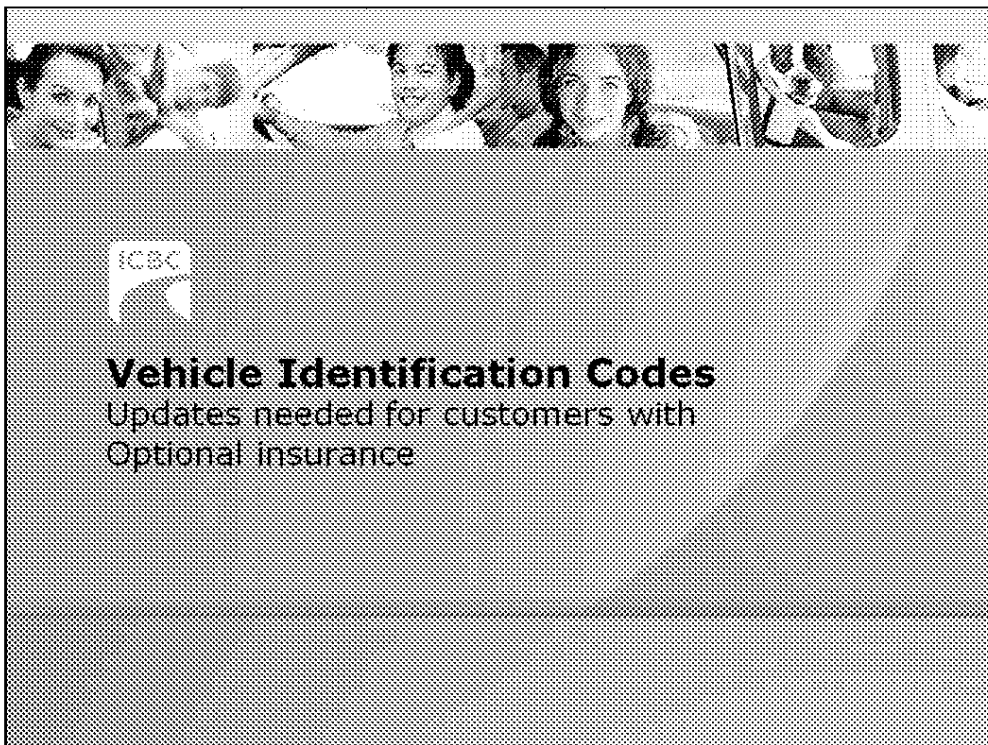


Obtained by Bob Mackin via Freedom of Information
bob@bobmackin.ca
twitter.com/bobmackin



Timeframe

- Customer data available
 - 10 years
 - Customer policy data

We know what we are calling the policy data

- Who
- What vehicle
- Type of coverage
- \$ spent

End result of the calculation

Timeframe

- Historic VIC to Rate Group tables available
 - 7 years
 - Used for estimating
 - Change between rate group estimated at 12%

2

Started project needed to define the problem to get an idea of the size both in customers affected and in dollars.

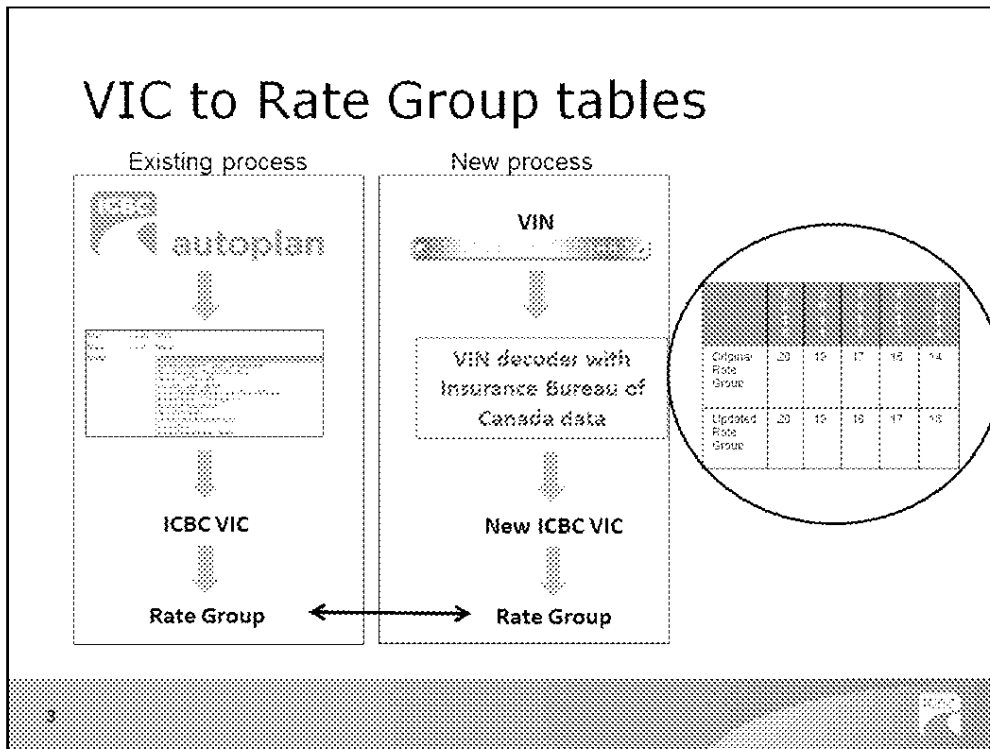
We used the Historic VIC to Rate group tables to be able to determine what rate group would be produced when the new customer's VIC was substituted in the old transaction.

It was an iterative process and we started working backwards from 2013.

To get an idea of the size in dollars we used an estimate of 12% difference between individual rate groups.

These were the numbers requested by the governance committee for 1, 5 and 7 years.

VIC to Rate Group tables



I've shown you this slide before. It's the process we used to identify the incorrect VICs. For this process we needed the VIC table.

We have VIC to Rate Group tables back for 7 years.

Calculation

- To find the actual changes in the Rate Groups at the individual customer level, we require the following for each year a policy was in effect
 - Algorithm
 - Rating tables


Once we were given the direction to proceed with seven years

The next step was to take those estimates and bring them down to the individual customer level

We started determining the requirements to calculate the impact at the individual customer rather than the 12% rate group estimate change.

To redo the past transaction not only do we need the rate group which would have been chosen by using the correct VIC we also needed:

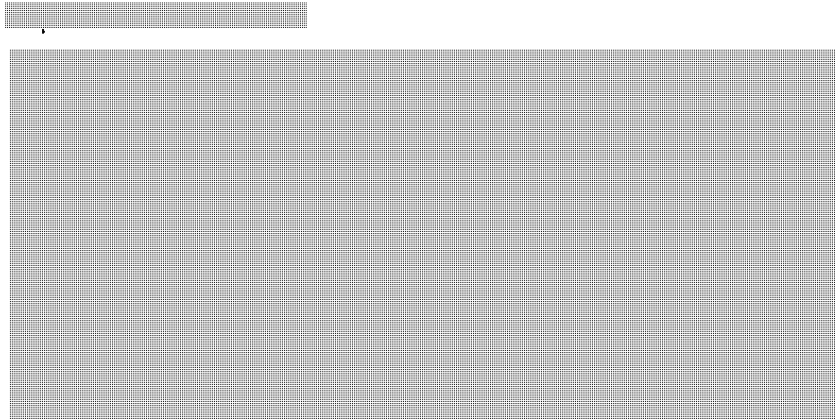
How we calculate premiums

- All coverages use a base premium of 
- Apply rating variables
 - Rate group
 - Deductible
 - Rate class
 - Rate class group
 - Territory
 - Sub territory
 - Claims-rated scale

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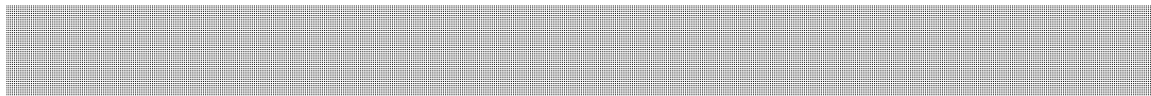
Algorithm

- Example: Comprehensive coverage



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So for just the portion of a customer's comprehensive coverage:



Each of those factors contain combinations of the rating variables previously highlighted.

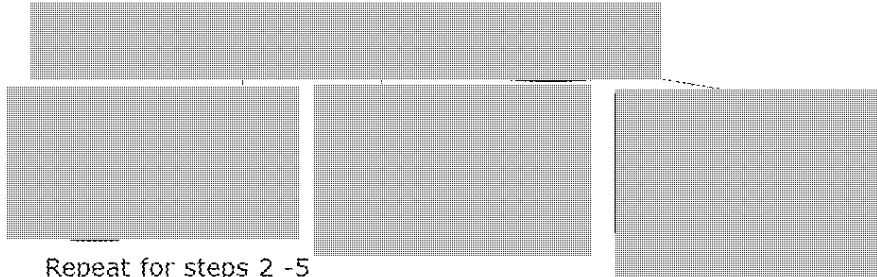
These rating variables can be interdependent, each of the brackets show the interdependencies under the comprehensive coverage

The algorithm shows which rating variables to add and subtract and their interdependencies. Its the equation.

Rating tables

- Once algorithm is known, need to apply rating tables for weighting

Example: Comprehensive coverage

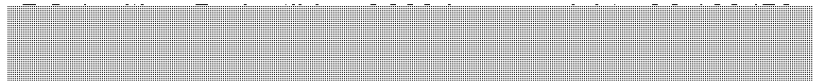


Repeat for steps 2 -5

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Each rating variable or factors also has a weighting. The weightings change on things like deductible chosen.

In the example the first factor



These are the rating tables.

To be able to complete the original transaction and compare apples to apples we need both the algorithm and the rating tables.

Timeframe

- Algorithm
 - Do not have prior to July 1, 2008
- Rating tables
 - Missing tables prior to July 1, 2008

Rating tables available to July 1, 2008 (ties back to rate change)

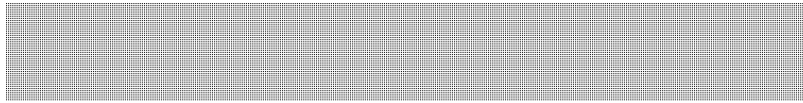
Algorithm available to July 1, 2008 (ties back to same rate change)

We don't have these tools is that when we implemented NRUE (new rating and underwriting engine) in 2011, we only built in data from July 1, 2008. This was because the data had to be reengineered to fit into the new system.

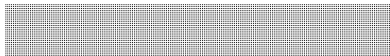
Three years was determined as the scope for the project because the frequency that we used the data dropped of substantially after three years. It was also very difficult (time and cost) to convert the algorithm and rating tables for the new system.

Options

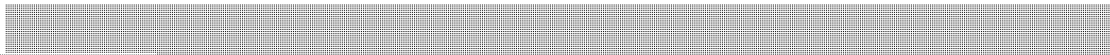
- Options



or



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Timeframe

- Considerations:

[REDACTED]

[REDACTED]

[REDACTED]

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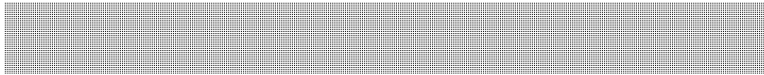


[REDACTED]. Need to investigate further.

[REDACTED]

Recommendation

- Full understanding of the solution requirements for individual customer level :
 - Data required and available
 - Tools required and limited availability
- Recommendation



14



Previously management has not made recommendation

We now fully understand the solutions requirements and what's available:

Data

- Customer policy data available for 10 years
- Historical VIC to rate group tables available for 7 years

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Tools

- Algorithm and rating tables available to July 1, 2008



Key facts on vehicle description updates

1. How many customers overpaid?

On average per year

- On average 40,000 (1.8 per cent) optional insurance customers per year overpaid on a portion of their optional insurance.

Over six years

- Approximately 240,000 optional insurance customers over the last six years had an incorrect vehicle description in ICBC's system which resulted in an overpayment on a portion of their optional insurance.

Average cost per customer per year

- The average reimbursement per customer is approximately \$21 per year.

Total cost of reimbursements

- ICBC anticipates the cost to reimburse customers who overpaid over the six years will be approximately \$36 million.

2. How many customers underpaid?

On average per year

- On average 58,000 (2.7 per cent) optional insurance customers each year underpaid on a portion of their optional insurance.

Over six years

- Approximately 350,000 of optional insurance customers over the last six years had an incorrect vehicle description in ICBC's system which resulted in an underpayment on a portion of their optional insurance.

Average cost per customer per year

- The average underpayment per customer is approximately \$34 per year. They will not be charged the difference for prior years.

Total cost of underpayments

- ICBC anticipates the cost of underpayments over the six years was approximately \$71 million.

3. How many customers are not affected?

- Approximately 95.5 per cent of customers were not affected.
 - ICBC had more than three million optional insurance customers over the last six years.

Key facts on vehicle description updates

4. What are the project costs?

Project costs are provisioned up to \$4 million. Below is a breakdown of current estimated costs for major items, it does not include all project costs.

\$2,000,000+ Estimated total staffing costs
*ICBC tracks employee time and assigns it to projects, similar to the private sector.
A dedicated team of more than 100 highly-skilled technical resources are assigned full-time to complete this complex project. They are checking 24 million optional insurance transactions over the last six years and implementing system changes.*

\$600,000+ Production of letters (*postage, printing and materials*)

\$100,000 Technology expenses

Various other costs are yet to be determined, as work continues to check vehicle descriptions for all customers and identify individual impacts. A contingency has also been set aside.

Project costs do not include the cost to reimburse customers. Costs are being paid from the optional side of ICBC's business and will have no impact on rates.



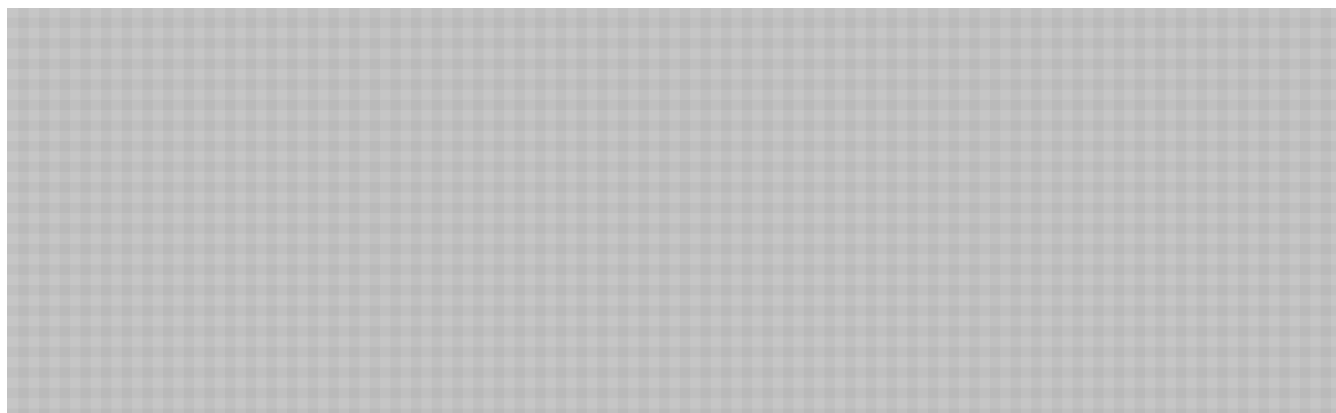
ISSUES NOTE

CONFIDENTIAL – ADVICE TO MINISTER

Vehicle description updates and optional reimbursements

DATE: APRIL 11, 2014

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Background:

- ICBC is in the process of checking the vehicle descriptions for its more than 3 million customers to make sure they paid the correct amount for their optional insurance.
- ICBC is working to update vehicle descriptions for affected customers, including looking back over the last six years to July 1, 2008, to reimburse customers who paid too much for their optional insurance.
- Approximately 40,000 (1.8 per cent) optional insurance customers each year had an incorrect vehicle description in ICBC's system which resulted in an overpayment on their optional insurance. The average reimbursement per customer is approximately \$21 per year. See Appendix for details.
- Approximately 58,000 (2.7 per cent) optional insurance customers each year had an incorrect vehicle description in ICBC's system which resulted in an underpayment on their optional insurance. The average underpayment per customer is approximately \$34 per year. They will not be charged the difference for prior years.
- 95.5 per cent of customers are not affected.
- Customers who purchase basic insurance only, and the vast majority of ICBC's customers who purchase basic and optional insurance, are not affected.
- The incorrect vehicle descriptions were identified as part of ICBC's move to a new computer system for its insurance business.
- Given the complexity of checking 24 million individual transactions, ICBC is still working to identify individual customer impacts. This process is expected

ICBC ISSUES NOTE – ADVICE TO MINISTER

to take until July, at which time ICBC will be communicating with financially impacted customers and providing reimbursement cheques to those who have overpaid.

- ICBC has met with the Fairness Commissioner and has engaged PWC in this issue. The Fairness Commissioner supports ICBC's approach with customers and PWC has audited the numbers to date and the solutions.
- ICBC is checking the vehicle descriptions for the last six years to July 1, 2008. This includes vehicles a customer currently insures, up until their expiration date.
- ICBC is going as far back as its insurance system is able to accurately recalculate historical premiums for customers.
- ICBC will reimburse customers who paid too much for their optional insurance Reimbursements include interest. Customers who paid too little, you will not be charged the difference for prior years.
- Reimbursements are being paid from the optional side of ICBC's business and will have no impact on rates. A provision was made in ICBC's 2013 budget to cover costs.
- Costs are estimated at \$36 million for reimbursements, \$3 million interest payments, \$4 million project costs.
- Many of ICBC's key systems are at the end of their life and the difficulties brokers have experienced with the current insurance system are a clear example of why they need to be upgraded. That's why ICBC has been investing in much-needed systems upgrades including a new insurance computer system, scheduled to be complete in 2015.

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Director, External
Communications &
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ICBC ISSUES NOTE – ADVICE TO MINISTER

Appendix:

- Estimates based on analysis to date:
 - ICBC had more than 3-million optional insurance customers over the last six years.
 - 95.5 per cent of customers were not affected.
 - Customers who purchase basic insurance only, and the vast majority of ICBC's customers who purchase basic and optional insurance, are not affected.
 - Approximately 40,000 (1.8 per cent) optional insurance customers each year had an incorrect vehicle description in ICBC's system which resulted in an overpayment on their optional insurance.
 - Approximately 58,000 (2.7 per cent) optional insurance customers each year had an incorrect vehicle description in ICBC's system which resulted in an underpayment on their optional insurance. They will not be charged the difference for prior years.
 - The average reimbursement per customer is approximately \$21 per year.
 - The average underpayment per customer is approximately \$34 per year.
 - The average annual premium for basic and optional is \$1,100.