

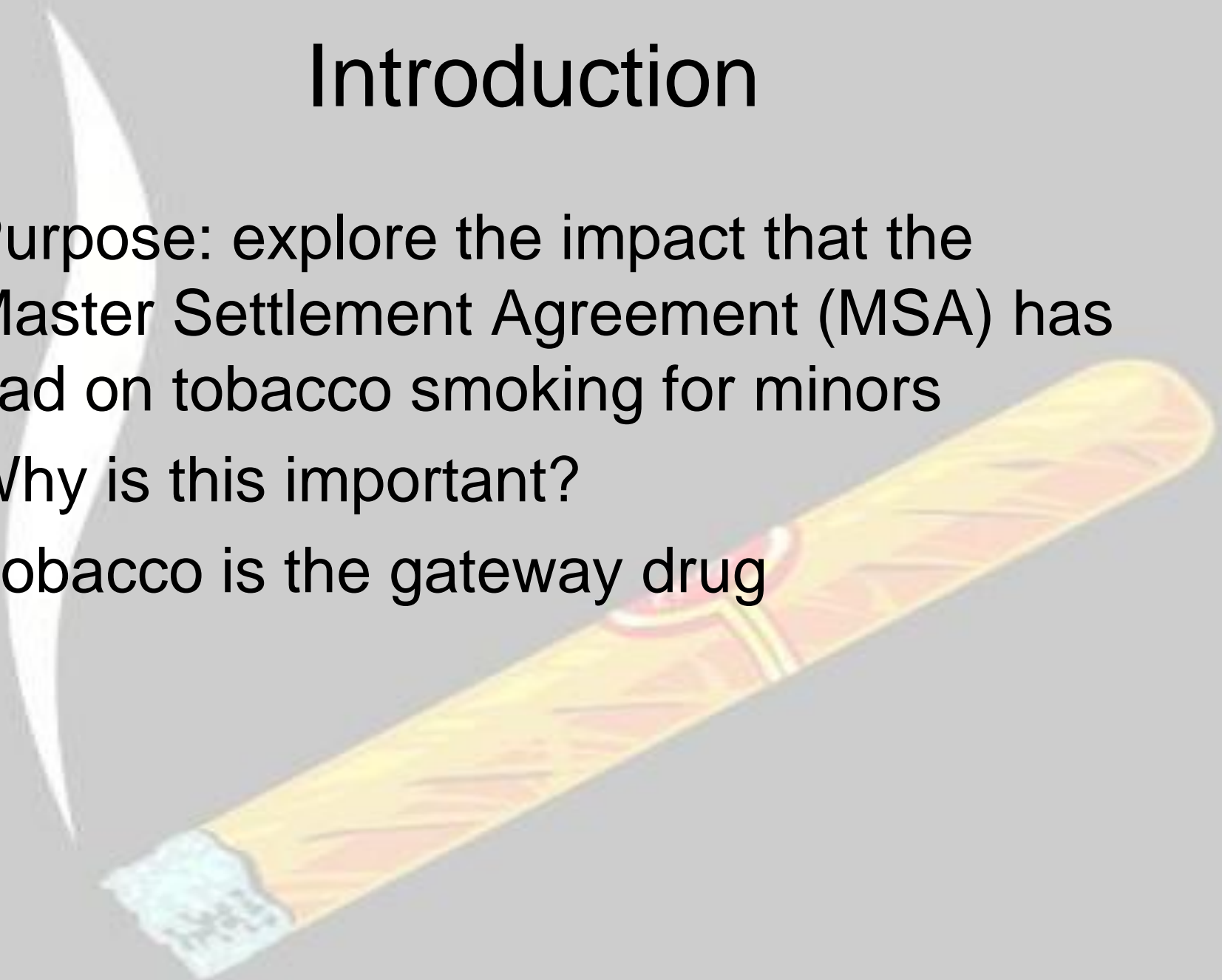


Smoking Caused by Tobacco Advertising?

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GPH 903: Intro to GIS
Professor Marcos Luna
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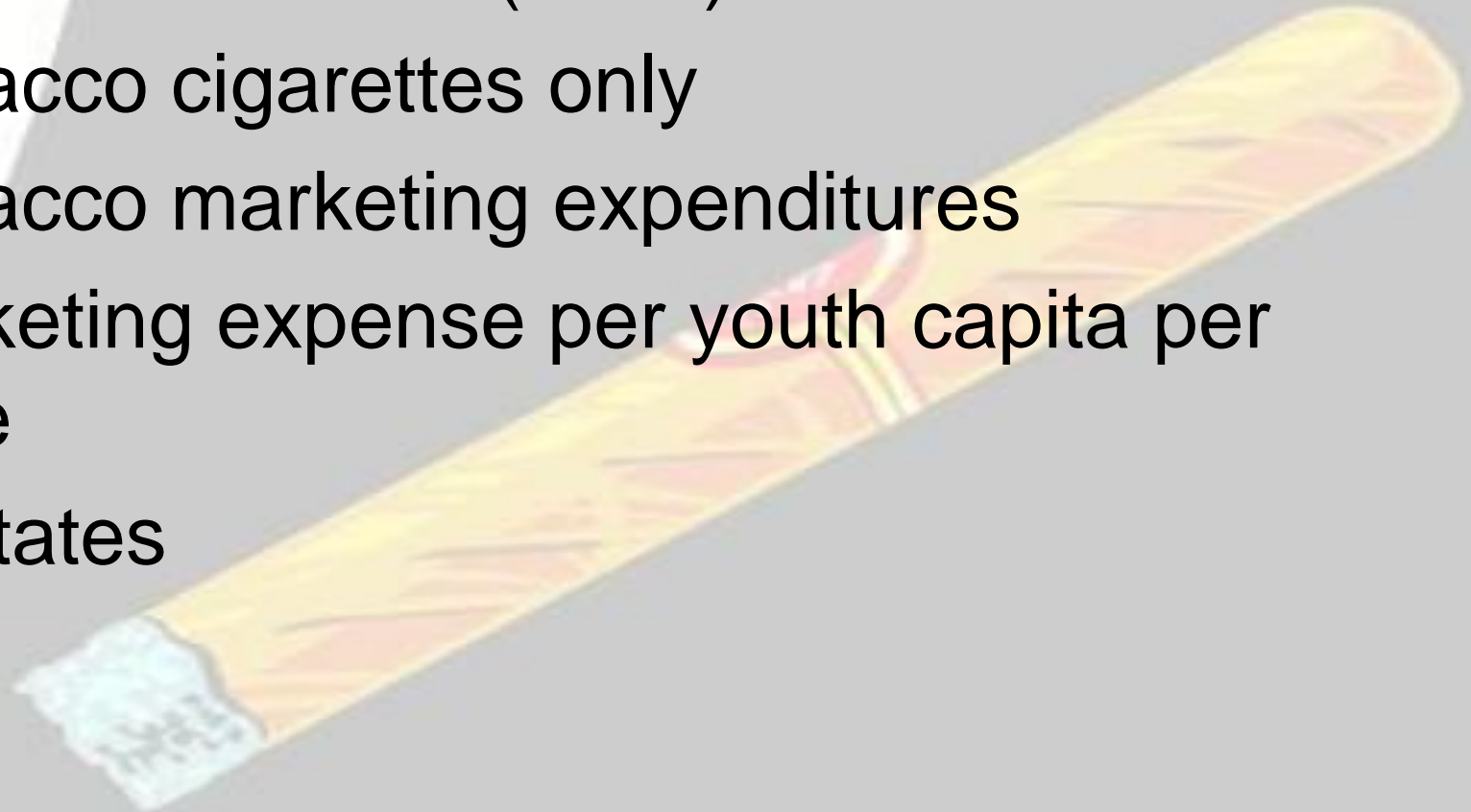
Introduction

- Purpose: explore the impact that the Master Settlement Agreement (MSA) has had on tobacco smoking for minors
- Why is this important?
- Tobacco is the gateway drug



Methods and Data

- Pre-MSA v. Post-MSA
- Benchmark: MSA (1998)
- Tobacco cigarettes only
- Tobacco marketing expenditures
- Marketing expense per youth capita per state
- 11 states



Results or Product

Impact of Tobacco Marketing on Youth Smoking (1997)

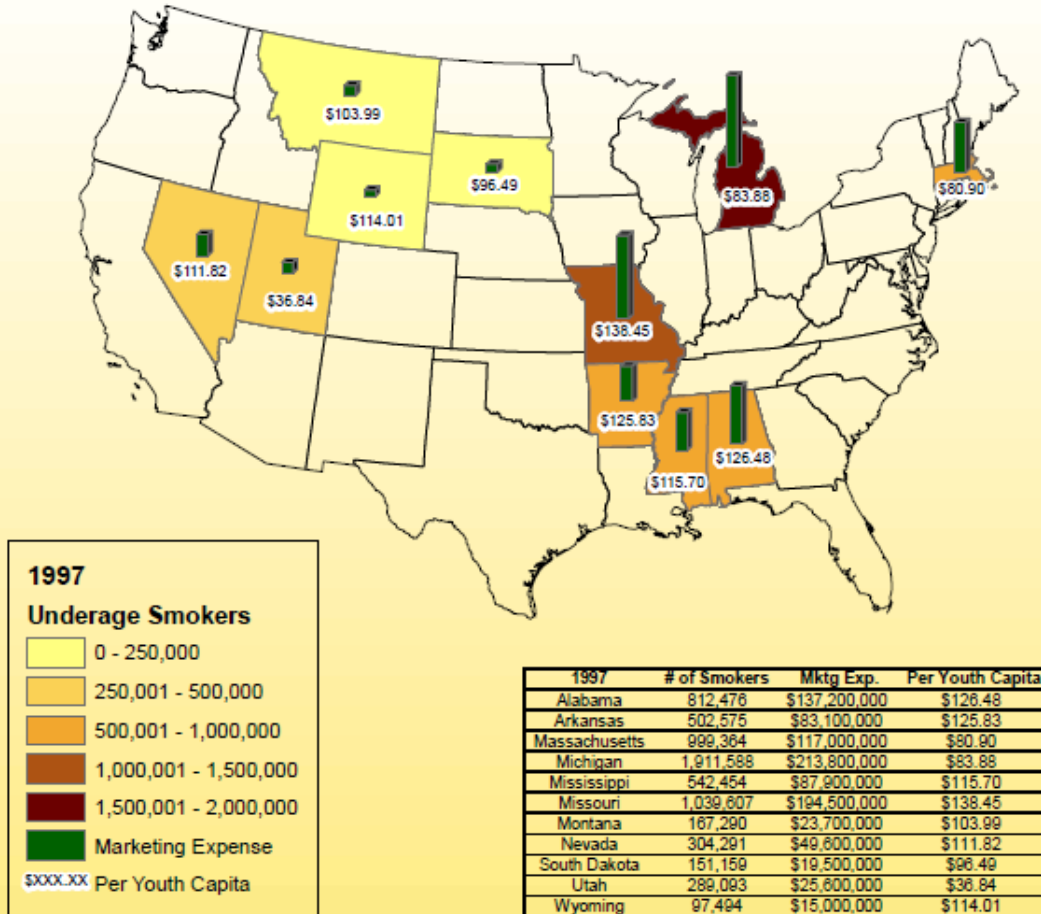
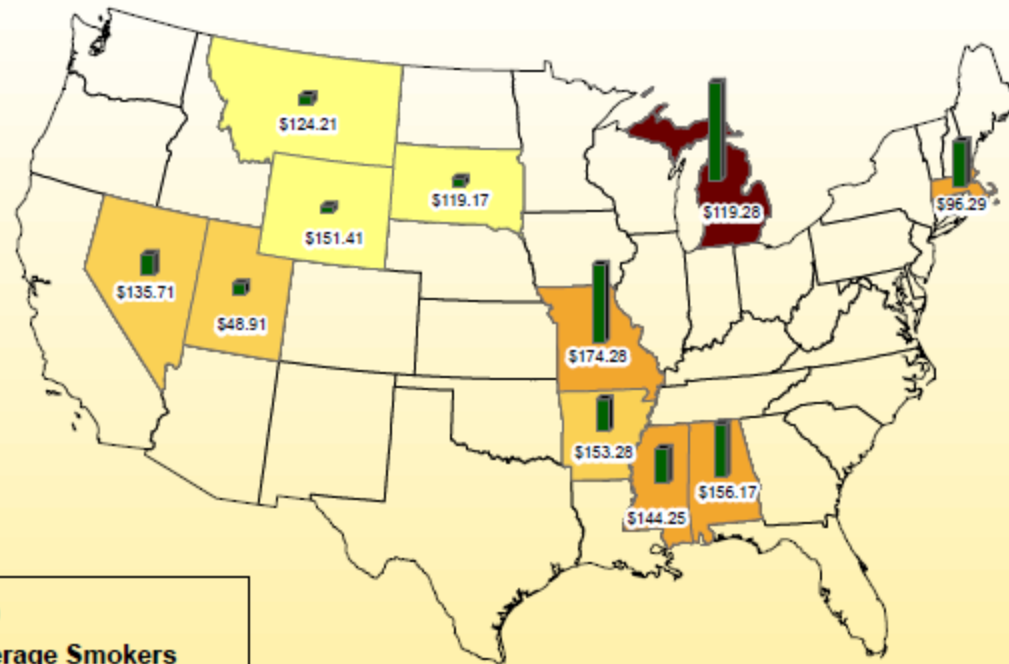


Table 1

Impact of Tobacco Marketing on Youth Smoking (1999)



1999
Underage Smokers

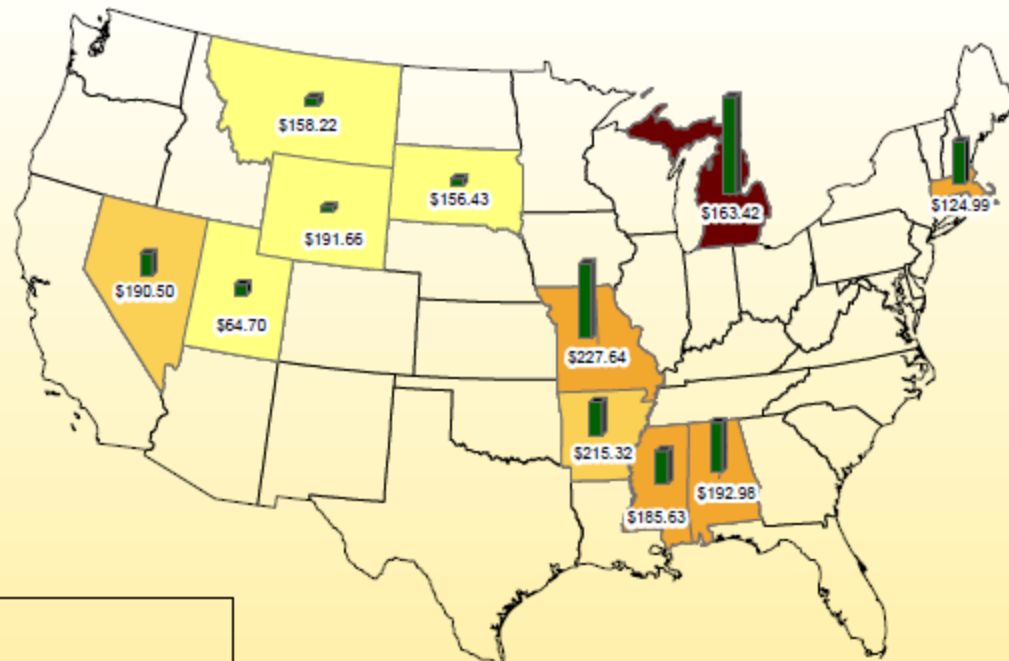
- 0 - 250,000
- 250,001 - 500,000
- 500,001 - 1,000,000
- 1,000,001 - 1,500,000
- 1,500,001 - 2,000,000
- Marketing Expense

\$xxx.xx Per Youth Capita

| 1999 | # of Smokers | Mktg Exp. | Per Youth Capita |
|---------------|--------------|---------------|------------------|
| Alabama | 796,434 | \$166,500,000 | \$156.17 |
| Arkansas | 486,585 | \$101,200,000 | \$153.28 |
| Massachusetts | 989,805 | \$141,400,000 | \$96.29 |
| Michigan | 1,849,142 | \$305,500,000 | \$119.28 |
| Mississippi | 547,334 | \$108,800,000 | \$144.25 |
| Missouri | 976,845 | \$243,900,000 | \$174.28 |
| Montana | 157,345 | \$27,800,000 | \$124.21 |
| Nevada | 340,101 | \$66,700,000 | \$135.71 |
| South Dakota | 146,151 | \$23,600,000 | \$119.17 |
| Utah | 277,287 | \$34,600,000 | \$48.91 |
| Wyoming | 87,877 | \$19,200,000 | \$151.41 |

Table 2

Impact of Tobacco Marketing on Youth Smoking (2001)



2001

Underage Smokers

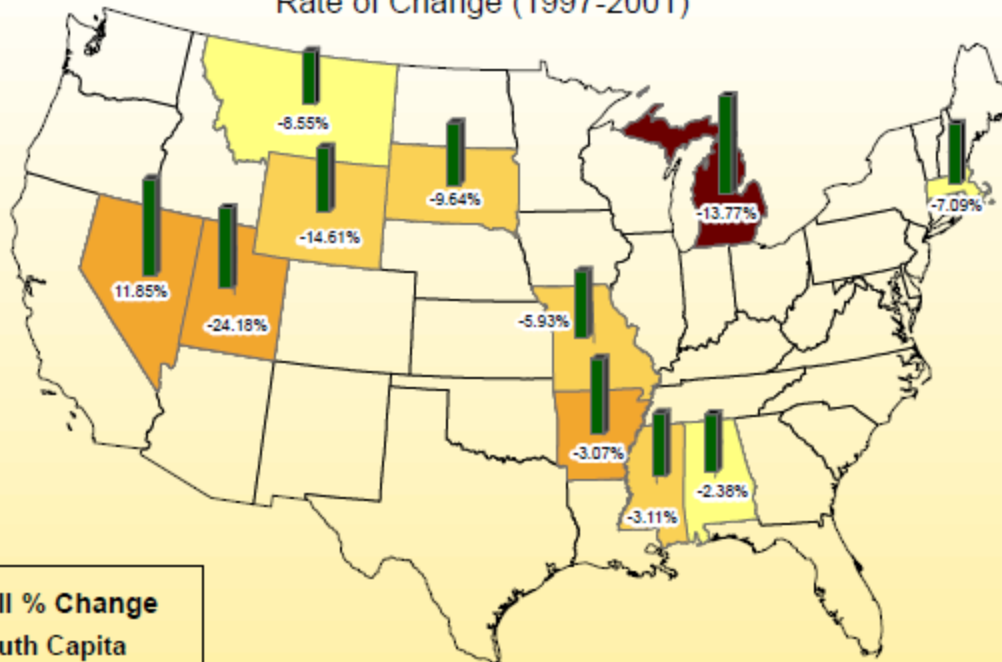
- 0 - 250,000
- 250,001 - 500,000
- 500,001 - 1,000,000
- 1,000,001 - 1,500,000
- 1,500,001 - 2,000,000
- Marketing Expense

\$xxx.xx PerCapita

| 2001 | # of Smokers | Mktg Exp. | Per Youth Capita |
|---------------|--------------|---------------|------------------|
| Alabama | 793,138 | \$216,800,000 | \$192.98 |
| Arkansas | 487,144 | \$146,500,000 | \$215.32 |
| Massachusetts | 928,540 | \$187,500,000 | \$124.99 |
| Michigan | 1,848,312 | \$424,200,000 | \$163.42 |
| Mississippi | 525,577 | \$143,900,000 | \$185.63 |
| Missouri | 977,969 | \$325,000,000 | \$227.64 |
| Montana | 152,991 | \$36,400,000 | \$158.22 |
| Nevada | 340,346 | \$97,500,000 | \$190.50 |
| South Dakota | 136,585 | \$31,700,000 | \$156.43 |
| Utah | 219,203 | \$46,500,000 | \$64.70 |
| Wyoming | 83,252 | \$24,700,000 | \$191.66 |

Table 3

Impact of Tobacco Marketing on Youth Smoking Rate of Change (1997-2001)



**Overall % Change
Per Youth Capita**

- 0% - 60%
- 61% - 70%
- 71% - 80%
- 81% - 90%
- 91% - 100%
- Marketing Expense
- xx.xx% Underage Smokers

| Rate Changes | Smokers | Marketing Expense | Per Youth Capita |
|---------------|---------|-------------------|------------------|
| Alabama | -2.38% | 58.02% | 52.58% |
| Arkansas | -3.07% | 76.29% | 71.12% |
| Massachusetts | -7.09% | 60.26% | 54.51% |
| Michigan | -13.77% | 98.41% | 94.83% |
| Mississippi | -3.11% | 63.71% | 60.44% |
| Missouri | -5.93% | 67.10% | 64.42% |
| Montana | -8.55% | 53.59% | 52.15% |
| Nevada | 11.85% | 96.57% | 70.37% |
| South Dakota | -9.64% | 62.56% | 62.12% |
| Utah | -24.18% | 81.64% | 75.63% |
| Wyoming | -14.61% | 64.67% | 68.11% |

Table 4

Discussion

- Results were inconclusive
- Main Strength
- Some Weaknesses
- Two Improvements



Sources

- Campaign for Tobacco-Free Kids <http://www.tobaccofreekids.org>
- Centers for Disease Control and Prevention
<http://apps.nccd.cdc.gov/youthonline/App/>
- Johns Hopkins Bloomberg School of Public Health
http://www.jhsph.edu/publichealthnews/press_release/PR_2000/smoking_drugs.html
- “Understanding the role of cigarette promotion and youth smoking in a changing marketing environment” by Krugman, Quinn, and Sung (2005)
- U.S. Census Bureau <http://factfinder.census.gov>
- “Youth targeting by tobacco manufacturers since the Master Settlement Agreement” by Chung, Garfield, Rathouz, Lauderdale, Best, and Lantos (2002)