# Minnesota's Modeling of Circuit Breaker Expansions 

Federation of Tax Administrators<br>Revenue Estimating and Tax Research Conference

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By
Rod Hoheisel
Minnesota Department of Revenue rod.hoheisel@state.mn.us

## Revenue Estimating Issues for Circuit Breaker Expansions

$\square$ Several proposals for major expansions of the homeowner circuit breaker program were made in the 2007 Legislative session
$\square$ Background for proposals and current program

- Difficult revenue estimating issues due to data and modeling limitations for major expansions


## State Tax Notes Article

- The Property Tax Circuit Breaker: A Survey of Current Programs by Karen Lyons, Sarah Farkas, and Nicholas Johnson (April 23, 2007)


## Rebates for Homeowners and Renters

as Percent of Total Property Tax Collections (2004)

| State | Percent |
| :--- | :---: |
| Michigan | $6.52 \%$ |
| Minnesota | $6.03 \%$ |
| New Jersey | $4.15 \%$ |
| Vermont | $3.30 \% / 8.06 \%^{*}$ |
| Missouri | $2.22 \%$ |
| Wisconsin | $1.69 \%$ |
| Montana | $1.27 \%$ |
| Maine | $1.11 \%$ |
| Pennsylvania | $0.99 \%$ |
| Dist. Of Columbia | $0.94 \%$ |
| Illinois | $0.77 \%$ |
| Maryland | $0.71 \%$ |
| New Mexico | $0.46 \%$ |
| Rhode Island | $0.34 \%$ |
| Massachusetts | $0.22 \%$ |
| New York | $0.09 \%$ |
| Oregon | $0.06 \%$ |
| Oklahoma |  |
| *pT Rebate/Education PT Payment |  |

## Homeowner Property Taxes in Minnesota

$\square$ Ranked $25^{\text {th }}-29^{\text {th }}$ * $($ depending on example) for homeowners
$\square$ Major property tax reforms in 2001 reduced overall tax levels
$\square$ Property tax levels have risen significantly since that time particularly for homeowners
*Source: 50 State Property Tax Comparison Study by Minnesota Taxpayer's Association


Change in Total Property Tax by Major Property Type:
Pay 2002 and Pay 2007
(\$000)

| Property Class | Total <br> Net Tax <br> Pay 02 | Total <br> Net Tax <br> Pay 07 | Average Annual <br> Percent Change <br> 2002-07 |
| :--- | ---: | ---: | :---: |
| Homestead | $\$ 1,867,123$ | $\$ 3,225,086$ | $11.6 \%$ |
| Non-Homestead | 152,571 | 412,531 | $22.0 \%$ |
| Apartments | 262,745 | 276,393 | $1.0 \%$ |
| Seasonal Recreational | 123,737 | 193,322 | $9.3 \%$ |
| Commercial/Industrial | $1,683,595$ | $2,051,211$ | $4.0 \%$ |
| Public Utility | 221,244 | 216,885 | $-0.4 \%$ |
| Agriculture | 275,398 | 406,971 | $8.1 \%$ |
| Total | $\$ 4,586,413$ | $\$ 6,782,399$ | $8.1 \%$ |



## Homeowner Property Tax Refunds

Fiscal Years 2002-2007


Average Refund $\$ 340$

$\$ 578$
$\$ 624$

## Property Tax Refund Eligibility

- Based on household income and amount of property tax paid on your principal home
$\square$ Homeowners qualify if total household income, after deductions for dependents, is less than $\$ 91,120$ for 2006 (adjusted for inflation annually)


## Total Household Income

## Sum of:

$\square$ FAGI

- Nontaxable social security or railroad retirement benefits
- Deductions for payments to IRA's, Keogh, SEP plans, and contributions to 401 K and deferred compensation plans
- Welfare payments, workers' compensation and veterans' benefits


## Total Household Income (Cont.)

Subtraction for dependents or elderly/disabled:

- Income is reduced based on number of dependents, e.g., $\$ 4,620$ for one dependent, $\$ 8,910$ for two dependents, up to $\$ 19,800$ for five or more dependents
$\square \$ 3,300$ if age 65 or older or disabled

Homeowner Schedule for 2006
By Various Income Levels
Step $1 \quad$ Step $2 \quad$ Step 3

| Household Income <br> After Subtractions <br> Examples | Homeowner Pays <br> $\mathbf{1 0 0 \%}$ of Tax Up to <br> this Percent of Income | Refund Equals <br> this Percent of Tax <br> (over step one) | To Maximum <br> Refund <br> Amount of: |
| :---: | :---: | :---: | :---: |
| $\$ 1,000$ | $1.0 \%$ | $85 \%$ | $\$ 1,700$ |
| $\$ 8,000$ | $1.5 \%$ | $80 \%$ | $\$ 1,600$ |
| $\$ 16,000$ | $2.0 \%$ | $70 \%$ | $\$ 1,420$ |
| $\$ 27,000$ | $2.5 \%$ | $60 \%$ | $\$ 1,300$ |
| $\$ 52,000$ | $3.0 \%$ | $55 \%$ | $\$ 1,140$ |
| $\$ 67,000$ | $3.5 \%$ | $50 \%$ | $\$ 920$ |
| $\$ 80,000$ | $4.0 \%$ | $50 \%$ | $\$ 680$ |
| $\$ 90,000$ | $4.0 \%$ | $50 \%$ | $\$ 340$ |

## Percentage of Property Tax Refund to Total Property Tax By Income With Two Dependents


${ }^{1}$ Maximum refund amounts by income.
${ }^{2}$ Distribution of property tax by income level ( OX O ), $25^{\text {th }}$ percentile $(\mathrm{O})$, median $(\mathrm{X}), 75^{\text {th }}$ percentile $(\mathrm{O})$
${ }^{3}$ Median property tax for homeowners receiving property tax refunds by income level (X)

Baseline FY 2007
Homeowners Receiving Property Tax Refunds

| Gross Income <br> Category | Filers | Percent <br> of <br> Filers | Average <br> Tax <br> Before PTR | Average <br> Refund | Average <br> Tax <br> After PTR | PTX -Income <br> Ratio <br> without PTR | PTX - Income <br> Ratio <br> after PTR | Number <br> at <br> Maximum | Percent <br> at <br> Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 00-\$ 10,000$ | 23,400 | $7 \%$ | $\$ 1,450$ | $\$ 940$ | $\$ 510$ | $26.8 \%$ | $9.4 \%$ | 5,420 | $23 \%$ |
| $\$ 10,000-\$ 20,000$ | 52,600 | $15 \%$ | 1,410 | 800 | 610 | $9.2 \%$ | $3.9 \%$ | 7,860 | $15 \%$ |
| $\$ 20,000-\$ 30,000$ | 63,600 | $19 \%$ | 1,650 | 690 | 960 | $6.6 \%$ | $3.8 \%$ | 7,390 | $12 \%$ |
| $\$ 30,000-\$ 40,000$ | 65,800 | $19 \%$ | 1,890 | 600 | 1,290 | $5.4 \%$ | $3.7 \%$ | 6,080 | $9 \%$ |
| $\$ 40,000-\$ 50,000$ | 57,400 | $17 \%$ | 2,140 | 530 | 1,610 | $4.8 \%$ | $3.6 \%$ | 5,020 | $9 \%$ |
| $\$ 50,000-\$ 60,000$ | 40,300 | $12 \%$ | 2,460 | 480 | 1,980 | $4.5 \%$ | $3.6 \%$ | 3,950 | $10 \%$ |
| $\$ 60,000-\$ 70,000$ | 23,000 | $7 \%$ | 2,890 | 440 | 2,450 | $4.5 \%$ | $3.8 \%$ | 2,870 | $12 \%$ |
| $\$ 70,000-\$ 80,000$ | 10,600 | $3 \%$ | 3,520 | 420 | 3,100 | $4.7 \%$ | $4.2 \%$ | 1,860 | $17 \%$ |
| $\$ 80,000$ or more | 6,500 | $2 \%$ | 4,190 | 340 | 3,850 | $4.8 \%$ | $4.4 \%$ | 2,150 | $33 \%$ |
| Total | 343,200 | $100 \%$ | $\$ 2,010$ | $\$ 620$ | $\$ 1,390$ | $5.5 \%$ | $3.8 \%$ | 42,580 | $12 \%$ |





## Property Tax Refund Model

## Baseline Model Includes:

$\square$ Most recent year filing data
$\square$ Formulas by household income level for percentages of income and property tax refund thresholds, and maximum refunds
$\square$ Projected growth in incomes (metro vs. non-metro, and seniors vs. non-seniors)
$\square$ Projected growth in homestead property taxes (residential homesteads vs. farm homesteads)

## Legislative Proposals - Two Types

## 1) Change parameters for current filers:

$\square$ Modify property tax refund percentages
$\square$ Modify maximum refund levels

- Modify senior/dependent subtractions



## Legislative Proposals - Two Types (Cont.)

## 2) Significant expansions in eligibility and refund amounts:

Example One: Additional circuit breaker to refund property tax exceeding $4 \%$ of income

- Proposed by Senior Federation and intent is to alleviate the highest burdens of the tax relative to income
- Expensive - around $65 \%$ increase in costs
- Eligibility - around $50 \%$ increase in number of filers
- Assumed participation would increase to $80 \%$

Percentage of Property Tax Refund to Total Property Tax By Income With Two Dependents Impact of Proposal for 4\% Cap on Net Tax As Percent of Income


## Example 1 (cont.)

- With 2 dependents, increases go only to those currently at the maximum PTR cap or above the income threshold.
- This is not generally true, though, as illustrated for zero dependents on the next slide.


## Legislative Proposals - Two Types (Cont.)

2) Significant expansions in eligibility and refund amounts: (Example 1 Cont.)

Alternative proposals (less costly)

- Refund tax exceeding $5 \%$ or $6 \%$ of income
- Age limitations (over 65)
- By age and occupancy (e.g., 15 or more years of ownership)
- Income limitations

Legislative Proposals - Two Types (Cont.)
2) Significant expansions in eligibility and refund amounts: (Cont.)
Example Two: New circuit breaker program extending to higher incomes (e.g., $\$ 150,000$ or $\$ 175,000$ ) would replace existing program.
Maximum refund increased to $\$ 2,450$.

- Income threshold of $2 \%$ for all income levels (currently $1 \%-4 \%$ ) and intent is to further target relief and base more on income
- Also, phases-out current market value homestead credit (now on property tax statement)


## Legislative Proposals - Two Types (Cont.)

2) Significant expansions in eligibility and refund amounts: (Cont.)

Example Two: (Cont.)

- Creates winners and losers and expensive over $200 \%$ increase in costs
- Eligibility - because homeowners are required to apply for the market value credit during the phase-out, participation is assumed to increase to $95 \%$


## Data Available for Modeling Expansions

- Parcel level property tax data for homeowners (with SSN) from counties
- File match of income tax data for homeowners to parcel level property tax data
- Tax incidence study file data (sample)
- Includes property tax for homeowners for base year 2004
- Total cash income for household


## Estimation Difficulties

- Tax incidence database
- Old 2004 base year data (2002 until 3/1/07 incidence study updates)
- Incidence income definition less comprehensive than total household income for PTR
$\square$ Revenue estimates needed for FY 08 to FY 11


## Estimation Difficulties (Cont.)

$\square$ Growth projections and growing data file information over numerous years

- Merging processing information with incidence file information for program expansions
- Predicting new participation levels


## Circuit Breaker Programs

- Efficient way to target tax relief based on ability to pay
- Particularly benefits seniors and other homeowners where need is greatest (lower incomes but relatively high property taxes)
$\square$ May become bigger issue with demographics and increased reliance on property tax

