What we did

- ► Create a database: transform NC budget data in pdf file format into an analyzable data frame using open-source programming language R
- ► Visualize the data: construct a data visualisation tool capable of running scenarios via Tableau
- Data can be used to forecast possible treatment effects of government policy such as introducing Taxpayer Bill Of Rights (TABOR) requirements in North Carolina

Data before (text PDF) & after (R Database)

BI233	OFFICE OF STATE BUDGET A	AWG				
	APPROPRIATION ADV		09:07:03	09/15/03		
3510				PAGE 1		
1351 1000	O DPI-GENERAL DEPUTY STATE SUPT.					
	DESCRIPTION	2003-04		2004-05		
REQUIRE	MENTS					
1141 8	EC/COUNCIL OF ST SAL-AP	104,523		104,523		
	1211 SPA-REG SALARIES-APPRO 1,677,638					
1212 S	PA-REG SALARIES-RECPT	70,725		1,677,638 70,725		
1311 R	EG(N S) TEMP WAGES-APPR	33,000		33,000		
1312 R	EG(N S) TEMP WAGES-RECP	6,657		6,657		
1321 C	1321 CONTR EMPL PER IRS-APPRO 2,975					
1411 C	T PAY - APPROPRIATED	267		267		
	PA&SPA-LONGVTY PAY-APPR	63,111		67,028		
	PA&SPA-LONGVTY PAY-REC	1,073		1,073		
	OCIAL SEC CONTRIB-APPRO	128,137		128,137		
	OCIAL SEC CONTRIB-RECPT	5,867		5,867		
	EG RETIRE CONTRIB-APPRO	56,436		56,436		
	EG RETIRE CONTRIB-RECPT	7,822		7,822		
	ED INS CONTRIB-APPRO	103,258		103,258		
	ED INS CONTRIB-RECPTS	6,954		6,954		
	RKER COMP-MED PAYMENTS	12,204		12,204		
1651 C	OMPENSATION TO BOARD ME	9,870		9,870		

Category	Budget code	Fund code	Account code	Description	Amount	Year
Education	1000	13510	1141	SEC/COUNCIL OF ST SAL-AP	104523	2003
Education	1000	13510	1211	SPA-REG SALARIES-APPRO	1677638	2003
Education	1000	13510	1212	SPA-REG SALARIES-RECPT	70725	2003
Education	1000	13510	1311	REG(N S) TEMP WAGES-APPR	33000	2003
Education	1000	13510	1312	REG(N S) TEMP WAGES-RECP	6657	2003
Education	1000	13510	1321	CONTR EMPL PER IRS-APPRO	2975	2003
Education	1000	13510	1411	OT PAY - APPROPRIATED	267	2003
Education	1000	13510	1461	EPA&SPA-LONGVTY PAY-APPR	63111	2003
Education	1000	13510	1462	EPA&SPA-LONGVTY PAY-REC	1073	2003
Education	1000	13510	1511	SOCIAL SEC CONTRIB-APPRO	128137	2003
Education	1000	13510	1512	SOCIAL SEC CONTRIB-RECPT	5867	2003
Education	1000	13510	1521	REG RETIRE CONTRIB-APPRO	56436	2003
Education	1000	13510	1522	REG RETIRE CONTRIB-RECPT	7822	2003
Education	1000	13510	1561	MED INS CONTRIB-APPRO	103258	2003
Education	1000	13510	1562	MED INS CONTRIB-RECPTS	6954	2003
Education	1000	13510	1631	WRKER COMP-MED PAYMENTS	12204	2003
Education	1000	13510	1651	COMPENSATION TO BOARD ME	9870	2003
Education	1000	13510	2150	ACADEMIC SERVICES	1212000	2003
Education	1000	13510	2181	WORKSHOP/CONF EXPENSE	80615	2003

Budget visualization using processed data



