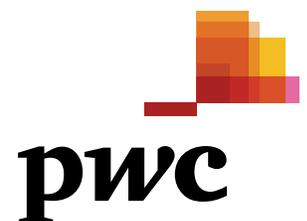




Operational Review:

The Insurance Corporation of British Columbia

January 2018



Contents

Glossary of Terms.....	3	Finance.....	46
Notice to Reader.....	6	Overview.....	46
Executive Summary.....	7	Accounts Payable.....	46
ICBC's Operating Environment.....	7	Vendor Management.....	46
Operational Review Scope and Approach.....	9	Reception of Invoices and Approval.....	47
Key Findings.....	10	Processing and Payment of Invoices.....	47
Claims.....	10	Accounts Receivable.....	47
Finance.....	11	Budgeting, Forecasting and Reporting.....	48
Driver Training Compliance.....	11	Budgeting.....	48
Estimated Net Savings.....	11	Forecasting.....	48
Introduction to the Operational Review.....	13	Reporting.....	49
Purpose.....	13	Summary of Observations: Finance.....	49
Context.....	14	Driver Training.....	50
Scope.....	18	Overview.....	51
Business Lines and Functions Analyzed.....	18	Monitoring and Measuring Schools.....	52
Approach and Report Structure.....	19	Driver Training Compliance.....	54
Current State Review of Operations.....	19	Summary of Observations: Driver Training.....	55
Opportunities for the Future.....	20	Interview Outcomes.....	56
Benefits and Implementation Considerations.....	20	Review of Past Recommendations.....	57
Current State Findings.....	21	Initiatives.....	59
Claims.....	21	Overview.....	59
Overview.....	21	Initiative: Optimize Vendor Management	
Initiation.....	22	and Strategic Sourcing.....	59
Assessment.....	25	Initiative: Improve Salvage	
Claims Adjudication: FNOL Retained.....	25	and Subrogation Management.....	64
Claims Adjudication: Material Damage & Salvage.....	25	Initiative: Shifting to a Proactive Injury Care	
Claims Adjudication Accident Benefits		Recovery Model.....	68
(First Person Liable).....	27	Initiative: Shift to a More Supportive Claimant Customer	
Claims Adjudication Bodily Injury Tort.....	30	Experience.....	72
Vendor Management.....	32	Initiative: Enhance Automation and Predictive Analytics.....	75
Vendor Management – Injury Claims.....	33	Additional Considerations.....	78
Vendor Management – Material Damage.....	34	Finance.....	78
Subrogation.....	35	Driver Training.....	79
Fraud.....	36	Implementation Timeline.....	81
Fraud Investigative Claims Team.....	36	Total Benefits Summary.....	82
Fraud SIU.....	38		
Settlement.....	39		
Claims Payment.....	39		
Summary of Observations: Claims.....	40		
Claims: File Review.....	43		
Closed File Review.....	43		
Approach.....	43		
Key Findings.....	44		
Material Damage Estimate Review.....	45		
Approach.....	45		
Key Findings.....	45		

Glossary of Terms

Term	Description
AB-Only	<i>Accident Benefits-Only</i> – Type of injury claim that provides drivers with compensation for injuries sustained from the accident where the claimant is the first party. Coverage includes medical and rehabilitation costs, wage losses, funeral and death reimbursements. ICBC provides up to \$150,000 in medical and rehabilitation costs to drivers and passengers, even if the driver was at fault.
Basic Autoplan Insurance	ICBC Basic Autoplan is the mandatory coverage needed for a vehicle in British Columbia. Basic coverage includes third party liability coverage, accident benefits, underinsured motorist protection, hit-and-run coverage and inverse liability protection.
Basic Insurance Third Party Liability	ICBC generally provides coverage up to \$200,000 when the at-fault driver in a crash receives a bodily injury claim against them.
BI	<i>Bodily Injury</i> – Type of injury claim that provides drivers with compensation for injuries sustained from the accident where the claimant is the third party. Given the tort environment in BC, claimants can elect to be represented by external counsel for BI claim settlement or choose to remain unrepresented.
CCAT	<i>Claims Contact Assessment Team</i> – A group of claims adjusters that reside within the Claims Contact Centre. These adjusters can adjudicate the files requiring more investigation in order to resolve liability that are retained within the Claims Contact Centre.
CCC	<i>Claims Contact Centre</i> – Physical locations where Customer Service Adjusters (CSAs) answer phone calls from claimants during FNOL (first notice of loss).
CEF	<i>Central Estimating Facility</i> – ICBC owned vehicle estimating facility. A number of ICBC estimators work from this location to determine the extent of damages on non-drivable vehicles and proposed value of a vehicle after an accident.
Claims Leakage	Claims leakage is the difference between the actual claims payment made and the amount that should have been paid if all leading practices were followed.
CSA	<i>Customer Service Adjuster</i> – Claims adjusters that conduct initial triage of claims and adjudicate low complexity claims. CSA's have the ability to initiate the claim file, collect FNOL information, and adjust low complexity claims that are resolved at the CCC.
CSAT Score	A numerical measure of customer satisfaction with a specific touchpoint (e.g., product, transaction, interaction, etc.) with a company.
DLIC	Driver Licensing Investigations and Compliance.

Glossary of Terms Cont.

Term	Description
DSI	Driving School Inspector.
DTIS	Driver Training Industry Support.
FNOL	<i>First Notice of Loss</i> – The initial report of a claim made to an insurance provider following a loss, theft, or damage to an insured asset. FNOL is normally the first step in the formal claims process lifecycle.
FNOL Retained	<i>First Notice of Loss Retained</i> – Claims, both material damage and injury, that are retained by the CCC for adjudication. The types of claims that can be retained: material damage claims that are low risk and low complexity and AB-only (i.e., no missed work) claims.
Guidewire ClaimCentre	Guidewire is a company that offers a suite of insurance applications that support insurance carriers with processes across the entire claims lifecycle. ICBC uses ClaimCentre, Guidewire’s end-to-end management solution for claims intake, adjudication and reporting.
ICT	<i>Investigative Claims Team</i> – A fraud management group within bodily injury claims that identifies potentially fraudulent claims and escalates cases to the SIU (special investigations unit) if further investigation is required.
KPI	<i>Key Performance Indicator</i> – Quantitative or qualitative metrics that are used to demonstrate how effective a group was in achieving their objectives.
MD	<i>Material Damage</i> – Type of a vehicle damage claim that provides drivers with compensation for material damages sustained from an accident. Coverage includes collision repair costs, total losses, glass repair and replacement, towing and storage and rental vehicles.
NetReveal	A software tool used within the auto insurance industry to flag potentially fraudulent claims by examining connections between historical data in claims.
Optional	In addition to Basic Autoplan Insurance, drivers in British Columbia have the option to purchase Optional Insurance. ICBC’s Optional Insurance policies provide additional coverage beyond the Basic Autoplan Insurance policy for three primary products: extended third party liability, collision and compensation.
Recovery Services	A group of claims adjusters that handle specific types of AB-only claims.
Represented	Bodily injury claims where the claimant retained legal representation. Represented claims proceed through the stages of litigation in British Columbia’s tort system. At ICBC, Senior Injury Adjusters, Claims Examiners and Senior Claims Examiners handle represented claims. A bodily injury claim can have AB component and represented BI component.

Glossary of Terms Cont.

Term	Description
Salvage	Salvage is used to describe damaged vehicles that have been deemed not cost effective to repair and are typically stored at one of ICBC's salvage yards and sold.
SIU	<i>Special Investigation Unit</i> – A dedicated ICBC department that investigates misconduct, fraud, criminal and provincial offences against the corporation.
SLA	<i>Service Level Agreement</i> – Contracts between ICBC and vendors who provide services to ICBC and claimants. The agreements define the cost, quality, availability of the services provided, and also include responsibilities for each contracting party.
Straight Through Processing (STP)	The automation of defined workflow processes for the systematic adjudication of claims through to settlement.
Subrogation	The inbound and outbound pursuit of damages or submission of debts for claims that have occurred between ICBC and out-of-province drivers insured by a third party, or non-insured drivers.
Tort	A tort is a civil wrong that causes someone else to suffer loss or harm resulting in the grounds for lawsuits against the person who committed the wrongful act, requiring them to compensate the grieving party for any damages or injuries suffered.
Triage	The process of assigning a claim to staff based on its segmentation. Once a claim is reported at FNOL, it is triaged by exposure type – AB, BI Unrepresented, BI Represented and Material Damage.
Unrepresented	Injury claims where the claimant does not seek legal representation. At ICBC, these claims are handled by Injury Adjusters. Both AB and BI claims can be unrepresented.

Notice to Reader

This Report is issued by PricewaterhouseCoopers LLP (“PwC”) for the exclusive use of the Ministry of the Attorney General of British Columbia (the “Ministry”) in connection with its performance review of the Insurance Corporation of British Columbia (“ICBC”).

Our work did not constitute an audit conducted in accordance with generally accepted auditing standards, an examination of internal controls nor attestation nor review services in accordance with the standards established by the Chartered Professional Accountants of Canada. Accordingly, we do not express an opinion nor any other form of assurance on the financial or other information, or operating internal controls, of ICBC.

PwC did not examine, compile or apply agreed upon procedures to satisfy the requirements of the Chartered Professional Accountants of Canada to the financial information used in this Report and we therefore are unable to express assurances on such information except where expressly stated in the Report to form part of the scope of our work.

Further this Report does not constitute an opinion as to legal matters, including the interpretation of the Insurance Corporation Act or any other similar matters. The economic impact of the various options is also outside the scope of PwC’s work.

Our work is based primarily on the information and assumptions listed in the body of this Report. While we read information from various sources we did not perform checking or verification procedures except where expressly stated in the Report to form part of the scope of our work. Our work and commentary is subject to assumptions, which may change with the benefit of further detailed information. We make no representation regarding the sufficiency of our work and had we been asked to perform additional work, additional matters may have come to our attention that would have been reported to the Ministry.

Some of the documents and figures we reviewed were produced by third parties. We did not corroborate or verify these documents and figures with these parties. It is outside the scope of our review to evaluate the methodology used to conduct independent studies; therefore, we have accepted the information as presented, including conclusions. Furthermore, Government established the scope of this review and it did not contemplate PwC engaging directly with stakeholders. Any external stakeholder comments or information about any ICBC-related issue, including the operational review, were shared with the Province directly.

The outputs of the Report are intended to provide the Ministry with information to assist in informing their decision-making process pertaining to ICBC. PwC accepts no liability in respect of any loss, damage or expense of whatsoever nature caused by any use the reader may choose to make of this Report, or which is otherwise consequent upon the gaining of access to the Report by the reader.

Our Report, including schedules and appendices, must be considered in its entirety by the reader. Selecting and relying on specific portions of the analyses, or factors considered by us in isolation may be misleading.

Executive Summary

ICBC's Operating Environment

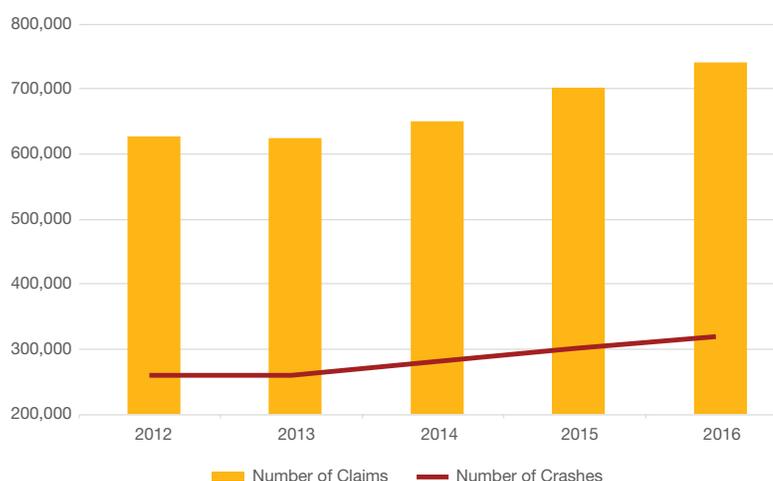
The Insurance Corporation of British Columbia ("ICBC"), a provincial crown corporation, was created in 1973 with a mandate to provide Basic and Optional vehicle insurance for BC motorists. ICBC is the sole provider of the mandatory Basic insurance product which is regulated by the British Columbia Utilities Commission ("BCUC"). ICBC also sells Optional auto insurance in a competitive marketplace.

Over the past several years, most jurisdictions in North America, Europe and Australia have experienced a significant increase in vehicle crashes and claims. ICBC has experienced a similar trend. Between 2012 and 2016, ICBC claims costs have increased by 58 percent, primarily due to:

- Increasing frequency (number of claims) and severity (cost of claims)
- Increasing number of claims per crash
- Significantly higher vehicle repair costs primarily due to embedded technology and more expensive materials
- Significantly higher bodily injury claims costs due to increased complexity of bodily injuries
- Increasing exaggerated and fraudulent claims
- Increasing incidents of distracted driving
- Increasing legal representation, including an increasing portion of claimants being represented at First Notice of Loss

Claims costs that include bodily injury costs and material damage costs represent the vast majority of ICBC's costs. With the pronounced trend in increased claims costs, insurance premiums collected by ICBC no longer cover the claims costs. This has resulted in significant financial losses in 2015/2016 and is impacting ICBC's long term projected financial stability.

Number of Claims vs Accidents in BC



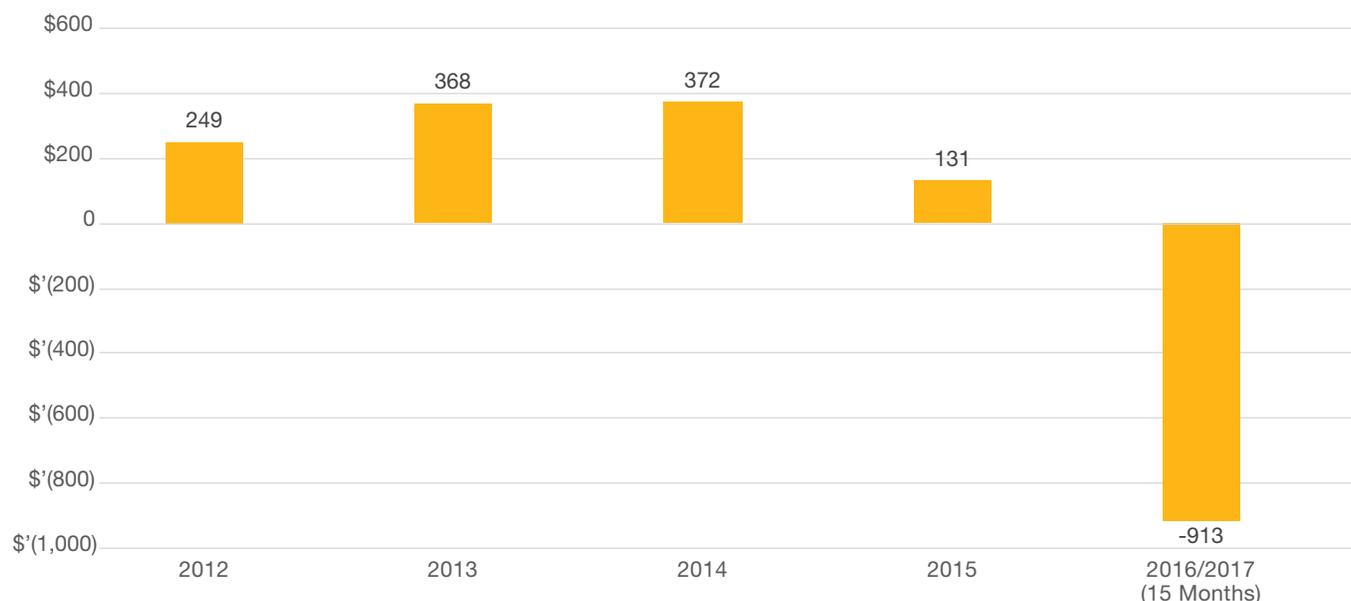
Source: ICBC

Net Incurred Costs for Claims



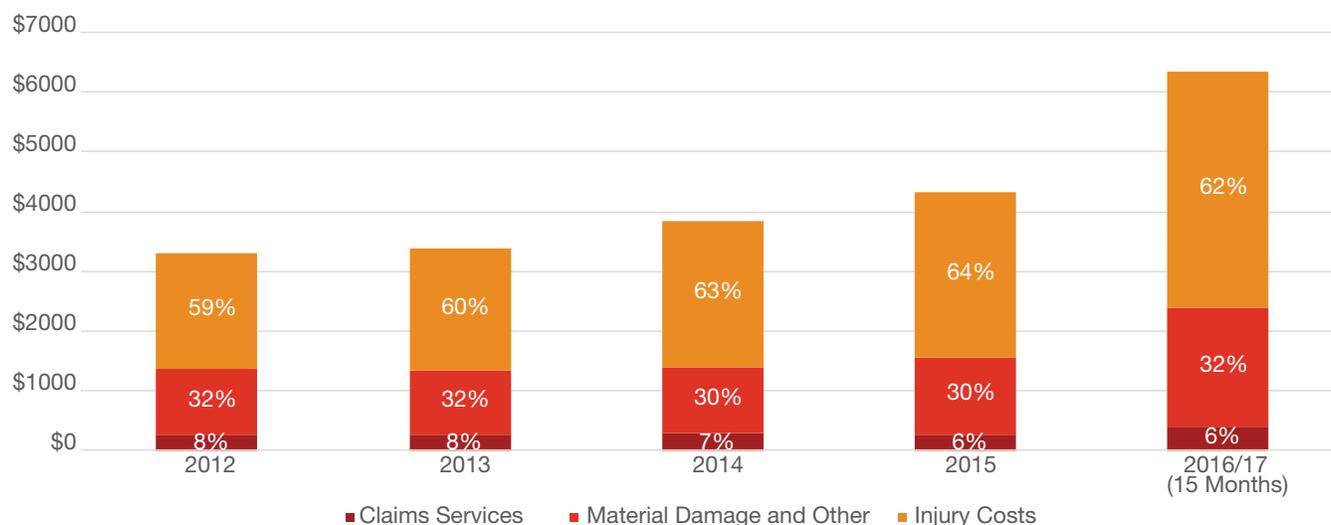
Source: ICBC

ICBC Summary Financial Outlook Net Income \$ Millions (Loss)



Source: ICBC

Claims Costs as a % of Total Spend



Source: ICBC

In order to manage costs and mitigate the pressure on insurance premium increases, other jurisdictions in Canada and abroad have undertaken major changes, such as increasing traffic safety, insurance product reform and shifting away from the litigation-based model to some form of no-fault model.

The Province of BC and ICBC have also undertaken a number of third party or external reviews, cost reduction initiatives and stricter driving enforcement. Despite ICBC's continuing efforts to identify and moderate claims costs within its control, claims costs are expected to continue to outpace premium revenues and investment income resulting in a financial outlook involving increasing substantial financial losses in the foreseeable future. Given the magnitude and the continued negative trending of the financial losses, substantial reform of the BC auto insurance system is required to address the structural issues.

The Ministry of Attorney General (the “Ministry”), which has responsibility for ICBC, has initiated a review of the operations of ICBC to ensure that it is providing effective programs, functions and services to ratepayers and to identify potential areas of opportunity. This Operational Review (the “Review”) which is focused on the ICBC operational components, is only part of the required BC auto insurance system structural reforms, but is a critical element as part of and in support of the broader initiatives required for financial sustainability.

Operational Review Scope and Approach

The Ministry has engaged PricewaterhouseCoopers LLP (“PwC”) to undertake the independent Operational Review to:

- Identify opportunities to improve operational cost efficiencies
- Assess cost effectiveness of ICBC’s programs and functions
- Identify any further significant operational cost savings

With these objectives in mind, recommendations are to be designed to maintain or improve quality service levels for ICBC customers.

The Review focused on the Claims, Finance and Driver Training Compliance business areas, as the Ministry identified those as areas of the greatest of opportunity to manage costs. Previous external reviews have covered other areas of the organization extensively. PwC used a structured five-phase approach to undertaking the evidence-based Review as follows:

1. **Planning and Kickoff** – Tasks and timelines were identified and scheduled in a Project Plan.
2. **Current State Review** – As part of the data gathering and fact-finding, PwC interviewed a cross-section of over 40 ICBC management and unionized staff including representatives identified by MoveUp, conducted file reviews of over 100 for each of closed claims files and completed material damage estimates, and reviewed recommendations from external reviews conducted from 2012 to 2017. PwC also applied its proprietary Insurance Operations Capability Model to assess ICBC’s operational performance for the in-scope business areas relative to leading practices of the Canadian and international automobile insurance market.
3. **Capabilities and Opportunities** – Analysis of the current state capabilities was conducted to assess the cost effectiveness of ICBC’s programs and functions and to identify and prioritize opportunities to improve operational efficiencies while maintaining or improving quality levels of service for ICBC’s customers.
4. **High Level Cost Benefit Analysis and Implementation Considerations** – 20 improvement opportunities were validated, prioritized and categorized into a number of implementable initiatives. For each initiative, costs, benefits, dependencies, implementation considerations, and cross impacts on other provincial programs and resources were identified.
5. **Implementation Approach and Final Report** – Developing key recommendations including a timeline by key initiative, as a way forward for ICBC to achieve the desired changes across the organization.

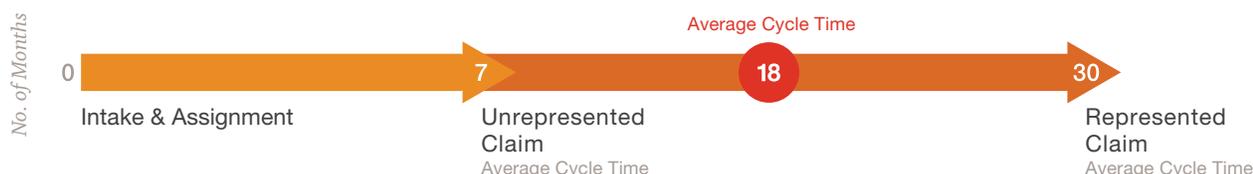


Key Findings

The summary findings for the current state of the three business areas (Claims, Finance and Driver Training Compliance) are that **the processes and the way ICBC is organized to deliver these services, based on the current service model, are generally cost efficient. In most cases, current state operations are performing at or above our view of industry average performance. However, there still exist some opportunities to change the claims service model to make it more cost effective. These opportunities will not address ICBC’s revenue shortfall but will contribute to improving operations in line with the industry.**

Claims

Our review of the claims intake function noted that in general, newly reported claims are assigned to an adjuster within 24 hours and this is in line with leading practices. Furthermore, we reviewed the volume of claims pending which refers to a claim that has been reported and the handling has been initiated by the adjuster. Claims remain pending for the duration that a claimant is receiving treatments for injuries, or their vehicle is being repaired, and the claim settlement is deliberated upon. The average settlement cycle time is currently 18 months for a bodily injury claim. The average settlement cycle time for an unrepresented bodily injury claim is seven months, and for a represented bodily injury claim is over 30 months. This is illustrated below:



ICBC has recently made significant efforts to reduce claim duration and reduce claims pending by increasing the number of injury adjusters (up from 555 in 2011 to 660 in 2016). The current volume of claims pending files is in line with expectations given ICBC’s unlimited tort auto insurance product environment.

In general, based on the current claims service model, the administration of ICBC’s claims is cost efficient and has improved from 8% of total claims cost in 2012 to 6% in 2016. A number of opportunities to further improve the claims service delivery model and management of injury and material damage costs have been identified that could lead to a reduction in overall claims costs while maintaining or improving quality service levels for ICBC customers. These have been categorized and summarized into the following five broad initiatives for ease of implementation:

- 1. Optimizing vendor management and strategic sourcing** – make changes to how ICBC manages vendors including material damage vendors such as auto repair which accounted for nearly ~\$850 million of spend in 2016, and, injury vendors, such as medical providers, which accounted for ~\$284 million in spend for 2016. This would include better leveraging ICBC’s purchasing power, adopting leading practices for strategic sourcing, segmentation of vendors, and governing relationships with vendors based on quality of service standards, and incentivizing innovation for cost efficiencies.
- 2. Improving salvage and subrogation management** – to establish enhanced procedures and protocols with the overarching goal of improving the quality and quantity of recoveries from salvage (non-repairable vehicles), and/or subrogation (at-fault or out-of-province third parties).

3. **Shifting to a proactive injury care recovery model** – to provide claimants with the most effective care model to expedite and optimize recovery, similar to the worker compensation boards’ approach to recovery and injury rehabilitation with a focus on timely recovery to return to work. ICBC can provide and encourage claimants to take advantage of injury treatment options and access to recommended treatment plans specific to their respective injury(s) and ongoing guidance and support from the adjuster(s) to optimize and accelerate the rehabilitation/recovery process. This will benefit the claimants with faster and better recovery outcomes and reduce overall claims costs through more effective use of medical providers.
4. **Shifting to a more supportive claimant customer experience** – this is a key enabler for the achievement and sustainment of the other initiatives. Augmenting strategies and refining customer/claimant interactions and communications to better support honest reporting of claims information; enhancing the claimant’s understanding of the claim process and their role in achieving positive outcomes; providing information and options for claimants to make more informed and better choices; better adherence to effective treatment plans; improved claimants understanding of the benefits of working with ICBC; and, increased transparency of the claims process. No benefits have been directly attributed for this enabler as it is considered to be encompassed within the other initiatives.
5. **Enhancing automation and predictive analytics** – this can be accomplished by leveraging the significant investment ICBC has already made in technology to further reduce or eliminate manual tasks through use of robotic automation technology and continuing to enhance the use of ICBC’s access to extensive province-wide and historical data to identify future trends, potential fraud, and provide more forward-looking information. This additional capacity created by using automation can then be redeployed to further focus on improving customer experience and claims handling.

Finance

The key Finance functions: Accounts Payable, Accounts Receivable and Budgeting, Forecasting and Reporting – all have structured processes in place and are generally cost effective. There are a number of opportunities for further improvement through better use of automation and enhanced monitoring of processes. Though these opportunities do not represent any substantial quantifiable benefits or operational cost savings, some of them have been included as part of the Claims initiative Enhanced Automation and Predictive Analytics to increase automation of reception of invoices and submission of payments.

Driver Training

There are effective processes in place to measure driving school compliance against the appropriate driver training regulations. Currently, the only formally captured measure of student outcomes is student pass rates, which may not always be indicative of producing safe or better drivers as a key outcome of the driving schools. ICBC can look at ways to better measure and assess driving school quality and trends including a more comprehensive view of outcomes through use of advanced analytics. The current model is reliant on reactive reviews due to limited resources in place to proactively examine driver training schools. This will require additional sources of data such as the students pre-test, and post-test driver history and can be included as part of the recommended initiative regarding Enhanced Automation and Predictive Analytics.

Estimated Net Savings

The following is a summary of the estimated net high level cost benefit analysis of benefits by initiative. The net savings include process efficiencies savings and/or claim cost savings less the cost to implement. The estimates provided are at a point in time, based on implementation in the current operating and market environments, and do not take into consideration the impact of other future initiatives or other changes. Any changes in these conditions could impact the benefits and costs by as much as 50%. As the initiatives will take at least a year to fully implement as well as the ramp up on the realization of the benefits, we have presented the business case summary on a three-year horizon. Three levels of sensitivity were detailed over three scenarios: low, medium (expected) and high.

Once fully deployed in Year 3, annualized savings are in the range of \$58 to \$93 million.

Annual Net Savings (\$ Millions) Year 3 Onwards			
Initiatives	Low (80%)	Medium (100%)	High (120%)
Optimized Vendor Management and Strategic Sourcing	\$37	\$46	\$56
Improved Salvage and Subrogation Management	\$1	\$2	\$2
Shift to a Proactive Injury Care Recovery Model	\$15	\$21	\$27
Enhance Automation and Predictive Analytics	\$5	\$6	\$8
Shift to a More Supportive Claimant Customer Experience	–	–	–
Total Net Savings	\$58	\$75	\$93

The highlighted numbers represent the expected net savings associated with each of the initiatives.

There are one-time and ongoing costs associated with each of the initiatives. One-time costs occur during the first year of implementation and represent the initial investment required to design and execute the initiative. Ongoing costs occur throughout the duration of the initiative and represent the time and effort required to maintain the initiative. Due to the one-time and ongoing costs, the full benefits associated with each initiative will not be realized until Year 3. If all initiatives were to be pursued, upfront costs are estimated to be \$17 million and ongoing costs after Year 3 are estimated to be \$8 million annually.

Projected Costs (\$ Millions)		
Initiatives	One-Time	Ongoing (Annual Cost)
Optimized Vendor Management and Strategic Sourcing	\$9	\$1
Improved Salvage and Subrogation Management	\$1	–
Shift to a Proactive Injury Care Recovery Model	\$6	\$7
Enhance Automation and Predictive Analytics	\$1	–
Shift to a More Supportive Claimant Customer Experience	–	–
Total	\$17	\$8

The identified performance improvement initiatives will support the net potential savings identified above; however, these potential savings will not address ICBC's financial gap between rising costs and expected revenues. In the best case scenario (high net savings), the total net savings associated with the initiatives will only offset approximately 2% of the Basic rate increase required to solve ICBC's revenue shortfall. The bigger opportunity to address ICBC's revenue shortfall lies with product reform. These operational initiatives should be taken into consideration as part of broader initiatives focused on an enterprise-wide approach to financial sustainability.

Introduction to the Operational Review

Purpose

The Insurance Corporation of British Columbia (“ICBC” or the “Corporation”) is a commercial Crown corporation created in 1973 to provide universal compulsory auto insurance to motorists in British Columbia (“BC”). ICBC’s governance is defined through legislation applicable to all Crown corporations, and legislation specific to the Corporation itself. ICBC’s mandate to provide Basic and Optional vehicle insurance for BC motorists is provided through the Insurance Corporation Act, Insurance (Vehicle) Act and the Motor Vehicle Act.

The Basic auto insurance rates are regulated by the British Columbia Utilities Commission (“BCUC”), an independent regulator. The BCUC approves Basic insurance rates and ensures the Basic insurance product is adequate, efficient and reasonable. ICBC also sells Optional auto insurance in a competitive marketplace.

In addition, ICBC provides driver licensing, vehicle registration and licensing, and violation ticket and government fine collections services on behalf of the Province under a Service Agreement between government and ICBC. ICBC also implements road safety initiatives to reduce crashes and losses on BC roads and to assist in managing claims costs.

The Ministry of Attorney General (the “Ministry”) which is responsible for a number of Crown corporations, agencies, boards and commissions, including ICBC, has established a steering committee to undertake an evidence-based Operational Review of ICBC to:

- Review, evaluate and provide recommendations regarding the structure and accountability of ICBC’s current lines of business to help ensure that ratepayers are provided with the most efficient, cost effective products, programs and services
- Assess and report on overall fiscal and operational management of the Corporation

The Ministry has engaged PricewaterhouseCoopers LLP (“PwC”) to assist in this process. As part of the Operational Review (the “Review”), PwC was asked to complete the following activities:

- Identify opportunities to improve operational efficiencies
- Assess the cost effectiveness of ICBC’s programs and functions
- Identify further operational cost savings

With these objectives in mind, recommendations are to be designed to maintain or improve quality service levels for ICBC customers.

Based upon areas already covered in past and ongoing reviews, the Ministry defined the scope for this Review to be:

- Claims
- Finance
- Driver Training

ICBC is the largest public auto insurance provider in Canada.



Context

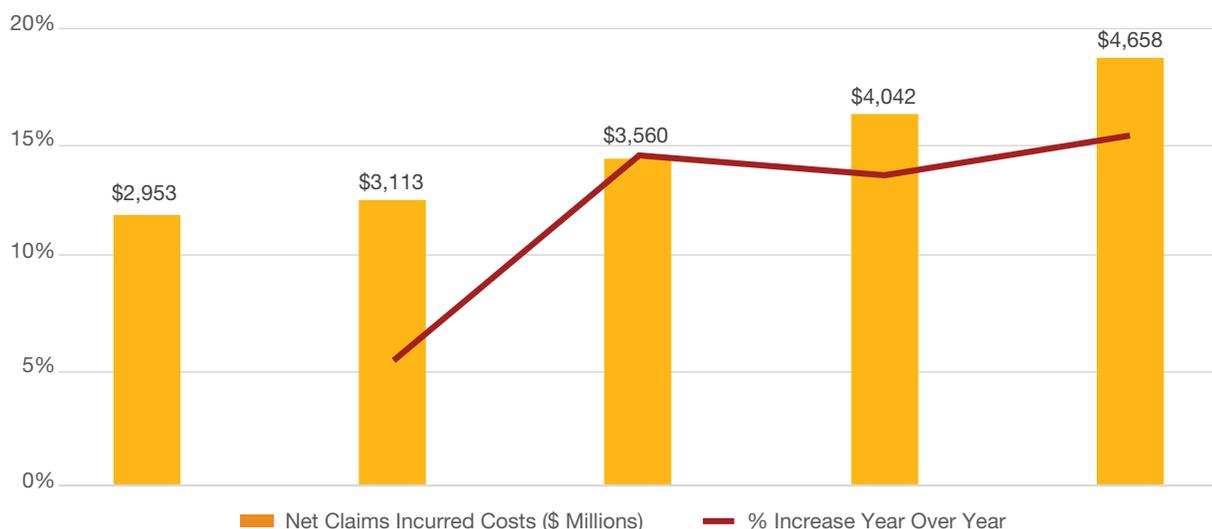
Auto insurance in BC is based on a full tort system, which means that an at-fault driver may be taken to court for the full range of damages. An injured party also has access to accident benefits coverage, regardless of fault, including medical and rehabilitation expenses and wage loss recovery. This environment may result in higher claims costs compared to jurisdictions that operate under different auto insurance systems.

Consistent with other North American jurisdictions, BC is experiencing an increased frequency of motor vehicle crashes. From these crashes, more people are claiming bodily injury with a shift toward higher complexity claims that cost more to settle. The growing sophistication of cars is also driving up repair costs due to the expensive cost of parts. These factors combined put upward pressure on rates for customers. Managing these costs in addition to exaggerated and fraudulent claims and increasing legal representation rates is critical to ICBC's ability to offer customers adequate insurance coverage at an affordable cost.

Over the past several years, most jurisdictions in North America, Europe and Australia have experienced a significant increase in vehicle crashes and claims. ICBC has experienced a similar trend. Between 2012 and 2016, ICBC claims costs have increased by 58 percent, primarily due to:

- Increasing frequency (number of claims) and severity (cost of claims)
- Increasing number of injury claims per crash
- Significantly higher average vehicle repair costs primarily due to embedded technology and more expensive materials
- Significantly higher bodily injury claims costs due to increased complexity of bodily injuries
- Increasing exaggerated and fraudulent claims
- Increasing incidents of distracted driving
- Increasing legal representation, including an increasing portion of claimants being represented at First Notice of Loss

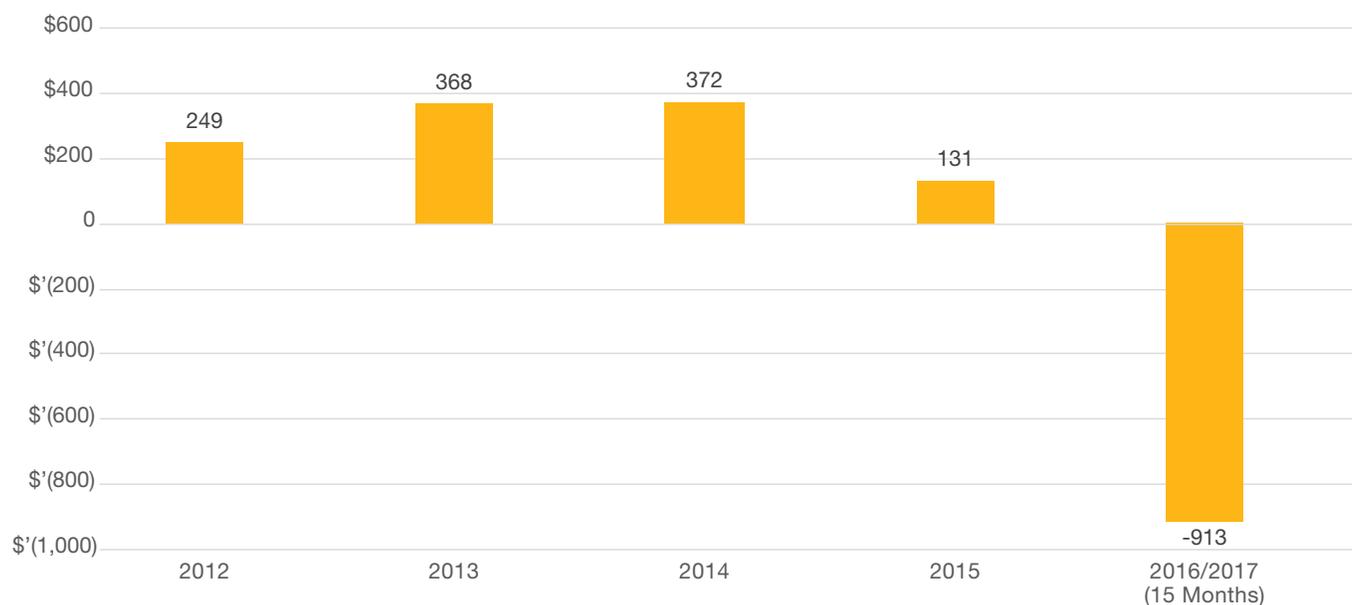
Net Incurred Costs for Claims



Source: ICBC

Claims costs that include bodily injury costs and material damage costs represent the vast majority of ICBC's costs. With the pronounced trend in increased claims costs, insurance premiums collected by ICBC no longer cover the full amount of claims costs. This has resulted in significant financial losses since 2016/17 and is impacting ICBC's longer term projected financial stability.

ICBC Summary Financial Outlook Net Income \$ Millions (Loss)

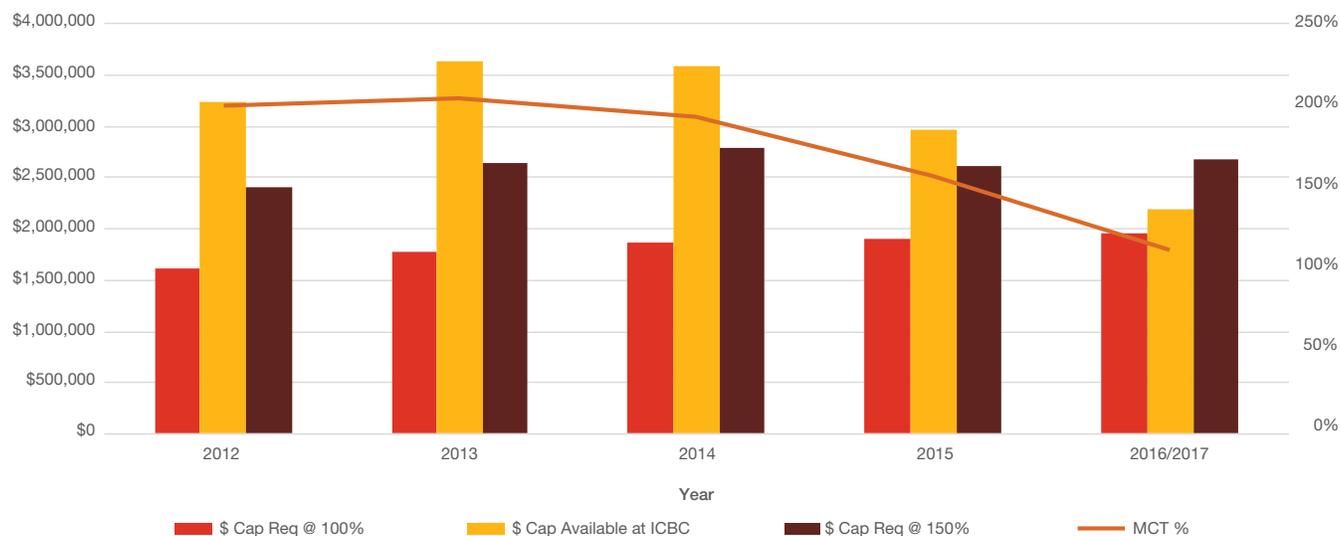


Source: ICBC

In order to manage these costs and mitigate the pressure on insurance premium increases, other jurisdictions in Canada and abroad have undertaken major changes such as increasing traffic safety, insurance product reform, and shifting away from the litigation-based model to some form of no-fault model.

One of the key performance measures of financial stability for the Canadian property and casualty insurance industry is the Minimum Capital Test ("MCT") established by the Office of Superintendent of Financial Institutions ("OSFI"). It is calculated as the ratio of capital available to the capital required based on specific risks, and is used to assess financial risk and long-term financial stability. While ICBC is not regulated by OSFI, ICBC is required under Special Direction IC2 from the Provincial Government to have a minimum of 100% MCT ratio for Basic insurance. ICBC's MCT ratio has been declining since 2013. This is another indication that long-term financial stability is at risk and that actions will be required to reverse this trend.

% MCT and Capital Available



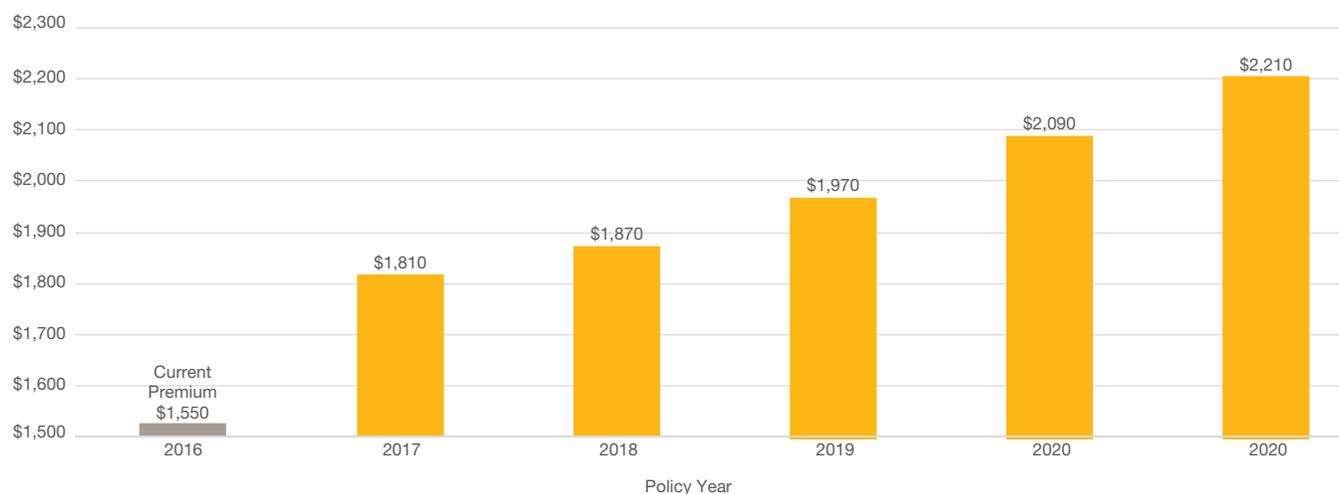
Source: ICBC

As claims costs are expected to continue to outpace premium revenues and investment income in the foreseeable future, management projects losses from operations for the current and future forecasted periods. ICBC continues ongoing efforts to identify the drivers of higher claims costs and moderate those within its control.

The Province of BC and ICBC has also undertaken a number of third party or external reviews, cost reduction initiatives and stricter driving enforcement. Despite ICBC's continuing efforts to identify and moderate claims costs within its control, claims costs are expected to continue to outpace premium revenues and investment income resulting in a financial outlook involving increasing substantial financial losses in the foreseeable future. Given the magnitude and the continued negative trending of the financial losses, substantial reform of the BC auto insurance system is required to address the structural issues.

The Ministry, which has responsibility for ICBC, has initiated a review of the operations of ICBC to ensure that it is providing effective programs, functions and services to ratepayers and to identify potential areas of opportunity. This Operational Review, which is focused on the ICBC operational components, is only part of the required BC auto insurance system structural reforms, but is a critical element as part of and in support of the broader initiatives required for financial sustainability.

Projected Required Premium Per Vehicle (Basic + Optional)



Source: ICBC

ICBC’s focus on continuous operational improvement, consistent quality, and fair handling of claims has resulted in initiatives with the objective to adequately manage claims in the face of increasing claims costs and higher claims volumes. Recently completed reviews have identified a number of potential cost savings opportunities and initiatives related to management of claims costs.

The Review incorporates the findings and analysis prepared in previous external reviews conducted over the past five years. Additionally, PwC has considered and incorporated other reviews in relation to financial management and reporting of the Corporation.



Scope

The Review is based on full access to ICBC information, staff, and certain other materials or data, not including public comment or input. The evaluation is based on comparisons of approaches taken by other segments of the insurance industry and by other jurisdictions in relation to ICBC's various business lines, and it includes interviews with a sample of ICBC unionized staff and management.

The scope of the Review spans three business lines: Claims, Finance, and Driver Training. Within each of these business lines, specific business functions and activities were analyzed. These are summarized in the following table.

The scope of the Review spans three business lines:

-  **Claims**
-  **Finance**
-  **Driver Training**

Business Lines and Functions Analyzed

Business Line	Business Functions to be Analyzed	Key Considerations
Claims	Claims Initiation	<ul style="list-style-type: none"> • FNOL process and procedures, intake capabilities • Claims triage effectiveness
	Claims Adjudication	<ul style="list-style-type: none"> • Case management process and efficiency • Qualitative review of a random sample of 100 claims over the past two years (vehicle and bodily injury) • Material damage assessment procedure • Recovery and subrogation processes • Injury management planning and comparison of injury rehabilitation times, plans, and outcomes with Workers Compensation Boards, specifically WorkSafe BC • Claims servicing approach and capabilities • Feedback and perspectives from Union
	Strategic Sourcing/Vendor Management	<ul style="list-style-type: none"> • Vendor segmentation and preferred network • Vendor relationship and sourcing management process • Closed file review of a random sample of 100 completed estimates by Express Repair shops • Auto-body glass shops cost comparison
	Fraud Prevention/Management	<ul style="list-style-type: none"> • Fraud detection process, automated protocols and efficiency • Fraud escalation process
	Claims Payment	<ul style="list-style-type: none"> • Payment process and practices
Finance	Finance	<ul style="list-style-type: none"> • Finance function structure, process and organization relative to leading Canadian insurance practices
Driver Training	Driver Training Compliance	<ul style="list-style-type: none"> • Driver training instructor compliance and enforcement • Review of operations in accordance to statutory obligations in light of administrative fairness and best practices

Approach and Report Structure

The Review has been designed to consider opportunities to improve operational efficiencies, assess the cost effectiveness of ICBC's programs and functions and identify further operational cost savings. The PwC team applied a consistent approach supported by time-proven methodology to meet the objectives of the review.



Current State Review of Operations

For the first phase of the Review, the PwC team examined the current state of operations of the business lines deemed to be in scope. In order to complete the review, PwC conducted interviews and assessed operations based on current capabilities. Additionally, PwC evaluated a sample of closed claims files and a sample of completed material damage estimates, as well as reviewed and considered previously completed reviews of ICBC.

Interviews with ICBC Unionized Staff and Management

PwC conducted over 40 interviews with management and unionized staff operating within the in-scope business lines of Claims, Finance and Driver Training. Interviews were focused on understanding staff members' roles and responsibilities, gaining an overview of existing processes, and highlighting existing challenges within their business.

Insurance Operations Capability Assessment

PwC utilized a proprietary Insurance Operations Capability Model which assesses an insurance company's operational performance relative to leading practices of the Canadian and international automobile insurance market. The PwC team assessed the current capabilities of ICBC's in-scope lines of business by reviewing documentation and conducting interviews with staff. For each area examined, the team assessed ICBC's current business practices relative to Canadian and international leading practices and rated them on a maturity scale (ad hoc, structured, or fully integrated). PwC took into consideration that ICBC is a public insurer and the only auto insurer in Canada operating within a full tort environment. As such, when comparing ICBC to practices in the market, PwC compared the structure and maturity of processes that are not comparable to other auto insurers; however, as appropriate, PwC considered the operational practices of similar public auto insurance operating environments such as those in Manitoba and Saskatchewan.

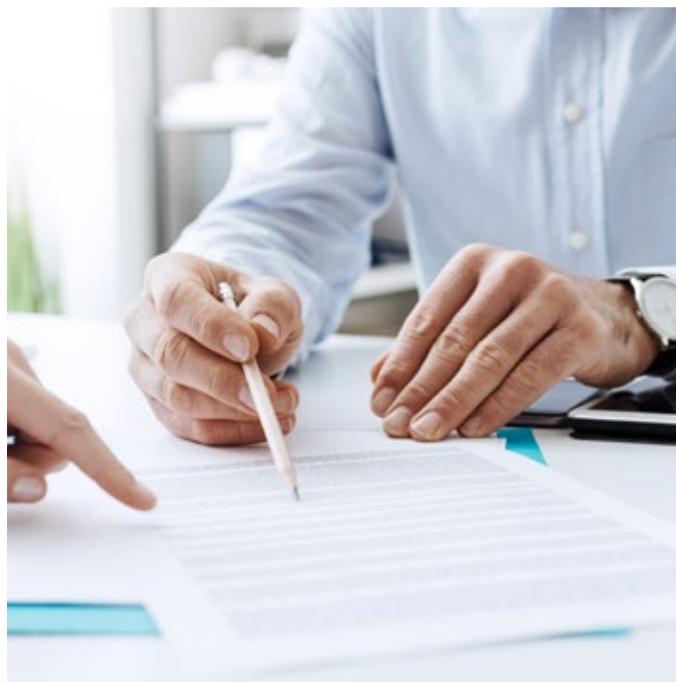


File Reviews

In conjunction with the capability assessment of operations, a file review of ~100 closed claims files, and a review of 100 completed material damage estimates were conducted. Based on a structured framework to identify opportunities for improvement, these files were reviewed for consistency of process, consistency of claims outcomes, and level of automation.

Review of Past Recommendations

PwC conducted a review of previous recommendations from external reviews from the period of 2012-2017 and specifically considered the status of the programs, initiatives and actions in response to those recommendations, with a focus on those related to Claims, Finance and Driver Training. The review was conducted to gain an understanding of the current initiatives in progress, initiatives that are currently under consideration, and initiatives that have been completed.



Opportunities for the Future

Based on the findings of the current state assessment, PwC conducted a gap analysis to identify opportunities for improvement within Claims, Finance and Driver Training. Potential opportunities for improvement within the operations in scope for the Review were prioritized based on potential financial impact, feasibility and timing.

The prioritized list of opportunities were then grouped into broader initiatives designed to create a positive impact to stakeholders, including ICBC and its customers. Some initiatives identified will also impact stakeholders external to ICBC, such as service providers. Initiatives were only developed based on the scope of the Operational Review, and are thus focused on enhancements or improvements to the structure or processes within Claims, Finance or Driver Training.

Benefit Summary and Implementation Considerations

For each initiative, high level cost benefit analysis and implementation considerations were developed to provide a view of expected actions, impacts, and outcomes. Both the data used to develop the benefits and the high level cost benefit analysis were reviewed. Implementation considerations were designed to provide a view of the requirements for executing each initiative. For each initiative, we have summarized implementation considerations, including key dependencies, internal and external support required, key direct and indirect stakeholders impacted, key risks to be managed and sequencing of activities in order to realize the expected benefits. Any decisions to implement these initiatives need to be made within the context of other ongoing ICBC and government priorities and activities.

Current State Findings

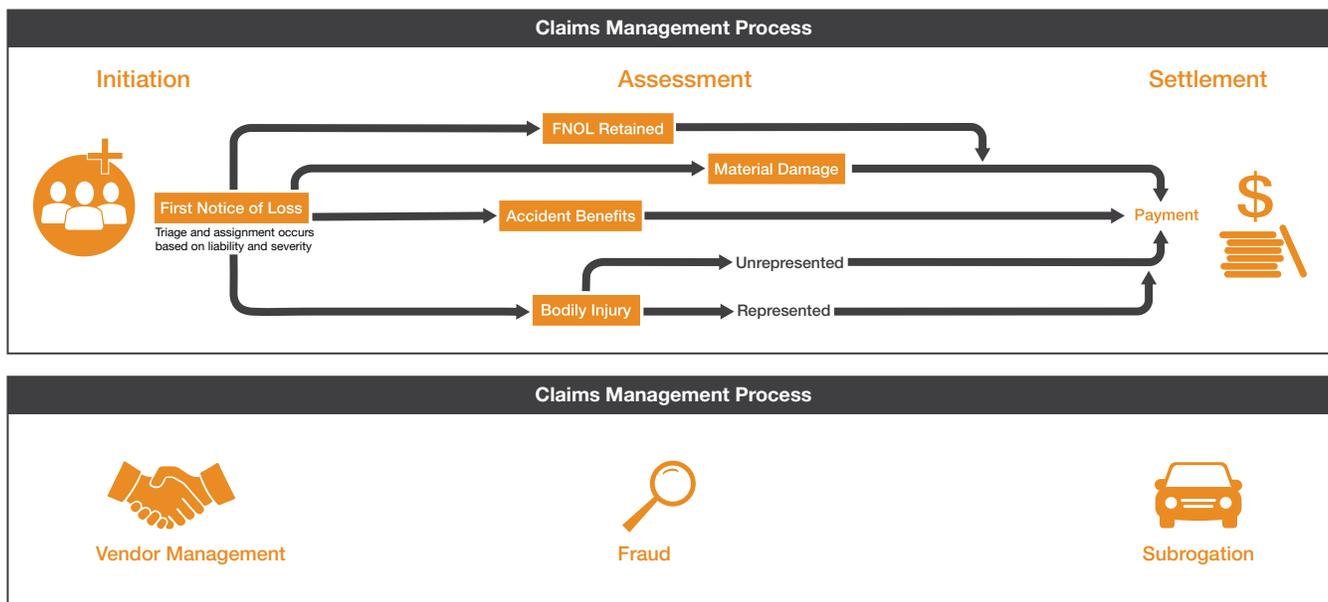
Current State Findings are arranged based on the three business lines in scope for the Operational Review. For each function assessed in a business line, the maturity assessment is included. Operations were assessed on a scale of process maturity ranging from ad-hoc, undefined processes that have limited structure and no automation, to integrated, where processes are well defined and consistently adhered to, leveraging automation whenever possible.

Claims

Overview

The review of operations within Claims incorporates the lifecycle of a claim from initiation, when a claim is reported to ICBC, through to payment and settlement of the claim leading to its closure. Within this lifecycle, there can be multiple activities involved as part of the assessment of the claim, or adjudication.

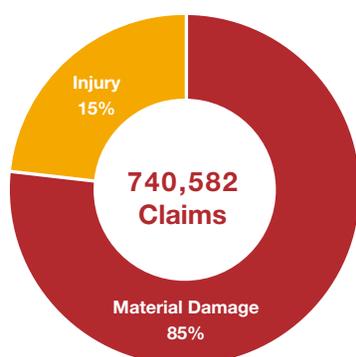
PwC assessed the current processes for managing claims relating to material damage and salvage (the handling of unrepairable vehicles), as well as injury related claims. Consistent with the auto insurance industry, there are two types of injury claims – accident benefits only and bodily injury – that have their own internal operational processes. As such, PwC examined injury claims processes pertaining to the driver of the vehicle (accident benefits) where the driver is liable and bodily injury claims where the injured party is not liable (such as a claim by a passenger or by a passenger of a vehicle that has been impacted). In either situation, the injured party may choose to remain unrepresented or elect to be represented by a lawyer, each resulting in a separate adjudication process.



The supporting activities of claims adjudication were also assessed. This included fraud, vendor management, and subrogation. Within these activities is fraud detection and prevention (or fraud management). Fraud detection can be carried out by claims staff in the process of assessing a claim, or by investigators assigned to suspicious claims. Vendor management of claims service providers is also included in the claims lifecycle. This includes direct providers such as auto body shops, or medical providers that provide services to claimants directly, and indirect providers such as independent adjusters or defense counsel that will support ICBC's adjudication of a claim. Lastly, this Operational Review included subrogation (the inbound and outbound pursuit of damages or submission of debts for claims that have occurred between ICBC and out-of-province drivers insured by a third party, or non-insured drivers).

In completing the Operational Review, findings have been broken down for each component in scope within the claims lifecycle. In order to examine ICBC's relative maturity of the current state processes, components have been evaluated relative to leading and common practices within the Canadian and international automobile insurance market.

Type of Reported Claims in 2016



Initiation

In 2016, 740,582 claims were opened at ICBC. Of the claims opened, 15% of claims were injury related and 85% of claims were material damage. The process of reporting a claim is commonly referred to in the industry as the First Notice of Loss ("FNOL"). There are two available channels for ICBC policyholders to report a claim: phone and online. The most common channel is over the telephone to ICBC's Claims Contact Centre.

Recently, ICBC enhanced its online portal for claims submission. Approximately 13% of eligible claims are submitted through the online channel; however, ICBC expects the number of claims reported online to grow in the future. Claims can be reported through either channel 24 hours a day, seven days a week, 365 days a year. Upon first contact, the severity

of the claim is assessed on a number of dimensions including whether an injury is present and if so, the scope of the noted injury. Depending on assessed severity, claims will remain with Claims Contact Centre staff or will be assigned to an appropriate adjuster for claims adjudication and settlement.



Customer service is critical at the initiation of the claim because it is often the main point of contact between the customer and the insurance provider. In line with other insurance providers, ICBC tracks customer service satisfaction through the claims call centre channel and enforces service level requirements for timeliness to answer calls, average handle time (time spent on the phone with the customer) and time to contact customers. ICBC's customer service levels can be improved to better meet the needs of customers using communications that inform the customer of the entire claims process. Currently, the Customer Satisfaction Score ("CSAT") at FNOL is 96.8%. ICBC has improved responsiveness with customers, as 65% of calls are answered within the goal time frame of 100 seconds, while maintaining high CSAT scores.

Customer Service in Claims

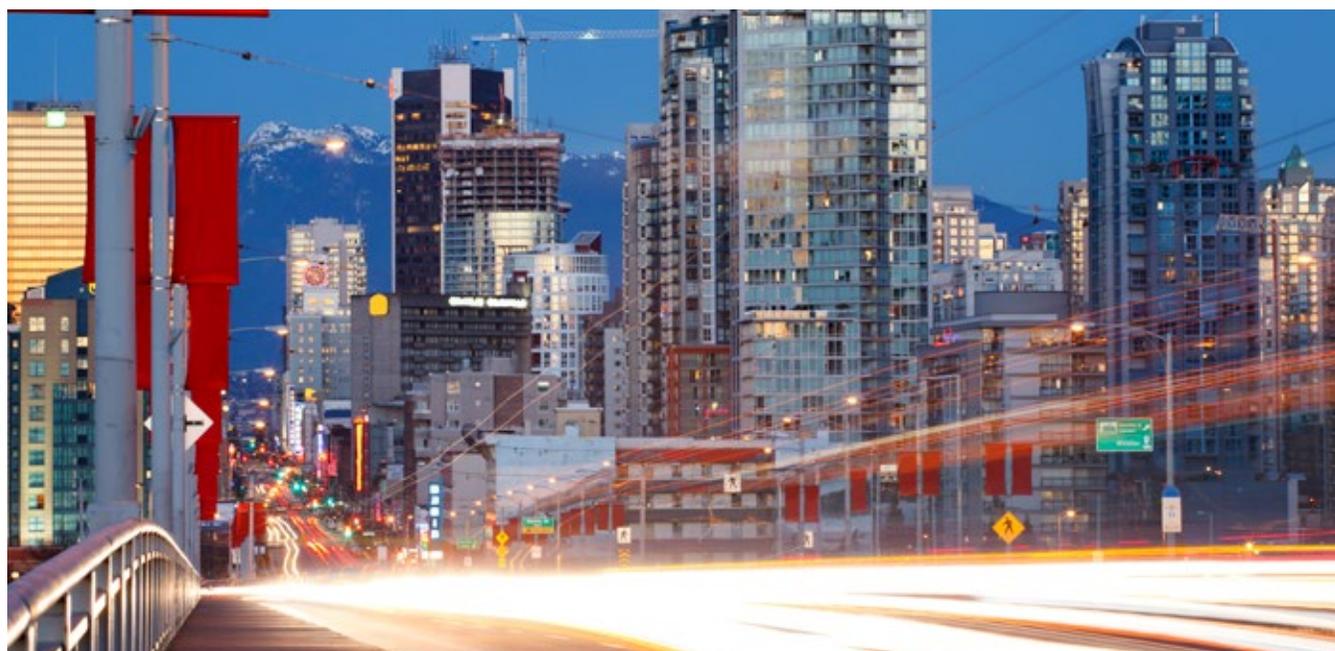
ICBC has prioritized improving its customer service within Claims. Customer satisfaction and timeliness to complete customer requests are now tracked within the organization. In 2018 a formal Customer Experience Program is being rolled out to all Call Centre employees which will emphasize their Customer Value Proposition themes of ease, support and value to the customers.



The corporation uses an industry leading claims management platform called Guidewire, which was implemented as part of ICBC’s Transformation Program. In line with leading practices, the Guidewire claims system automatically segments claims by type and severity, but adjusters have the ability to manually override segmentation and/or assignment. For material damage claims, there are four possible adjusters groups that claims can be assigned to based on claims complexity. For injury claims, there are adjuster groups that claims can be assigned to based on claim type and severity/complexity, customer needs, risk and/or alignment to a plaintiff counsel firm.

Overall, ICBC’s FNOL process is mature relative to industry peers due to the availability of multiple claims reporting channels, real time data input verification and quality review, and automated claims segmentation and assignment to the appropriate adjuster.

Claims Contact Centre adjusters have defined guidelines and templates available to help guide their conversations with claimants and properly manage claims. In comparison, leading providers incorporate advanced call scripts with principles of behavioural economics to better engage with and guide a claimant’s actions for settlement. Improvements could also be made to reduce the complexity of segmentation and the need to manually override segmentation. Additionally, leading insurers continue to invest in deploying robotic process automation (“RPA”) technologies. For example, elsewhere in the industry RPA has been deployed to successfully integrate newer systems, such as NetReveal (for fraud detection) or automate repetitive tasks through the use of bots to improve workflow efficiency. Increasing automation creates capacity for staff to spend more time high value work that improves the customer’s experience.



Assessment

Claims Adjudication: FNOL Retained

58% of all new, non-glass claims reported are adjudicated and retained with the Claim Contact Centre which drives customer experience and efficiency. The claims that are retained within the Claims Contact Centre are lower complexity non-injury claims or straightforward minor injury claims that only require medical expense reimbursement.

FNOL retained claims are adjusted within the Claims Contact Centre by Customer Service Adjusters who are trained to handle low complexity accident benefit and material damage dispute claims. Adjusters aim to close these low complexity claims at the first point of contact. If a claimant calls to follow up, they can be assigned to speak with a different adjuster than before. Within the Claims Contact Centre there is also a Claims Contact Assessment Team (“CCAT”) that adjudicates more complex liability claims within a threshold approved to be retained within the Centre. The CCAT has individual caseloads that they manage from open to close which allows customers to interact with a single adjuster. The Contact Centre has extended hours beyond claims adjudication hours, providing ICBC the ability to connect with customers in a timelier manner.

PwC’s assessment of adjudication of FNOL retained claims ranks comparable to industry average as Claims Contact Centre processes are defined, claims are segmented by complexity and claims quality assurance is monitored and tracked.

Leading practice insurers use web-enabled straight-through processing to automatically adjudicate low complexity claims, and where an adjuster is required, they manage individual caseloads. Within the Claims Contact Centre claims can be reassigned to the next available Customer Service Adjuster when a claimant follows up on their claim. CCAT adjusters, on the other hand, do not hand off files as they have individual caseloads. Customer Service Adjusters are focused on providing excellent customer service to claimants at the first point of contact with the claims centre.



Claims Adjudication: Material Damage & Salvage

Material damage claims are assigned at FNOL immediately to one of four key adjuster types based on claims profile: claims adjuster, specialized handling team, out of province and commercial. Resolving liability is a critical first step in the material damage claim process. Adjusters determine the state of the vehicle and deem them as non-drivable or drivable.

For minor drivable claims, claimants are provided the option to use collision repair vendors within ICBC’s network. Preferred vendors for collision repair are within the vendor category of Express Repair. Express Repair body shops receive the vehicle and submit estimates for review to ICBC estimators. 69% of all claims estimates are completed by Express Repair body shops, the remainder are completed by ICBC estimators. ICBC estimators review 66% of estimates completed by Express Repair shops, representing 89% of the total dollars paid to the Express Repair. They review the estimate against the photos and information received regarding the damaged vehicle. In addition, ICBC estimators conduct site visits on 2.5% of the Express Repair shop estimates to review shops for quality assurance purposes to mitigate risks for claimants. Estimators conducting site visits are to ensure compliance with ICBC’s policy and procedures and to investigate claims damages in more details when the reported loss

does not match the damages being presented. Estimators approve the estimate or request for supplemental information in Mitchell (estimating tool) which pushes automatic notes for the adjuster within ClaimCentre. For drivable claims, customers are provided with an appointment at an ICBC Claims Centre where ICBC's on-site estimators assess the damage.

If the vehicle is deemed non-drivable, ICBC estimators review the claim details and reported vehicle damage to determine whether the vehicle is repairable or likely a total loss. Additionally, they determine where it should be towed: to ICBC's central estimating facility or a salvage yard if the vehicle is an obvious total loss. If the vehicle is immediately sent to salvage, an estimator reviews the vehicle to confirm it is a total loss. If the vehicle is an obvious total loss, the vehicle is assigned to a total loss handler to manage the claim. If a vehicle is towed to the Central Estimating Facility ("CEF"), an estimator reviews the vehicle to determine if the vehicle is a total loss. If the vehicle is deemed a total loss at CEF, the vehicle remains at CEF and is handled by the claims estimator. If the vehicle is deemed not an obvious total loss at CEF, the estimator manages the repair of the vehicle with the required services.

Material Damage Estimates and Repairs

The majority of claims within material damage are considered minor drivable claims. For these types of claims, ICBC refers claimants to vendors within the Express Repair program, housing over 90% of material damage vendors. The Express Repair program requires that auto body shops submit estimates for services.

Express Repair vendors adhere to standard rates for the five services of paint and materials, shop materials, sheet metal, mechanical and electrical, frame and refinish.

Based on the Express Repair vendor's earned authority levels, estimates can be auto-approved in Mitchell for level 1 repairs within \$1,500 authority limit, or level 2 \$2,500 authority limit. Estimators review a selection of the estimates from Express Repair shops (currently 66% of total estimates) and accept estimates within +/- 20% buffer of expected service costs based on a review of photos of the damage. Subsequently, all remaining estimates could be reviewed as part of ICBC's overall governance process.

The specialized handling team adjudicates claims relating to total theft and total fire, or suspicious claims that may require investigation based on impaired driving, criminal charges, or an insurance rating breach. The specialized handling team can be assigned the claim at time of initiation or re-assigned if the specialized characteristics arise.

Out of province adjusters adjudicate claims where the ICBC insured driver is in an accident within British Columbia with an out of province driver, or where the ICBC insured driver is in an accident when driving outside of the province of British Columbia.

Commercial adjusters handle claims relating to commercial clients, such as rental car companies or taxi fleets. They also adjudicate claims relating to certain vehicle sizes that are deemed commercial size. Commercial adjusters can be assigned a claim based on automatic assignment, or based on the commercial client as certain adjusters manage commercial fleets.

Claims adjudication for non-injury material damage claims ranks well compared to industry peers.

Claims are immediately assigned to an appropriate claims adjuster by the claims system based on the severity of the damage and claims type. Material damage adjusters, total loss handlers and estimators adhere to well defined adjudication and salvage processes. The Mitchell estimating platform is used to provide adjusters and estimators with an enhanced system that integrates with express repair vendors and ICBC’s Guidewire claims system leading to improved workflow, communication, reporting and performance management. The Mitchell platform is one of the leading software systems for estimation in the market. Hand-offs and segmentation types are minimized within drivable vehicle claims. For non-drivable vehicles, hand-offs and re-segmentation can occur frequently after the initial review by the estimator due to increased complexity and the possibility a claim will require specialized handling or move to a total loss.

Within ICBC’s material damage claims adjudication process, gaps exist relating to straight-through processing of simple claims, number of hand-offs and re-segmentation of claims and limited quality assurance of material damage vendors. In comparison, leading practice insurers straight-through process a high number of low risk, low complexity claims with no human approvals required but monitor claims processing through robust quality assurance practices. Leading practice insurers are beginning to introduce behaviourally-enhanced next-step and follow-up communications that are customized to claimant situations, in order to direct claimants to preferred repair vendors and reduce the likelihood of fraud.



Claims Adjudication Accident Benefits (First Person Liable)

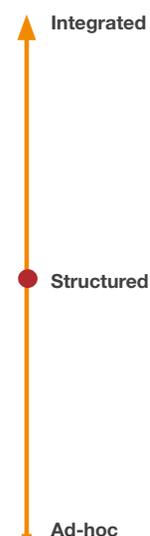
Accident Benefit-Only refers to injury claims where the driver, or policyholder of the vehicle, has been in an accident and is claiming injuries. Regulations for administering benefits to treat the injuries of the injured party are referred to as Part 7 benefits. Part 7 benefits generally cover three types of expenses: payment of medical expenses, payment of rehabilitation expenses and payment of wage benefits. In the event of a death, the benefits also cover funeral expenses and loss of support benefits. Within Part 7, there are limits in place on the amount covered for each type of expense.

Accident benefit claims are either retained with the contact centre adjusters or assigned to one of two accident benefit adjusters groups (Recovery Services or Claims Adjusters) based on specific criteria of the injury. Minor accident benefit injuries with no missed work are retained at the Contact Centre Adjudication Team. Claims are reassigned from the contact centre to Recovery Services if the treatment lasts beyond eight months or if there is work missed. Recovery Services also handles catastrophic injuries. Within Recovery Services, recovery benefits coordinators work with claimants to ensure they receive the necessary contractual accident benefits as outlined in Part 7. ICBC grants pre-approval for massage therapy, physiotherapy and chiropractic treatments in order to provide adequate treatment immediately.

For more complex claims, the adjuster determines approved coverage of the accident benefit and assigns an occupational therapist to conduct an assessment and recommend treatment. Assigning an occupational therapist and gaining pre-approval for specific treatments helps facilitate timelier access to benefits. For claims with prolonged recovery beyond eight months, ICBC adjusters will attempt to work with the customer, their physician and their treatment provider to develop a return to work plan. However, adherence to injury recovery plans is voluntary for customers. While adjusters remain involved in customer rehabilitation, a full tort environment invites the involvement of other participants such as plaintiff counsel and additional medical assessments.

Claims adjudication for accident benefit-only claims is on par with industry average.

Accident benefit-only claim adjudication has defined procedures that are adhered to by adjusters. To allow recovery services and injury claims adjusters to focus on value added work, First (or Liable) Party Claims where customers are only seeking accident benefit treatment are retained within the Claims Contact Centre and managed by the CCAT team for up to eight months. Adjusters aim to ensure ICBC is paying what is covered by the insurance policy and seek to fairly reimburse claimants for their losses, returning as close to their pre-accident condition as possible. Recovery plans by injury type exist and are adhered to by the customer and adjuster with support from occupational therapists and vocational consultants. However, there is limited adjuster involvement in recovery management. Leading practice insurers have targeted communications that are personalized to customers and leverage behavioural economics to improve adherence to next steps.



Claims Backlog versus Claims Pending

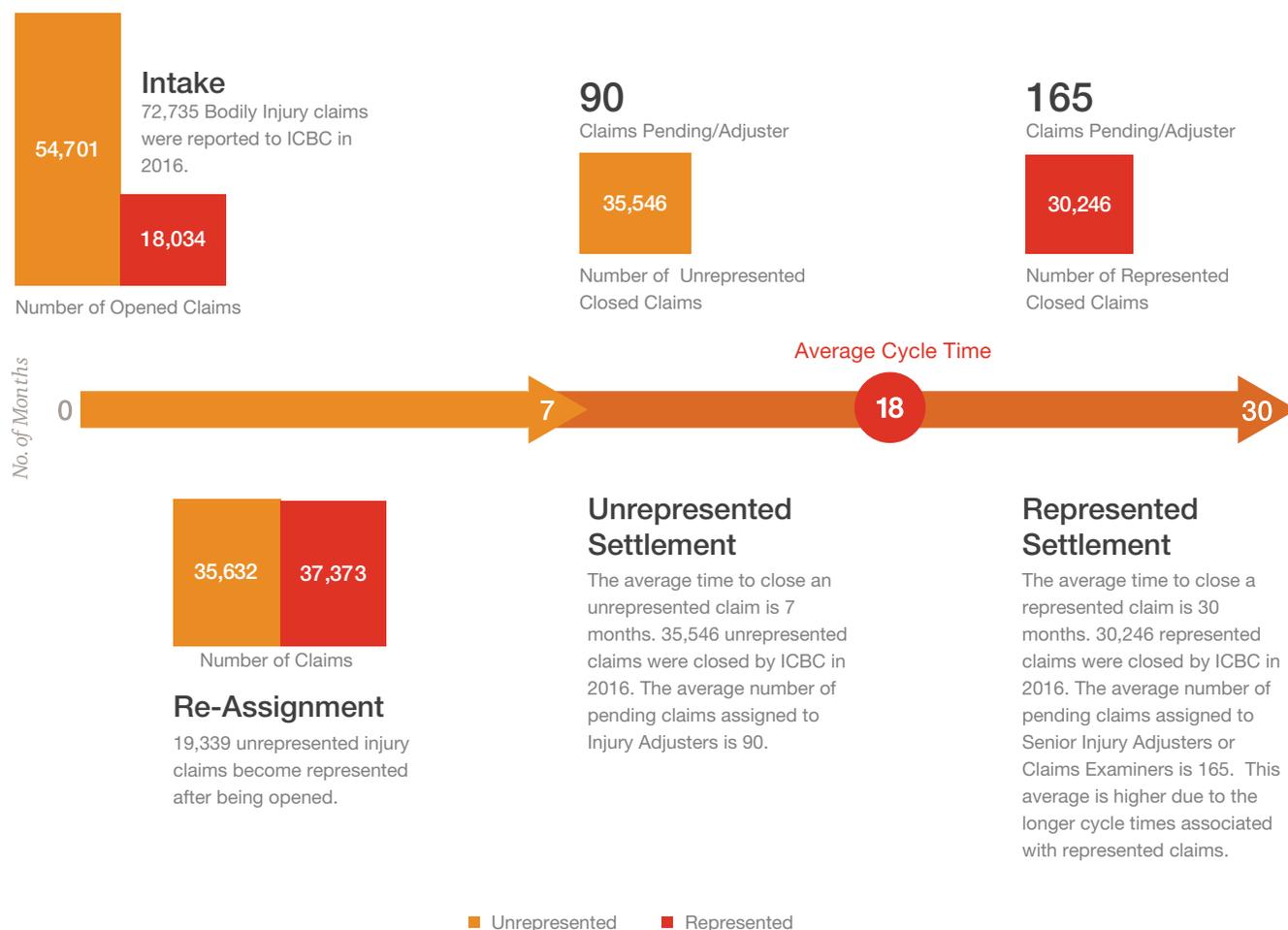
In managing the adjudication of a claim, there is a distinction between a claims backlog and claims pending. Claims backlog conjures the notion that claims have been reported to an insurance provider by the claimant and have not yet been assigned for handling by an adjuster. In this event, a claimant would be waiting for an adjuster to contact them to initiate the claims process and provide support for their injury or material damage repair.

In contrast, a claims pending refers to claims that have been reported and the handling has been initiated by the adjuster. Claims remain pending for the duration that a claimant is receiving treatments for injuries, or their vehicle is being repaired, and the claim settlement is deliberated upon. Insurance adjusters, depending on their role dealing with material damage or injury claims, can have claims pending at levels between 50 to 200 on a rolling timeline. Adjusters that deal with claims that require less frequent interactions with the claimant or claims service provider will often have higher claim spending because the activities required for each claim demands less of their time.

PwC's review of claims assessed the question of claims backlog versus claims pending. Newly reported claims are assigned to an adjuster within 24 hours. Injury adjusters average claims pending is 140, which includes represented files that restrict interaction directly with the claimant, and that tend to have a longer duration. ICBC has made significant efforts since 2012 to reduce claim duration and reduce claims pending by increasing the number of injury adjusters (up from 555 in 2011 to 660 in 2016). External factors such as increasing claims frequency and claims severity increase the average claims pending because they impact the volume and duration of claims.

The current volume of claims pending files is in line with expectations given ICBC's full tort auto insurance product environment. Further, ICBC does not have a backlog of claims.

Injury Claims Pending

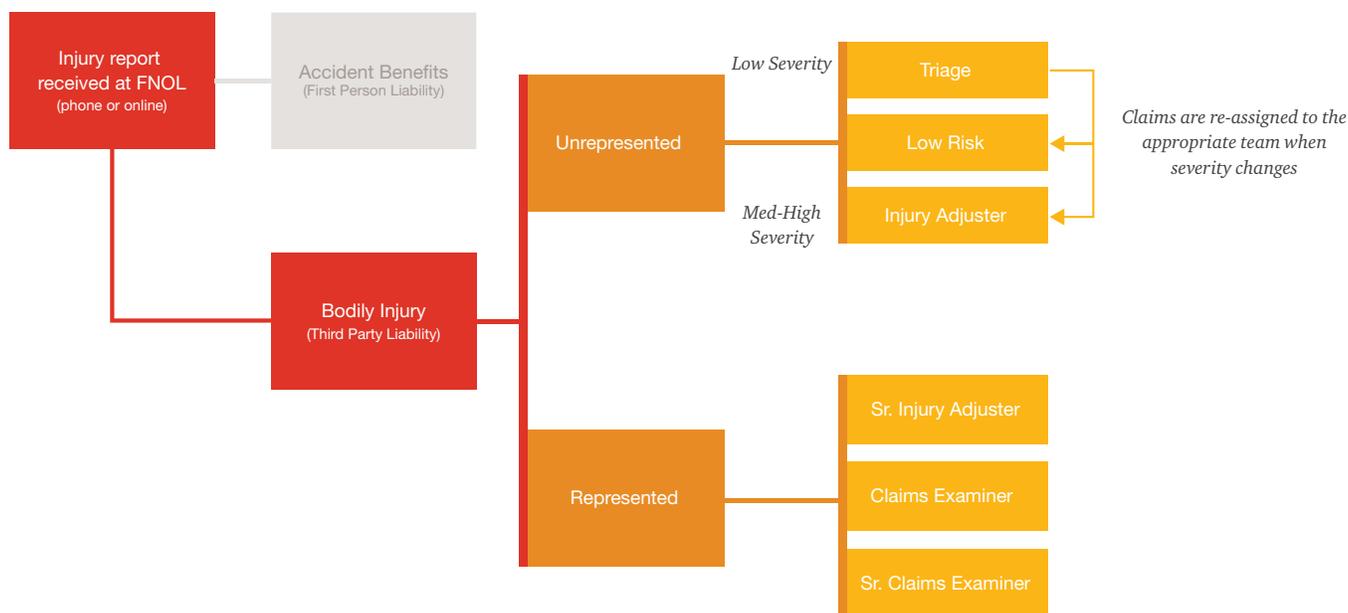


Why do Represented Claims Take Longer?

Once a claim becomes represented the adjuster cannot interact directly with the claimant. All matters relating to adjudication and to reaching the settlement occur with the plaintiff counsel who then liaises with the claimant. When the plaintiff initiates a legal action (i.e. Issues a Notice of Civil Claim) against the ICBC insured, trial dates drive the timelines for the litigation process. This process includes document disclosure, examinations under oath, obtaining expert reports, and the trial and associated preparation; however, the two parties can settle the claim at any point in the litigation process. The recent increase in the volume of represented claims has put additional pressure on the court system, extending the wait time for trial dates thus extending the timeliness for claim settlement.

Claims Adjudication Bodily Injury Tort

At FNOL, all non-labile or non-contentious tort claims are assigned to either an adjuster specialised in unrepresented or represented claims. Claims identified as represented are assigned immediately and directed to represented injury adjusters through a centralized process within one or two business days. Represented injury adjusters are assigned claims based on type of claim risk or law firm alignment. Claims identified as unrepresented are immediately assigned to a triage team if they are considered low risk or to an injury adjuster if considered medium to high risk. Low risk claims are triaged further based on type of risk or customer needs.



Injury adjusters work with the claimants/law firm to settle the claim. There is no requirement for injured claimants to pursue specific treatment; under tort law, injured customers claim all medical expenses deemed necessary and reasonable. Adjusters are not closely involved in designing a plan for the rehabilitation of the customers and focus on settling the claim. In efforts to improve adjuster relationships with claimants, ICBC has focused on providing strong customer service in a multicultural environment; services can be translated into 170 languages. ICBC has dedicated teams of injury adjusters who speak fluent Punjabi, Mandarin, Cantonese and Korean to work with customers in those languages.

Comparison to other Canadian insurers for bodily injury tort claims adjudication cannot be conducted due to BC’s unique tort environment. ICBC’s current state was evaluated based on the maturity of existing processes and focus on continuous improvements.

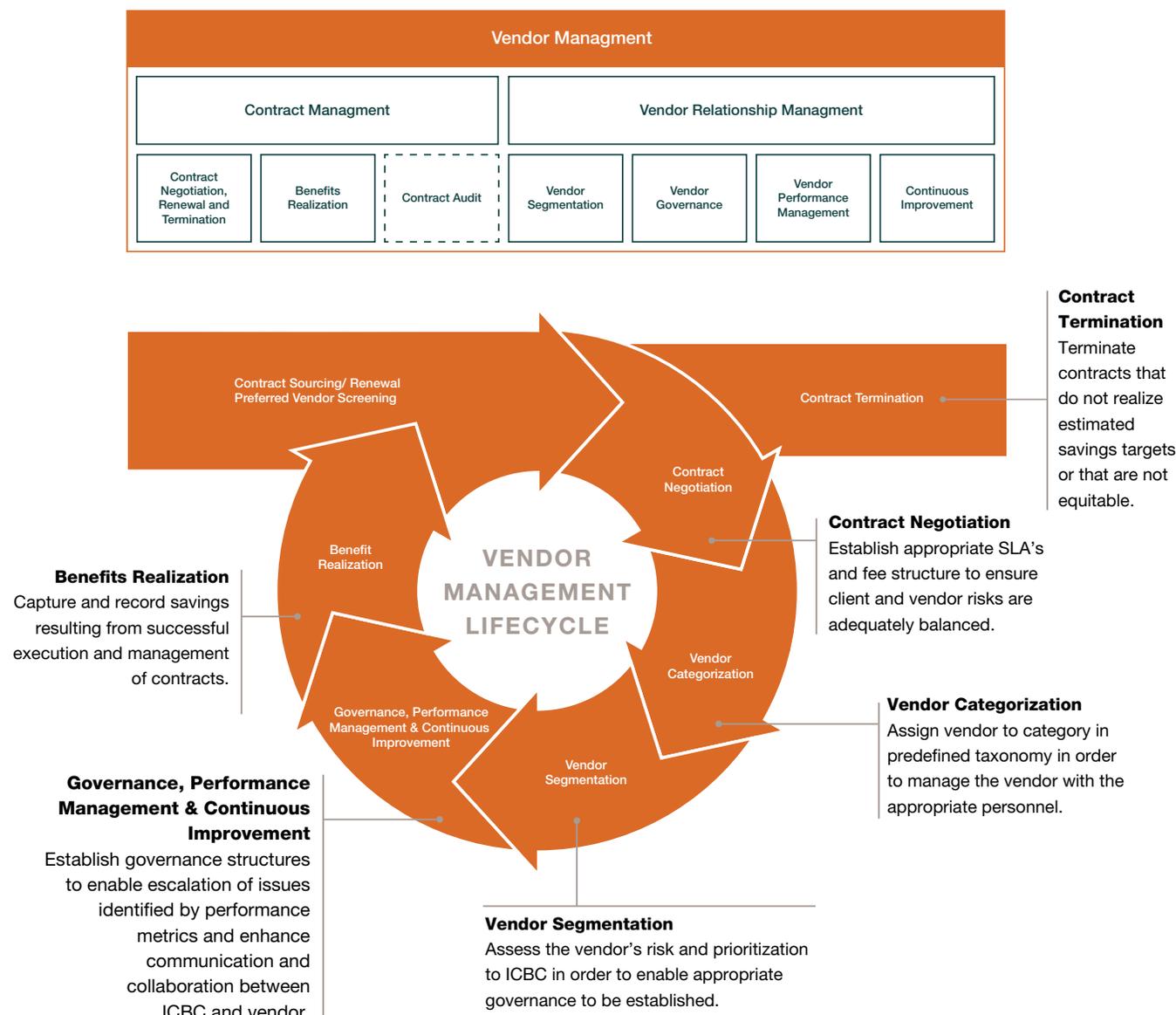
Notwithstanding BC’s unique tort environment, claims adjudication of bodily injury claims is well structured and proactively managed. Claims processes are well defined within departments and adhered to. Based on claims risk profile, claims are assigned/re-assigned to specific adjuster levels; however, there are multiple levels of segmentation which lead to re-assignment. There is an emphasis on minimizing claims leakage and enhancing customer service for unrepresented claims. Communications and proactive care planning for recovery could be behaviourally enhanced to strengthen ICBC claims management in order to improve the claimant’s claim journey and potentially minimize claim costs.



Vendor Management

Vendor management within claims enables insurers to proactively manage its costs of services, drive service excellence and lessen risks related to claims vendor spend. Strategic sourcing is a function of vendor management that allows organizations to leverage their purchasing power and ensure they are driving the most value from suppliers based on contract terms and service standards. Vendor relationship management is the practice of actively managing a company's interaction with current and potential suppliers. A strong vendor management and strategic sourcing function allows insurers to use their considerable bargaining power to drive significant claims cost savings and enhancements to claimant outcomes and service standards through augmented control over its suppliers. For the scope of this operational review, vendor management is limited to services provided as part of the adjudication of a claim, specifically for material damage and injury claims.

The graphic below depicts the vendor management lifecycle:



Vendor Management – Injury Claims

Vendor management for injury claims is still in its infancy stages as there are limited structured programs for medical care providers of injury treatment and limited tracking of vendor performance. In the past, injury related vendor management was not in operation at ICBC, and there are current limitations on how ICBC can interact with service providers and create contracts based on negotiated rates. Competition law currently dictates that the Corporation cannot make agreements with trade organizations due to the risk of collusion. The Corporation has also been constricted in its ability to unilaterally dictate rates based on industry and other information. Government regulation does not currently allow for the direction of rates by ICBC.

The Strategic Sourcing team has recently rolled out three vendor management initiatives within bodily injury claims as ICBC is working toward establishing enhanced vendor management for injury service providers:

1. **Strategic Alliance:** Create a fixed fee program for legal defense based on a predetermined level of legal support related to the complexity of a claim (ranked 1-6).
2. **Provider Programs:** Programs are in place for chiropractors (flat fee programs) and occupational therapists (participation agreements). However, room for improvement exists to broaden ICBC’s approach to injury management programs which would require legislative change.
3. **Independent Medical Services Program:** Mandatory independent evaluation for all applicable injury claimants containing fixed-fee pricing with specialized doctors.

Despite progress with these initiatives, ICBC requires additional structure, dedicated personnel, direction to negotiate contract terms and agreements with vendors, standardized invoicing, improved data quality and performance management tools to manage injury vendors more efficiently.

Vendor management for injury claims ranks below the industry average as ICBC is restricted by historical regulations to procure and manage medical service providers, and to create a preferred program.

In comparison, leading insurers in Canada and globally have robust governance and contract management processes, segmentation models and tools to tier medical service providers as well as holistic KPIs and SLAs to monitor and manage performance. For such insurers, medical service providers’ relationships are proactively managed through frequent reviews.



Vendor Management – Material Damage

Within ICBC’s Central Services Division sits the Strategic Sourcing team and the Supplier Management Office. This team is responsible for maintaining and managing relationships between ICBC and material damage suppliers (i.e., glass repair shops, towing companies, rental car companies, and auto body shops). Strategic Sourcing and the Supplier Management Office share responsibilities relating to vendor relationship management including contract renewal, strategic interactions with suppliers and assessing value to customers. As previously indicated for vendor management of medical service providers for injury claims, ICBC is more constricted in its ability to negotiate contracts and segment vendors than other insurers in Canada and globally because of their position as a crown corporation.

The ICBC material damage vendor network is extensive. Within collision repair vendors there is a lack of sufficient segmentation, with over 90% of vendors segmented into the top tier program, Express Repair. The Express Repair program provides claimants the option of proceeding directly to an ICBC accredited Express Repair facility for an estimate and repair. For Express Repair shops with earned authority levels, the repairs are pre-approved under a threshold of \$1,500 for level 1 and \$2,500 for level 2 repairs. Vendors earn level 1 authority when they have achieved and maintained an individual KPI score above the current agreed upon threshold for six full consecutive months. They can earn level 2 by achieving KPI scores above the set target, exceed their regional original equipment manufacturing pricing targets, receive positive audit scores, and receive no poor performance reviews. ICBC monitors material damage repair costs through internal control audits, supplier compliance audits, estimate reviews, and site visits. Material damage audits are completed based on potential risk of a vendor’s noncompliance to ICBC KPIs and SLAs.



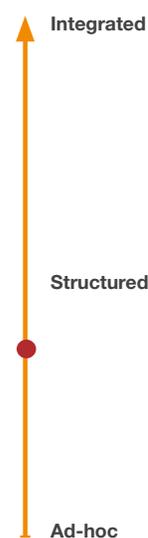
The current barriers to entry to become a top-tier supplier are very low with most providers achieving this status. Typically, vendor management functions would define robust standards around contract language and SLAs and instill penalties for under- or lack of performance and/or poor customer feedback. ICBC has specific SLA's, and requirements in its agreement, program guide & claims procedures, and instills various penalties for poor performance and non-compliance (removal of earned authority, reduced labour rate, removal from icbc.com, etc.); however, removal from this segment is a rarity, with action to remove vendors from the list is very scarcely taken. Lack of removal is due to the lack of segmentation in the program, as it would have a significant impact on the supplier if they are removed from the existing top tier.

Further, ICBC does not effectively use vendor performance to inform strategic negotiations of future contracts, as ICBC is constrained by the Competition Act to negotiate contracts with groups of vendors or trade organizations for risk of collusion.

ICBC ranks below industry average, due to lack of segmentation of suppliers through its current supplier programs, and ICBC's limited ability to direct volume to specific, tiered vendors.

Leading insurers in Canada and globally fully segment vendors, define SLAs and performance metrics, integrate vendor portals, govern vendors through frequent assessments and quality reviews and act to remove vendors who do not adhere to contractual requirements and performance standards. ICBC's existing approach to vendor management in this area is below the industry norm.

However, in line with leading practices, ICBC has implemented Mitchell, a material damage estimation tool, that provides seamless integration of claims and vendor systems with functionality to set appointments and submit estimates. There are five tracked KPIs for the 500+ Express Repair shops within the material damage vendor segment. The KPIs are consolidated into a scorecard that is generated monthly and posted to an online portal which vendors can access. These performance rankings are not made public.



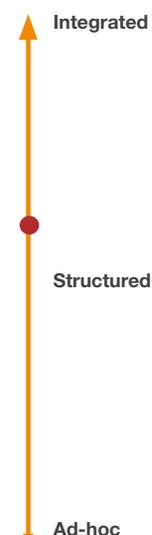
Subrogation

Subrogation is the inbound and outbound pursuit of damages or debts for claims that have occurred between the insured and drivers insured by a third party or uninsured party. Subrogation within ICBC is unique, as the Corporation is a provincial public insurer and the sole provider of Basic auto insurance. As a result, the majority of claims subrogation is handled internally using system triggers to transfer subrogation costs between claim files of ICBC customers. Commercial claims and/or out of province claims account for 70-80% of subrogation claims annually, with 50-60% of those claims being out of province. Remaining subrogation files fall within bodily injury and material damage.

Subrogation activities include: establishing liability between ICBC and the third party; preparing the subrogation file; releasing the file to the third party; and, negotiating settlement. In line with leading practices, ICBC has built relationships with third party companies that it frequently subrogates with.

Given the unique nature of subrogation at ICBC, subrogation has not been a key focus area for claims. **However, current subrogation activities ranks in line with industry average due to the standards and procedures in place.** These standards are reviewed frequently with adjusters for continuous improvement. All adjusters' roles and responsibilities include subrogation activities, but results are not linked to individual performance evaluations.

A gap for subrogation relative to leading practices in the Canadian and global market is the lack of defined subrogation performance metrics. Leaders in subrogation functions have well defined processes with holistic metrics that are frequently updated with the input of legal counsel or other related parties. Leading practice insurers also typically have a dedicated subrogation team that is segregated by subrogation type. At ICBC, due to the limited number of subrogated files, there is only one dedicated subrogation full-time equivalent employee that handles commercial claims. Out of province adjusters handle subrogation activities as part of their adjudication responsibilities.



Fraud

Fraud management related to claims involves the tracking and identification of fraudulent (or potentially fraudulent) activities where an exaggeration of the severity of a claim or the fabrication of damages relating to a claim may have occurred. Within ICBC, claims fraud detection and prevention is managed by a dedicated Special Investigation Unit (SIU) and within the Investigative Claims Team (ICT) within the claims organization.

Fraud Investigative Claims Team

ICBC has recently implemented a new fraud management unit within injury claims, the Investigative Claims Team (ICT). Adjusters handling injury claims can escalate claims for review by the ICT if they detect the potential presence of fraud. Training is provided to adjusters and job aids are available to provide guidance on how and when to escalate files to the ICT or to SIU. Once received, ICT takes over ownership of adjudication and will analyze the claim for fraud potential to determine if further escalation to SIU is required. The majority of the ICT files are represented. Therefore the Investigative Claims Team adjuster works directly with the defense lawyers settling injury claims to share the findings of their investigation analysis.

Optimal Fraud Management Lifecycle

The graphic below depicts the lifecycle of an optimized fraud detection and management function:



Fraud Management within the Investigative Claims Team ranks slightly above industry average due to the process standardization, job aids and training provided for recognition of fraud within claims.

Notwithstanding the current standardization of process, job aids and training, no formal questionnaires, scorecards, or electronic prompts have been implemented to inform adjusters on potential high-risk files that require escalation to ICT. Leading practice uses automation for routing files between ICT and SIU.

Savings from the fraud program are currently being tracked. ICBC could continue to expand their approach to savings tracking to measure savings from potential fraud identified at FNOL and escalated to the ICT. It can leverage leading practices to define goals and performance measures for injury adjusters and Investigative Claims Team adjusters to monitor their role in identifying and escalating fraud, and further improve process structure to emphasize to all claims staff the importance of fraud detection in order to minimize claims leakage.



Fraud SIU

SIU led fraud management can be initiated directly through external sources such as phone calls or emails from the public relating to potentially fraudulent claimants, or internally through the claims adjusters or underwriting. Once the SIU receives an alert on a potentially fraudulent claim, dedicated analysts review the claim to determine whether it requires further investigation. If so, it is escalated to an analyst to perform a cyber investigation and/or an officer to perform a field investigation.

When a cyber investigation is launched, analysts within SIU conduct public internet searches and analysis of publicly available information. If a field investigation is warranted, SIU investigators will perform an investigation including potentially contacting the claimant for interview, or if deemed necessary hiring a third party to undertake surveillance; however, that is rare.

If fraud is confirmed and there is supporting evidence for a denial of the claim or a change in claims payments, the adjuster is notified by SIU and they send the claimant a formal letter of denial or adjustment. If criminal activity is confirmed, the SIU officer recommends criminal charges directly to the Crown Counsel. The ICBC SIU is a level 2 law enforcement agency, thus having the ability to perform investigations, make presentations to a prosecutor and conduct statement analysis. The officers are also sworn Peace Officers.

The SIU team has recently implemented NetReveal to enhance fraud detection capabilities. NetReveal is a leading technology tool that is designed to detect suspicious claims based on activities in the claims files. It is automated and assigns a risk rating for all claims, with claims past a certain rating moving into the NetReveal queue. SIU has hired a significant number of new staff (from 60 staff at the end of 2015 to 114 currently) to increase their ability to manage fraudulent investigations and manage alerts generated by the NetReveal tool. While it is still too early to comment on the success of NetReveal, it appears to support the Corporation's goal of improving fraud detection and will help free up officers to focus more of their time on fraud investigations. Use of tools such as NetReveal are increasingly common practice for insurers in Canada and globally.

SIU's Fraud Management is approaching leading practice due to ICBC's investment and enhancement of fraud detection using analytics tools (NetReveal) and the mature structure of the SIU team.

ICBC is leveraging data analytics collected internally and through the NetReveal tool to detect potential fraud. ICBC has emphasized the importance of fraud management by structuring the SIU team to include analyst and field investigators and hiring additional staff to meet the workload demands adequately. In line with leading practice, ICBC uses direct flagging of potential fraud that is handled explicitly by the SIU team and communicates the importance of fraud detection within the broader claims organization.



Settlement

Claims Payment

Claims payments are processed by claims administration staff. These staff are focused on two subsets of payments: customer payments and vendor payments. Invoices are automatically assigned to claims administration staff who manually administer each payment. For claims customer payments, the default payment method to claimants is cheque. Unless a claimant has elected to receive electronic payments, a physical cheque will be printed and mailed.

Customer payments can be processed and approved within the claims administrative staffs' authority once approved by the file handler. If outside of their authority limits, it is escalated to the appropriate file handler for approval. Approved payments are issued to customers through a batch print on a nightly basis.

Invoices from vendors are received by the adjuster in various forms including paper, fax and email, and most invoices are not received in a standardized template as it is not currently required by ICBC. Vendor invoices are manually entered into Guidewire by the adjusters or estimator reviewing the services provided by the vendor. The adjuster reviews the invoice and determines if it will be approved for payment. Payments are sent to recipients via electronic fund transfer. Once the invoice is entered in Guidewire and the payment is approved, it is submitted to be part of the next batch payment for that vendor. Certain claims invoices, for example for car rentals and towing charges, can be processed without adjuster approval. Vendors with a supplier number (those vendors who have a pre-arranged supplier relationship with ICBC) are paid in bulk on set payment schedules, typically every two weeks. Non-registered vendors (no supplier number) are paid on a net 30-day basis from invoice date for each invoice.

Claims payments maturity is below industry average due to the manual effort required and the prevalence of physical cheques requiring printing and mailing for payments to claimants.

Customers elect their payment preference, but the default for customers is by physical cheque. In contrast, electronic invoice submission and electronic fund transfer is frequently used for vendor payments. Leading practice would allow for only electronic invoice receipt and electronic payments for both customers and vendors.



Summary of Observations: Claims

Based on the review of the current state of the claims organization and processes within ICBC, PwC has determined that there are standardized and generally efficient processes in place that align with, or are in some cases above, the industry average.

PwC assessed ICBC's claims operation relative to Canadian and global leading practices within the automobile insurance market. ICBC's claims processes and organization ranks at or above the industry average in most areas. Notwithstanding these findings, there do exist some key areas for improvement that should be further considered.

Key recommended areas for consideration within the claims function are listed below. Each area has been qualitatively evaluated on its potential benefit to ICBC's operations, taking into account: potential reduction in operating costs; enhancements to structure and process within the organization; and, level of complexity to implement. For example, small impact would provide minor savings to the organization, and minimal impact to day to day operations; large impact would provide significant savings relative to the operations within the scope of this review and have a direct impact to staff roles and structure, and require refinement or design of new processes.

These opportunities will not address ICBC's revenue shortfall but will contribute to improving operations in line with the industry.

Area of Consideration	Description	Potential Impact to Operations
Robust Vendor Management	Structured strategic sourcing and relationship management of vendors to assign/adjust existing tiers, establish SLAs and performance requirements and define contractual relationships are standard industry practices. Augmenting existing activities in this area for ICBC could lead to claims cost savings, and enhance service and outcomes for claimants.	Large
Representation on Claims	Injury claims are increasingly becoming represented by legal counsel, leading to increased claims costs and time to settle. In 2016, 51% of bodily injury claims were represented; 48% of these began as represented claims, and 52% began as unrepresented claims and became represented after they were reported and opened. A focus on reducing the number of represented claims through improved care and recovery management for unrepresented bodily injury claims could reduce overall claims durations as fewer claims will endure the lengthy representation process; this can in turn reduce costs without compromising service and outcomes for claimants. While no other Canadian insurer has a similar full tort environment, numerous carriers are actively pursuing strategies related to providing optional managed care frameworks to enhance recovery outcomes and streamline injury claims processes.	Large

Area of Consideration	Description	Potential Impact to Operations
Review Accident Benefits Limits	<p>Limits on Part 7 Accident Benefits have not maintained consistency with modern pricing (e.g., compensation for lost wages), leading to increased complexity in providing adequate care to injured customers that are liable. Updates would enhance the quality and adequacy of care and potentially reduce the move to reduce representation.</p>	Large
Caring for Injuries	<p>Implementation of Guidewire has led to increased quantity and quality of data available on customers and claims information which should improve ICBC's ability to manage care and provide value to the claimant. However, in the current legislative environment, there are limitations as to ICBC's ability to impactfully affect change in proactively managing injury claims. In particular, ICBC's role in claims management is significantly reduced with the presence of representation.</p>	Large
Staff Performance Management	<p>Increases in new hires has led to a high number of new employees requiring training and support to excel in new roles, coaching to support success and talent management to support attrition within claims departments. Minor enhancements to the quality of training will improve staff efficiency and effectiveness and drive increased customer satisfaction. This is a key concern echoed by unionized employees that can be addressed in the near term and will further improve employee engagement and subsequent customer service.</p>	Medium
Digital Claims Payments	<p>A significant amount of payments relating to material damage claims and medical suppliers occur through electronic fund transfer. However, opportunity exists to significantly reduce all other cheque payments as currently there is significant physical printing and mailing of cheques to claimants. Moving to broader electronic fund transfer across the organization will reduce processing and handling costs and improve the efficiency of payments and enhance customer experience.</p>	Small

Area of Consideration	Description	Potential Impact to Operations
Refined Segmentation and Assignment	Segmentation requires a focus on assigning claims to appropriate adjusters to manage care effectively and provide valuable services to customers. Stronger training and controls to monitor that claims are segmented and assigned effectively enhances claim outcomes and efficiency.	Small
Review Approval Limits and Authority	Average costs of parts and services for claims have increased, leading to manager approvals on many claims. Revisiting approval and authority limits will streamline processes and increase efficiency.	Small
Enhance Quality Assurance	Quality assurance programs have been initiated within the claims organization to review manual and automated processes. Sustainment and continuous improvement to effectively manage risk is required to ensure the programs and processes continue to add value and be efficient and effective.	Small

The above areas for consideration within Claims have been considered and are integrated in PwC’s recommendations, summarized in the report section “Initiatives”. The ability of ICBC to execute initiatives identified in “Initiatives” will, in some cases, be impacted by current regulation and/or legislation.

Claims: File Review

Closed File Review

At the direction of the Ministry, the Review was to include a qualitative review of ~100 closed claims to assess service quality and ICBC's productivity in processing claims, and to examine the claims backlog to the extent that one exists. The claims reviewed covered both material damage and injury claims and included lower, medium and higher-value claims; early settlements versus claims that take longer to settle (including those that went to trial). Specific claimant/adjuster interviews were not required but rather higher-level findings and assessments were completed. This closed file review was intended to be a qualitative review in order to identify any opportunities for improvements in overall service quality and productivity. While the number of files reviewed does not provide statistically significant measurements of financial attributes such as average claim size, it was sufficient to provide insights into the practices and processes in place for managing claims.

Approach

PwC's approach was to assess whether ICBC's claims handling processes and procedures were aligned with industry accepted and expected practices. For purposes of the Review, the claims data and information was accessed through the claims system, Guidewire, which was implemented in 2013, and as such any claims prior to this date were in the legacy system and not selected. 103 closed claims were provided to PwC as follows: 56 injury unrepresented, 28 injury represented, and 19 non-injury claims. The 103 closed claims provided were not intended to be a statistically valid sample and therefore neither the distribution of the types of claims nor the outcomes of the review should be used as a basis for projecting results nor is it representative of the distribution of claims volumes at ICBC.

PwC's review of these claims files focused on:

1. Claims settlement amount, including payments for services, relative to averages ICBC report
2. Frequency of interactions with claimant or claimant representative
3. Timing of payments made
4. Payments made in excess of reserve set in the system

Of 103 Closed Claims:

56
Injury unrepresented

28
Injury represented

19
Non-injury



Key Findings

The results of the Review suggest that adequate processes are in place for managing claims. The observations are consistent with the broader findings of the Review of operations. The key findings noted specifically from the file review are as follows:

- **Automation:** Guidewire (the claims workflow management application) has enabled automation within claims processing specifically regarding claims payments to vendors and movement of chargeable payments from 'Deny' to 'Accept' claims.
- **Customer Service:** This review noted that the frequency by which ICBC interacts with customer and/or representatives vary from claim to claim, indicating that there is a tailored approach to handling claims based on severity. This is in line with industry leading practices.
- **Claims Costs:** The review noted variations between average claim costs within the sample versus ICBC's reported average claims costs in 2016. This variation is due to the prevalence of larger, litigated represented claims and claims that proceeded to trial within the 103 file sample which is not indicative of the distribution of all of ICBC's annual claims.
- **Quality Assurance:** Procedures for measuring and adhering to established internal processes and rules are in place. Based on the sample reviewed, claims were in adherence to the processes in place. There is an opportunity to further assess the current quality assurance procedures and we encourage management to continue to work on strong quality assurance practices that are aligned with the associated risk in order to ensure that reasonable and acceptable levels of mitigation are achieved at all times.

These findings align with the findings of the Review. Though the sample size of 103 closed claim files is not statistically significant to warrant definitive conclusions, overall it provided further support to the opportunities identified as part of this Operational Review.

Material Damage Estimate Review

At the direction of the Ministry, the Review was to also include a review of ~100 estimates from body shops to compare information from the estimates against the related claim payment. The claims reviewed covered material damage estimates from vendors within the Express Repair program. The objective was to verify whether ICBC's processes and procedures were aligned with good industry practices and where noted, provide recommendations in order to improve management's processes, controls and procedures.

Approach

The approach to perform the qualitative review of ~100 estimates was to focus on certain aspects of material damage that align with the objectives of this review.

PwC's review of the material damage estimates was focused on:

1. Consistency between estimates provided to ICBC and total payment amount to the material damage vendor
2. Consistency of rates for services across the material damage vendors

All of the claim estimates selected related to claims documented in Guidewire ClaimCentre implemented by the Corporation in 2013.

Key Findings

The qualitative results of the Review, although not statistically sufficient to draw firm conclusions, indicated that processes were in place for receiving and paying estimates from material damage vendors. These processes are consistent with the broader findings of the Current State Review of operations, specifically relating to material damage vendors and the Express Repair program for approved vendors.

There is an opportunity to further assess and enhance the current quality assurance procedures and we encourage management to continue to build on their existing quality assurance program. The key findings specifically from this files review are as follows:

- **Consistent Pricing:** Rates used by the body shops were consistent among each other and within 5% of the national average (based on PwC's experience within the auto insurance industry). Rates included in this analysis refer to paint and materials, shop materials, sheet metal, mechanical and electrical, frame, and refinish.
- **Automatic Payments:** Payments are executed via straight-through processing with ICBC's payment system, Aries Payment Request (APR) that is tied to the integrated estimating system. PwC noted that estimates and invoices are consolidated as one document. This practice is made possible through pre-approval thresholds for payments against material damages, based on the current collision repair vendor management program in place, Express Repair.
- **Quality Assurance:** Procedures for measuring and adhering to established processes and rules are in place. Based on the sample reviewed, estimate and payments for repairs were in adherence to the processes in place.

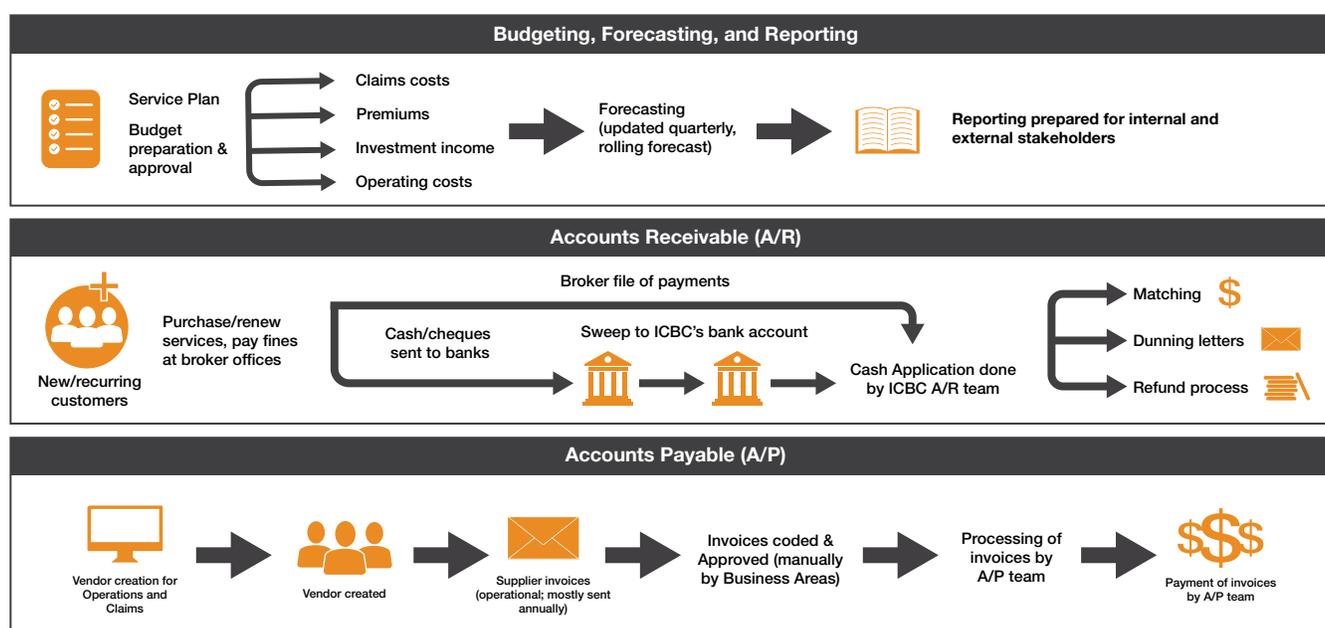


Finance

Overview

The following Finance processes have been reviewed at a high-level to identify opportunities for productivity efficiencies, effectiveness of the functions, and any further operational savings for the following finance processes:

- Accounts Payable
- Accounts Receivable
- Budgeting, Forecasting and Reporting



Accounts Payable

The current state findings are detailed by major process within Accounts Payable:

Vendor Management:

Duplicate and inactive vendors exist in the vendor master data (including claims vendors). The process is lacking a formal review of the vendor master data on an ongoing basis, and making changes accordingly, such as removing inactive and duplicate vendors. ICBC has advised that there is a project currently underway to remove duplicate vendors and standardize the process to prevent duplicate vendors. ICBC should continue with this project as it will improve data quality and support improved analytics and analysis.

Reception of Invoices and Approval:

The majority of vendor invoices for operational expenses such as utilities and rent are sent via mail to the business areas, rather than via email directly to the Accounts Payable team (via a generic mailbox address), or via Electronic Data Interchange. The Accounts Payable team is not responsible for processing claim payments, this function is conducted by the Claims organization.

The coding and approval of invoices is performed by the business areas, and this process is performed manually, rather than electronically via workflows directly in the Enterprise Resource Planning (“ERP”) system.

Processing and Payment of Invoices:

The majority of business areas submit their invoices manually to the Accounts Payable team, rather than via email. The Accounts Payable team manually enters the invoices in the SAP ERP system, the world leader in ERP systems. There is no usage of technology such as Optical Character Recognition to capture the invoice data automatically. The target to enter an invoice in SAP is five days, whereas leading practice is to receive and enter an invoice in the system is two days or 48 hours to avoid a backlog of invoices to process. This is usually achievable with the proper technology and processes in place.

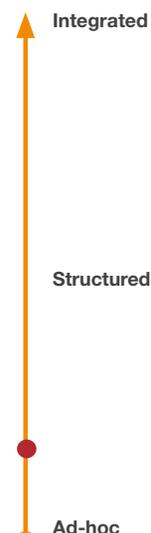
If an invoice for goods is received, but the receiving of the goods has not been performed in SAP, the invoice will be blocked for payment. If there are significant price or quantity discrepancies, the invoice will also be blocked for payment. For each of these scenarios, the Accounts Payable team will manually follow up with the buyers to resolve the issue.

ICBC aims to use Electronic Fund Transfer as the method of payment as much as possible; however, only 60–70% of invoices are paid via this method. The Accounts Payable team still processes manual cheques, which are mostly for non-registered vendors.

The maturity of processes within Accounts Payable indicate that ICBC is below the industry average.

The end-to-end process for Accounts Payable is quite manual with limited technology being used. This explains the elevated cost to process an invoice (\$11.63*). The average cost to process an invoice for the peer group (industry sector) ranges from \$3.79–\$10.99.

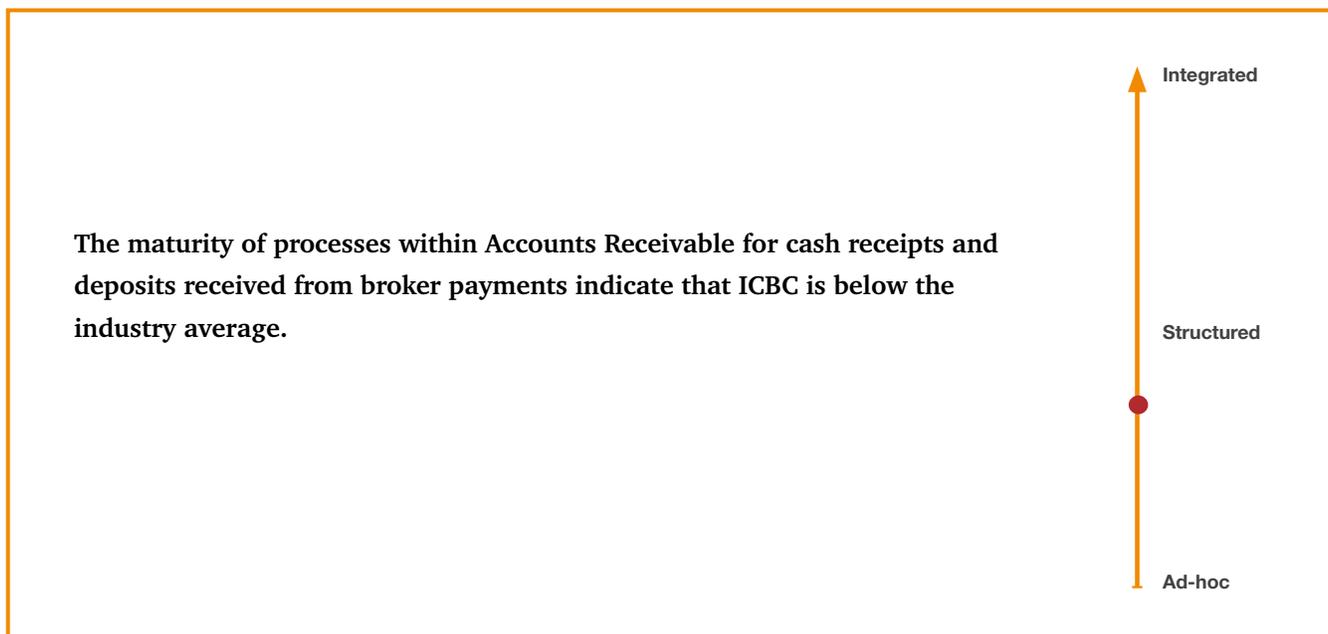
**This cost was calculated based on the information provided by ICBC (total remuneration of A/P department divided by total number of annual invoices processed)*



Accounts Receivable – Broker Payments

Payments for services are made directly by the policyholder with the broker (either by credit card or by cash/cheque). Payments received in the form of cash and cheques are deposited by the brokers into an ICBC account, at a financial institution within the province. ICBC has set up over 200 bank accounts for the convenience of the brokers.

A large number of bank accounts (> 200) that have to be swept into ICBC's main account adds manual work and complexities to the reconciliation process for the Accounts Receivable team. Further, mismatches due to timing between the broker file and the funds in the bank account need to be reviewed by the Accounts Receivable team causing additional efforts. This is mainly a result of deposits being made twice per week rather than on a more frequent basis. Lastly, a web portal does not exist which would allow customers to view their notices online, and make payments.



Budgeting, Forecasting and Reporting

The current state findings are detailed by major process for Budgeting, Forecasting and Reporting:

Budgeting:

For the operating expenses budget preparation, each division has a liaison person to work with the Financial Consulting & Advisory Services team. SAP is leveraged to assist with the budget preparation; a few iterations of the budget are required.

Scenario modelling is used particularly for claims and investment income, as the largest volatility in the budget. Claims expense and investment income fluctuate significantly under the impact of external factors, and are difficult to predict. A few iterations of the budget are usually required. The ICBC Service Plan is prepared based on approved budgets.

Templates for operational budgets are not all standardized across divisions; ICBC can continue its efforts to standardize the templates in the short term.

Forecasting:

The forecasts contain both internal costs such as labour and other operating costs, and external driven elements such as claims costs and investment income. On the internal costs, ICBC's forecast are fairly close. Claims costs and investment income are much more volatile, ICBC needs to adjust the forecasts and model various scenarios accordingly as changes in external factors arise. The claim costs forecasts which are based on actuarial estimates and investment income are outside the scope of this Review and is the

focus of a separate subsequent PwC review. ICBC previously used forecasting software but found that the system was limited in its flexibility to handle modeling numerous scenarios in a timely fashion. Therefore, ICBC now prepares scenarios and forecasts in Excel. Although using spreadsheets is not ideal, there does appear to be adequate controls around the Excel spreadsheets.

Reporting:

There are multiple sources of information for the preparation of reports; SAP should be the “single source of truth”. Ad-hoc reports are prepared, and the volume of these reports can increase at the demand of the government.

ICBC’s financial reporting currently is prepared in accordance with International Financial Reporting Standards (“IFRS”) which results in an accounting mismatch in the income statement between the volatility in claims costs due to changes in the claims discount rate and the related changes in the fair value of available for-sale investments that support the claims liabilities. This accounting mismatch was also reported in a previous external review. Note that this is a financial reporting timing issue where changes in claims liabilities are recognized in income each year whereas the offsetting changes in the fair value of the investment portfolio are only recognized when the investment is sold. The current accounting standards will be replaced in 2021 whereby there will be an opportunity to resolve the accounting mismatches.

The maturity of processes within the Budgeting, Forecasting and Reporting processes indicate that ICBC is above the industry average.

This is due to the centralization of these activities.



Summary of Observations: Finance

Based on the review of the current state of the claims organization and processes within ICBC, PwC has determined that there are standardized and generally efficient processes in place that align with, or are in some cases above, the industry average.

PwC assessed ICBC’s Finance function relative to Canadian and global leading practices within the automobile insurance market. ICBC’s finance processes rank at or below the industry average in most areas. Notwithstanding these findings, there do exist some key areas for improvement that should be further considered.

Key recommended areas for consideration within the finances function are listed below. Each area has been qualitatively evaluated on its potential benefit to ICBC, taking into account: potential reduction in operating costs; enhancements to structure and process within the organization; and, level of complexity to implement. For example, small impact would provide minor savings to the organization, and minimal impact to day to day operations; large impact would provide significant savings relative to the operations within the scope of this review and have a direct impact to staff roles and structure, and require refinement or design of new processes.

These opportunities will not address ICBC’s revenue shortfall but will contribute to improving operations in line with the industry.

Area of Consideration	Description	Potential Impact to Operations
Reliance on Highly Manual Processes	Within Account Payables, the majority of processes require manual effort from the Accounts Payables team. From invoice keying to follow up with vendors, members of the Accounts Payables team are conducting highly manual tasks that could be completed more efficiently by technology. Reducing the level of manual effort required for Accounts Payable processes could lead to a reduction in time required to process invoices and payments.	Medium
Complex Reconciliation Efforts	Due to the significant amount of bank accounts that exists to support money deposited by the brokers, there is a significant amount of manual effort on maintenance activities. The Accounts Payable team has created several complex reconciliation processes to support the multiple bank accounts.	Medium
Limited Technologies in Place	ICBC Finance does not adequately leverage technology within Accounts Payables which leads to a reliance on highly manual processes to receive and enter invoices into the system. Leading practice technology would enable ICBC to capture invoice data automatically; therefore, reducing the time to process invoices.	Medium

Driver Training

The review of the Driver Training was focused on examining the current processes for monitoring driver training schools and driving instructor’s compliance with regulations. Specifically, the Review considered the current standards, adherence to processes and governance of this area of ICBC’s operations. The purpose of the Review was to assess whether the current level of oversight, and subsequent impact on driving training and driver instructor training standards, is below required standards. The Review examined whether guidelines were being followed and whether the processes and resources available to the business units support the objective of creating a high quality driver training environment.

Overview

Driver training compliance is administered by two business units: Driver Training Industry Support and Driver Licensing Investigations and Compliance. The business units were separated in 2015 partly to increase independence and objectivity in the process.

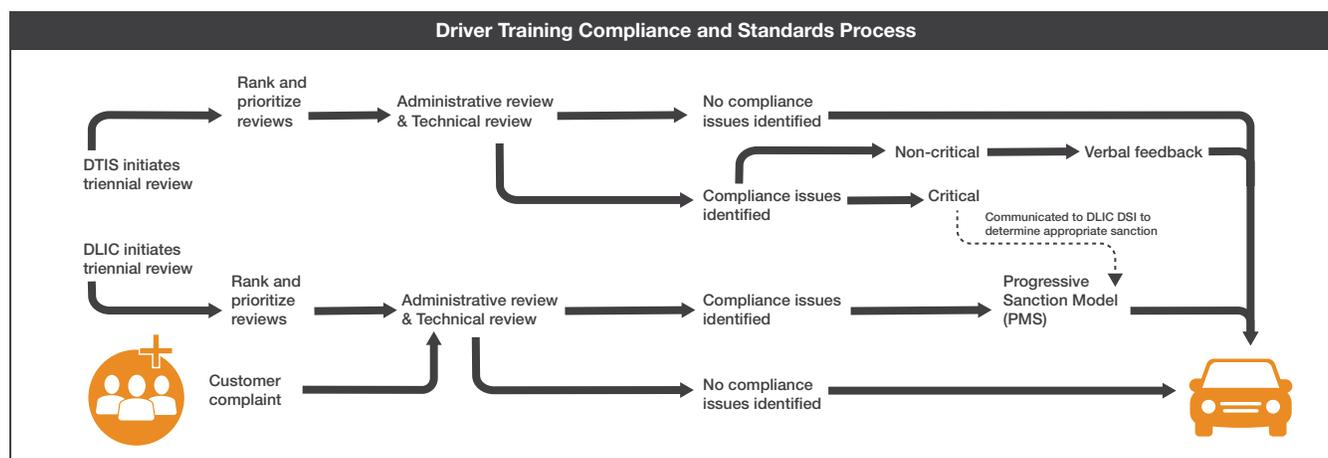
Driver Training Industry Support responsibilities include reviewing, approving and issuing driver training school and instructor licenses, and Graduated Licensing Program driver training school curriculum development. Driver Licensing Investigations and Compliance responsibilities include enforcing Division 27 of the Motor Vehicle Act for instructors and schools, and ensuring compliance with the driving school/instructor code of conduct. Driver Training Industry Support has a dedicated staff of three driving school inspectors who are responsible for the review of driver training schools, and Driver Licensing Investigations and Compliance has a dedicated staff of two driving school inspectors who are overseen by a coordinator who also performs compliance reviews at driver training schools.



As of October 2017, there were 655 driver training schools in British Columbia and 2,364 instructors. A driver training school must reapply for a license on an annual basis and driving instructors must apply for a license on a biennial basis.

Outside of the reapplication process, a more substantive review of driver training schools for compliance and standards is generally undertaken after one of two events: 1) After three years has passed since the last review in line with the policy for completing a triennial review of all driver training schools; or 2) Following the identification of an issue either by Driver Licensing Investigations and Compliance or Driver Training Industry Support staff who are engaging with a particular driving school, or as a result of an issue being identified by a third party. This approach to reviewing driver training schools uses both a mandatory review approach (the triennial review) and a risk based approach (through issue identification and notification). In the event that an issue or a failure to comply with applicable regulations is identified, the school at fault will enter into the ICBC progressive sanctions model with incremental penalties applied up to a withdrawal of a license.

In the current state, the approach to monitoring and measuring driver training school and instructor compliance proceeds in line with regulatory and legislative guidance. The emphasis of driver training school compliance and instructor assessments is focused on compliance and meeting mandatory criteria, and the guidance for undertaking a review of a school is clearly outlined in ICBC's policy and procedures manuals.



Monitoring and Measuring Schools

Due to the volume of schools (over 650) and of instructors (over 2,300) it appears as though there are limited resources in the relevant ICBC business units of Driver Training Industry Support and Driver Licensing Investigations and Compliance with responsibility for performing the oversight function in this area. The current model relies on a small number of experienced staff applying discretion in applying the progressive sanctions model which can lead to a lack of consistency in applying sanctions. The reliance on a small number of experienced staff presents challenges in succession planning for key roles. A jurisdictional scan of driver training oversight capabilities in a selection of Canadian Provincial peers showed the ratio of driver training schools to driving school instructors are significantly lower than the level observed in BC.

	British Columbia	Canadian Provincial Peers
Driving Training School to DSI Ratio	109 : 1	3 – 50 : 1
Driving Instructors to DSI Ratio	394 : 1	66 – 175 : 1

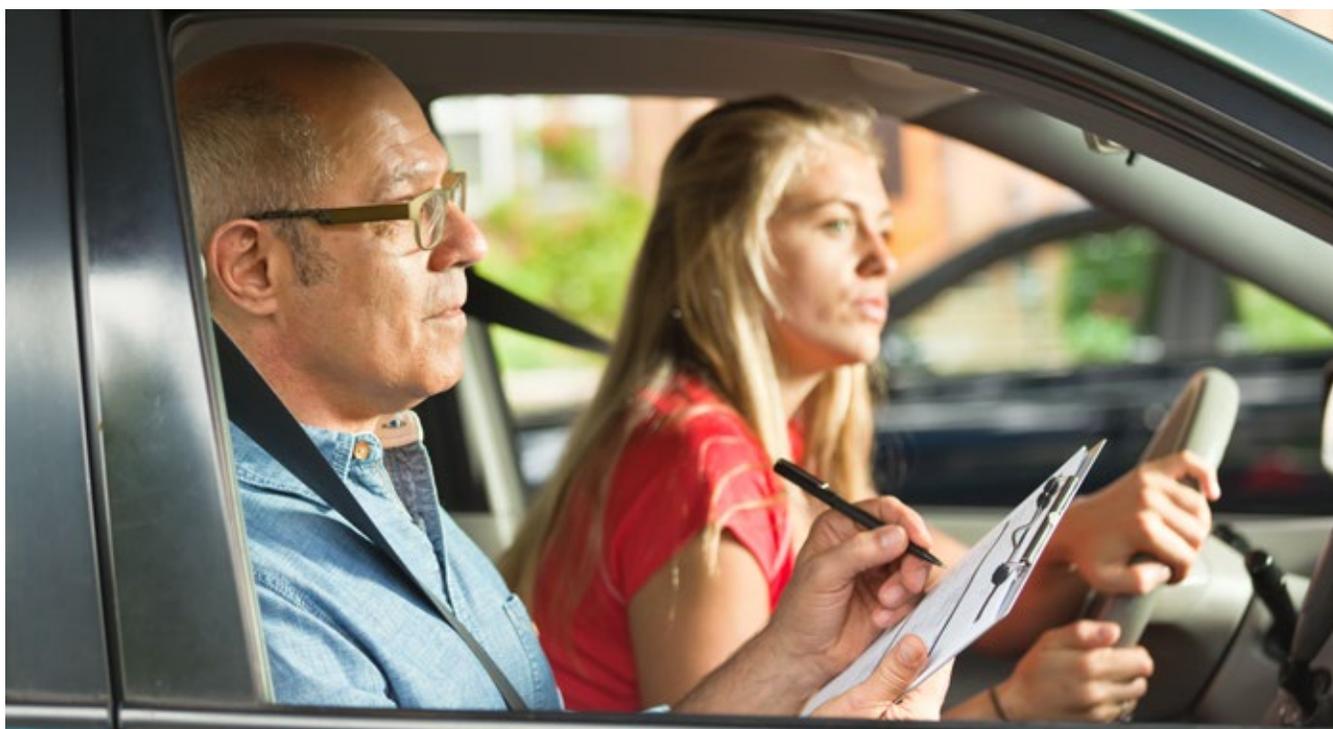
Note: The ratio combines driver school instructors from both DTIS and DLICs into its calculation to be consistent with other Canadian Provincial systems reviewed who have combined teams of driving school instructors performing both training assessments and compliance reviews.

It was observed that the limited resources lead to a reactive approach to conducting reviews with an emphasis on the risk based approach to initiating a review. Certain driving schools with a history of poor performance receive more regular reviews than schools with a record of compliance. This approach can be effective in directing resources to the training schools or instructors that are more likely to have standards or compliance issues; however, some schools that are not on the radar of inspectors may not be reviewed for a period of three years.

This is an outlier with other jurisdictions who commonly undertake more regular, albeit on occasion less comprehensive, reviews on a 1-2 year cycle. The business unit relies on a small number of experienced staff, reducing the role to a reactive one. Increasing resources could support proactive issue identification.

The approach to undertaking a review of a driver training school either on a triennial basis or following the identification of a specific issue is based on a standardized approach. This makes it effective at assessing compliance but not currently able to effectively or consistently assess the quality of instruction provided by both driving schools and driving instructors. Furthermore, although some information on driver training performance is being captured, it is not yet in a format that can be used to undertake detailed quality analysis.

The lack of appropriate data to measure the performance of driver training increases the reliance on the small number of driving school inspectors within Driver Training Industry Support to identify driver training schools that are performing at an above average level by observing the quality of instruction provided during a review. The development of an effective set of quality measures for driver training schools and a centralized system for these to be captured in would be beneficial in assisting driver school inspectors in: 1) Identifying issues with the quality of driver training instruction at an early stage, and; 2) Reinforcing the risk based approach currently applied in the review cycle with the limited resources being more efficiently deployed to support poorer performing driver training schools. This recommendation is described in more detail in the additional considerations section of this report.



Driver Training Compliance

Driver training schools in British Columbia operate as private businesses under license and ICBC is limited in the extent to which they can materially impact the quality of driver training schools after they have reached the minimum level required for compliance with a school's terms of license. The limited resources and lack of data to effectively measure school quality create a challenging environment for ICBC to identify best practices within driver training schools. There is currently only minimal data available to assess driver training school quality in terms of post-test crash outcomes and the available data on test pass rates does not clearly capture the impact a driver training school has had on a successful candidates driving behaviour and outcomes.

The challenges in measuring and defining what a high performing school is, in addition to the limited available resources to work with driver training schools to observe quality of instruction during assessments, limits the ability for ICBC to identify schools that require support and subsequently support them in improving quality of driver training schools. There are limited areas where ICBC can exercise a greater level of control of driver training schools through initiatives such as the Graduated Licensing Program. However, the Graduated Licensing Program training is provided by only approximately 7% of driver training schools and the numbers of drivers choosing to complete the curriculum has been declining over the last five years.

Driver training compliance and standards oversight is focused on compliance measured against mandatory criteria. It does not currently optimize the use of data and analytics to assess driver training school and instructor quality.

The business units responsible operate with a limited number of experienced staff. As a result, the teams are required to be reactive and are not able to readily pursue quality improvement initiatives. The business units have been able to perform well in terms of retaining key staff; however, the current model's reliance on experienced staff may exacerbate issues in regard to succession planning for key roles.



Summary of Observations: Driver Training

Based on the review of the current state of the driver training compliance and standards oversight approach within ICBC, PwC has determined that there are standardized and generally efficient processes in place that align with, or are marginally below, the industry average.

PwC assessed ICBC's driver training compliance and standards oversight approach relative to Canadian and global leading practices within the automobile insurance market. ICBC's driver training compliance and standards oversight approach is marginally below the industry average. Notwithstanding these findings, there do exist some key areas for improvement that should be further considered.

Key recommended areas for consideration within the driver training function are listed below. Each area has been qualitatively evaluated on its potential benefit to ICBC, taking into account: potential reduction in operating costs; enhancements to structure and process within the organization; and, level of complexity to implement. For example, small impact would provide minor savings to the organization, and minimal impact to day to day operations; large impact would provide significant savings relative to the operations within the scope of this review and have a direct impact to staff roles and structure, and require refinement or design of new processes.

These opportunities will not address ICBC's revenue shortfall but will contribute to improving operations in line with the industry.

Area of Consideration	Description	Potential Impact to Operations
Resourcing Constraints	Driver Training Industry Support and Driver Licensing Investigations and Compliance teams rely on a small number of experienced staff to provide oversight to ensure the standards and compliance are in line with regulatory requirements. By having limited staff in these roles, it forces those individuals in the role to become reactive versus proactive. Increased resources could support both proactive issue identification and industry best practices.	Medium
Use of Data & Analytics	There is currently limited data available to measure the quality of driver training instruction outside of the in-person training assessments performed by Driver Training Industry Support staff. Some information on driver training test performance is being captured, but this may not be an accurate measure of driver training school quality as it may not be possible to effectively measure the impact a specific school had on a student's test performance and does not reflect post-test crash outcomes for students.	Medium
Standardized Review Processes	The approach to undertaking assessments of driver training schools/instructors for compliance and training assessment purposes is based on a standardized approach. This makes it effective at assessing compliance but generally ineffective at assessing the quality of driver training.	Small

Interview Outcomes

Based on discussions with over 40 ICBC Union and Management, the following themes emerged. These themes have been incorporated into the opportunities within operations for the Corporation.

Union/Management: The responses between Union and Management were consistent. Union leadership and staff were very much aligned with the perspectives PwC heard from Management. PwC did however note that Union elected interviewees had more specific concerns about training, authority limits and management of vendors, which were more pronounced than management perspective.

Training: Additional training on standard and exceptional processes, and providing an understanding of how individual roles fit into the broader claims lifecycle and organization is desired at multiple levels of staff.

Authority Limits: Rising costs of services and parts are increasing faster than current authority limits in certain departments, such as claims for commercial vehicles and accident benefits. A review of authority levels in areas where manager approval is frequent can be beneficial to determining if increases in authority limits will help decrease the duration of a claim.

Vendors: Improved oversight and control of the vendors is necessary. Current restrictions for negotiating contracts and tiering vendors limits the ability of ICBC to proactively manage their interactions with vendors across the claims lifecycle.

Management: Improvements in management structure and oversight have been beneficial and supportive to staff, and has improved employee engagement. Across multiple departments interviewed, Management support was frequently cited as a positive factor impacting teams and individuals.

Active Case Management: Due to legislation and policies with providers, staff feel they have limited ability to provide insights into claimant recovery and provide proactive support in claims to guide the case management process for accident benefit and bodily injury claims.

Compliance: Compliance and Quality Assurance (QA) measures are in place, but additional resources to support ongoing and proactive monitoring and measurement of the efficacy of QA processes are required. Continuous improvement to the quality assurance function will enhance risk management and the efficacy of the Corporation's QA program.

Review of Past Recommendations

As part of the scope of this review, PwC reviewed past recommendations proposed to ICBC to gain an understanding of initiatives that have been suggested relating to operations within Claims, Finance and Driver Training. Recommendations relating to areas of the business outside of the scope of this operational review are not commented upon in detail.

Over the past five years, ICBC has participated in external reviews that have contributed to recommendations to improve ICBC's operational efficiency, product and distribution strategy, and relationship with external stakeholders (customers, service providers and Government). ICBC has implemented the majority of the past recommendations within their span of control, but broader engagement and support from external stakeholders is required to address the outstanding opportunities.

Since 2014, ICBC implemented structural, operational and technology-related recommendations within their scope of control. ICBC has solidified their governance structure with the Government, reduced operating costs, and transformed their approach to claims management. The benefits associated with these recommendations are tracked and have been reported to ICBC's Board of Directors.

- **Operational Excellence:** Cost containment initiatives relating to operations have been implemented; these include reductions in management staffing levels and compensation, stricter discretionary spending policies and detailed budget reviews ^[1]. ICBC leveraged Lean Methodology to implement an Operational Excellence program across multiple departments, including claims management. The program has contributed to process efficiencies and savings of more than \$100 million over the past few years ^[2].
- **Technology Advancement:** ICBC invested in new technology and data to refine their approach to claims management. The implementation of Guidewire workflow management tool within Guidewire's Claims Centre demonstrates ICBC's sharpened focus on providing a positive customer experience. ICBC also used data and analytics to streamline processes for identifying potentially fraudulent claims, and staffed a full-time Special Investigation Unit to accommodate the increase in investigations due to enhanced detection.
- **Quality Assurance:** Claims quality assurance and coaching programs were implemented to control claims leakage and maintain focus on customer service. Centralized and decentralized quality reviews are ongoing, and a central review team was established to conduct claims leakage, theme and trend reviews.

ICBC has made progress on the majority of the procurement and vendor management recommendations that were approved by the Government. However, additional opportunities exist to develop an effective vendor management function and work with service providers to construct the best care options for claimants.

Past recommendations to ICBC have not received Government approval, and others are pending further discussion. Support from the Government is a crucial step for executing procurement and vendor management initiatives.

- **Strategic Sourcing:** The Strategic Sourcing and the Supplier Management Office were revised in 2016 to develop specific sourcing strategies, monitor and track supplier performance and identify additional improvement opportunities. ICBC received previous Government approval to implement specific initiatives such as the establishment of fixed fees with legal defense firms, a windshield repair program and an independent medical services program ^[3].
- **Vendor Segmentation:** ICBC recognizes that opportunities exist to develop a competitive tiering system and enforce a comprehensive set of key performance indicators (KPIs) that strike a balance between low cost and fair treatment of suppliers. New initiatives to enhance the collision and auto glass repair programs, including competitive tiering and revised pricing, were put forward by ICBC and are under review and development.

- **Managed Care:** ICBC has also explored a total care management plan for bodily injury claims. Flat-fee programs with chiropractors and a participation agreement with occupational therapists are in place. This shift towards managed care represents the beginning of a turning point in ICBC's approach to product design and the consideration of reform within the industry.

The release of Ernst & Young's 2017 report, *Affordable and Effective Auto Insurance – A New Road Forward for British Columbia* articulated that the auto insurance industry is facing structural challenges, and changes to ICBC's operations without product reform would not alone return them to profitability. PwC agrees with this conclusion. Ernst & Young outlined a series of options, ranging from minor product reforms to accident benefits, to a fundamental shift away from an adversarial legal system (tort).

Even though ICBC has made progress on the past recommendations, PwC believes the larger question of product reform and legislative reform will have the greatest impact on the sustainability of the Corporation. ICBC has demonstrated a commitment to operational change across their organization and recognizes that shifts in their operating structure may be required to support a revised product portfolio. To do so, ICBC, the BCUC, and the Government will need to engage in a broader conversation on ICBC's product portfolio and establish a new standard of what should be included.



[1] *ICBC Response: The Review of the Insurance Corporation of British Columbia by the Government of British Columbia, June 2014.*

[2] *Affordable and Effective Auto Insurance – A New Road Forward for British Columbia, July 2017.*

[3] *ICBC's Independent Medical Services Program consists of a set of secured contracts for medical assessments. Assessments include medical reports and opinions from specialists in neurosurgery, neurology, orthopedics, physiatrists and psychiatry.*

Initiatives

Overview

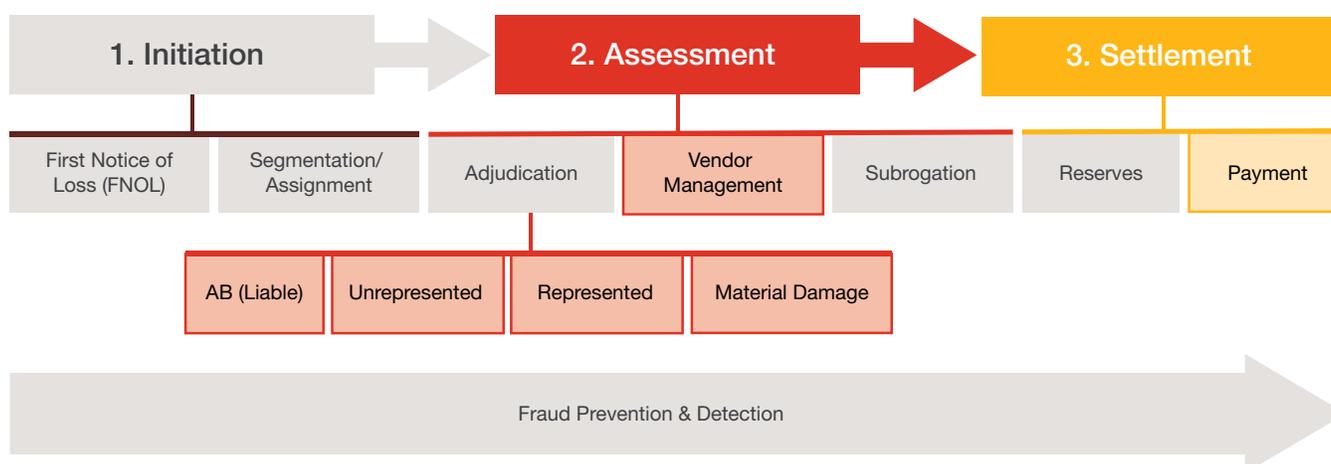
In reviewing the operations of ICBC with a focus on Claims, Finance and Driver Training, opportunities have emerged that could reduce costs and operating expenses. Taking into account recommendations from past reviews, insights from interviews that included Union and Management representation, and leveraging PwC’s experience in the auto insurance market both in Canada and globally, multiple opportunities were identified. The focus of these initiatives is within Claims, the largest cost and expense functional area within the Review’s scope.

Each initiative is compatible with ICBC’s current operating environment and a potential future environment with refinements to the product or the insurance tort system. Expected implementation considerations and a high-level benefits summary have been included within each of the initiative overviews outlined below. The implementation considerations outline the dependencies and any additional actions required by ICBC in order to realize the expected benefits. The benefits summary provides an overview of the expected cost savings and details on how those cost savings will be achieved.

Initiatives are not presented in order of priority and should be viewed as distinct improvements that can be executed alongside one another or individually. Prioritization and decisions required to implement the initiatives will need to be considered in tandem with enterprise-wide projects that could impact the financial stability of the organization beyond operations. The prioritization must be part of ICBC’s enterprise-wide planning approach. Such activities are in line with the best practice approach to implementing changes within an organization.

Initiative: Optimizing Vendor Management and Strategic Sourcing

Impacted Areas of Claims Lifecycle



Optimization of vendor management enables ICBC to manage its costs of services proactively, drive service excellence and lessen risks related to claims vendor spend. Strategic sourcing is a function of vendor management that allows organizations to leverage their purchasing power and ensure they are driving the most value from suppliers based on contract terms and service standards. Vendor relationship management is the practice of actively managing a company’s interaction with current and potential suppliers. A strong vendor management and strategic sourcing function will allow ICBC to use its considerable bargaining power to drive significant claims cost savings and enhancements to claimant outcomes and service standards through augmented control over its suppliers.

Insurers that have a robust vendor management function have realized significant benefits in the form of: cost savings, operational efficiency, and augmented customer service. Advanced insurers that have adopted leading practices have seamless integration of claims and vendor systems with functionality to set appointments and submit estimates. Vendor relationship management at leading insurers includes a system that segments vendors, defines Service Level Agreements (SLAs) and KPIs, integrates vendor portals, and conducts frequent vendor assessments through reviews. These leading insurers actively seek to remove non-strategic or underperforming vendors.

To redesign the Vendor Management and Strategic Sourcing function, ICBC can define roles for sourcing and relationship management according to vendor categories such as medical providers, legal, auto repair, and independent adjusters, to more actively monitor vendor performance. Leading insurers have a claims specific vendor management and strategic sourcing function that integrates with their broader organisation-wide strategic sourcing function, but acknowledge that vendor management within claims has different requirements to sourcing/vendor management of other non-claims related services (e.g. technology providers or custodial services). Currently, ICBC's claims related vendor network is extensive and fairly unified for material damage – over 90% of material damage vendors are in the top tier segment – and in its infancy for injury-related service providers. By broadening the role of vendor relationship managers, vendors can be proactively managed and measured on their performance. In turn, claims staff such as estimators and adjusters can focus on their roles in adjudicating a claim, rather than measuring and monitoring suppliers. It was mentioned during interviews with claims staff that there is a desire to spend less time measuring and monitoring suppliers. A structured and effective vendor management function within Claims, consisting of strategic sourcing and relationship management, will reduce the burden of time spent by estimators to manually review estimates or injury adjusters reviewing medical invoices and instead focus on guiding customers to suppliers that have proven they will adhere to service levels, quality standards and provide timely service.

Optimizing vendor management includes modifying Strategic Sourcing's current mandate to include the negotiation of vendor contracts to be in the best interest of ICBC, customers and service providers.

Contracts can include rate limits, SLAs for customers and adherence to processes such as standardized invoicing. ICBC can also design contracts to provide incentives for vendors to innovate in the way they provide services to benefit the efficiency and effectiveness of the claims process and the service and or treatment provided to the claimant. ICBC's vendor management function within claims will then be able to monitor adherence to the contracts and associated SLAs. Relationship managers will govern vendors and measure their performance using holistic KPIs within defined/monitored performance tools. This aligns with the comments heard from Strategic Sourcing staff during interviews regarding the necessity for ICBC to monitor and enforce adherence to the contracts and associated SLAs. Based on contract terms and performance outcomes, vendors will be segmented into tiers and governed accordingly. ICBC can build segmentation based on services, volumes, KPIs and adherence to SLAs, and establish governance structures to enable escalation of issues identified by performance metrics. Top tier vendors will represent the highest performing group of vendors within each category.

Improving focus on vendor management and strategic sourcing in claims can lead to claims cost savings by the negotiation of rates and enhanced customer service through adherence to quality service as defined through SLAs. ICBC can benefit by reducing the total amount paid to vendors based on improved control and oversight. Customers will benefit from enhanced, predictable, quality services. With increased management of vendors, ICBC can also potentially enhance competition in the market, further driving innovation and service enhancements where vendors seek competitive pricing and advanced services to become (or remain) a top-tier vendor.

Implementation Considerations

In order to achieve the benefits identified for optimizing strategic sourcing and vendor management there are implementation considerations.

People

- 1. Establish a Vendor Management Team:** Establish a dedicated team within the Supplier Management Office to manage vendor relationships, including improved oversight over the billing process and the claimant experience. The team can work with Strategic Sourcing to negotiate and contract with different spend categories such as medical providers and legal professionals. Roles and responsibilities between Strategic Sourcing and Vendor Management will require clarification and communication to specify each individual's role within their team and their integration with one another. Each individual in the team should be dedicated to one vendor category in order to benefit from specialization and develop a close relationship with key vendors in the industry. Current employees and newly onboarded team members will benefit from structured training on their roles within the vendor management lifecycle, specifically on governance, performance management, performance reviews, vendor segmentation and contract management.
- 2. Communicate and Train Claims Staff on Vendor Program:** Communications will be beneficial to inform adjusters and internal counsel on ICBC's new approach to vendor management. This will include informing them of the preferred network, providing guidance to staff on how to discuss the preferred vendors with claimants, and educating them on the benefits of the optimized vendor program. Communications and training for estimators will also be required to delineate the roles of estimators and vendor managers on quality assurance and management of vendor performance.

Process

- 1. Contract Management Process:** Creating a contract process will guide negotiations with vendors, and renegotiations based on each vendor's adherence to established SLAs. Included in contracts are a required adherence to rates, SLAs, performance reviews, submission of invoices and use of vendor portal.
- 2. Design Vendor Segments per Vendor Category:** Designing injury and material damage vendor segments will allow ICBC to tier vendors based on the services provided, volumes, KPIs and adherence to SLAs. The segments should be specific to the needs of each vendor category.
- 3. Establish Governance Structure:** Designing processes for governing vendors by category or each vendor segment will allow the vendor managers to adequately increase oversight and control of vendor relationships and to monitor compliance to contract requirements.
- 4. ATS Program:** Revising the Alternative Transport Service (ATS) program will be beneficial to only require payment for services provided to claimants.
- 5. Refine QA Program:** Performing a cost-benefit analysis of an optimal threshold for auto approvals and the optimal number of manual reviews for a materially significant sample size of estimates and invoices across all vendor categories and vendor segment can be beneficial to improve transparency. Defining the process for audits to be completed automatically within current systems by estimators and by vendor managers will support the implementation of a vendor relationship management program and a strong quality assurance process for estimators to control claims leakage.

Technology and Tools

- 1. Vendor Management Tool:** Adopting the use of a set of technologies will assist vendor managers in vendor segmentation based on established criteria, monitoring and vendor performance improvement planning (PIP), increasing ICBC's ability to monitor vendor performance.
- 2. Vendor Portal:** Establishing a vendor portal for injury and material damage vendors will provide direct invoicing and payment, and sharing of important information relating to performance management.
- 3. Vendor Scorecards:** Designing scorecards will support vendor managers' assessment of vendor performance based on the contract requirements and other KPIs (e.g., service quality). Vendor managers can enforce remediation or segmentation based on the scorecard outcomes.

Benefits Summary

By optimizing the vendor management and strategic sourcing function, ICBC has the opportunity to realize between \$37 and \$56 million in annual net savings by year 3. Based on the work ICBC has already done, it would more likely that ICBC could achieve the low end of the benefits. However, PwC has seen more aggressive approaches that are less concerned about suppliers which allows them to achieve the higher range of benefits. The high range of benefits within this model is conservative with respect to other jurisdictions. In calculating the benefits of optimizing vendor management within material damage and injury claims, the top five vendor categories of spend were analyzed to identify cost savings in the areas with the highest impact to ICBC, as follows:

Material Damage Spend Category (Top 5)	2016 Annual Spend (\$M)
Collision Repair Shops	\$ 687.0
Glass Repair	\$ 72.8
Towing and Storage	\$ 32.0
Commercial and Heavy Equipment	\$ 30.0
Rental Car	\$ 26.0
	\$ 847.8



Source: ICBC

Injury Spend Category (Top 5)	2016 Annual Spend (\$M)
Physiotherapy	\$ 31.2
Occupational Therapy	\$ 17.1
Medical Rehabilitation	\$ 11.3
Kinesiologist	\$ 8.4
Massage Therapists	\$ 5.0
	\$ 72.9



Source: ICBC

These savings are driven by a re-designed program for material damage vendors, who contributed to nearly \$850 million in spend in 2016 that includes defined processes for contract negotiations, KPIs and governance practices. Vendor management savings can also be driven through a separate management program for all injury vendors (e.g., medical service providers, lawyers), who contributed to a total of roughly \$284 million in spend in 2016. Together, these initiatives will increase ICBC's control and oversight over material damage and injury spend. The key drivers of the savings is the negotiation of rates through contract management and the use and management of vendors through ongoing relationship management.

These savings can be achieved through competitive sourcing and ongoing vendor performance management. New contracts with specified SLAs for rates, volume discounts and service quality should be introduced for both material damage and injury vendors. This new approach to strategic sourcing will allow ICBC to refine their existing segmentation process in material damage and introduce a new approach for injury vendors. Once the contracts are established, ongoing performance management of KPIs will contribute to a tiered vendor system. These initiatives will contribute to driving prices down and increasing consistency across vendor performance, provide enhanced service to customers, and improved oversight and control over vendors based on segment.

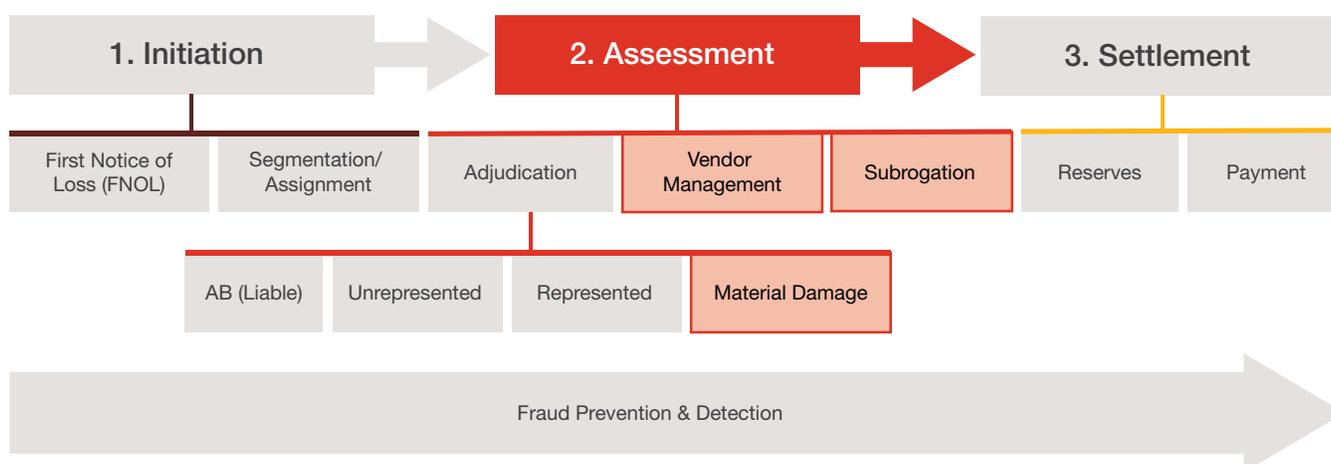
The following vendor management activities have also been considered but cannot yet be quantified, as an independent cost benefit analysis is required to determine their viability. A detailed review of each of these activities was not in scope for the Review:

- **Optimize in-house legal defense counsel department:** A cost-benefit analysis can be conducted to understand the value of an increase in resources within in-house defense counsel to expand capacity to meet demands for defense counsel on represented claims and improve oversight of spending on defense costs, in addition to improving in-house legal counsel skill-sets to be capable of handling higher complexity files and managing all defense services. These efforts can reduce spend on external defense counsel by increasing the number of cases handled in-house without reducing the effectiveness of defense counsel, whether internal or external.
- **Repairing parts instead of replacing:** In line with initiatives already underway at ICBC, continue to promote the repair of glass instead of full replacement.
- **Enhanced oversight and control of the vendor process:** In addition to a more structured sourcing and vendor management program, ICBC can consider ways to improve their control over the vendor process either through flat-fee programs, partnership models or vertically integrating certain processes into ICBC services. Further analysis is required.



Initiative: Improve Salvage and Subrogation Management

Impacted Areas of Claims Lifecycle



Salvage is the handling of un-repairable vehicles. Salvage vehicles are sent to/held in a salvage yard until the vehicle’s parts are sold at auction. Typically, the longer a vehicle remains in a salvage yard, the less valuable the parts become. Subrogation is the inbound and outbound pursuit of damages, or requirements to pay debts for claims that have occurred between an ICBC insured driver and drivers insured by a third party or uninsured party. It is in the best interest of insurers to pursue subrogation to the greatest extent possible to recover all damages or debts. Both salvage and subrogation result in claims leakage when they are not actively pursued for recovery leakage (unnecessary claims expenses) increases. Claims leakage can be defined as the difference between the actual claims payment made and the amount that should have been paid if all leading practices were followed.



Leading practice insurers manage salvage yards as vendors. Salvage yards are assessed with performance scorecards and must adhere to specific KPIs and SLAs. As well, adjusters are automatically notified once a sale of parts happens at the salvage yard. In the case of subrogation, leading practice insurers have dedicated target and pursuit teams that handle all types of subrogation within the organization. Performance expectations of those staff members are tied to the organization's subrogation KPIs.

To improve salvage and subrogation management, ICBC can establish enhanced procedures and protocols with the overarching goal of improving the quality and quantity of inbound and outbound recoveries.

ICBC can improve the focus on salvage and subrogation for all claims staff at the time of claims submission (FNOL) and continue focus throughout the claims lifecycle. Specific to salvage, ICBC can evaluate the benefits of expanding the operating hours of salvage yards. With greater access to the salvage yards, ICBC can reduce the towing spend on the transfers of vehicles from the estimating facilities to the salvage yards because they can go directly to the salvage location. For subrogation, ICBC can redesign roles and responsibilities to improve control over subrogation efforts and improve the effectiveness of inbound and outbound recovery efforts. This aligns with what was heard during interviews with claims staff who mentioned that there was a possibility for greater subrogation recovery if a stronger focus was put on subrogation throughout adjudication. Creating a dedicated, centralized team is in line with generally accepted and leading industry practices in the Canadian and global insurance market. Additionally, ICBC can enhance relationships with internal and external partners (e.g., third party salvage vendors, third party insurance companies) to improve oversight and streamline their processes within these important claims functions.

Improving focus on salvage and subrogation can lead to a reduction in claims leakage. Though subrogation and salvage activities do currently exist within the organization, enhancing these functions will further reduce overall claims expenses.



Implementation Considerations

In order to achieve the benefits identified for improving salvage and subrogation, the following implementation considerations are required.

People

- 1. Communicate and Train Claims Staff on Salvage and Subrogation Processes:** Increase salvage and subrogation recoveries through additional training and communications to adjusters. Communications will be required to inform claim staff on the new processes for subrogation and salvage. This includes educating staff on the importance of early identification of potential subrogation files at time of reporting and the direct relationship between early reporting and greater recovery value. Communications will also be required for the out-of-province (OOP) adjuster group to explain the distinct roles and responsibilities of adjusters and the target and pursuit team in subrogation management.

Process

- 1. Introduce Subrogation Key Performance Indicators (KPIs):** Develop subrogation key performance indicators (KPIs) to improve adjuster focus on improved recovery identification at time of claims reporting (FNOL) and throughout the claims lifecycle. Adherence to subrogation KPIs will be measured and be considered as part of performance management.
- 2. Subrogation Package Process:** Create a process for subrogation package creation. Enforce the use of standard subrogation package templates within Guidewire to improve the efficiency of subrogation information gathering and processing. During an interview with ICBC's Commercial Claims Officer, it was mentioned that the gathering of information for the subrogation package and creation of the subrogation package has several opportunities for efficiency improvements.
- 3. Salvage Vehicle Delivery Process:** Standardize the vehicle delivery process so that vehicles are immediately delivered to ICBC-owned salvage yards, where applicable. The standardization will greatly reduce the number of multiple vehicle transfers/tows prior to delivery to ICBC-owned salvage yards. The operating hours of ICBC's existing salvage yards will need to be reviewed in order for savings to be achieved.

Technology

- 1. Guidewire Configuration:** Develop new Guidewire business rules to support the collection of required information for subrogation efforts. Create templates within Guidewire to auto populate and send subrogation communications to third parties (e.g., mail merge).

Benefits Summary

By improving the management of subrogation and salvage, ICBC has the opportunity to realize between \$1 and \$2 million in annual net savings by year 3. The key drivers of these savings are increased focus on salvage and subrogation management throughout the claims lifecycle and expanding the scope of salvage operations.

These savings can be achieved through the standardization of the subrogation and salvage processes, improved governance mechanisms for subrogation and exploring additional opportunities for additional salvage revenues. By encouraging all claims adjusters to focus on subrogation and salvage management at the time of claims submission (FNOL) and throughout the claims lifecycle, ICBC can increase the quantity of savings for inbound and outbound subrogation efforts. Adjusters will focus their time and effort on managing all claims components and include subrogation and salvage management as a key part of claims management. ICBC can also benefit from additional operating hours for salvage yards as the necessity for multiple vehicle transfers could be reduced.

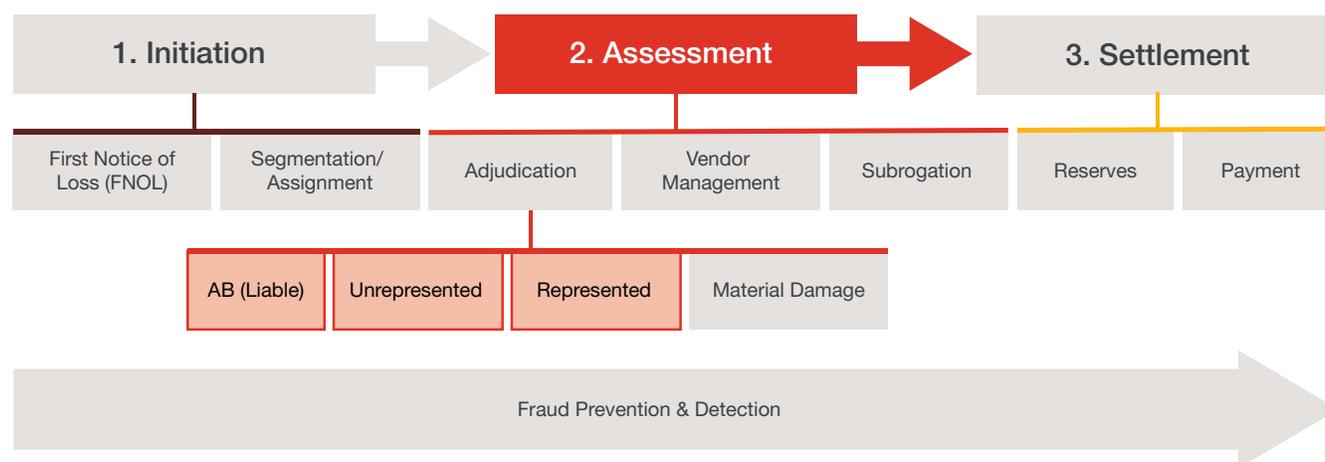
In calculating the benefits of improving salvage and subrogation management, the average number of subrogation files handled per adjuster and the average time spent on recovery files were analyzed to identify potential time savings and efficiency gains due to enhanced process standardization and KPIs to promote subrogation activities. Examining PwC's prior experience with the lens of ICBC's unique tort environment, PwC believes there is the opportunity to improve subrogation recoveries for material damage claims and injury claims, while OOP and Commercial claims are closely monitored and structured. For salvage, additional analysis on the benefits of changing operational structure is required.

The following subrogation and salvage management activities have also been considered but cannot yet be quantified, as an independent cost benefit analysis is required to determine their viability. A detailed review of each of these activities was not in scope for the Review:

1. **Establish a Dedicated Target and Pursuit Team for Subrogation:** Determine the number of resources required for a dedicated target and pursuit team to handle files identified for subrogation. Between adjusters and target and pursuit team members, segregation of roles and responsibilities will require clarification and communication to specify each individual's role with the case management and subrogation process.
2. **Review Staffing Requirements at ICBC Owned Salvage Yards:** Consider staffing requirements and determine if additional resources are required at ICBC-owned salvage yards to support operations through extended operating hours.
3. **Assess Impact of Selling Salvage Outside of British Columbia:** Perform a cost-benefit analysis on salvage vehicle values and their daily depreciation to identify if the data shows there is a benefit to sell more vehicles outside of British Columbia leading to an increase in salvage revenues.
4. **Determine Potential Operational Efficiencies from Salvage Yard Consolidation:** Performing a cost-benefit analysis on the operations of salvage yards will provide ICBC with data that could support a decision to consolidate the Central Estimating Facility and Queensborough yards.

Initiative: Shifting to a Proactive Injury Care Recovery Model

Impacted Areas of Claims Lifecycle



Proactive care planning and recovery is designed to provide claimants with the most effective care model in efforts to expedite and optimize recovery. A proactive care recovery model provides claimants with access to defined courses of treatments specific to their respective injury(s) and ongoing guidance and support from the adjuster(s) throughout the recovery process. Under this model, insurers have access to recommended treatment plans specific to each injury type. Injury adjusters use the treatment plans as a guide to support claimant's throughout their recovery. Leading insurers and workers' compensation boards involve the injury adjusters in all facets of the claimant's recovery at a level that is commensurate with injury severity. Involvement can include scheduling of medical appointments, attending medical assessments and in-house visits. They work in collaboration with medical services providers and workplaces to improve claimants' recoveries as close as possible to their pre-injury state.

Insurers that have adopted proactive care planning and recovery models have noticed significant tangible and intangible benefits. Adopting a proactive care recovery model provides insurers with greater oversight of the claims lifecycle and improves claimant's customer satisfaction and engagement. Working closely under the guidance of medical providers, adjusters are able to provide claimants with recommended treatment programs that are proven to support recovery. Leading practice insurers have implemented case management tools that allow claimants receiving injury benefits to access and submit information through online channels. The ability to upload information such as medical reports and diagnostic imaging and the use of user-defined dashboards helps keep insurers and claimants connected outside of phone and in-person channels and improves transparency of the status of a claim. Additionally, insurers have focused on reducing hand-offs to build a one-to-one relationship which enhances trust and joint accountability of the claim outcome.

Introducing proactive care planning for injury claims within unrepresented injury claims can enable adjusters to work more closely with medical practitioners and service providers to introduce proactive care planning and recovery management that will provide the best opportunity for recovery for claimants.

Adjusters can be assigned to claims based on the alignment between the adjuster's experience and the type/severity of the claimant's injury to ensure claimants receive the necessary support and guidance for the best course of care. Adjusters can benefit from specialized training for specific types of injury(s) and severity, so they are familiar with the claimant's treatment plan. ICBC can continue enhancing and developing skill-sets of adjusters to improve claims outcomes. For ICBC's proactive care recovery model to be effective it will require partnerships with the medical community, a structured relationship between the adjuster and

the medical practitioner, and enhanced communications to the claimant. ICBC can also consider adjustments to their existing claims segmentation model at FNOL to promote assigning claimants to an adjuster with the optimal skill sets to support their recovery.

In comparison to the recovery management model used by workers' compensation boards, such as WorkSafeBC, ICBC will still be limited in its ability to require adherence to a care program. Whereas WorkSafeBC and other provincial workers' compensation boards provide service to employers, ICBC services its own customers in their injury recovery as well as people who were injured by an ICBC insured and are now seeking compensation for their injuries. This distinction is important in understanding the different relationship with the recipients of a recovery management or managed care plan. Whereas WorkSafeBC can mandate the care program, claimants can elect to follow the recommended treatment plan and jointly work with their injury adjuster, medical practitioners and service providers towards recovery.

Developing a proactive care recovery model for unrepresented injury claims can be beneficial to manage claimant's recovery and enhance the relationship between claimants and ICBC. Injury adjusters working directly with unrepresented claimants can provide support so that claimants are better-taken care of and recover towards their pre-injury state faster (when possible). Additionally, through such a model, ICBC can enhance relationships and build greater collaboration across all medical services providers.

Comparison to WorkSafeBC

Within the WorkSafe rehabilitation model, there are policies and guidelines for the health care treatments available to an injured worker based on their type of injury. WorkSafeBC can review and refine a recovery and return-to-work plan if the approved treatment plan is not sufficient to return the injured worker to their pre-injury state or return them to work in a similar capacity. WorkSafeBC can also terminate a treatment plan if recovery is considered complete. If an injured worker does not adhere to their treatment plan or does not attend their medical examination or their treatments, payments may be suspended, at the discretion of the claimant. Further, general practice is that injured workers should not have more than one treating practitioner at a time. WorkSafeBC is only liable to pay for care, treatment, and wage loss directly related to accepted claims from injuries sustained in the course of employment. They also can modify or end a treatment plan when there is evidence that return to work is possible, or treatment is no longer necessary, or if there is an indication of rehabilitation plateau, where an injured worker is not expected to experience any further benefit of treatment. Any disputes over benefits are appealable to the Workers' Compensation Appeal Tribunal. The decision of the Tribunal is based on characteristics of each case and are not precedent setting.

In contrast, ICBC cannot unilaterally decide to end a treatment plan or restrict a claimant from seeking additional medical opinions or services at the risk of acting in bad faith. It is a legal requirement of the basic auto plan insurance product to continue the provision of treatments to injured claimants until they no longer elect to receive treatment. Further, claimants can elect for representation, whether their claim is accident benefits (first party liability) or bodily injury (third party liability). If a claimant chooses to be represented, ICBC can no longer interact directly with the claimant or recommend a course of treatment, unless the claimant chooses to divulge their care plan.

By adopting a proactive care plan for accident benefit and unrepresented bodily injury claims, ICBC can play a larger role in the design and adherence to treatment plans for managing injury by helping the claimant make more informed decisions to support their recovery while still respecting the claimant's freedom to choose their medical practitioners, and ultimately their recovery plan. Fundamentally, the worker's compensation and auto insurance products are different in legal nature, and therefore operational comparisons are very difficult to make.

Implementation Considerations

There are implementation considerations across people, process and technology that are necessary for ICBC to be successful in introducing proactive care planning and recovery management to achieve greater oversight in claims management and reduction in claims duration.

People

- 1. Training, Upskilling and Recruiting Resources:** Review the current skills specializations within injury claims staff and determine areas where specialization currently exists and what new skills may be required to allow ICBC to provide claimants with a dedicated team to support their recovery. Developing training materials for claims staff on a proactive care planning model and recommended injury treatment plans will up-skill the claims staff on common injuries and recovery requirements. The desire to develop additional skills related to injury treatment was mentioned during interviews with claims staff. ICBC will also determine needs for additional resources due to increased time spent per adjuster on servicing claims with treatment plans.
- 2. Establishing a Technical Consultant Role:** Claims staff mentioned during the interviews the need for technical claims expertise to support claims management. Technical consultants will provide additional support and guidance to adjusters of both unrepresented and represented claims. ICBC can on-board and train resources on requirements for a technical consultant role. Communicating the purpose of the role and the benefits to claims staff to introduce the additional resource will promote the acceptance and use of this dedicated role.
- 3. Communicating Changes to the Community:** Communications will be required to inform and educate ICBC staff and the medical services provider community in British Columbia on the proactive recovery model.

Process

- 1. Voluntary Treatment Plans:** ICBC can work in collaboration with the medical services provider community to design recommended treatment plans for the most prevalent injury types. These plans will help inform the adjusters in how to best guide the proactive care of claimants during adjudication.

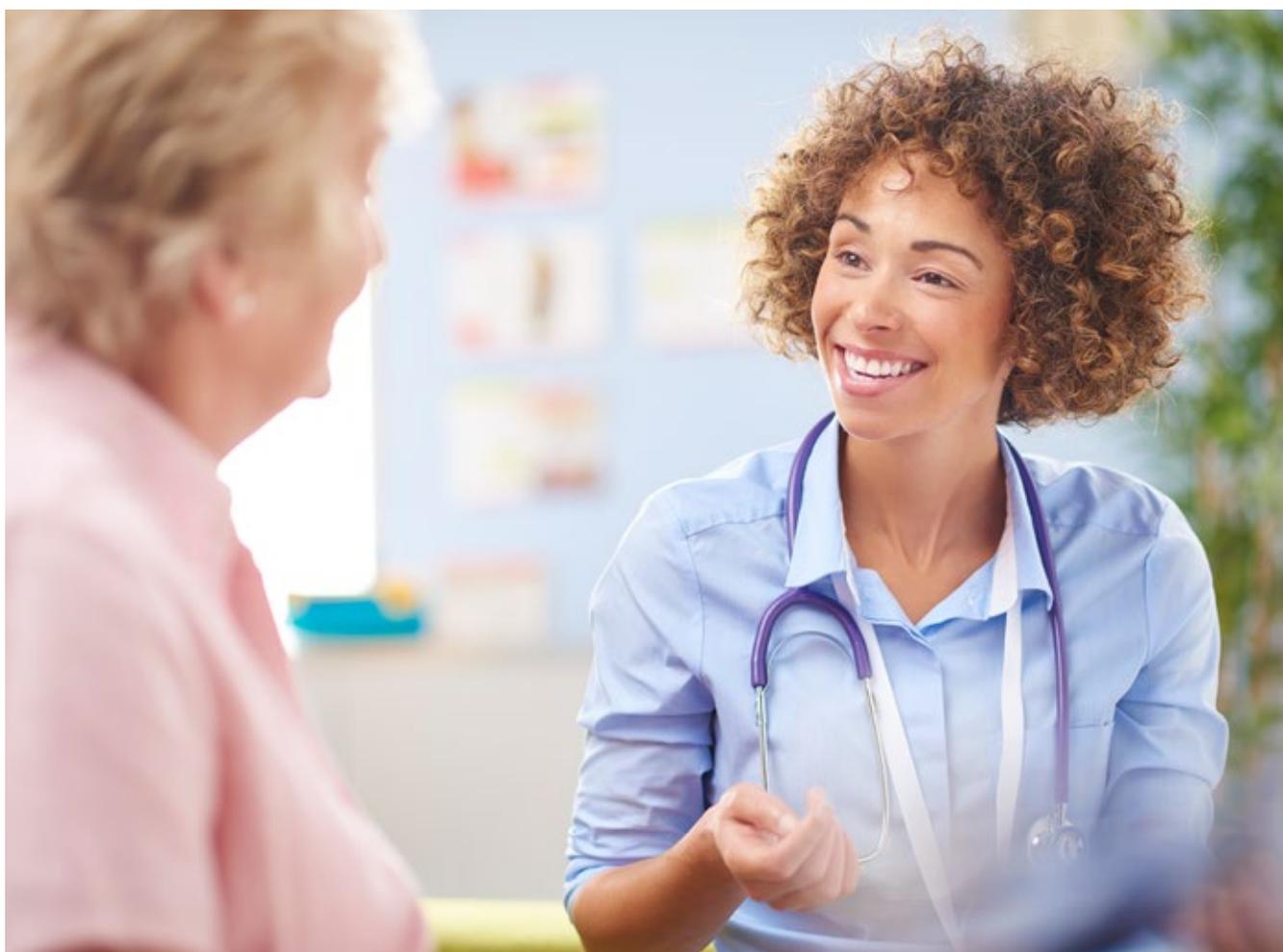
Technology

- 1. Guidewire Integration:** Incorporate recommended treatment plans within Guidewire in order to be accessible within the claims workflow system.
- 2. Vendor Portal Integration:** Treatment plans should be integrated with vendor portals to be accessible by medical service providers in order to streamline approvals and payments for treatments that are part of treatment plans.

Benefits Summary

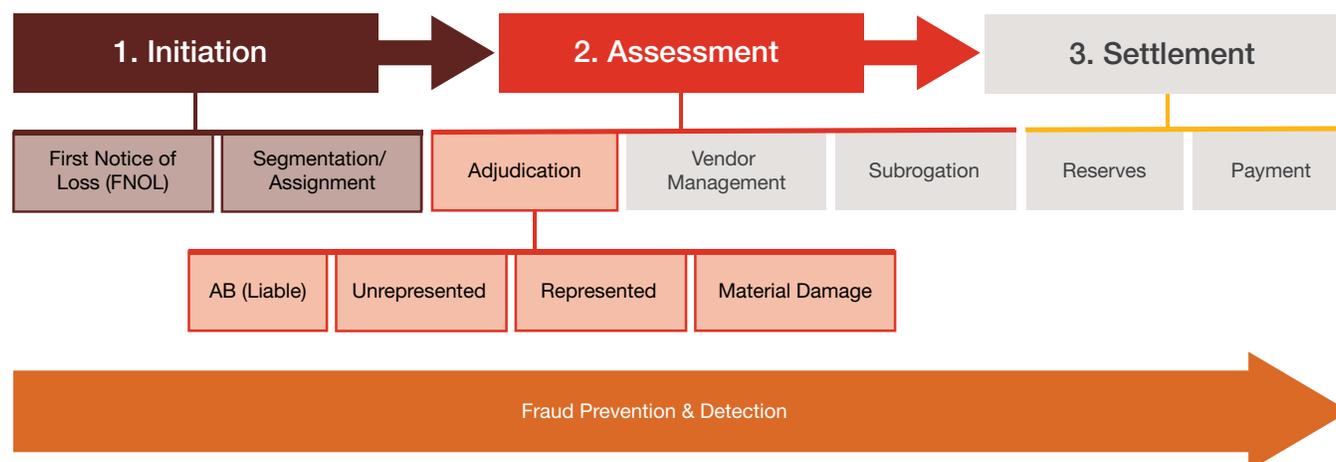
By developing proactive care planning and recovery programs, ICBC has the opportunity to realize between \$15 and \$27 million in annual net savings by year 3 (based on a current spend on injury claims of \$1.9 billion). The key drivers of the savings are increased oversight on injury claims, reduction in claims duration, and a modest reduction in claims becoming represented due to elected adherence to recommended treatment plans.

In order to realize these savings, ICBC will need to work with medical service providers to design recommended treatment plans specific to each injury type. Adjusters can become specialized by injury type and will benefit from having an understanding of specific types of injury(s) and severity for claims handling. They can become more familiar with the claimant's treatment plan so they can provide the necessary support for claimants to recover to their pre-injury state faster by using the best course of care. By working closely with medical service providers, recommended treatment plans will be created that are suitable and agreeable to claimants and their medical providers. Other jurisdictions that have implemented proactive care models have realized significant savings, such as P&C carriers in Australia and Canadian workers' compensation boards. It is PwC's hypothesis that by implementing proactive care planning for unrepresented claims, claimants can have their recovery needs met earlier, potentially leading to a faster claim settlement and potentially lead to a reduction in claimants seeking representation.



Initiative: Shift to a More Supportive Claimant Customer Experience

Impacted Areas of Claims Lifecycle



Our review noted that ICBC has strived and succeeded in making some customer experience improvements over the past few years, including enhancements to online capabilities and the implementation of SLA's around customer service timelines. Looking forward, there are opportunities to follow the practices of leading insurers and take advantage of behavioural economics principles to further enhance customer experience and proactively manage claims outcomes.

Behavioural economics uses insights from cognitive psychology to explain why people behave the way they do and how individual actions can be influenced positively. The rapidly growing literature (and experience of other insurers within Canada and globally) on behavioural economics shows that people's decision-making uses thought processes that are intuitive and gut-driven rather than deliberate and calculated.

Reliance on intuitive processes leads to 'cognitive biases', which leads to a predictable shift in behaviour and decision making depending on the situation and framing of information. On the one hand, these biases can cause people to misjudge important facts, be inconsistent in their perception of events or judgement of value, and miscalculate probabilities or the likelihood of an event occurring. Importantly, these biases can also cause people to be influenced by the actions of others, to disengage when faced with complex information or processes, to be more vulnerable to notions of loss than gain, to be motivated by positive framing of context, and to anchor their expectations in achieving goals.

Leading insurers are introducing behaviourally optimized communications. Leveraging a deep understanding of all customer interactions, ICBC can design strategies to influence behaviour positively to reinforce a fair and transparent claim settlement and ease process anxiety by enhancing the claimant's understanding of the claims process and their role in achieving positive outcomes. Insurers address the following with behavioural economic principles: improving understanding in moments of complexity, awareness of the end-to-end process, providing clarity in language, reducing moments of unease and negativity, and improving continuity of content.

The principles of behavioural economics can be applied to improve the customer experience for claimants, claims partners, and the broader ICBC community.

ICBC can leverage behavioural economics principles across all communications related to the claims lifecycle. Initially, ICBC can leverage the existing understanding of the customer experience to focus on the known customer points of friction along the customer claims journey (eg., understanding the claims process at the time of FNOL and the claimant's participation in it leading to a claim outcome) and review all associated communications. ICBC can design interventions based on the principles of behavioural economics to positively impact claimant behaviour during communication touch points. Enhanced communications through behavioural economics can be managed as part of their broader customer service strategy and provide benefits of honest reporting of claims information, improve adherence to managed care plans, improve claimants' understanding of the benefits of working with ICBC and increase transparency of the claims process. As it has been noted previously, ICBC already places emphasis on providing efficient service to customers, and behavioural economics will support the continuous improvement of building and maintaining a positive relationship with customers.



Implementation Considerations

There are implementation considerations that are necessary for ICBC to be successful in shifting towards a more supportive claims customer experience to realize improved claims outcomes and customer experience.

People

1. **Assess Resource Requirements:** Determine resource requirements to support enhanced communications and application of behavioural science to communications.

Process

Shifting towards a more supportive claimant customer experience supports the achievement of some of the benefits within the following initiatives: optimize vendor management and strategic sourcing, shifting to a proactive injury care recovery model, improve salvage and subrogation management. The implementation considerations for this initiative are tied to the following processes:

1. **Policyholder Communications:** Create revised customer education materials to provide relevant claims information to potential claimants at time of becoming a policyholder and upon renewal leading to improved customer satisfaction and claims outcomes. Communications will inform policyholders of what to expect in a claims process. Based on outcomes of analysis for salvage opportunities, improved communications for attaining allowance for salvage may also be sent to policyholders at time of policy renewal.
2. **Claimant Communications:** Apply principles of behavioural economics to claimant communications to promote the benefits of working directly with ICBC and adhering to treatments plans to promote recovery. Encourage honest reporting of claims severity at time of claim initiation to reduce claims leakage.
3. **Encourage Use of Preferred Vendors:** Expand the scope and frequency of communications directed to claimants on the benefits of preferred vendors. Provide job aids or training materials to adjusters to provide guidance on how to discuss the benefits of working with a preferred vendor.

Technology

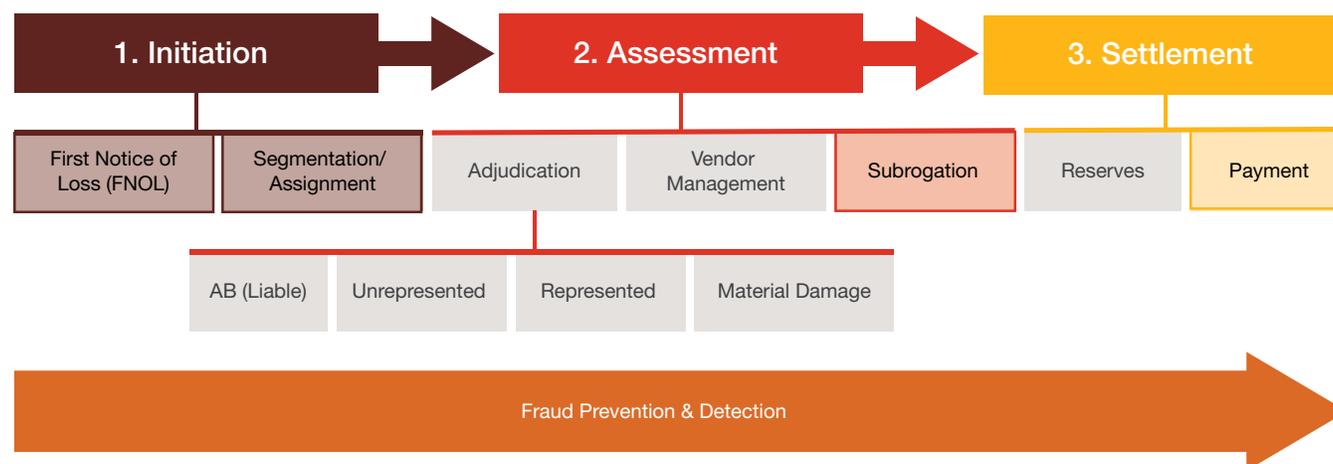
1. **Customer Portal Integration:** Any standardized communications for customers (policy holders or claimants) can be integrated into the mobile or web portal.

Benefits Summary

Benefits are not quantified separately for this initiative as they would be realized as part of the implementation of the other initiatives. Introducing the principles of behavioural economics to customer communications helps to support honest reporting of claims information, improved adherence to managed care plans, improved claimant understanding of the benefits of working with ICBC and increasing transparency of the claims process.

Initiative: Enhance Automation and Predictive Analytics

Impacted Areas of Claims Lifecycle



Automation using technology serves to replace the mundane, highly manual tasks involved in a process that was previously completed by an individual. The goal of automation reduces the manual effort of employees to complete low value activities and to reduce the errors that can result from manual tasks. Data analytics is the collection, interpretation and presentation of themes in data. Further to data analytics, predictive analytics use various predictive modelling techniques to analyze current and historical information to make predictions about future events. Both of these disciplines are being deployed in the current auto insurance industry.

Leading practice insurers have started to introduce robotic process automation technology to reduce or eliminate manual effort associated with specific processes and procedural work effort. In doing so, these insurers are deploying robotic process automation to create capacity for staff to focus on customer-facing value-added work. This has created a data rich platform upon which insurers are now exploring the use of new advanced analytics capabilities. With increased access to data, insurers have begun using analytic dashboards to monitor and assess performance on a much more granular and often real-time basis. Specific technologies behind this include the use of machine learning and artificial intelligence to gain insights into predictive outcomes for claims.

There are opportunities to introduce automation in several areas across the ICBC claims lifecycle.

While ICBC has implemented some leading systems and technology for claims operations (e.g., Guidewire), PwC did not observe significant automation within the claims operation for the reviewed in scope areas. Most notably, automation can be further leveraged at FNOL. Guidewire's ClaimCentre can be programmed to automatically identify low-complexity claims submitted through the portal or the phone channel that does not require human intervention such as single vehicle accidents with minimal vehicle damage and no reported injuries. Additionally, with the introduction of new tools ICBC can consider using historical and current data to identify and escalate potential subrogation and fraud claims at claims reporting by further leveraging existing NetReveal capabilities. Expanding the presence of automation at ICBC will be beneficial as employees will be able to focus their time and effort on more complex tasks that require focused effort and judgement to complete. Within claims, adjusters and call-centre staff can benefit from automation by removing low-complexity manual activities, freeing up time to focus on higher-complexity claims. They can also take advantage of straight-through-processing for low-complexity claims where data has proven there are standardized and consistent outcomes.

Further, encouraging online claims submission through the ICBC portal and mobile applications and opting-in to Electronic Fund Transfer payment options will support the opportunity to increase the use of automation capabilities for faster processing and settlement of low complexity claims. In addition to enabling automation to support swift adjudication, there is an opportunity to enable automation to identify and escalate potential subrogation and fraud claims at the time of submission. The enhanced use of historical data and predictive modelling using recently implemented tools will be required to support this automation.

Implementation Considerations

There are implementation considerations that are necessary for ICBC to successfully realize claims costs reductions and operational efficiencies through the introduction of automation and predictive analytics. These considerations are broken out by people, process, and technology depending on the nature of the impact to ICBC.

People

- 1. Training Employees:** Adjusters will benefit from reduced time spent on low-complexity administrative activities but may require additional training for higher complexity tasks. As heard during interviews with claims adjusters, improving the skillset of adjusters for higher complexity claims will benefit the claims staff as a whole.
- 2. Analyst Resources:** In order to manage automated processes and measure the efficacy of predictive analytics tools (such as SubroSpotter or NetReveal), analyst resources will be required to monitor these processes and identify opportunities for further improvement.

Process

- 1. Increase Volume of Claims Submitted to the Claims Portal:** Improving policyholder awareness of mobile channel for claims can improve timely reporting of claims information, reduce demand at the call centre on low complexity claims and reduce the overall cycle time of a claim.
- 2. Straight-Through Processing of Low-complexity Material Damage Claims:** Low-complexity material damage claims that have standardized rates and services and can be submitted through online channels, and in doing so, straight through processing can be leveraged to eliminate the need for manual approvals or reviews of claims.
- 3. Automatic Adjudication for FNOL Retained Accident Benefit Injury Claims (e.g., Minor injury – No Missed Work):** Enabling automation for low-complexity accident benefit claims can allow adjusters to focus on value-added work and reduce cycle time of low-complexity injury claims, thus providing faster services and payments to claimants.
- 4. Electronic Funds Transfer (EFT) as the Default Option for Claims Payment:** Making EFT the default option for claims payments to claimants reduces the need for manual printing and mailing of cheques, cutting down on the internal cost of physical payments to claimants (e.g., printing, postage).

Technology

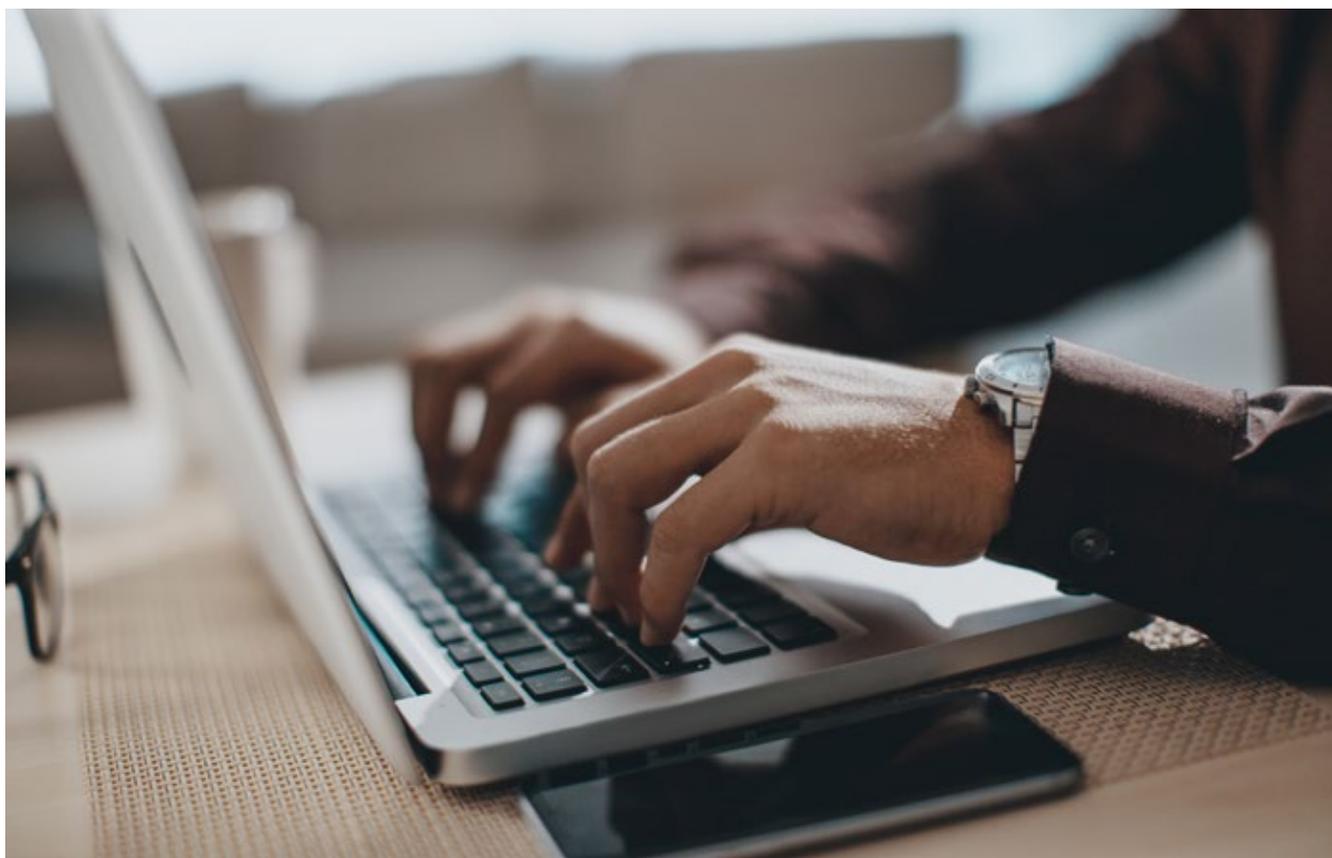
- 1. Guidewire Integration:** Refine Guidewire business rules to enable straight-through processing of low-complexity injury and material damage claims.

Benefits Summary

Improvements to automation capabilities and increased use of predictive analytics allows ICBC the opportunity to realize between \$5 and \$8 million in annual net savings by year 3. The key drivers of these savings are reductions in claims cycle time and increased accuracy and control over claims spend. By expanding the presence of automation, ICBC will enable employees to focus their time and effort on more complex tasks. ICBC can benefit from the expansion of straight-through processing capabilities for low-complexity claims as these claims do not require manual intervention and will adhere to standardized processes that drive consistent outcomes. Further, encouraging online claims submission (e.g., portal, mobile application) and defaulting to EFT payment options will support the increased use of automation capabilities for faster processing and settlement of both low and high complexity claims. Lastly, using data and predictive modelling to proactively identify subrogation and fraudulent claims at time of submission will lead to reduced claims leakage.

The following automation and predictive analytics activities have also been considered but cannot yet be quantified, as an independent cost benefit analysis is required to determine their viability. A detailed review of each of these activities was not in scope for the Review:

- 1. Schedule Maintenance of NetReveal:** As part of the newly implemented fraud improvement programs, ICBC will benefit from scheduled maintenance of NetReveal. As seen with other insurers in Canada that have implemented this tool, it is beneficial to review the outcomes of fraud detection in NetReveal within six months of implementation in order to measure efficacy of results and refine business rules to drive desired outcomes.
- 2. Use of Dashboard Reporting Tool:** ICBC can benefit from a dashboard reporting tool to visualize ICT and SIU outcomes, identify efficacy of referrals from NetReveal, external sources and internal referrals. Such a tool can improve transparency of the efficacy of initiatives and track the KPIs of manual and automated processes.



Additional Considerations

In addition to the quantified benefits resulting from the Review, considerations to the future state have been made based on the current state review of Finance and Driver Training functions.

Finance

The current state review of the Finance functions within ICBC shows that structured processes are in place and adhered to. Opportunities for further improvement have been considered to align with broader industry trends towards automation and enhanced monitoring of processes. For each of the main business areas analyzed within the scope of this review, recommendations are provided below. These recommendations do not have quantifiable benefits associated with them and relate most specifically to process improvements or technological enhancements to achieve operational efficiencies.

- 1. Review of Processes:** A review of the end to end process for Accounts Payable (dealing with operational expenses) can be performed to improve the efficiency of the process by leveraging technology and SAP functionalities.
- 2. Vendor Management:** Implement a formal process to review the vendor master data on a regular basis, and make changes accordingly to remove inactive or duplicate vendors. This will reduce the amount of items in the vendor master data, and ensure it is up to date.
- 3. Receipt and Approval of Invoices:** Vendors can be informed and educated to encourage central submission of invoices to an Accounts Payable generic mailbox. Currently, the invoices for operating expenses are being sent via mail to the business areas. ICBC can consider implementing Electronic Data Interchange (EDI) solution to allow vendors to send their invoices electronically via EDI. Once completed, ICBC can encourage vendors to be set up as EDI vendors.
- 4. Processing and Payment of Invoices:** ICBC can investigate the possibility of using Optical Character Recognition (OCR) technology to capture invoice information directly into SAP (automatically) rather than manually entering the invoice information in SAP. ICBC can also investigate SAP workflow functionalities to send invoices to business areas for coding and approval. Further, ICBC can explore reducing processing time of invoices (currently the target is five days) by leveraging technologies such as EDI, OCR and workflow functionality.
- 5. Three-way Matching:** ICBC can enable SAP functionality to send workflows to the buyers when there are price/quantity discrepancies, or the goods have not been received in the system.

Accounts Receivable

- 1. Bank Accounts:** ICBC can benefit from reducing the number of bank accounts currently being managed by ICBC, allowing brokers to deposit the cash/cheques into their account, and sweeping the funds into ICBC's main bank account.
- 2. Cash Receipts and Deposits Made by Brokers:** ICBC can examine the possibility of increasing the frequency of cash/cheque deposits made by brokers at the financial institutions.
- 3. Accounts Receivable Performance Measurement:** ICBC can implement and track metrics (e.g., unapplied cash, aging of customer accounts and dispute reasons), through the use of dashboards and reporting mechanisms. This will assist in controlling and monitoring the health of the operations, ensuring the overall efficiency and effectiveness of the end-to-end processes.

Budgeting, Forecasting and Reporting

- 1. Budget Preparation:** ICBC can standardize the templates for operating expenses budgets across all divisions, and use one standard template across ICBC.
- 2. Forecast Preparation:** ICBC can benefit from preparing operating expenses forecasts directly in SAP rather than in Excel spreadsheets (if possible, based on system flexibility).
- 3. Reporting of Financial Data:** When financial information is prepared outside of the Finance function (i.e., by other divisions) such information/reports need to be consistently submitted to Finance for vetting, to ensure that all financial information agrees to the core financial system and book of records in SAP.



Driver Training

The current state observations of the driver training school oversight and compliance found that there are effective processes to measure driver training school compliance against obligations under Division 27 of the Motor Vehicle Act regulations. A key objective of the ICBC business units that oversee driver training schools and instructors is to support the industry in producing positive outcomes such as good quality drivers. A good quality driver can be viewed as one that not only is able to effectively pass the driving test within British Columbia but can drive in a safe manner (zero/low crash rate and low motor vehicle contraventions). As such, the additional considerations detailed below consider a small number of incremental steps that could be considered by ICBC to support the industry in producing good quality drivers.

Data Collection

An improved system for capturing information from driving training schools can be developed. The improved data collection can be focused on two areas – improving data quality and increasing data access.

Data Quality

There is currently no efficient or effective means to objectively measure the quality of a driving school using readily available data. The most common approach to assess driver training school quality is through reviews that are initiated on a triennial basis or following a review initiated following a referral from a third party or another part of ICBC.

As driver training schools operate as independent licensed business it is challenging to accurately measure the quality of an individual driver training school by measuring the success rate of students taking driving tests. The information that is currently captured as part of a driver training school's compliance obligations under Division 27 of the Motor Vehicle Act regulations are not principally designed to measure driver training school quality. Currently, only minimal data exists to provide driving test pass rates or post-test crash outcomes and behaviours. In addition, the available data is not able to accurately measure the impact of a driver training school on the standard of driving of a student. Information relating to the number of hours of practice outside of lessons is not currently a required source of information that a school reports.

The current requirements under Division 27 of the Motor Vehicle Act regulations include a requirement to log records of students trained, including student's name, driver's licence number, class of driver's licence, date, time and length of each lesson, name of instructor of each lesson, subject taught, type of training, and fee charged for each lesson in addition to records of each instructor employed, including name and driver's licence number. As a result, PwC has identified the following activities may be beneficial to improving the quality of data and its usage:

1. **Leverage Current Data:** ICBC can consider how it uses currently captured information to map school and instructor quality and make use of advances in data analytics to identify trends of performance.
2. **Collect New Sources of Data:** ICBC can complement the analysis of currently captured data by also examining the different data sources accessible regarding a driver's pre-test driving experience, in terms of total hours of instruction and non-instructive driving prior to sitting a test, and post-test driving experience in terms of crash outcomes motor vehicle contraventions and insurance claims.

The data that is currently captured can be used more effectively by applying data analytics to map trends and outliers in performance. This can be complemented by broadening the data captured to gather more information on a driver's pre and post-test driving history.

Data Access

There is currently no centralised system for capturing the information that driver training schools are required to keep as part of their obligations under Division 27 of the Motor Vehicle Act regulations. The development and implementation of a centralized data system where information could be updated in a timely manner would offer three main benefits to ICBC in its role of overseeing driver training school compliance and quality.

1. **Data Input:** The input of data, or a failure to do so in a timely manner, could enable the early identification of driver training schools that may require a review. This would support the risk-based approach that ICBC currently apply to prioritize reviews of driver training schools within the required triennial review cycle.
2. **Data Availability:** The availability of data in a centralized location would provide an opportunity for ICBC to undertake regular province wide reviews on the performance of driver training schools against compliance requirements in addition to driver training quality, should suitable data sources be identified to measure this.
3. **Data Centralization:** A centralized system would provide a more efficient manner to capture certain types of information related to compliance. This would be beneficial in reducing the time take to capture and review certain types of information and enable driving school inspectors to allocate additional resources and time to other compliance related tasks.

Driving Instructor Standards

The current system for oversight of driving instructors is focused on ensuring compliance with regulations. A driving instructor may also be subject to a quality assessment as part of a Driver Training Industry Support undertaken as part of a triennial review. The quality assessment is triggered following the identification of a lack of compliance or by an issue raised by a third party. As a result, the level of oversight and control that ICBC has on the standard of individual driving instructors can be limited.



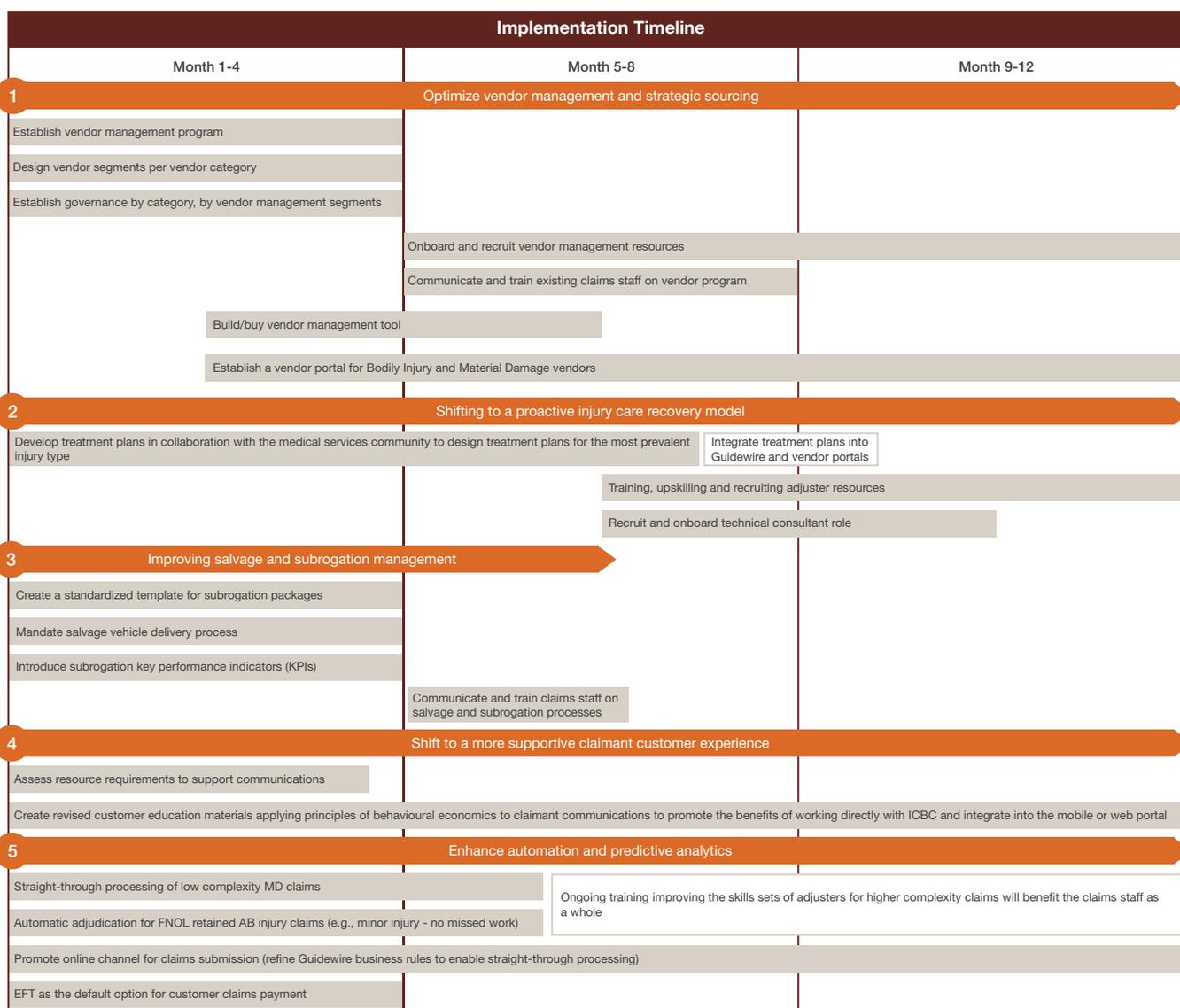
ICBC can benefit from the design and implementation of regular refresher courses for driving instructors on a voluntary or mandatory basis. Based on interviews with ICBC employees, this is an activity that ICBC has identified and is exploring the potential benefits of implementing.

Implementation Timeline

Overview

The time requirements associated with the implementation of each initiative are outlined in the chart below. The implementation time requirements and considerations for each initiative were determined independently of one another. Implementation of each initiative is expected to begin in Year 0 and are implemented in parallel with one another. It is assumed that there are no dependencies that could prevent the immediate implementation of any of the initiatives. It also assumes that there are no resource constraints which could also prevent the immediate implementation. Additionally, the implementation plan for all initiatives does not take into account the in-flight or planned initiatives within ICBC.

The following chart depicts an illustrative implementation timeline for each initiative. It should be noted that this consolidated implementation plan is not indicative of the sequencing and timing of ICBC's implementation of all initiatives. The initiative sequencing on the following timeline requires further refinement to account for dependencies and other planning considerations, such as enterprise-wide projects.



Total Benefits Summary

The following assumptions were necessary to provide an initial estimate on potential benefits for the initiatives identified.

Accuracy: All cost, benefit, and FTE savings are approximates and the calculations identify potential benefits for a point in time using the data available at the time of analysis. To determine a deeper level of accuracy will require further investigation into current staffing levels, market conditions, internal capabilities to execute initiatives and expectations for initiative completion. The costs and benefits are reasonable for this initial activity and we would expect to see a number of further refinements across various line items once detailed business casing takes place.

Sensitivity Analysis: Three levels of sensitivity were detailed over three scenarios: low, medium (expected) and high. Each of these scenarios has a range of benefit or cost that is consistent across all initiatives. A low value is a conservative view (80% of anticipated benefit). Medium is the anticipated benefit (100% of projected benefit). The high scenario reflects a stronger position for 120% of benefit attainment. The ideal target for the benefits is shown for the medium level analysis.

Benefits: For all identified opportunities benefits are attributable to type categories:

- **Process Efficiencies:** Reflection of a reduction in the actual effort associated with completion of a specific activity or group of activities. This is represented as reduction in time associated with that effort. This is measured by calculating the employee cost of the effort (using salary and other loading costs) that can now be used on higher value activities.
- **Claims Cost Savings:** Reflecting a change in the amount paid in indemnity for claims, either by exposure (material damage or injury), or overall.

Costs: Internal costs were provided by ICBC. Where necessary, PwC provided cost estimates (+/- 50%) based on industry experience and marketplace knowledge.

Projections: The cost benefit analysis projections will cover a period of three years; however, the benefits have been phased out over multiple years in some cases when the benefits will not be realized in the first year (benefits are cumulative year over year).

Annual Net Savings (\$ Millions) Year 3 Onwards			
Initiatives	Low (80%)	Medium (100%)	High (120%)
Optimized Vendor Management and Strategic Sourcing	\$37	\$46	\$56
Improved Salvage and Subrogation Management	\$1	\$2	\$2
Shift to a Proactive Injury Care Recovery Model	\$15	\$21	\$27
Enhance Automation and Predictive Analytics	\$5	\$6	\$8
Shift to a More Supportive Claimant Customer Experience	–	–	–
Total Net Savings	\$58	\$75	\$93

The highlighted numbers represent the expected net savings associated with each of the initiatives.