



Iowa Discounted Tax Reform: Taking Retirees Off the Tax Roles & Creating Over 8,000 Jobs

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A. INTRODUCTION

From Albany to Sacramento, most state capitals are seeing a surge in state revenue growth.¹ Except for states struck by Hurricane Katrina, revenues are generally exceeding earlier projections. However, Iowa continues to struggle. Although revenues exceeded expectations for fiscal year (FY) 2004, the state's fiscal and economic problems remain.

According to the Governor's office, "revenue growth in FY 2005 and FY 2006 is projected to be below average levels from previous years, and costs for education health care, and security will continue to grow."² Iowa has reduced its general fund spending since FY 2002. The spending cut in FY 2002 was "the largest percentage reduction of any of the fifty states."³

Out-migration of workers is another problem. Drawn by opportunities elsewhere, highly qualified professionals are leading an exodus out of Iowa. According to the 2000 census, Iowa suffered a net loss of 33,000 people between 1995 and 2000.⁴ Most of those leaving are young workers just entering the workforce. Of the total number of people leaving the state, 27,797 or 71% were between the age of 20 and 34.⁵ At the same time, Iowa faces a graying population that poses a challenge to state government. According to the census, 14.9% of the state's total population is now 65 or older. The Census Bureau projects that this share will be 22.4% by 2030.⁶ According to Tom Mortenson, publisher of the *Postsecondary Education Opportunity Newsletter*, Iowa lost 70,000 bachelor's degree holders between 1989 and 2001.⁷ Policymakers believe the current "brain drain" threatens Iowa's future economic growth.

In response to the fiscal and economic crisis in Iowa, "Iowans for Discounted Taxes!" (IDT) has introduced a tax plan aimed at expanding the economy and reversing the population outflow. The

¹ John M. Broder, "States' coffers swelling again after struggles," *New York Times*, November 25, 2005, A6.

² Office of the Governor, "Iowa Budget Report Fiscal Year 2006," January 2005.

³ *Ibid.*, citing the National Conference of State Legislatures.

⁴ U.S. Census Bureau, *Migration by Sex and Age for Population 5 Years and Over for the United States, Regions, States, and Puerto Rico: 2000*, PHC-T-23, Table 3, available at <http://www.census.gov/population/www/cen2000/phc-t23.html>; Internet; accessed 03 March 2004.

⁵ *Ibid.*

⁶ Iowa Department of Revenue, "Issue Paper: State Tax Policy Implications of an Aging Population", available online at: <http://www.iowaccess.org/tax/taxlaw/IssuePaper1-AgingPopulation.pdf>; Internet; accessed 15 February 2006.

⁷ Amada Paulson, "Iowa, come home! One state fights its brain drain," *Christian Science Monitor*, October 22, 2003, available at <http://www.csmonitor.com/2003/1022/p01s02-ussc.html>; Internet; accessed 04 March 2004.

“Discounted Tax Reform Proposal” (hereinafter called “the Plan”) would give taxpayers the option of paying income taxes equal to a flat percentage of their earned income, in exchange for forgoing all deductions and exemptions. Taxpayers who choose this option would pay no state tax on dividends, interest income, pensions, Social Security payments or capital gains.

Under the Plan, taxpayers could continue to pay taxes according to the existing schedule, if they so choose. Paying the flat tax on earned income would simply become an alternative to paying the existing tax. Individual taxpayers could choose the method that minimizes their total tax liability, ensuring that no taxpayer would end up paying more income tax.

IDT recently asked The Beacon Hill Institute to determine how the proposed tax change would affect the state’s economy. In summary, our findings are as follows:

- In the first year of its implementation, the tax change would create 8,031 new jobs, an increase of 0.53%.⁸ Of these new jobs, about 29% would be filled by people moving into the state and rest by people already in the state. The new jobs represent a permanent increase over the number of existing jobs, the increase growing slightly in future years.
- The plan would cost the state treasury \$72.43 million in tax revenue in the first year of implementation, representing a revenue loss of 1.39%. This revenue gap would slowly disappear so that in 17 years after the first year of implementation, the state would collect as much revenue as it would have collected without the Plan. Thereafter state revenue collections would be greater than they would have been without the Plan.

Our overall finding is that the Plan offers a promise to confer small but positive benefits on the state economy at negligible cost to the state Treasury.

Should the state adopt the Plan? Voters and legislators considering that question in the light of this study should understand how we have approached our task. We have tried to make a conservative (which is to say, “worst-case”) estimate of the revenue and job effects. Our estimates reflect what we see as the maximum loss in revenues and the minimum gain in jobs.

Readers should also understand what we did not attempt to do. We did not attempt to estimate what may be the most important effect of the Plan, which would be to staunch the outflow of retirees to warmer, more tax-friendly climes. Nor did we consider the likely psychological effect

⁸ The figures are calculated based on calendar year 2007 estimated data.

on businesses that would see the Plan as an effort to attract investment. This is not because we considered those effects unimportant but because they lay outside the scope of our analysis.

A legislator or opinion leader reading this study might well conclude that the Plan represents a gamble worth taking. On the downside, it would inflict manageable revenue losses that, in the fullness of time, would turn into revenue gains. On the upside, it would, at worst, create a few thousand more jobs and, at best, make a substantial dent in the outflow of both young workers and retirees to other states.

B. METHODOLOGY

In order to measure the effects on tax revenue, this study determines how the proposal would affect Iowa's personal income tax and retail sales tax revenues. These two revenue streams accounted for 72.76% of Iowa's total net collections in FY 2005.⁹

We divided households into the following AGI (adjusted gross income) groups:

- Negative or zero
- Zero to \$10,000
- \$10,000 to \$20,000
- \$20,000 to \$30,000
- \$30,000 to \$40,000
- \$40,000 to \$50,000
- \$50,000 to \$60,000
- \$60,000 to \$70,000
- \$70,000 to \$80,000
- \$80,000 to \$90,000
- \$90,000 to \$100,000
- \$100,000 to \$125,000
- \$125,000 to \$150,000
- \$150,000 to \$175,000
- \$175,000 to \$200,000
- \$200,000 to \$250,000
- \$250,000 to \$500,000
- \$500,000 to \$1 Million
- More than \$1 Million

Using 2003 data provided by the Iowa Department of Revenue,¹⁰ we prepared a hypothetical income tax return for the average household in each of the income groups noted above. We did so in order to determine how much tax the average household would pay under the current system. However, because the study must reflect what would happen in 2007, not 2003, we estimated the

⁹ This figure is estimated using measures published in: "2005 Annual Report," Iowa Department of Revenue, available at: <http://www.state.ia.us/tax/educate/0578508.pdf>; Internet; accessed March 6, 2006.

¹⁰ We would like to thank the Iowa Department of Revenue in general, and Michael Lipsman and Jay Munson in particular, for providing us with the data and for their comments and suggestions.

tax liabilities for 2007. This required us to estimate the number of returns and the average tax paid in 2007, under both current law and the Plan.

For our current law estimate, we increased the number of returns in each household group¹¹ by 1.61%¹² and the tax paid by 17.67%¹³ above the 2003 level. For the Plan, we calculated the tax base that would have applied to existing filers in 2003 and the average tax that the same filers would have paid in 2003, had the Plan been in place.¹⁴ For filers who, under the Plan, would have chosen to file using the existing tax return, we determined that their tax liability would be 17.67% (the same percentage increase as we applied to the current-law estimate) greater in 2007 than it would have been in 2003. For filers who take advantage of the Plan, we estimated that their 2007 tax liability would be 18.65% higher,¹⁵ since it is computed solely on earned income.

To determine the “static” revenue loss, we calculated the difference between the average taxes paid under both scenarios (Plan minus current-law tax) in 2007 and multiplied that number by the estimated number of filed returns under the current law in 2007.

To calculate the overall, or “dynamic”, effect on the income tax revenue, we calculated the effect the Plan would have on the number of returns filed in 2007. In this process, we recognized that the Plan would have a double effect on the number of returns filed in 2007: The lower personal income tax rate would, first, induce some Iowa residents to join the labor force and, second, induce some people living outside Iowa to enter the state in response to the increased disposable

¹¹ The assumption here is that the number of returns in each household group will grow by the population rate. This is a simplifying assumption since getting into the different demographics in the different income groups is not within the scope of this report.

¹² Institute for Economic Research, “Iowa Economic Forecast,” December 2005 and March 2006. This figure was calculated as the four-year population growth rate from 2002 to 2008, using the population figures provided by the forecast.

¹³ Ibid., This figure was calculated as the four-year personal income growth rate, based on an estimation of the yearly personal income tax growth rate from 2002 to 2008 using the population figures from the forecast December 2005 and March 2006.

¹⁴ Under the new tax reform the household would pay the minimum of two numbers: one, the tax paid under the current existing law and two, 5.32% of the amount given by adding up points 1, 5, 10 and 11 of the 1040 form.

¹⁵ Institute for Economic Research. This figure was calculated as the four-year wages and salary disbursement growth rate, based on an estimation of the yearly growth rate from 2002 to 2008 using the wages and salary disbursement figures provided by forecast December 2005 and March 2006. .

¹⁹ The elasticities used for both types of effects on the different household groups can be found in the Appendix.

income that they would enjoy under the Plan.¹⁹ We calculated the difference between the total taxes paid under both scenarios by multiplying the average tax paid by the number of returns filed in each scenario.

As noted above, we also examined the effect of the Plan on retail sales tax revenues.²⁰ These tax revenues would change for two reasons: first, a lower personal income tax rate implies a higher disposable income that is available for consumption; second, the number of people buying retail goods in Iowa would increase, as people (current and new residents) entered the labor force.

We adjusted fiscal 2005 data to expected 2007 calendar-year levels. Here, we inflated the total retail sales tax revenue by 6.60%.²¹ The estimated total retail sales tax revenue becomes the benchmark for determining the effects of the Plan on retail sales tax collections.

Sales tax revenues would rise as the disposable income of current residents rose and as new workers entered the state labor force. The disposable income of current residents would rise because some residents already in the labor force would pay lower taxes and because some residents currently outside the labor force would enter the labor force. We call the rise in sales tax revenue attributable to the increased disposable income earned by current residents who are already in the labor force the “static” effect on those revenues. We call the total effect the “dynamic” effect.

Assume that

- d = the percentage change in disposable income for current residents already in the labor force,
- n = the percentage change in number of workers (both residents and migrants),
- $STRC07$ = sales tax revenues that would be collected under current law in 2007 and
- $STRP07$ = sales tax revenues that would be collected under the Plan in 2007.

Then:

$STRP07 = (1 + i)(1 + n)STRC07$. The “static” effect is $(1 + i)STRC07 - STRC07$. The “dynamic,” or total, effect is $STRP07 - STRC07$.

²⁰ The sales tax data used in this study is from “Iowa Retail Sales & Use Tax Report – Annual FY 2005” by the State of Iowa Department of Revenue.

²¹ Institute for Economic Research. This figure is the compounded income and population growth rate from FY 2005 to calendar year 2007 using figures provided by “Iowa Economic Forecast.”

We set n , the percentage increase in the number of workers and of jobs, equal to the percentage increase in filed personal income tax returns.

We next determine the number of years that must pass before the total revenue collected by the state under the Plan exceeds the revenue that it would have collected under current law.

Assume that:

- $PITRC07$ = personal income tax revenue that would be collected in 2007 under current law,
- $PITRP07$ = personal income tax revenue that would be collected in 2007 under the Plan,
- $STRC07$ = sales tax revenue that would be collected in 2007 under current law,
- $STRP07$ = sales tax revenue that would be collected in 2007 under the Plan,
- a = yearly growth rate of personal income,
- b = yearly growth rate of wages and salaries,
- r = yearly growth rate of population,
- p = proportion of people filing a tax return under the Plan and
- t = number of years that must elapse after the first year of implementation of the Plan in order for the state to collect as much revenue under the Plan as it would have collected under current law.

Then the following equality must hold:

$$\begin{aligned} (PITRC07 + STRC07)[(1+a)(1+r)]^t &= \\ &= PITRP07 \left\{ [1 + p \cdot a + (1-p)b](1+r) \right\}^t + STRP07 [(1+a)(1+r)]^t \end{aligned}$$

Solving this equation, we find that $t = 17.38$. If the Plan were adopted on January 1, 2007, revenues will equal the benchmark (or “baseline” level) they would have reached under current law by around April 2025. Thereafter revenues will exceed this level.

C. RESULTS

In table C-1 we present the static and dynamic tax revenue effects for both the personal income tax and the retail sales tax. The static scores show that the personal income tax revenue would decrease by about \$136.85 million, whereas the sales tax revenue would increase by about \$1.58 million, leaving a net static effect of approximately -\$135.28 million. This represents a decrease of 2.60% in the tax revenue below what would have been collected without the Plan. After taking into account the dynamic effects, the personal income tax revenue collected would drop by about \$82.44 million, but the retail sales tax revenue would increase by about \$10.01 million. The total dynamic effect is a loss in tax revenue of \$72.43 million, which is 1.39% of the revenue that would be generated if current law remained in place.

Table C-1 Tax Revenue Effects of the Discounted Tax Reform Proposal

Tax	Static	Dynamic
Personal Income Tax	\$ (136,851,495)	\$ (82,439,582)
Retail Sales Tax	\$ 1,575,729	\$ 10,013,343
Total	\$ (135,275,766)	\$ (72,426,239)

The Plan is not revenue neutral. At the time of implementation and for many years into the future, it causes the state to collect slightly less revenue than it would otherwise have collected. Thereafter it causes the state to collect slightly more revenue than it would otherwise have collected. Could we make the Plan revenue neutral?

The short is, “No.” Because the taxpayer would be given a choice between tax filing options, he would always choose the option that imposes the lower tax. In the first year of implementation, taxpayers taking advantage of the Plan would contribute 56% of total personal income tax revenue.²² The increase in the number of filing households – because of both the increased willingness of current Iowa residents to work and the influx of new residents – does not offset the resulting negative effect, and neither does the increase in revenue collected from the retail sales tax.

²² The tax rate proposed under a Discounted Tax rate has an upper limit at which it will stop being effective. Since the taxpayer can choose, raising the tax rate will decrease the tax revenue loss because fewer people would take advantage of the lower rate. If state government keeps raising the rate it will find itself in a position where no one would pay less income tax under the Plan, and everyone would file under the current law, making the Plan ineffective.

Table C-2 Distribution by Households of Personal Income Tax Revenues

HH Group (AGI)			Revenues		
			Current Law	Discounted Tax	
				Static	Dynamic
Negative	or	\$0.00	\$ -	\$ -	\$ -
\$0.00	to	\$10,000	\$ 1,524,083	\$ 1,524,083	\$ 1,524,083
\$10,000	to	\$20,000	\$ 103,619,603	\$ 103,619,603	\$ 103,619,603
\$20,000	to	\$30,000	\$ 228,690,113	\$ 228,690,113	\$ 228,690,113
\$30,000	to	\$40,000	\$ 297,852,024	\$ 297,852,024	\$ 297,852,024
\$40,000	to	\$50,000	\$ 337,748,635	\$ 337,748,635	\$ 337,748,635
\$50,000	to	\$60,000	\$ 353,065,477	\$ 353,065,477	\$ 353,065,477
\$60,000	to	\$70,000	\$ 344,785,895	\$ 337,295,982	\$ 340,083,079
\$70,000	to	\$80,000	\$ 310,328,569	\$ 293,462,980	\$ 299,454,404
\$80,000	to	\$90,000	\$ 251,116,686	\$ 235,243,346	\$ 240,932,747
\$90,000	to	\$100,000	\$ 193,599,442	\$ 177,870,965	\$ 183,417,433
\$100,000	to	\$125,000	\$ 298,000,602	\$ 270,289,088	\$ 281,442,879
\$125,000	to	\$150,000	\$ 163,883,944	\$ 146,947,458	\$ 153,685,123
\$150,000	to	\$175,000	\$ 108,330,446	\$ 95,390,058	\$ 101,227,855
\$175,000	to	\$200,000	\$ 79,009,366	\$ 69,562,229	\$ 73,805,902
\$200,000	to	\$250,000	\$ 107,903,370	\$ 96,777,561	\$ 101,792,851
\$250,000	to	\$500,000	\$ 212,834,060	\$ 210,101,216	\$ 211,510,523
\$500,000	to	\$1 Million	\$ 124,195,938	\$ 124,195,938	\$ 124,195,938
\$1 Million	or	Over	\$ 101,894,765	\$ 101,894,765	\$ 101,894,765

Tables C-2 and C-3 present the household distribution of total revenue and number of returns filed, respectively, under both the current law and the Plan. The highlighted cells in both tables correspond to household groups for which the Plan is effective, i.e., households that choose to file under the proposed Plan. Those households have AGIs greater than \$60,000 but less than \$500,000.²³ They represent 28.03% of the total returns that would be filed in 2007 under current law and 66.96% of the total tax revenue that would be collected.

We find that, under the Plan, 7,356 additional taxpayers would file personal income tax returns. This means a 0.53% increase in returns filed when compared to those that would be filed in 2007 under the current tax law. Taking this percentage increase as a proxy of employment growth

²³ Note that because the study examines average households, we take particular care not to imply that only the households within these groups will be affected if the reform is adopted. Other households in different income groups may be also be affected.

induced by the Plan in 2007, we find that the Plan would create 8,031 jobs, or 0.53% of projected 2007 employment.²⁴

Table C-3 Distribution by Households of Personal Income Tax Returns

HH Group (AGI)			Current	
			Law	Discounted Tax
Negative	or	\$0.00	33960	33960
\$0.00	to	\$10,000	271795	271795
\$10,000	to	\$20,000	218252	218252
\$20,000	to	\$30,000	192890	192890
\$30,000	to	\$40,000	151237	151237
\$40,000	to	\$50,000	121554	121554
\$50,000	to	\$60,000	97688	97688
\$60,000	to	\$70,000	76952	77588
\$70,000	to	\$80,000	57803	58983
\$80,000	to	\$90,000	40889	41878
\$90,000	to	\$100,000	27880	28750
\$100,000	to	\$125,000	36910	38433
\$125,000	to	\$150,000	16776	17545
\$150,000	to	\$175,000	9424	10001
\$175,000	to	\$200,000	6069	6440
\$200,000	to	\$250,000	7152	7522
\$250,000	to	\$500,000	10653	10724
\$500,000	to	\$1 Million	4113	4113
\$1 Million	or	Over	2922	2922

Table C-4 projects the changes in revenues for both the personal income tax and the retail sales tax for the period 2007 to 2025. The table also shows, for each year, the amount by which employment under the Plan would exceed employment under current law.

The table shows how the gap in personal income tax revenue would fall over time. This is the result of two factors. First, although population would grow in the “steady state” at the same rate under current law as under the Plan, more people would be working under the Plan. Therefore, the difference in the number of working people (Plan versus current law) would increase each

²⁴ The Institute for Economic Research, “Iowa Economic Forecast,” March 2006, projects that non-farm employment will be 1,512,120.

²⁶ This column contains labor supply elasticity with respect to taxes. Measurements based on estimates taken from the literature. Main sources are: Hausman, J. (1981), “Labor Supply,” *How Taxes Affect Economic Behavior*, ed. H.J. Aaron and J. A. Penchman, (Washington DC, Brookings Institution). See also Hausman, J., “Taxes and Labor Supply,” *Handbook of Public Economics*, ed. A. Auerbach and M. Feldstein, (Amsterdam, North-Holland, 1985), pp. 213-263; and Hausman, J. and P. Ruud (1984), “Family Labor Supply with Taxes,” *American Economic Review*, vol. 74, no. 2, pp. 242-8.

year by the same percentage as the growth in population. Second, part of the personal income tax liability under the Plan would be calculated on earned income, which grows at a faster rate than total personal income. This would cause the personal income tax revenue under the Plan to grow faster than it would grow under current law.

Table C-4 also shows how the sales tax revenue difference would grow over time. Because sales tax revenue collected under the Plan would be larger than sales tax revenue collected under current law and because population would be larger as well, the difference in sales tax revenue (Plan versus current law) would also grow over time.

Table C-4 Changes in Tax Revenues and Employment Over Time by Source

Year	Tax Revenue			Actual Employment Less Baseline Employment		
	PIT	Sales Tax	Total	Current	Migration	Total
2007	\$ (82,439,582)	\$ 10,013,343	\$ (72,426,239)	5,670	2,361	8,031
2008	\$ (81,719,011)	\$ 10,448,946	\$ (71,270,065)	5,681	2,366	8,047
2009	\$ (80,774,489)	\$ 10,903,498	\$ (69,870,991)	5,692	2,370	8,062
2010	\$ (79,587,660)	\$ 11,377,824	\$ (68,209,837)	5,703	2,375	8,077
2011	\$ (78,138,986)	\$ 11,872,784	\$ (66,266,202)	5,713	2,379	8,092
2012	\$ (76,407,674)	\$ 12,389,276	\$ (64,018,398)	5,724	2,384	8,108
2013	\$ (74,371,608)	\$ 12,928,237	\$ (61,443,371)	5,735	2,388	8,123
2014	\$ (72,007,270)	\$ 13,490,644	\$ (58,516,626)	5,746	2,393	8,139
2015	\$ (69,289,659)	\$ 14,077,516	\$ (55,212,143)	5,757	2,397	8,154
2016	\$ (66,192,209)	\$ 14,689,919	\$ (51,502,290)	5,768	2,402	8,170
2017	\$ (62,686,697)	\$ 15,328,963	\$ (47,357,734)	5,779	2,406	8,185
2018	\$ (58,743,148)	\$ 15,995,806	\$ (42,747,341)	5,790	2,411	8,201
2019	\$ (54,329,737)	\$ 16,691,659	\$ (37,638,078)	5,801	2,415	8,216
2020	\$ (49,412,683)	\$ 17,417,783	\$ (31,994,900)	5,812	2,420	8,232
2021	\$ (43,956,141)	\$ 18,175,495	\$ (25,780,646)	5,823	2,425	8,247
2022	\$ (37,922,081)	\$ 18,966,168	\$ (18,955,912)	5,834	2,429	8,263
2023	\$ (31,270,167)	\$ 19,791,238	\$ (11,478,929)	5,845	2,434	8,279
2024	\$ (23,957,632)	\$ 20,652,201	\$ (3,305,431)	5,856	2,438	8,294
2025	\$ (15,939,132)	\$ 21,550,617	\$ 5,611,484	5,867	2,443	8,310

Table C-4 shows how the decreasing difference in personal income tax revenue and the increasing difference in retail sales tax revenue would cause the total revenue difference to disappear shortly after the Plan has been in place for 18 years. We can also see how by that time the number of jobs would be about 8,300 more than would exist under current law. Furthermore, the table shows that about 70.60% of the job change would be caused by the increase in labor-

force participation by current Iowa residents, while the other 29.40% would be caused by the inflow of workers.

D. APPENDIX

Table D-1 Taxable and Disposable Income elasticities by Household group

HH Group			Taxable Income ²⁶	Disposable Income ²⁷
Negative	or	\$0.00	-0.15	1.30
\$0.00	to	\$10,000	-0.15	1.30
\$10,000	to	\$20,000	-0.18	1.50
\$20,000	to	\$30,000	-0.19	1.55
\$30,000	to	\$40,000	-0.20	1.60
\$40,000	to	\$50,000	-0.20	1.60
\$50,000	to	\$60,000	-0.25	1.80
\$60,000	to	\$70,000	-0.25	1.80
\$70,000	to	\$80,000	-0.25	1.90
\$80,000	to	\$90,000	-0.25	2.00
\$90,000	to	\$100,000	-0.25	2.00
\$100,000	to	\$125,000	-0.30	2.10
\$125,000	to	\$150,000	-0.30	2.10
\$150,000	to	\$175,000	-0.35	2.30
\$175,000	to	\$200,000	-0.35	2.30
\$200,000	to	\$250,000	-0.35	2.30
\$250,000	to	\$500,000	-0.35	2.30
\$500,000	to	\$1 Million	-0.35	2.30
\$1 Million	or	Over	-0.35	2.30

²⁷ This column contains immigration elasticity with respect to after tax income. Measurements based on estimates taken from the literature. Main sources are: Bartik, T. J., *Who Benefits from State and Local Economic Development Policies?*, Kalamazoo: W.E. Upjohn Institute for Employment Research; 1991) Treyz, George I., Rickman, Dan S., Hunt, Gary L. and Michael J. Greenwood, "The Dynamics of U.S. Internal Migration," *The Review of Economics and Statistics*, (1993) vol. 75, no. 2, pp. 209-14; Vaillant, M. (1994), "The Incidence of State Personal Income Taxes," unpublished paper, Harvard University.

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