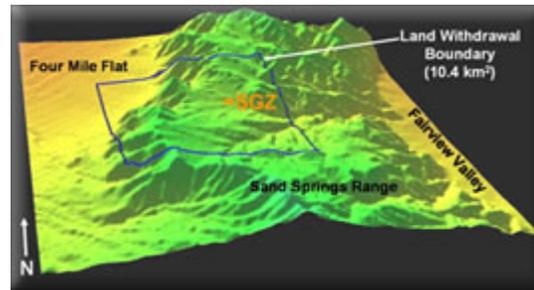
Technical Analysis Overview

Framework

- January 2004 through 2006
 - Walker Group
 - Huntsman Advisors
 - Tax Reform Task Force
- Duplicate and Expand Analysis
- Model
 - Assumptions
 - Data
 - Analysis

What is a model?

- A simple version of reality.



Example



- A **map** is a type of a model.
 - It reduces reality to a small set of useful facts.
 - It uses symbols to communicate complex information.
 - It is designed with a specific goal, often to assist in getting from one point to another.

Using a model



Map

- Ideas
- Road signs
- Street map
- Directions
- Other people
- Course map

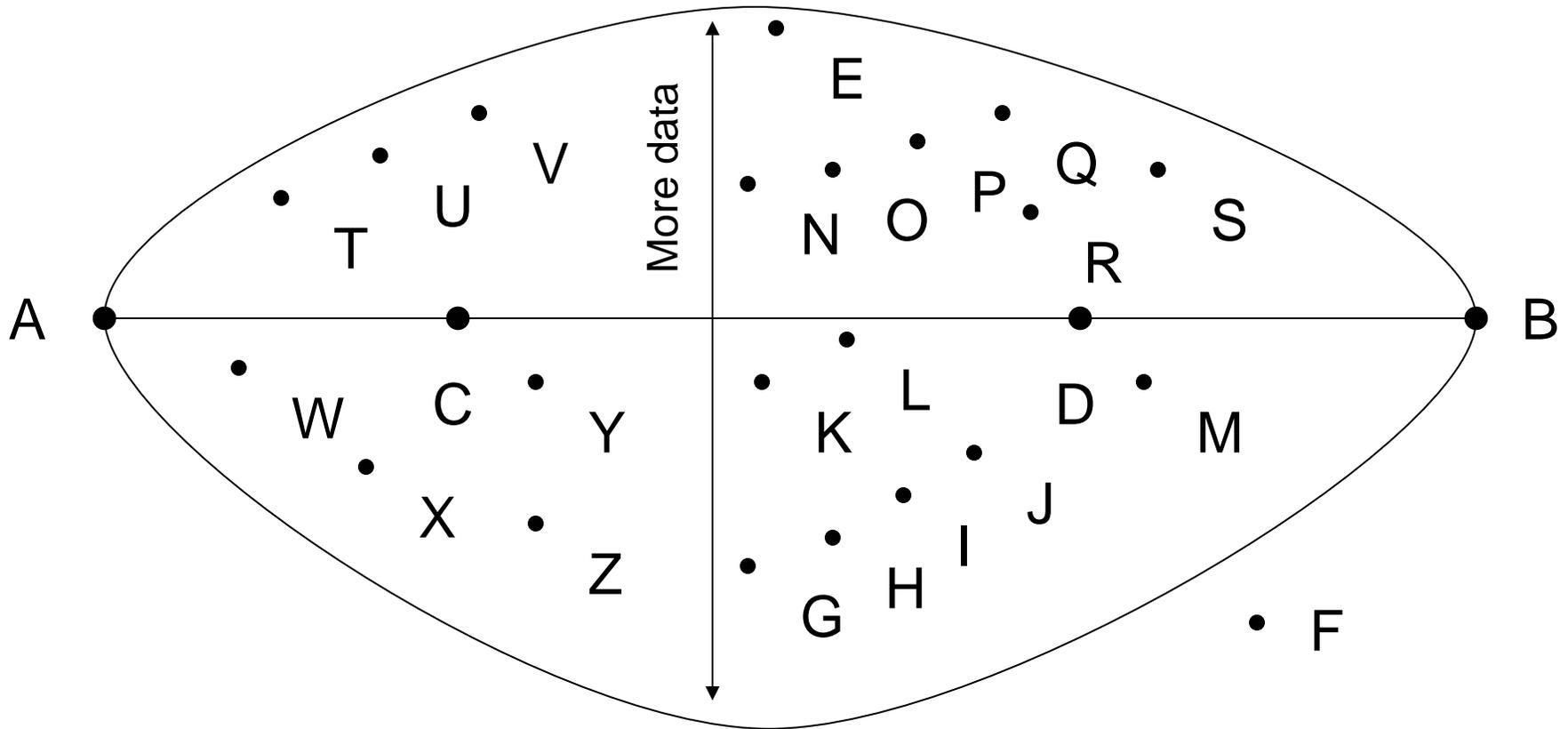
Analytic Model

- Assumptions
- Data
- Calculations
- Inferences
- Economic theory
- Growth rates
- Demographics
- Tabulations
- Charts
- Graphs

Analytic Model

- Tool
 - Describes facts and relationships
 - Logical
 - Repeatable
 - Focused

Modeling Process

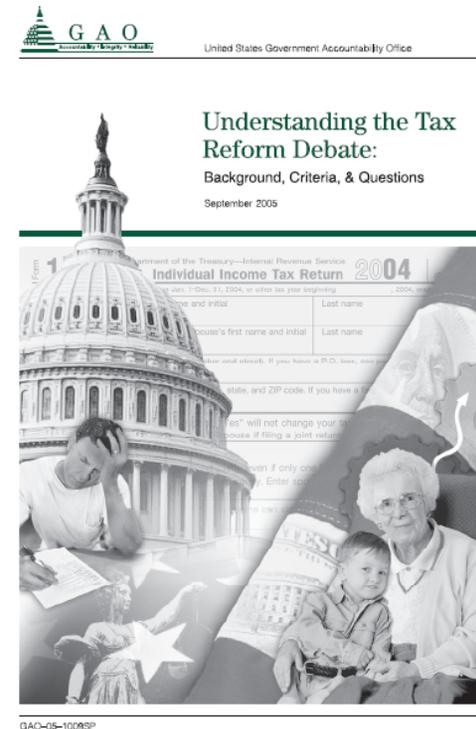


Elements of Tax Reform Model

- Assumptions / Constraints
 - broaden the base, lower the rate
 - protect the poor
- Data
 - Utah State individual income tax returns
 - Federal individual income tax returns
- Analysis
 - sas
 - Excel

Understanding the Tax Reform Debate

- Revenue needs: income tax funds education
- Equity:
 - ability to pay (horizontal, vertical)
 - benefits received
 - distributional analysis
- Economic efficiency:
 - economic decision making
 - work and savings decisions
- Simplicity, Transparency, and Administrability
- Transition
 - identifying affected parties



Data

- Utah State income tax returns
 - 1,000,000 records
 - over 100 variables
 - data from TC-40, TC-40S
 - income, deductions, credits
- Federal income tax returns
 - 1,000,000 records
 - over 25 variables
 - components of income
 - components of itemized deductions

A photograph of a Utah State income tax return form, specifically the 2004 TC-40. The form is tilted and shows various sections for reporting income, deductions, and credits. The title at the top reads "High Individual Income Tax Return" and "2004 TC-40".A photograph of a federal income tax return form, specifically the 2005 Schedule A-Itemized Deductions form. The form is tilted and shows various sections for reporting itemized deductions. The title at the top reads "Schedule A-Itemized Deductions" and "2005".

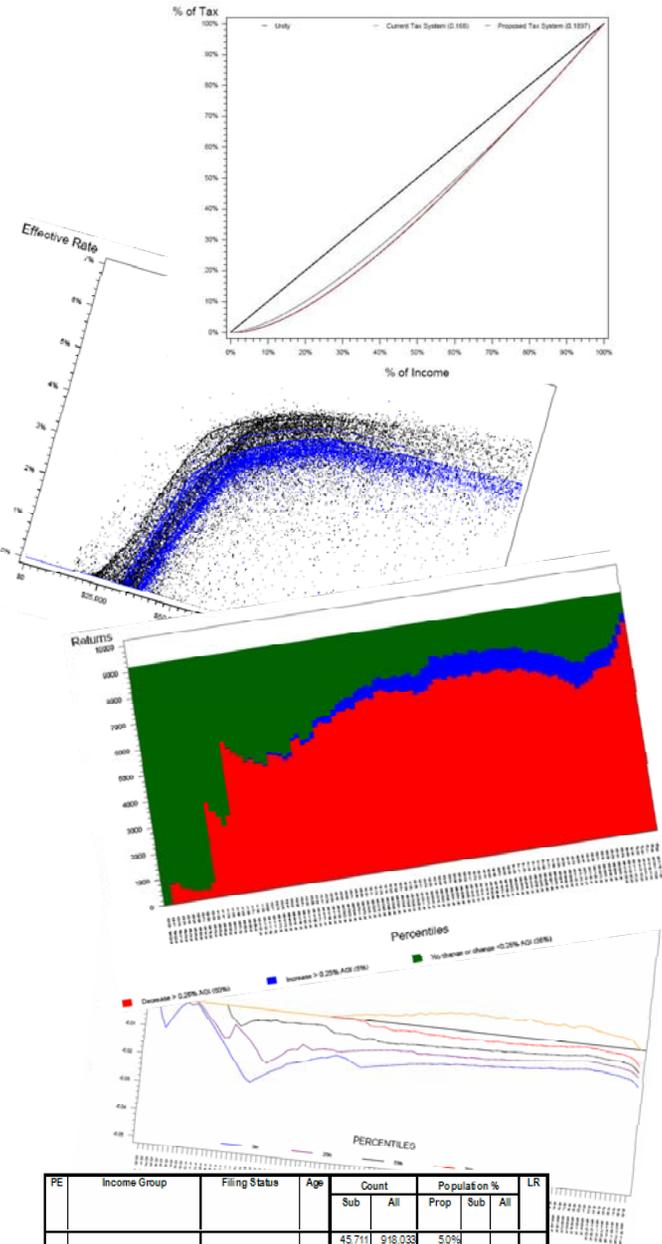
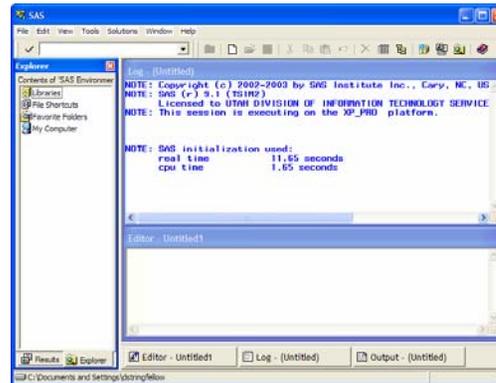
Analysis

- **sas**

- code is built in separate modules
- code contains automated integrity checks
- matches and merges federal and state data
- performs calculations on millions of individual records
- enables repeatable projections
- summarizes & displays results
- outputs summarized data for excel analysis

- **Excel**

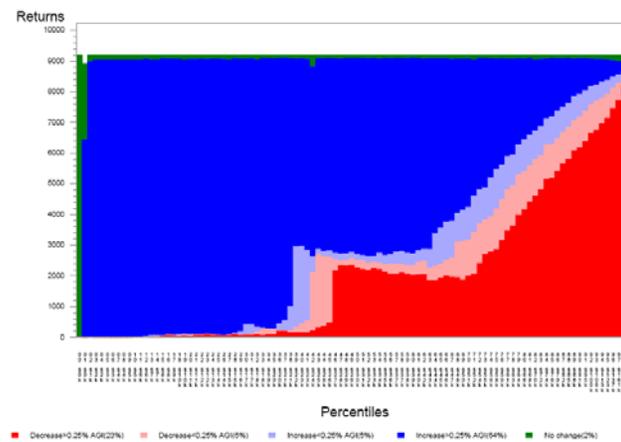
- links to sas output
- enables visually aesthetic and useful tables



PE	Income Group	Filing Status	Age	Count		Population %			LR
				Sub	All	Prop	Sub	All	
				45,711	916,033	5.0%			
0				134	87,766	0.2%	0%	10%	0.0
1				11,223	278,775	4.0%	25%	30%	0.8
2				11,034	224,142	4.9%	24%	24%	1.0
3				5,724	109,212	5.2%	13%	12%	1.1
4				6,046	101,069	6.0%	13%	11%	1.2
5				5,077	62,999	8.1%	11%	7%	1.6
6				3,428	34,032	10.1%	7%	4%	2.0
7				3,045	20,036	15.2%	7%	2%	3.1
			<65	40,855	829,216	4.9%	89%	90%	1.0
			>=65	4,876	88,817	5.5%	11%	10%	1.1

Constraints

- Cost
- Confidentiality – Title 27 USC
- Broaden the base, lower the rate
- Protect the poor – results of a flat tax
- Minimizing the number of taxpayers with tax increases



Model

- Import data
- Clean and prepare data for model
- Geocode
- Imputing missing information
- Creating percentiles (grouping data)
- Inferring home ownership
- Distributing gains from sales tax reduction
- Retirement credit
- Data management
- Tax reform calculations
- Summarizing and presenting results
- Information regarding the current tax system

Tax Reform Calculations

$$\text{Current Tax} = [\text{Adjusted Income}_c - \text{Deductions/Exemptions}_c] [\text{Brackets}_{1,6}] [\text{Tax Rates}_{1,6}]^T - \text{Credits}_c$$

Adjusted Income_c = Federal adjusted gross income + State income tax deducted as an itemized deduction + Lump sum distribution + State Taxes allocated from an estate/trust + Medical Savings Account + Utah Educational Savings Plan + Reimbursed adoption expenses + Child's income excluded from parent's return + Municipal bond interest + Untaxed income of a Trust

Deductions_c = (Standard or Itemized Deduction) + Personal exemptions + Federal tax*0.5 + State tax refund + Retirement deduction/exemption + U.S. Interest + Medical Savings Account + Utah Educational Savings Plan + Health care insurance premiums + Long-term care insurance premiums + Adoption expenses + Native American income + Railroad retirement income + Equitable adjustments + Gains on capital transactions + Nonresident active duty military pay + National Guard/Reserve military pay

Credits_c = At-home parent + Qualified sheltered workshop + Renewable energy systems + Clean fuel vehicle + Historic preservation + Enterprise zone + Low-income housing + Hiring disabled + Recycling market + Tutoring disabled + Research activities + Research machinery/equipment + Tax paid to another state + Live organ donation expenses

$$\text{Proposed Tax} = (\text{Adjusted Income}_p - \text{Deductions/Exemptions}_p) \times \text{Tax Rate} - \text{Credits}_p$$

Adjusted Income_p = Federal adjusted gross income + Utah Educational Savings Plan + Municipal Bond Interest + Untaxed income from a trust

Deductions_p = U.S. Interest + Native American income + Railroad retirement + Equitable adjustments

Credits_p = Taxpayer + Charitable contribution + (Mortgage interest or home owner) + Tax paid to another state

$$\Delta \text{ Tax} = \text{Proposed Tax} - \text{Current Tax}$$

Questions?

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