

## Tax Incidence Analysis

Prepared by the Tax Research Division, Minnesota Department of Revenue

April 1, 2011

### Governor's Supplemental Budget Tax Proposals

HF 1231 (Paymar) and SF 925 (Marty)

The Governor's Tax Proposals (Supplemental Budget, March 2011) include the following provisions:

- New 4<sup>th</sup> income tax bracket – 10.95% tax rate on Minnesota taxable income over \$150,000 joint, \$85,000 single, and \$130,000 head of household starting in 2011. The new tax bracket is indexed for inflation.
- Increased income subject to corporate tax, primarily due to (1) repeal of the foreign royalty deduction and foreign operating corporations (FOCs), (2) repeal of exemption for insurance companies, (3) inclusion of Minnesota sales by all members of a unitary group in the Minnesota sales factor, and (4) indexing minimum fees for inflation.
- Increase in the research and development tax credit (primarily corporate tax).
- New state property tax on homes and seasonal recreation property ("cabins") valued over \$1 million.
- Various sales tax provisions that on net increase the tax base and raise revenue.

These tax law changes would modify the burden of state and local taxes compared to what it would be under current law. The bill's impact can be estimated using the database and underlying models developed for the *Minnesota Tax Incidence Study*. **Because that study projects income and taxes to calendar year 2013, this analysis generally estimates the impact of law changes in that year.**

#### ***Law Changes Included in the Analysis***

- **New 4<sup>th</sup> Income Tax Bracket:** The impact is modeled using the House Income Tax Simulation Model for tax year 2013. Minnesota residents would pay \$807 million (91%) of the \$888 million of additional tax.
- **Corporate Tax Changes:** The burden of the estimated \$134 million increase in corporate tax is modeled using the corporate tax incidence model. (The \$134 million total is net of the corporate tax reduction due to the expanded Research and Development Credit.) Roughly half of the net corporate tax change would have its initial impact on manufacturing, the other half on commercial sectors. Some of the burden would be borne in higher prices, some in lower wages, and some in lower returns to business owners. Tax burdens for Minnesota residents would rise by an estimated \$79 million (about 60% of added revenue). The estimates show the long-term burden, after businesses have fully adjusted to the change in tax burdens.
- **Tax on Homes Valued More than \$1 Million:** 70 percent of the estimated \$44 million levy would fall on homesteads and 30 percent on non-homestead residential or seasonal recreational property ("cabins"). For homestead property, the Tax Incidence sample is used to

identify homes with market values exceeding \$1 million. For non-homestead residential and seasonal recreational residential property, 30 percent is assumed to be owned by nonresidents. Because the specific owners of non-homestead properties are not identified in the sample, the tax is assumed to fall on those who claim very high itemized deductions for property taxes.

Those subject to the higher property tax would generally see a reduction in state income by claiming increased itemized deductions on their income tax return.

- **Sales Tax:** The bill expands the definition of taxable admissions and would increase sales tax remitted by some remote sellers, including some on-line hotel bookings. The tax burden on Minnesota consumers is assumed to rise by \$16 million (85%) of the net \$19 million in tax.

### ***Law Changes Not Included in the Analysis***

- Federal conformity provisions are not included in the analysis. Most law changes would affect tax years 2010 through 2012, but not 2013 (the year modeled here). The two income tax provisions that would affect 2013 (other than timing provisions) would largely offset one other.
- Proposed changes in the estate tax and the tax on “snowbirds” were excluded because they would not affect full-year residents.

### ***Results by Population Decile: Minnesota Taxes***

- The tax burden on Minnesota taxpayers would rise by \$941 million. Almost 90% of the tax increase would fall on the top 5%. More than two-thirds would fall on the top 1%.
- The new 4<sup>th</sup> tier income tax bracket would account for 86% of the added revenue. The new 4<sup>th</sup> tier rate would fall on those with highest incomes – 99% in the 10<sup>th</sup> decile, 98% in the top 5%, and 75% in the top 1%.
- The tax on homes valued over \$1 million would fall largely on the top 5%, with 78 percent of the burden. The 12 percent falling on those in the 1<sup>st</sup> and 2<sup>nd</sup> deciles reflects taxpayers with low incomes because they reported large business losses.
- Tax burdens would rise by an average of 0.47% of income. Tax increases as a percent of income are below the average in all but the 10<sup>th</sup> decile (at 1.05% of income). For the top 1% of taxpayers the increase would equal 2.06% of income.
- The base expansion for the corporate and sales taxes is regressive, but that impact is overwhelmed by the income tax and property tax changes, as shown in the table below. Under current law, the top 1% of taxpayers has the lowest effective tax rate (at 9.7% of income) and the drop from the 9<sup>th</sup> decile (11.9%) to the tenth decile (10.4%) is significant. Under the proposal, this would not be true. The top 1% of taxpayers would have a higher effective tax rate than the 3<sup>rd</sup>, 4<sup>th</sup>, and 10<sup>th</sup> deciles, and the sharp drop in the effective tax rate between the 9<sup>th</sup> and 10<sup>th</sup> decile –projected to be 1.5% of income under current law – would be cut by two-thirds (to 0.55%).

- The population Suits index would rise from -0.047 to -0.025. Though still regressive, this would be less regressive than estimated in four of the last six editions of the *Minnesota Tax Incidence Study* (for tax years 1998 through 2008).

2013 Population Decile	Income Range	Percent of All Households	Tax Burden as Percent of Income		
			Current Law	Proposed Law	Change
First	\$ 11,298 & under	10%	30.46%	30.80%	<b>0.34%</b>
Second	\$ 11,299 to \$ 18,732	10%	12.10%	12.22%	<b>0.12%</b>
Third	\$ 18,733 to \$ 26,788	10%	11.02%	11.09%	<b>0.07%</b>
Fourth	\$ 26,789 to \$ 35,561	10%	11.55%	11.62%	<b>0.07%</b>
Fifth	\$ 35,562 to \$ 46,044	10%	12.06%	12.13%	<b>0.06%</b>
Sixth	\$ 46,045 to \$ 59,437	10%	12.10%	12.16%	<b>0.06%</b>
Seventh	\$ 59,438 to \$ 76,276	10%	12.07%	12.13%	<b>0.06%</b>
Eighth	\$ 76,277 to \$ 99,386	10%	12.30%	12.35%	<b>0.05%</b>
Ninth	\$ 99,387 to \$142,225	10%	11.89%	11.96%	<b>0.07%</b>
Tenth	\$ 142,226 & over	10%	10.36%	11.41%	<b>1.05%</b>
ALL		100%	11.47%	11.95%	<b>0.47%</b>
Top 5%	\$ 200,907 & over	5%	10.07%	11.46%	<b>1.39%</b>
Top 1%	\$ 472,626 & over	1%	9.68%	11.74%	<b>2.06%</b>

- More details are shown in Tables 1 and 2 below.

### ***Results by Population Decile: Change in Minnesota and Federal Tax Burdens***

Because homeowner property taxes and state income taxes can be claimed as itemized deductions on federal income tax returns, a change in these taxes will change federal tax liability. The change in federal tax will offset part of the change in Minnesota income taxes and homeowner property taxes.

There is no federal offset for those who do not itemized deductions, nor is there any offset for a taxpayer who is subject to the federal alternative minimum tax (because property and state income taxes are not deductible). For those who itemize (and are not subject to the federal AMT), the portion of the change in Minnesota tax that is offset by the change in federal liability is generally equal to the federal tax rate on the last dollar of the taxpayer's income. The offset is 15% for a taxpayer in the 15% tax bracket and 35% for a taxpayer in the 35% tax bracket.

- The change in federal tax liability would offset 26.7% (\$215 million) of the \$807 million increase in Minnesota income taxes.
- The change in federal tax liability would offset 26.2% (\$9 million) of the \$39 million increase in property taxes on homes valued over \$1 million.
- Although the bill would increase the burden of Minnesota state and local taxes by \$941 million, it would increase the total burden of federal plus Minnesota state and local tax burdens by \$717 million.
- When both federal and state taxes are considered, tax burdens would increase by an average of 0.36% of income. The tax burden would rise by 0.78% of income (rather than 1.05%) in the 10<sup>th</sup> decile and by 1.43% of income (rather than 2.06%) for the top 1% of taxpayers .

2013 Population Decile	Income Range	Percent of All Housholds	Net Change in Minnesota Tax Burden as Percent of Income	Net Change in Federal Taxes as Percent of Income:		Net Change in Minnesota <i>and Federal</i> Tax Burden as Percent of Income
				Higher Itemized Deductions for Home Property Tax	Lower Itemized Deductions for Minnesota Income Tax	
First	\$ 11,298 & under	10%	<b>0.34%</b>	0.00%	0.00%	<b>0.34%</b>
Second	\$ 11,299 to \$ 18,732	10%	<b>0.12%</b>	0.00%	0.00%	<b>0.12%</b>
Third	\$ 18,733 to \$ 26,788	10%	<b>0.07%</b>	0.00%	0.00%	<b>0.07%</b>
Fourth	\$ 26,789 to \$ 35,561	10%	<b>0.07%</b>	0.00%	0.00%	<b>0.07%</b>
Fifth	\$ 35,562 to \$ 46,044	10%	<b>0.06%</b>	0.00%	0.00%	<b>0.06%</b>
Sixth	\$ 46,045 to \$ 59,437	10%	<b>0.06%</b>	0.00%	0.00%	<b>0.06%</b>
Seventh	\$ 59,438 to \$ 76,276	10%	<b>0.06%</b>	0.00%	0.00%	<b>0.06%</b>
Eighth	\$ 76,277 to \$ 99,386	10%	<b>0.05%</b>	0.00%	0.00%	<b>0.05%</b>
Ninth	\$ 99,387 to \$142,225	10%	<b>0.07%</b>	0.00%	0.00%	<b>0.07%</b>
Tenth	\$ 142,226 & over	10%	<b>1.05%</b>	-0.01%	-0.26%	<b>0.78%</b>
ALL MINNESOTA HOUSEHOLDS		100%	<b>0.47%</b>	0.00%	-0.11%	<b>0.36%</b>
Top 5%	\$ 200,907 & over	5%	<b>1.39%</b>	-0.01%	-0.35%	<b>1.02%</b>
Top 1%	\$ 472,626 & over	1%	<b>2.06%</b>	-0.02%	-0.62%	<b>1.43%</b>

- More details are shown in *Tables 3 and 4* below.

## Table 1. Dollars of Tax Burden

### Tax Incidence Analysis

### Tax Proposals in Governor Dayton's Supplemental Budget (March 2011)

(Dollars in \$1000s)

2013 Population Decile	Income Range	Number of Households	Current Law Total State and Local Tax	Change in Tax <sup>1</sup>					Proposed Law Total State and Local Tax
				4th Tax Bracket at 10.95%	Corporate Tax Increases	State Levy on Homes Valued Over \$1 Million <sup>2</sup>	Sales Tax Increases	Total Net Change in Tax	
First	\$ 11,298 & under	263,199	\$ 530,646	-	1,947	3,395	605	5,947	\$ 536,593
Second	\$ 11,299 to \$ 18,732	263,199	479,849	-	2,601	1,314	754	4,669	484,518
Third	\$ 18,733 to \$ 26,788	263,199	656,857	-	3,389	18	879	4,286	661,143
Fourth	\$ 26,789 to \$ 35,561	263,199	945,059	-	4,343	2	1,017	5,362	950,421
Fifth	\$ 35,562 to \$ 46,044	263,199	1,285,863	-	5,220	329	1,156	6,705	1,292,568
Sixth	\$ 46,045 to \$ 59,437	263,199	1,673,264	-	6,352	26	1,341	7,718	1,680,982
Seventh	\$ 59,438 to \$ 76,276	263,199	2,146,415	-	7,814	1,284	1,602	10,700	2,157,115
Eighth	\$ 76,277 to \$ 99,386	263,199	2,821,394	5	10,008	247	1,939	12,199	2,833,593
Ninth	\$ 99,387 to \$142,225	263,199	3,672,422	5,753	13,058	1,118	2,347	22,275	3,694,697
Tenth	\$142,226 & over	263,199	8,516,676	801,442	24,503	30,714	4,362	861,020	9,377,696
ALL MINNESOTA HOUSEHOLDS		2,631,989	\$ 22,728,445	807,200	79,234	38,446	16,000	940,880	\$ 23,669,325
Top 5%	\$ 200,907 & over	131,652	\$ 6,076,987	787,701	15,874	30,004	2,918	836,497	\$ 6,913,484
Top 1%	\$ 472,626 & over	26,332	\$ 2,992,407	608,410	6,082	22,743	1,306	638,541	\$ 3,630,948

<sup>1</sup> Increases in corporate and sales taxes are net of some tax reductions (such as the R&D credit).

<sup>2</sup> Total is net of the reduction in income tax due to higher property tax on homes valued over \$1 million.

**Table 2. Tax Burden as Percent of Income**

Tax Incidence Analysis

Tax Proposals in Governor Dayton's Supplemental Budget (March 2011)

2013 Population Decile	Income Range	Percent of All Housholds	Current Law Tax as Percent of Income	Change in Tax as Percent of Income <sup>1</sup>					Proposed Law Tax as Percent of Income
				4th Tax Bracket at 10.95%	Corporate Tax Increases	State Levy on Homes Valued Over \$1 Million <sup>2</sup>	Sales Tax Increases	Total Net Change in Tax	
First	\$ 11,298 & under	10%	30.46%	0.00%	0.11%	0.19%	0.03%	<b>0.34%</b>	30.80%
Second	\$ 11,299 to \$ 18,732	10%	12.10%	0.00%	0.07%	0.03%	0.02%	<b>0.12%</b>	12.22%
Third	\$ 18,733 to \$ 26,788	10%	11.02%	0.00%	0.06%	0.00%	0.01%	<b>0.07%</b>	11.09%
Fourth	\$ 26,789 to \$ 35,561	10%	11.55%	0.00%	0.05%	0.00%	0.01%	<b>0.07%</b>	11.62%
Fifth	\$ 35,562 to \$ 46,044	10%	12.06%	0.00%	0.05%	0.00%	0.01%	<b>0.06%</b>	12.13%
Sixth	\$ 46,045 to \$ 59,437	10%	12.10%	0.00%	0.05%	0.00%	0.01%	<b>0.06%</b>	12.16%
Seventh	\$ 59,438 to \$ 76,276	10%	12.07%	0.00%	0.04%	0.01%	0.01%	<b>0.06%</b>	12.13%
Eighth	\$ 76,277 to \$ 99,386	10%	12.30%	0.00%	0.04%	0.00%	0.01%	<b>0.05%</b>	12.35%
Ninth	\$ 99,387 to \$142,225	10%	11.89%	0.02%	0.04%	0.00%	0.01%	<b>0.07%</b>	11.96%
Tenth	\$ 142,226 & over	10%	10.36%	0.98%	0.03%	0.04%	0.01%	<b>1.05%</b>	11.41%
<b>ALL MINNESOTA HOUSEHOLDS</b>		<b>100%</b>	<b>11.47%</b>	<b>0.41%</b>	<b>0.04%</b>	<b>0.02%</b>	<b>0.01%</b>	<b>0.47%</b>	<b>11.95%</b>
Top 5%	\$ 200,907 & over	5%	10.07%	1.31%	0.03%	0.05%	0.00%	<b>1.39%</b>	11.46%
Top 1%	\$ 472,626 & over	1%	9.68%	1.97%	0.02%	0.07%	0.00%	<b>2.06%</b>	11.74%

<sup>1</sup> Increases in corporate and sales taxes are net of some tax reductions (such as the R&D credit).

<sup>2</sup> Total is net of the reduction in income tax due to higher property tax on homes valued over \$1 million.

<b>Governor's Supplemental Budget "Population-Decile" Suits Index:</b>	<b>-0.025</b>
Baseline "Population-Decile" Suits Index (from TIS):	-0.047

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### Table 3. Change in Dollars of Tax Burden: Minnesota and Federal Taxes

Tax Incidence Analysis *Including Change in Federal Tax*

Tax Proposals in Governor Dayton's Supplemental Budget (March 2011)

(Dollars in \$1000s)

2013 Population Decile	Income Range	Number of Housholds	Net Change in Minnesota Tax Burden	Net Change in Federal Taxes Due To:		Net Change in Minnesota <i>and Federal</i> Tax Burden
				Higher Itemized Deductions for Home Property Taxes	Lower Itemized Deductions for Minnesota Income Tax	
First	\$ 11,298 & under	263,199	\$ 5,947	-	-	5,947
Second	\$ 11,299 to \$ 18,732	263,199	4,669	-	-	4,669
Third	\$ 18,733 to \$ 26,788	263,199	4,286	-	-	4,286
Fourth	\$ 26,789 to \$ 35,561	263,199	5,362	-	-	5,362
Fifth	\$ 35,562 to \$ 46,044	263,199	6,705	(36)	-	6,669
Sixth	\$ 46,045 to \$ 59,437	263,199	7,718	(4)	-	7,714
Seventh	\$ 59,438 to \$ 76,276	263,199	10,700	(238)	-	10,461
Eighth	\$ 76,277 to \$ 99,386	263,199	12,199	(49)	(1)	12,149
Ninth	\$ 99,387 to \$142,225	263,199	22,275	(285)	(1,476)	20,513
Tenth	\$ 142,226 & over	263,199	861,020	(8,042)	(213,830)	639,148
ALL MINNESOTA HOUSEHOLDS		2,631,989	940,880	(8,656)	(215,307)	716,918
Top 5%	\$ 200,907 & over	131,652	836,497	(7,836)	(210,597)	618,064
Top 1%	\$ 472,626 & over	26,332	638,541	(7,095)	(190,509)	440,937

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**Table 4. Change in Minnesota and Federal Tax Burden as Percent of Income**

Tax Incidence Analysis *Including Change in Federal Tax*

Tax Proposals in Governor Dayton's Supplemental Budget (March 2011)

2013 Population Decile	Income Range	Percent of All Housholds	Net Change in Minnesota Tax Burden as Percent of Income	Net Change in Federal Taxes as Percent of Income:		Net Change in Minnesota <i>and</i> Federal Tax Burden as Percent of Income
				Higher Itemized Deductions for Home Property Taxes	Lower Itemized Deductions for Minnesota Income Tax	
First	\$ 11,298 & under	10%	<b>0.34%</b>	0.00%	0.00%	<b>0.34%</b>
Second	\$ 11,299 to \$ 18,732	10%	<b>0.12%</b>	0.00%	0.00%	<b>0.12%</b>
Third	\$ 18,733 to \$ 26,788	10%	<b>0.07%</b>	0.00%	0.00%	<b>0.07%</b>
Fourth	\$ 26,789 to \$ 35,561	10%	<b>0.07%</b>	0.00%	0.00%	<b>0.07%</b>
Fifth	\$ 35,562 to \$ 46,044	10%	<b>0.06%</b>	0.00%	0.00%	<b>0.06%</b>
Sixth	\$ 46,045 to \$ 59,437	10%	<b>0.06%</b>	0.00%	0.00%	<b>0.06%</b>
Seventh	\$ 59,438 to \$ 76,276	10%	<b>0.06%</b>	0.00%	0.00%	<b>0.06%</b>
Eighth	\$ 76,277 to \$ 99,386	10%	<b>0.05%</b>	0.00%	0.00%	<b>0.05%</b>
Ninth	\$ 99,387 to \$142,225	10%	<b>0.07%</b>	0.00%	0.00%	<b>0.07%</b>
Tenth	\$ 142,226 & over	10%	<b>1.05%</b>	-0.01%	-0.26%	<b>0.78%</b>
ALL MINNESOTA HOUSEHOLDS		100%	<b>0.47%</b>	0.00%	-0.11%	<b>0.36%</b>
Top 5%	\$ 200,907 & over	5%	<b>1.39%</b>	-0.01%	-0.35%	<b>1.02%</b>
Top 1%	\$ 472,626 & over	1%	<b>2.06%</b>	-0.02%	-0.62%	<b>1.43%</b>

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## Technical Addendum

### A. Assumptions about Changes in Local Property Taxes<sup>1</sup>

- When general purpose aids to local governments are reduced, a portion of those aid cuts will result in property tax increases. Recent levy reports from local governments indicate that overall levy back reported by cities and counties was 56% in 2010. Levy back declined to 42% in 2011 when deeper aid cuts were imposed.
- For 2012 and future years we assume that non-school local governments will levy back 50% of aid cuts up to a 10% increase in their property tax levy. Any cut beyond that level will be levied back at a 30% rate. In other words, those jurisdictions facing deeper aid cuts that will require a greater percent increase in their levy will be expected to have a lower levy-back rate.

### B. Estimating the Incidence of CHANGES in Business Taxes (“Incremental Incidence”)

- As explained on pages 61-62 of the Tax Incidence Study, the incidence of a change in the level of business taxes (“incremental incidence”) will differ from the average incidence of existing business taxes (“average incidence”). Average incidence divides an existing business tax into three parts – the national average tax on all capital, the sector differential, and the Minnesota differential. In contrast, a change in the level of a business tax is all treated as a change in the Minnesota differential.
- If the level of Minnesota business taxes changes, this will generally change the amount of *federal tax* paid by the business – either the federal corporate income tax or the federal individual income tax (for flow-through businesses). For a corporation paying federal tax at the 35% rate, each additional \$1000 in Minnesota tax will reduce the federal tax burden by \$350. So \$350 of the \$1000 of Minnesota tax burden is borne by the federal government in foregone tax revenue. The burden of the remaining \$650 in tax may be shifted to consumers in higher prices or to workers in lower compensation – or it may reduce the after-tax income of the business owner. This analysis assumes an average federal tax rate for business property owners of 30% for corporate tax and 20% for individual income tax.<sup>2</sup>
- The extent to which the tax burden will be shifted to consumers or workers will depend on the nature of the market. Minnesota tax changes are most likely to result in price changes if the market is local and close competitors see the same change in tax. Businesses selling in national or international markets are much less likely to shift the added cost to consumers by raising prices (or reduce their price in response to a tax cut). *As in the incidence study, the incidence results assume the market has time to fully adjust to any tax changes.*
- The incidence of the business tax changes in the bill (as modeled here) is as follows:
  - Corporate tax increases: 28% shifted to consumers, 31% shifted to workers, 0.2% borne by Minnesota owners, and 41% borne by nonresidents.

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<sup>1</sup> Not relevant for this bill analysis, but retained for consistency.

<sup>2</sup> For corporate tax, the analysis assumes a federal tax rate of 35%.