### **Tax Incidence Analysis**

Prepared by the Tax Research Division, Minnesota Department of Revenue August 30, 2018

# Laws 2018, Chapter 205 (H.F. 947, 1<sup>st</sup> Engrossment) Vetoed Omnibus Tax Bill

# The bill, which was passed by the legislature and vetoed by the Governor on May 23, 2018, would have made the following permanent tax law changes:

- Income Tax:
  - Switch to federal adjusted gross income (FAGI), rather than federal taxable income, as the starting point for calculating Minnesota taxable income. Maintain the standard deduction and personal exemption amounts from prior federal law. Create itemized deductions generally equal to those under prior federal law.
  - Reduce 1<sup>st</sup> bracket rate from 5.35% to 5.3% in tax years 2018 and 2019 and 5.25% beginning in tax year 2020, and reduce 2<sup>nd</sup> bracket rate from 7.05% to 6.95% in tax years 2018 and 2019 and 6.85% beginning in tax year 2020.
- Tax on Flow-Through Business
  - Conform to some federal changes in the definition of taxable income. Fully conform to Section 179 expensing.
- Corporate Tax:
  - Reduce the corporate franchise tax rate from 9.8% to 9.65% in tax years 2018 and 2019 and 9.1% beginning in tax year 2020.
  - Repeal the corporate alternative minimum tax.
  - Conform to some federal changes in the definition of taxable income. Fully conform to Section 179 expensing.
  - Include foreign deferred income in Minnesota taxable income after the federal deduction. Maintain current treatment of global intangible income and foreign derived intangible income.
- Sales and Use Tax:
  - Create sales tax exemptions for purchases by certain medical facilities and nonprofits.
- Property Taxes:
  - Expand eligibility for the property tax refund, exclusion for veterans with a disability, and agricultural homestead classification.
  - Increase a special taxing district's property tax levy authority.

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 the latest study projects income and taxes to calendar year 2019, this analysis generally estimates the impact of law changes in that year.** That study's baseline projections of tax burdens to 2019 are reduced by \$280 million to account for the state and local tax cuts enacted in 2017. They are also adjusted to include the state impact of federal law changes that were included in the February forecast, which increased the resident tax burden by an estimated \$69 million.<sup>1</sup> Note that dollar estimates are for calendar year rather than fiscal year. The analysis is limited to **permanent** changes in tax law. Law changes phased in over several years (such as the changes in income and corporate franchise tax rates) are modeled as if fully effective in 2019.

A change in state and local taxes will in some cases have a direct impact on federal taxes – either by changing federal itemized deductions or by changing state and local taxes deducted on federal returns filed by businesses. *Appendix 1 takes those changes in federal taxes caused by state tax changes into account.* 

### Impact of Proposals on Minnesota State & Local Tax Burdens on Minnesota Residents

- Individual Income Tax Changes: All changes to the individual income tax were modeled using the House Income Tax Simulation Model for tax year 2019. Those provisions include the switch to FAGI as the starting point for calculating Minnesota taxable income, the creation of a Minnesota standard deduction, personal exemptions, and itemized deductions, and the reduction in income tax rates. The rate changes were modeled as if fully phased in in tax year 2019, reducing tax liability of Minnesota residents by \$174.0 million. (Minnesota residents would receive 95.3% of the benefit. The remainder would go to nonresidents.)
- **Pass-through business provisions:** The tax burden on pass-through business income of Minnesota residents would increase by **\$150.7 million** (90.6% of the total revenue gain from these provisions, with the remainder borne by nonresidents.) The burden is assumed to fall on business owners in proportion to their share of pass-through income.
- Corporate Tax Changes: The reduction in the corporate franchise tax rate and other changes to the corporate franchise tax were modeled using the corporate tax incidence model. The rate reduction is modeled as if fully phased in by tax year 2019. Some of the tax reduction would be passed to consumers in the form of lower prices, some in higher wages, and some in higher returns to business owners. Tax burdens for Minnesota residents would drop by an estimated \$21.4 million (about 72.5% of lost revenue). The remainder would go to nonresidents or the federal government (as higher corporate tax revenue). These estimates apply to the long-term burden, after businesses have fully adjusted to the change in tax burdens.
- Sales and Use Tax: The sales tax burden for Minnesota residents would drop by \$0.2 million in tax year 2019. Those changes were modeled based on the distribution of consumer sales tax burdens in the incidence database.
- **Property Taxes:** The local property tax burden (net of property tax refunds) rises by \$0.7 million. Farm taxes fall by \$0.7 million, while taxes on homes and other business property rise. The state property tax burden falls by less than \$0.05 million.

<sup>&</sup>lt;sup>1</sup> The February forecast included an estimated increase in Minnesota income tax revenue due to the higher federal standard deduction, which was assumed to raise Minnesota tax on some who would no longer itemize deductions federally. That adjustment was not made here because the Department of Revenue has more recently issued guidance on the topic. Based on that guidance, such an increase in state tax liability is not expected.

### Law Changes Not Included in the Analysis

- Several federal update provisions were not included in this analysis because they were temporary or were timing shifts. Temporary provisions include bonus depreciation, the temporary extension of the 7.5% floor on medical expense deductions, extension of the angel investment credit, project-specific sales tax exemptions for construction materials, and the provisions of the Disaster Tax Relief Act and Bipartisan Budget Act of 2018. The change to the historic preservation credit was a timing shift that did not affect the total amount of the credit.
- Several small income tax changes are excluded due to lack of data (a net tax increase of less than \$3 million).

### Results by Population Decile: Change in Minnesota State and Local Tax Burdens

Table 1 shows the impact of the bill by decile.

- The state and local tax burden on Minnesota taxpayers would decrease by **\$44.3 million**. Every decile except the first and tenth deciles would see a decrease in taxes.
- The increase in the 10<sup>th</sup> decile is concentrated among taxpayers with the highest incomes. The lower half of the top decile would have a tax decrease of \$22.6 million. In contrast, the tax burden on the next 4% would increase by \$3.3 million. The top 1% would see an increase of \$67.4 million. The tax burden for the other 90% of taxpayers (deciles 1 to 9 combined) would fall by \$92.3 million.
- Total Minnesota state and local tax burdens would fall by 0.15% of current-law burdens. Tax burdens for the top decile would increase by 0.4%, and tax burdens for the top 1% would increase by 1.49% of current-law burdens.

### Table 1. Dollars of Minnesota State and Local Tax Burden Impact of Tax Changes in H.F. 947

						Minnesota	State and Local	Tax Burden	
									Percent
2019			Percent of	Percent of	Current Law	Proposed Tax	Change in	Decile's Share	Increase in
Population			All	All	Tax Burden	Burden	Tax Burden	of Total	Burden Over
Decile	Income Ra	inge	Households	Income	(\$1000s)	(\$1000s)	(\$1000s)	Change in Tax	Prior Law
1	13,418 & u	ınder	10%	0.9%	\$ 571,084	\$ 571,265	\$ 181	-0.4%	0.03%
2	13,419 to	21,894	10%	1.9%	612,123	611,600	(523)	1.2%	-0.09%
3	21,895 to	31,391	10%	2.9%	832,797	832,255	(541)	1.2%	-0.06%
4	31,392 to	41,344	10%	4.0%	1,136,324	1,135,031	(1,293)	2.9%	-0.11%
5	41,345 to	55,093	10%	5.3%	1,577,530	1,572,818	(4,712)	10.6%	-0.30%
6	55,094 to	70,943	10%	6.8%	2,091,890	2,081,531	(10,359)	23.4%	-0.50%
7	70,944 to	92,150	10%	8.8%	2,733,424	2,719,178	(14,246)	32.2%	-0.52%
8	92,151 to	121,494	10%	11.5%	3,517,853	3,493,753	(24,101)	54.4%	-0.69%
9	121,495 to	174,624	10%	15.7%	4,795,757	4,759,011	(36,746)	83.0%	-0.77%
10	174,625 & o	ver	10%	42.2%	12,093,231	12,141,287	48,056	-108.5%	0.40%
ALL MINN	ALL MINNESOTA HOUSEHOLDS			100.0%	\$ 29,962,014	\$ 29,917,729	\$ (44,286)	100.0%	-0.15%

Estimated Calendar Year 2019 Impact

#### Detail for the 10th Decile

Lower Half	174,625	to 250,362	5%	11.1%	3,230,283	3,207,685	(22,598)	51.0%	-0.70%
Next 4%	250,363	to 598,214	4%	15.4%	4,341,045	4,344,322	3,277	-7.4%	0.08%
Top 1%	598,215	& over	1%	15.6%	4,521,903	4,589,279	67,376	-152.1%	1.49%
Full Decile	174,625	& over	10%	42.2%	\$ 12,093,231	\$ 12,141,287	\$ 48,056	-108.5%	0.40%

Table 2 shows the change in tax liability under the bill as a percent of income by decile.

Minnesota state and local tax burdens would decrease by an average of 0.02% of income. The reduced tax burden is largest for the 5<sup>th</sup> through 9<sup>th</sup> deciles and the lower half of the 10<sup>th</sup> decile. The 2<sup>nd</sup> through 4<sup>th</sup> deciles benefit to a lesser degree. The burden for the top 1% would increase by 0.17% of income.

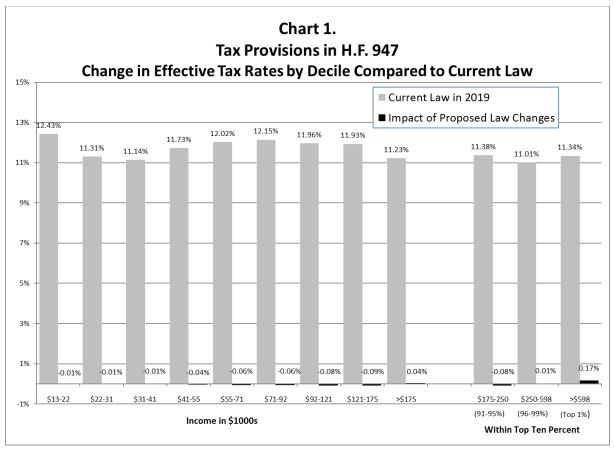
## Table 2. Tax burden as Percent of Income Impact of Tax Changes in H.F. 947

2019 Population	Incon	ne Ra	ange	Percent of All		Minnesota State and Local Tax Burden Percent of Income			
Decile				Households	Current Law	Proposed Law	Change		
1	13,418	& u	nder	10%	25.80%	25.80%	0.01%		
2	13,419	to	21,894	10%	12.43%	12.42%	-0.01%		
3	21,895	to	31,391	10%	11.31%	11.30%	-0.01%		
4	31,392	to	41,344	10%	11.14%	11.13%	-0.01%		
5	41,345	to	55,093	10%	11.73%	11.69%	-0.04%		
6	55,094	to	70,943	10%	12.02%	11.96%	-0.06%		
7	70,944	to	92,150	10%	12.15%	12.08%	-0.06%		
8	92,151	to	121,494	10%	11.96%	11.88%	-0.08%		
9	121,495 to 174,624			10%	11.93%	11.84%	-0.09%		
10	174,625 & over			10%	11.23%	11.27%	0.04%		
ALL MINN	ALL MINNESOTA HOUSEHOLDS				11.73%	11.72%	-0.02%		

Estimated Calendar Year 2019 Impact

Detail for the 10th Decile

Petan jer the						
Lower Half	174,625	to 250,362	5%	11.38%	11.30%	-0.08%
Next 4%	250,363	to 598,214	4%	11.01%	11.02%	0.01%
Top 1%	598,215	& over	1%	11.34%	11.51%	0.17%
Full Decile	174,625	& over	10%	11.23%	11.40%	0.04%



As discussed on page 17 of the 2017 Minnesota Tax Incidence Study, results for the first decile are overstated for several reasons. This chart starts with the second decile.

**Chart 1** illustrates current-law effective tax rates by decile and the change in effective tax rates. Effective tax rates would change very little under the bill. The current effective tax rates range from 11.01% to 12.43%. The bill would generally reduce effective rates by between 0.01% and 0.09% of income, but the top 1% of the households would see an increase of 0.17% of income.

## Suits Index for Proposed Tax Changes

Most of the changes in the bill would be progressive. The income tax changes are highly progressive, since the income tax liability is reduced for most taxpayers but increased for those with highest incomes. The change in the corporate franchise tax is also progressive.

- The income tax changes affecting flow-through income would have a Suits index of **+0.478**. All other income tax changes would have a Suits index of **+0.040**. Combined they would have a Suits index of **+3.385**.
- The Suits index is **+0.161** for the corporate tax, **+0.258** for the sales tax, and **+0.156** for state property taxes.
- The changes in local property taxes would be regressive, with a Suits index of **-0.259**, but the impact is very small. The cut in local sales tax is progressive, but has a negligible impact.
- The Suits index for all the changes in the bill is **+1.861**, which is very progressive. With the proposed tax changes, the Suits index for Minnesota state and local taxes would become less negative, increasing from -**0.022** (under current law) to **-0.019**.

# Table 3. Change in Minnesota State and Local Tax Burden by Tax TypeImpact of Tax Changes in H.F. 947

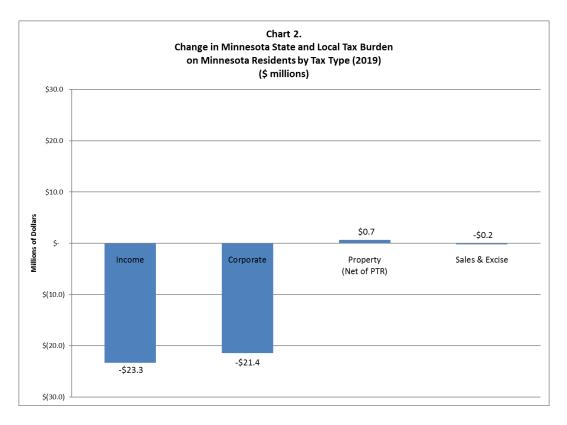
Estimated Calendar Year 2019 Impact, by Tax Type

				Dollars in \$1,000s									
				Change in Tax Burden									
2019		Percent of	Percent of	Income Tax-			Property	Sales and					
Population		All	All	Income Tax	Flow-	Corporate	Tax Net of	Excise					
Decile	Income Range	Households	Income	Personal	Through*	Tax	PTR	Taxes	Total				
1	\$13,418 & under	10%	0.9%	(\$9)	\$740	(\$553)	\$11	(\$8)	\$181				
2	13,419 to 21,894	10%	1.9%	(5)	216	(738)	13	(9)	(523)				
3	21,895 to 31,391	10%	2.9%	(688)	1,078	(936)	15	(11)	(541)				
4	31,392 to 41,344	10%	4.0%	(2,375)	2,184	(1,132)	43	(12)	(1,293)				
5	41,345 to 55,093	10%	5.3%	(6,059)	2,671	(1,367)	57	(14)	(4,712)				
6	55,094 to 70,943	10%	6.8%	(11,868)	3,135	(1,652)	42	(16)	(10,359)				
7	70,944 to 92,150	10%	8.8%	(18,206)	6,012	(2,087)	54	(19)	(14,246)				
8	92,151 to 121,494	10%	11.5%	(29,042)	7,480	(2,637)	120	(23)	(24,101)				
9	121,495 to 174,624	10%	15.7%	(44,679)	11,398	(3,524)	86	(28)	(36,746)				
10	10 174,625 & over 10%		42.2%	(61,107)	115,776	(6,777)	212	(48)	48,056				
ALL MINN	NESOTA HOUSEHOLDS	100.0%	(\$174,038)	\$150,692	(\$21,404)	\$652	(\$188)	(\$44,286)					

Detail for the 10th Decile

Lower Half	\$174,625 to 250,362	5%	11.1%	(\$30,515)	\$10,243	(\$2,353)	\$44	(\$17)	(\$22,598)
Next 4%	250,363 to 598,214	4%	15.4%	(24,531)	30,478	(2,754)	103	(19)	3,277
Top 1%	598,215 & over	1%	15.6%	(6,061)	75,056	(1,671)	65	(12)	67,376
Full Decile	\$174,625 & over	10%	42.2%	(\$61,107)	\$115,776	(\$6,777)	\$212	(\$48)	48,056

\*Includes the impact on business income from sole proprietorships, S corporations, partnerships, and farms.



**Chart 2** shows the tax changes by tax type. The reduction in income tax (-**\$23.3 million**) and corporate franchise tax (-**\$21.4 million**) are the biggest components of the change. **Table 3** provides more detail on the income tax changes, showing the impact on flow-through income separately. Because of conformity to the base expansions in federal law, tax on flow-through entities would increase, partially offsetting the rate reductions and other income tax changes.

#### Table 4. Impact of H.F. 947 on State and Local Tax Collections and Tax Burdens

Calendar Year 2019 All dollars in millions

			As Imposed		After S	hifting	Suits Index
	Change in	MN	Non-		MN		for Tax Change
Тах Туре	-	Households	Residents	Business	Households	Exported	(Full Sample)
State Taxes				20011000			(i un cumpie)
Taxes on Income and Estates							
Individual income taxPersonal	-182.7	-174.0	-8.6		-174.0	-8.6	0.040
Individual income taxFlow-through	166.4	150.7	-8.0 15.7		150.7	-8.0 15.7	0.478
•	-29.5	150.7	15.7	-29.5	-21.4	-8.1	0.478
Corporate franchise tax Estate tax	-29.5			-29.5	-21.4	-8.1	0.161
Total Income and Estate Taxes	-45.8	-23.3	7.1	-29.5	-44.7	-1.0	1.843**
	-43.0	-23.5	/.1	-29.5	-44.7	-1.0	1.645
Taxes on Consumption							
Total sales tax							
General sales tax	-0.2	-0.2	-0.0		-0.2	-0.0	0.258
Sales tax on motor vehicles							
Motor fuels excise tax							
Alcoholic beverage excise taxes							
Cigarette and tobacco excise taxes							
Insurance premiums taxes							
Gambling taxes							
MinnesotaCare taxes							
Solid waste management taxes							
Total Consumption Taxes	-0.2	-0.2	-0.0		-0.2	-0.0	0.258
Taxes on Property							
Residential recreational property							
Commercial	-0.0			-0.0	-0.0	-0.0	0.135
Industrial	0.0			0.0	0.0	0.0	0.135
Utility	-0.0			-0.0	-0.0	-0.0	0.188
Motor vehicle registration tax	0.0			0.0	0.0	0.0	0.100
Mortgage and deed taxes							
Total Property Taxes	-0.1			-0.1	-0.0	-0.0	0.156
	0.1			0.1	0.0	0.0	0.150
Property Tax Refunds	0.2	0.2			0.2		0.675
Homeowners	-0.2	-0.2			-0.2		0.675
Renters		0.2					0.675
Total Property Tax Refunds	-0.2	-0.2			-0.2		0.675
Total State Taxes	-46.3	-23.8	7.1	-29.6	-45.2	-1.1	1.830**
Local Taxes							
Property Taxes							
General Property Tax	1.1	1.0	0.0	-0.0	0.9	0.2	-0.259
Homeowners (before PTR)	0.9	0.9			0.9		-0.172
Residential recreational property	0.1	0.1	0.0		0.1	0.0	-0.262
Commercial	0.3			0.3	0.1	0.1	-0.135
Industrial	0.1			0.1	0.0	0.0	-0.070
Farm (other than residence)	-0.8			-0.8	-0.7	-0.2	0.109
Rental Housing	0.0			0.2	0.1	0.0	-0.391
Utility	0.2			0.2	0.1	0.0	-0.188
Mining Production Taxes (taconite)	0.5			0.5	0.2	0.1	0.100
Taxes on Consumption							
-	-0.0	0.0	0.0		0.0	0.0	0.250
Local Sales Taxes	-0.0	-0.0	-0.0		-0.0	-0.0	0.258
Local Gross Earnings Taxes							
Total Local Taxes	1.1	1.0	0.0	-0.0	0.9	0.2	-0.259
Total State and Local Taxes	-45.2	-22.7	7.1	-29.6	-44.3	-0.9	1.861**

All dollar values rounded to nearest tenth of a million dollars. All values that are truly zero are shown as blanks.

Parts may not sum to totals due to rounding.

\* Suits indexes for a *reduction* in regressive taxes (such as the sales tax) are shown as positive because the tax *cut* makes the system less regressive. \*\*Although the Suits index for a single tax or the tax system as a whole will be between -1.000 (most regressive) and +1.000 (most progressive), the Suits index for a law *change* can lie outside this range. This is particularly true if the change combines tax cuts for lower income households with tax increases for high income househoulds (as it does here), or vice versa.

**Table 4** provides more detail of the overall impact of proposals, in the same manner as shown on Table3-1 in the Tax Incidence Study for all current-law taxes. (See page 44 of that report.)

## Appendix 1: Impact of the Bill on Both 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 state and local taxes can change federal tax liability. In the aggregate, the change in federal tax offsets part of any increase or decrease in each of these Minnesota taxes.

There is no federal offset for those who do not itemize deductions, nor is there any tax offset for a taxpayer who is subject to the federal alternative minimum tax (because property and state income taxes are not deductible under the AMT). For itemizers with a change in state and local tax deductions, the portion of the change in Minnesota tax that is offset by a change in federal liability is generally equal to the federal tax rate on the last dollar of the taxpayer's income. For example, the offset is 12% for a taxpayer in the 12% tax bracket and 37% for a taxpayer in the 37% tax bracket.

This analysis takes into account the recent federal law changes, including the increased standard deduction, the new \$10,000 cap on total state and local tax deductions (\$5,000 for married separate filers), and changes in federal income tax rates.

The federal law changes greatly reduced the size of the federal tax offset. With the higher standard deduction, there are far fewer itemizers, and remaining itemizers whose state and local taxes exceed the cap (generally true at high income levels) will be unaffected by small changes in such taxes.<sup>2</sup>

- Higher federal tax liability would offset \$2.3 million (10.0%) of the net \$23.3 million reduction in Minnesota income taxes paid by Minnesota residents.<sup>3</sup> Reduced federal tax liability would offset \$0.01 million (1.5%) of the net \$0.8 million increase in property taxes on homeowners.
- Although the bill would increase the burden of *Minnesota* state and local taxes by \$44.3 million, it would increase the total burden of *federal plus Minnesota* state and local tax burdens by \$42.0 million.

The small impact of the federal tax offset on net tax burdens and effective tax rates is shown in Tables 5 and 6. Because of the limit on state and local tax deductions, many taxpayers with the highest incomes do not get an offsetting change in federal tax. The net effect of the federal offset is to make the proposal slightly more progressive, although the change in tax as a percent of income is negligible. After adjusting for the change in federal taxes, the Suits index for the bill increases from 1.861 to 1.949.

<sup>&</sup>lt;sup>2</sup> The federal law changes also greatly reduced the number of taxpayers subject to the federal AMT, so no adjustment was made to identify those still subject to the AMT.

<sup>&</sup>lt;sup>3</sup> The 10% federal tax offset for the change in Minnesota income tax is atypical. The mix of tax increases at the top (where most itemizers are subject to the federal cap on state and local tax deductions) and decreases for most other taxpayers (whose itemizers are less likely to be subject to the cap) yields this high percentage, but the average ratio of the change in federal tax to the change in Minnesota income tax never exceeds 4.1% within any decile. The ratio exceeds 2% only in deciles 6 through 8. Overall, the ratio is only 1.2% for the bill's mix of proposed changes in state income tax. It is only 0.2% in the 10th decile and essentially zero for those in the top 1 percent. The 1.2% average ratio means that the federal tax offset – positive or negative – would average only 1.2% of the proposed changes in federal tax.

### Table 5. Dollar Change in Minnesota State, Local, <u>and Federal</u> Tax Burden Impact of Tax Proposals in H.F. 947 in 2019

(Dollars in \$1,000s)													
						U U	Federal Taxes						
						Due	то:						
						Change in	Change in	Net Change in					
					Net Change	Itemized	Itemized	Minnesota <b>and</b>					
2017					in	Deductions for	Deductions for	<b>Federal</b> Tax					
Population				Number of	Minnesota	Minnesota	Home Property	Burden					
Decile	Incom	e Ra	nge	Households	Tax Burden	Income Tax	Taxes	(\$1,000s)					
1	\$13,418	& u	inder	10%	\$ 181	\$-	\$-	\$ 181					
2	13,419	to	21,894	10%	(523)	0	0	(523)					
3	21,895	to	31,391	10%	(541)	(12)	0	(553)					
4	31,392	to	41,344	10%	(1,293)	0	(0)	(1,293)					
5	41,345	to	55,093	10%	(4,712)	8	(0)	(4,705)					
6	55,094	to	70,943	10%	(10,359)	204	(1)	(10,156)					
7	70,944	to	92,150	10%	(14,246)	642	(3)	(13,607)					
8	92,151	to	121,494	10%	(24,101)	772	(4)	(23,333)					
9	121,495	to	174,624	10%	(36,746)	614	(3)	(36,136)					
10	174,625 & over		10%	48,056	107	(1)	48,162						
ALL MINN	ESOTA HOU	SEH	OLDS	100%	\$ (44,286)	\$ 2,335	\$ (13)	\$ (41,963)					

Detail for the 1	Detail for the 10th Decile												
Lower Half	\$174,625 to \$250,362	5%	\$	(22,598)	\$	78	\$	(1)	\$	(22,521)			
Next 4%	250,363 to 598,214	4%		3,277		24		(0)		3,300			
Top 1%	\$598,215 & over	1%		67,376		6		(0)		67,382			
Full Decile	\$174,625 & over	10%	\$	48,056	\$	107	\$	(1)	\$	48,162			

### Table 6.

### Change in Minnesota State, Local, <u>and Federal</u> Tax Burden as Percent of Income Impact of Tax Proposals in H.F. 947 in 2019

-			
(Dollars	in Ś	1 000s	)

	Net Change in Federal Taxes										
						Net Change in	Federal Taxes	Net			
					Net	as Percent of Income		Change in			
					Change in	Change in	Change in	Minnesota <b>and</b>			
					Minnesota	Itemized	Itemized	<i>Federal</i> Tax			
2017				Percent of	Tax Burden	Deductions for	Deductions for	Burden as			
Population				All	as Percent of	Minnesota	Home Property	Percent of			
Decile	Incom	e Ra	nge	Households	Income	Income Tax	Taxes	Income			
1	\$13,418	& u	nder	10%	0.01%	0.000%	0.000%	0.01%			
2	13,419	to	21,894	10%	-0.01%	0.000%	0.000%	-0.01%			
3	21,895	to	31,391	10%	-0.01%	0.000%	0.000%	-0.01%			
4	31,392	to	41,344	10%	-0.01%	0.000%	0.000%	-0.01%			
5	41,345	to	55,093	10%	-0.04%	0.000%	0.000%	-0.03%			
6	55,094	to	70,943	10%	-0.06%	0.001%	0.000%	-0.06%			
7	70,944	to	92,150	10%	-0.06%	0.003%	0.000%	-0.06%			
8	92,151	to	121,494	10%	-0.08%	0.003%	0.000%	-0.08%			
9	121,495	to	174,624	10%	-0.09%	0.002%	0.000%	-0.09%			
10	10 174,625 & over		ver	10%	0.04%	0.000%	0.000%	0.04%			
ALL MINN	ESOTA HOU	SEHO	OLDS	100%	-0.02%	0.001%	0.000%	-0.02%			

### Detail for the 10th Decile

Lower Half	174,625	to 250,362	5%	-0.08%	0.000%	0.000%	-0.08%
Next 4%	250,363	to 598,214	4%	0.01%	0.000%	0.000%	0.01%
Top 1%	598,215	& over	1%	0.17%	0.000%	0.000%	0.17%
Full Decile	\$174,625	& over	10%	0.04%	0.000%	0.000%	0.04%

## **Appendix 2: Technical Notes**

### A. Assumptions about Changes in Local Property Taxes

• Local government levies will change in response to changes in state aids and credits. Standard assumptions are used by the Property Tax Division to estimate the magnitude of those changes.

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

- As explained on pages 70-71 of the 2017 *Tax Incidence Study*, the incidence of a change in the level of business taxes ("incremental incidence") will differ from the 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 21% rate, each additional \$1,000 in Minnesota tax will reduce the federal tax burden by \$210. So \$210 of the \$1,000 of Minnesota tax burden is borne by the federal government in foregone tax revenue. The burden of the remaining \$790 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 federal tax rates of 21% for corporate tax and 20% for individual income tax.
- 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 face 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 had 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 and occupation tax cuts: 36% benefits Minnesota consumers, 36% benefits Minnesota workers, less than 1% benefits Minnesota owners, and 27% benefits nonresidents and the federal government.
  - Business property tax reductions for nonresidential property (other than farms): 35% of the benefits to Minnesota consumers, 21% to Minnesota workers, 5% to Minnesota owners, and 39% to nonresidents and the federal government. For rental residential property, 55% of the benefits to renters, 23% to Minnesota owners, and 22% to nonresidents and the federal government. For tax cuts on farms, 78% of the benefits to Minnesota owners, 2% to labor, and 20% to the federal government.
  - Tax increases on flow-through businesses are assumed to be borne by the owners of such property.
  - Although technically just a change in the timing of tax, the increased limits on Section 179 expensing will have a long-run impact on tax burdens. The long-run steady state impact was estimated and included in this analysis.