

The Capital Regional District Integrated Road Safety Unit: An Evaluation



**December 2007
Policing and Community Safety Branch**

Executive Summary

Background

This evaluation examines the operation, effectiveness, and efficiency of the Capital Regional District Integrated Road Safety Unit (CRD IRSU). The CRD IRSU was developed under a Memorandum of Understanding between the Insurance Corporation of British Columbia (ICBC) and the Ministry of Public Safety and Solicitor General.

The evaluation examines 2006 violation output, collision statistics at sites targeted for enhanced traffic enforcement, and the operations of the unit. The evaluation compares the 2006 CRD IRSU output data with the previous enhanced traffic enforcement model deployed in 2003.

Enforcement Performance

- ⇒ The CRD IRSU issued 22,549 traffic violations in 2006 – a 166% increase over the previous enhanced enforcement model (2003 Targeted Traffic Enforcement Program and Counter Attack).
- ⇒ The CRD IRSU model produces slightly fewer officer visibility hours (81%) than the comparative 2003 model.
- ⇒ The distribution of violations is similar to the 2003 enhanced traffic enforcement model. Four in ten CRD IRSU violations (39%) were issued for speeding, 17% to failure to wear a seatbelt, 4% to intersection offences, and 3% to impaired driving.
- ⇒ The CRD IRSU cost per violation is \$63.69 – almost one-half (45%) of the cost of the previous model per violation ticket.
- ⇒ The total provincial investment in the CRD IRSU of \$1.44 million realizes \$3.75 million in economic benefits.
- ⇒ For every dollar invested by ICBC in the CRD IRSU a \$2.61 benefit is realized:
 - \$1.31 in traffic revenue;
 - \$0.43 in RCMP contribution;
 - \$0.46 in driver point premiums; and
 - at least \$0.41 in collision reduction savings.

Collisions and Injuries

- ⇒ This evaluation examined total traffic collisions and injury collisions at 15 high crash sites which were targeted for enforcement by the CRD IRSU. The results showed:
- 9.1% reduction in total police-reported collisions over the 2000 to 2004 average; and
 - 8.7% reduction in police-reported traffic injury collisions over the 2000 to 2004 average.

Recommendations for Improvement

- ⇒ A number of 'recommendations for improvement' have been identified based on interviews with members of the Joint Management Team, the former and current Officers in Charge, and IRSU police officers. These areas are:
- **Policy, Plans and Protocols** - renewal or development of the strategic plan, the enforcement program, and documents providing increased transparency and clarity between levels of the integrated structure. Better internal reporting structures would also increase the effectiveness of the unit.
 - **Data Provision and Analysis** – further developing the capacity of the IRSU to measure progress through data and information partnerships with partners.
 - **Finance** – creating financial protocols that lead to flexibility in capital purchases by the Joint Management Team.
 - **Human Resources** - establishing greater human resource clarity and increasing the attractiveness of the secondment offer to prospective members.
 - **Communication** – developing proactive media relations plans for public awareness and education, and reactive issue management plans for dealing with difficult situations and response to media calls.

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Chapter 1 - Introduction

Overview

This evaluation examines effectiveness and efficiency of the Capital Regional District's Integrated Road Safety Unit (CRD IRSU).

The CRD IRSU is an integrated policing unit designed to:

- ⇒ Provide targeted enhanced traffic enforcement to B.C.'s capital region;
- ⇒ Use data-driven traffic enforcement strategies; and
- ⇒ Target high-risk driving behaviours such as speeding, failure to wear a seatbelt, intersection offences, aggressive driving, and impaired driving.

The IRSU is drawn from officers from five different police agencies - Victoria, Saanich, Central Saanich, Oak Bay, and the local Royal Canadian Mounted Police (RCMP).

The evaluation focuses on three areas:

- ⇒ Enforcement performance;
- ⇒ Collisions and injuries; and
- ⇒ Economic benefits of the program.

In addition, the integrated nature of the unit is evaluated. The integrated structure of the unit provides many advantages to enhanced traffic enforcement in the region, including the focus on a single mandate across jurisdictional boundaries, and increased cost-efficiency.

Each of these areas is examined in separate chapters, with a final chapter highlighting possible areas that could be improved.

Background

Since 1996, the Insurance Corporation of British Columbia (ICBC) has invested in enhanced traffic enforcement as part of its on-going commitment to road safety. Previous to 2003, the process of delivering these funds involved direct payments from ICBC to police agencies to fund officer overtime. The three main programs that provided overtime funding to police officers were the enhanced Counter Attack program (road side checks for impaired drivers); the Targeted Traffic Enforcement Program, or TTEP (extended traffic enforcement hours for municipal police agencies); and the Enhanced Road Safety Enforcement Initiative (extended traffic enforcement hours for RCMP jurisdictions).

In December 2003, a Memorandum of Understanding (MOU) was signed between ICBC and the Ministry of Public Safety and the Solicitor General (Province of B.C.) to change the process by which ICBC funded enhanced traffic enforcement programs. The MOU is a five year agreement whereby ICBC provides funds to the Ministry of Public Safety and Solicitor General (the Ministry). The Ministry (through Police Services Division) then manages, delivers, and evaluates enhanced traffic enforcement road safety programs.

Several advantages were realized through the MOU. First, the arrangement removed the perception of a possible conflict of interest – that of having an independent corporation appear to be funding and directing police operations. The Enhanced Traffic Enforcement MOU removed this confusion and created greater clarity by placing control of policing within the appropriate lines of responsibility.

Second, as a result of the Province delivering this enhanced enforcement initiative through the Provincial Policing Contract, an additional federal contribution of 30 percent is available for enhanced traffic enforcement in the province. Essentially, this partnership means approximately an extra five million dollars per year in federal funding for traffic enforcement programs is available.

Third, the stable funding provided under the MOU provided the Ministry and police agencies an opportunity to develop a more comprehensive and more strategic road safety enforcement.

The current enhanced traffic enforcement program – as delivered by Police Services Division through the Road Safety Unit - has five specific goals:

1. Increasing levels of traffic law enforcement;
2. Deterring and capturing auto thieves;
3. Increasing public awareness about enhanced traffic law enforcement and traffic safety through ICBC public awareness programs;
4. Ensuring that police officers are well-trained, and that police have a forum for identifying improvements in traffic enforcement; and
5. Conducting research and evaluation into road safety.

Overall, sixteen strategies are used to achieve these five goals. The addition of 110 full-time traffic officers across the province dedicated to enhanced traffic enforcement represents one of these strategies. It is important to note that these positions were created to increase resources for traffic enforcement. This means that local police departments and detachments are still responsible for providing baseline traffic enforcement within their municipalities.

The Capital Regional District Integrated Road Safety Unit (CRD IRSU) was the first integrated traffic unit developed, and represents one of the many initiatives taking place under the MOU to improve road safety in the province.

Reasons for the Integrated Road Safety Unit Model

There are four main ways the IRSU differs from enhanced from a traffic enforcement standpoint.

1. Enhanced Enforcement Mandate

Unlike regular traffic units, IRSUs are tasked only with enforcement. This mandate frees officers from a number of time consuming tasks that often lessen the amount of time officers spend on strict enforcement - investigations into driving and parking complaints, collision investigation, and other general calls for service.

2. Data Driven Enforcement

IRSU units are driven by data. They focus on statistical data from the TAS (Traffic Accident System) database provided by ICBC. The statistics indicate the most frequent days, times, and locations of serious injury and fatality collisions. By focusing enforcement on these areas it is expected that traffic injuries will be prevented.

3. Behaviour Focused Enforcement

IRSU units have a specific mandate to address high-risk driving behaviours that contribute to a disproportionate share of serious injuries and fatalities. These behaviours include impaired driving, seatbelt violations, speeding, aggressive driving, and intersection violations.

4. Improved Traffic Enforcement Training

Because the IRSU is a specialized traffic enforcement unit, there are opportunities for specialized training. Given the unit is an integration of many police agencies IRSU officers are encouraged to develop the highest standard of traffic enforcement skills. When their secondment is complete, officers then take these skills back to their home units when their secondment is complete.

Key Characteristics of the CRD IRSU

The business case for the CRD IRSU was written by the RCMP in July 2004.

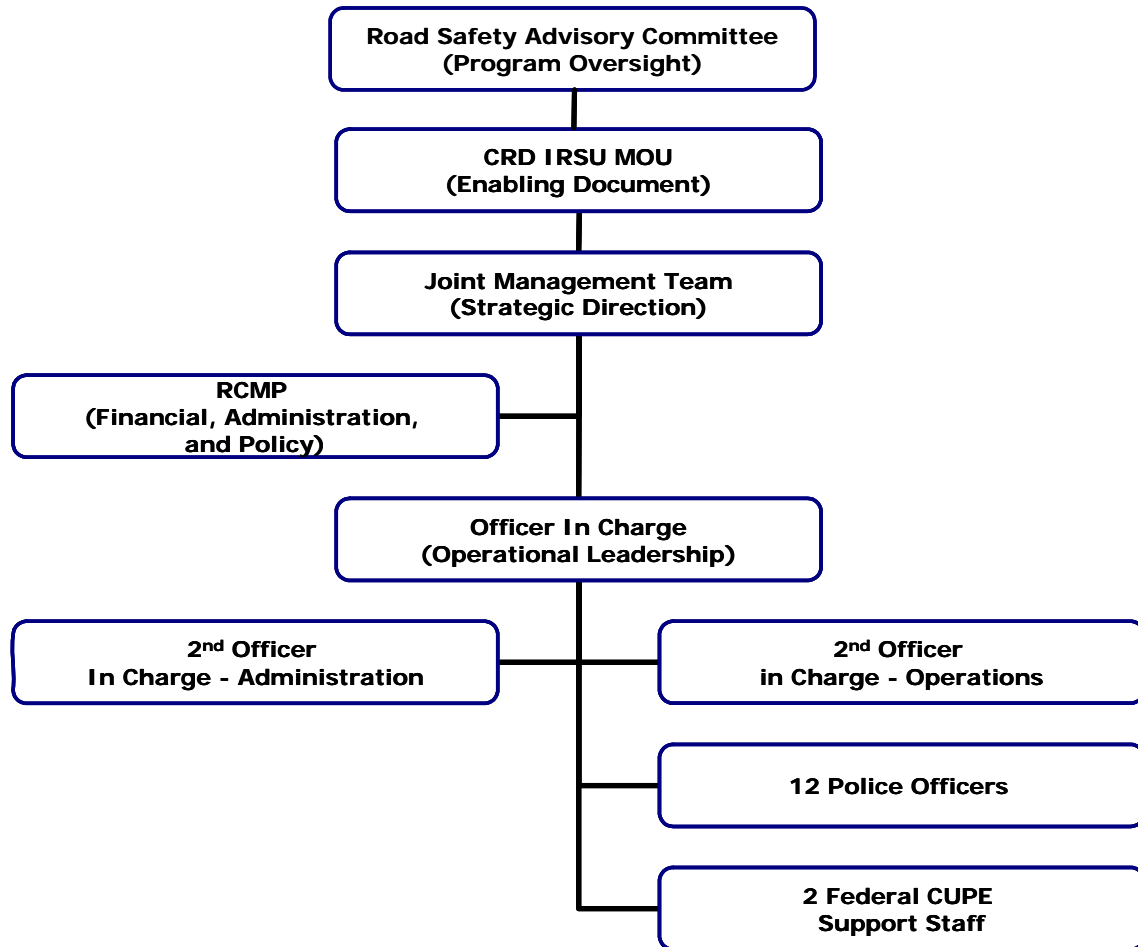
Subsequent negotiations with independent municipal departments took place during the fall. The MOU was in the final stages of agreement when the first five officers started with the unit in January of 2005. In May 2005, the unit began operations.

Key characteristics of the unit include:

- ⇒ A separate CRD IRSU Memorandum of Understanding governs the financial and human resources relationship between Police Services Division, the RCMP, and the participating independent municipal police departments;
- ⇒ The unit's authorized strength is 15 positions;
- ⇒ Five officers are seconded from the RCMP, four each from the Victoria and Saanich Police Departments, one from Oak Bay, and one from Central Saanich;
- ⇒ Three officers represent the operational leaders – an Officer in Charge assisted by a 2nd Officer in Charge of administration and another in charge of road operations;
- ⇒ Two CUPE support staff work with the unit and are federal government employees;
- ⇒ The RCMP acts as the fiscal agent for the unit;
- ⇒ The JMT is responsible for the strategic leadership of the unit, including budget oversight, expenditures, enforcement strategy, and performance measurement; and
- ⇒ The Chair of the Joint Management Team (JMT) is a member of an inter-agency Road Safety Advisory Committee who is ultimately responsible for program oversight.

The positions detailed in the organizational chart refer to authorized positions.

CRD IRSU Organizational Chart



Method

Three data sources were used to complete this evaluation.

Qualitative Interviews - Measuring the Effectiveness of Integration

Researchers interviewed all officers of the Joint Management Team, the former and current Officers in Charge, the 2nd Officers in Charge, police officers working for the unit, support staff and a District Traffic Commander with the RCMP. The purpose of these interviews was to obtain perspectives regarding the MOU, the Joint Management Team, enforcement strategies, data collection and analysis, integration, training, equipment, and other issues that may have arisen throughout the development and operation of the unit.

CRD IRSU Program Data - Measuring Enforcement Performance

CRD IRSU program statistics were used to examine the number and type of violations issued.

The analysis evaluated:

- ⇒ The number of violations;
- ⇒ The distribution of violations written with a focus on strategic enforcement targets: speeding, intersection, aggressive driving, occupant restraint, and impaired driving violations; and
- ⇒ The number of officer visibility hours provided to the community.

These outputs are compared to a previous enhanced traffic enforcement model, namely, the Targeted Traffic Enforcement Program (TTEP) and Counter Attack programs of 2003. The 2003 statistics refer to program activity of the TTEP and CA programs in the Capital Regional District.

TAS Data - Measuring Collisions and Injuries

To evaluate the success of the IRSU in achieving enforcement outcomes – lower collisions, injuries and fatalities at high crash sites – yearly data over the previous six years were analysed. The data used for this was from the Traffic Accident System (TAS) of police-reported collisions; this database is managed by ICBC.

A sample of fifteen high-crash sites that had been provided to the IRSU for enhanced traffic enforcement was examined. The traffic collisions at these fifteen sites were examined between 2000 and 2006. The 2006 total number of collisions were compared to the average collisions at the same sites between 2000 and 2004.

These fifteen sites were selected as they are the sites with the highest injury crash statistics in the region. In total, 60% of the injury collisions in all high crash locations provided to the CRD IRSU occurred at these sites.

A conservative economic analysis was also completed. The goal was to provide a conservative ‘ballpark’ estimate of the cost savings and revenues generated by the program to answer the question ‘Is there an adequate return on investment through the CRD IRSU?’ This return on investment is based on revenue generated from violations issued, RCMP ‘top-up’ funding, premium increase benefits to ICBC, and potential cost savings of reduced collisions.

The method of calculating economic value is more fully explained in Chapter 4.

Chapter 2 – Enforcement Performance

This chapter examines the CRD IRSU's 2006 outputs¹ and compares these outputs to the previous enhanced traffic enforcement model used – namely the 2003 TTEP (Targeted Traffic Enforcement Program) and Counter Attack (CA) programs.

The chapter presents some key findings, including:

1. The unit wrote over 22,500 violation tickets in 2006.²
2. Violation output varied significantly month to month.
3. This violation output corresponded roughly to staffing levels throughout the year.
4. CRD enforcement was most heavily focused on speeding (39%), and seatbelt (17%) violations.

Comparing the CRD IRSU to the 2003 Targeted Traffic Enforcement (TTEP) and Counter Attack (CA) programs, demonstrated the following:

1. The two models provided approximately the same number of visibility hours at a similar cost.
2. The CRD IRSU model resulted in over 2.5 times the number of violation tickets.
3. Per violation issued, the TTEP/CA model was more than twice as expensive as the CRD IRSU model.

Overall, the CRD IRSU is less expensive and more productive than the previous model used for enhanced traffic enforcement in the Capital Regional District.

¹ The statistics presented for the CRD IRSU are the cumulative total of all CRD IRSU funded activities including regular IRSU staffing hours, IRSU overtime hours, and overtime hours worked by local police agencies funded by the CRD IRSU budget. Overtime hours provided by other police agencies are most often Counter Attack operations.

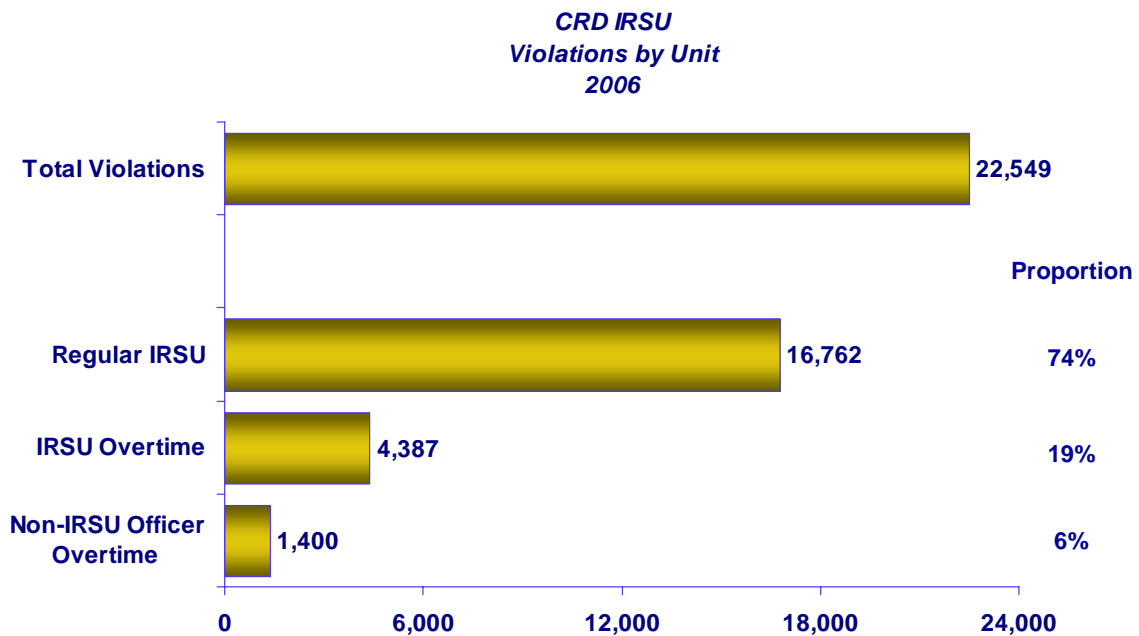
² This total does not include any violations issued by the Intersection Safety Camera Unit in the CRD region.

CRD IRSU Violation Output

Strong output

The CRD IRSU issued 22,549 violations in 2006. Of these violations, three-quarters (74%) were issued by CRD IRSU staff on their regular shift, one-fifth (19%) were issued by CRD IRSU staff working overtime, and six percent were issued by non-IRSU officers working under the auspices of the CRD IRSU budget.

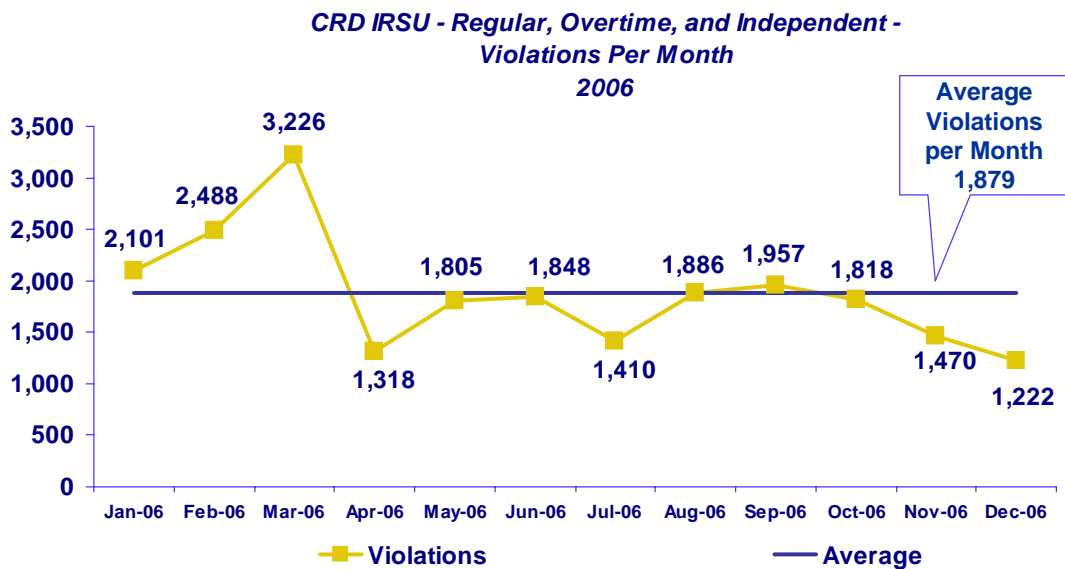
Violations by Type of Deployment



Output varies with staff levels and end of fiscal year

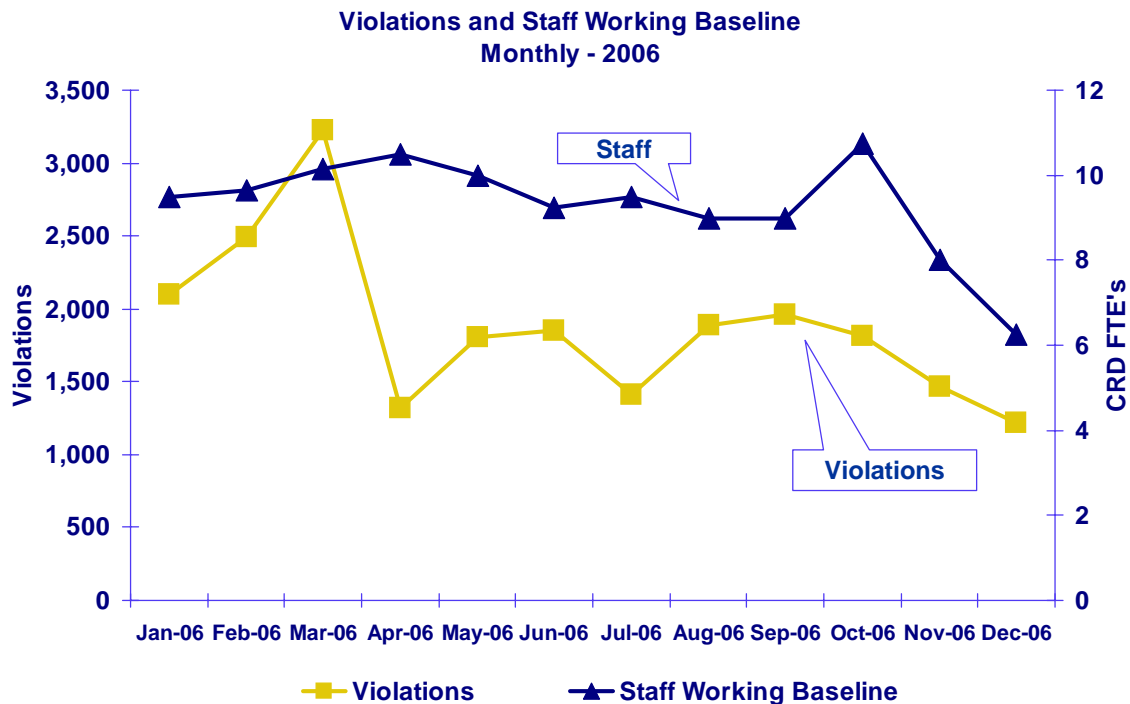
Over the 2006 period, the CRD IRSU issued an average of 1,879 violations per month. Two factors affected the variation in the number of violations issued. The high March 2006 output was likely affected by extended overtime during the month. In addition, staffing levels, particularly during the October to December period, varied with violation output statistics. The next two charts illustrate the pattern of violation tickets issued over the 2006 year.

Violations per Month



Includes: speeding, occupant restraints, intersection offences, non-moving violations, vulnerable road user infractions, 215, ADP charges, vehicle impounds, notice and orders, impaired driving charges, no driving licence, driving prohibited, and criminal interdictions

Staffing and Output



Majority of violations issued in key areas

The majority of violations issued by the IRSU reflected their enforcement priorities (aggressive driving, seatbelts, impaired driving, and intersections). Two-fifths of violations issued by the CRD IRSU in 2006 were for speeding (39%). Another one-sixth (17%) were issued for seatbelt violations. Two other priority areas (intersections and impaired drivers) formed a smaller proportion of violations.

The number of intersection violations (4%) were likely affected by the difficulty of enforcing these offences, and the fact that the intersection cameras installed at 10 high crash intersections in Saanich and Victoria are considered to be very effective at detecting intersection offences.³ Difficulties associated with traditional enforcement of intersection offences are: 1) time intensive 2) requirement for multiple officers 3) traffic

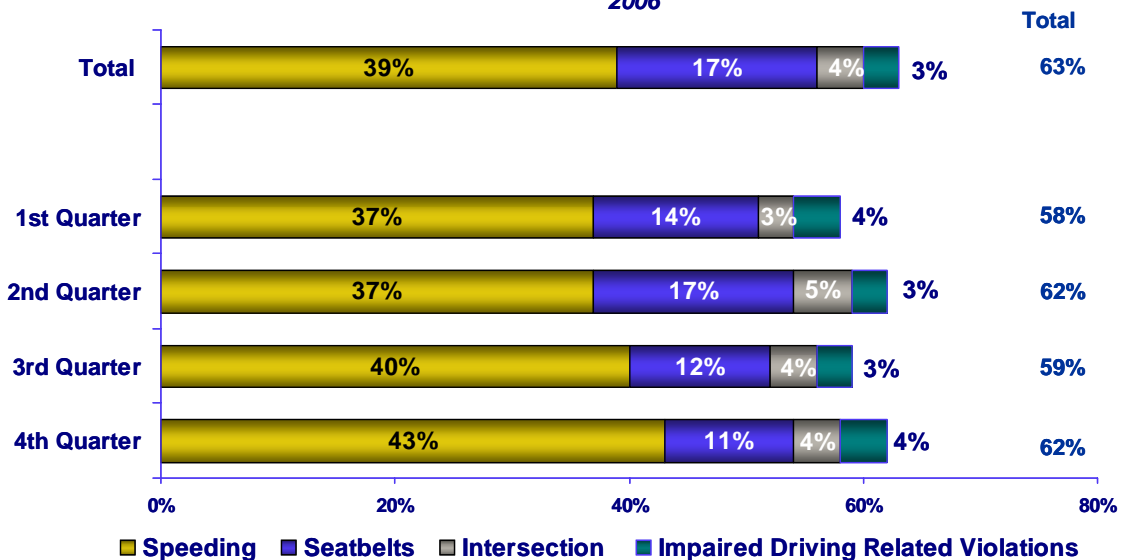
³ Violations issued under the Intersection Safety Camera Program were not included in the counts for the IRSU.

event only occurs every few minutes (limiting vehicles which could be in violation) 4) greater tendency to have violation challenged in court 5) increased court time involved with post-violation process.

Other violations issued but not highlighted in the graph include 'other' non-moving violations (21%), 'other' moving violations (5%), and no driver's licence (3%).

Violation Distribution

CRD IRSU Violations by Type - Distribution
Regular IRSU, IRSU Overtime, and Independent Overtime
2006



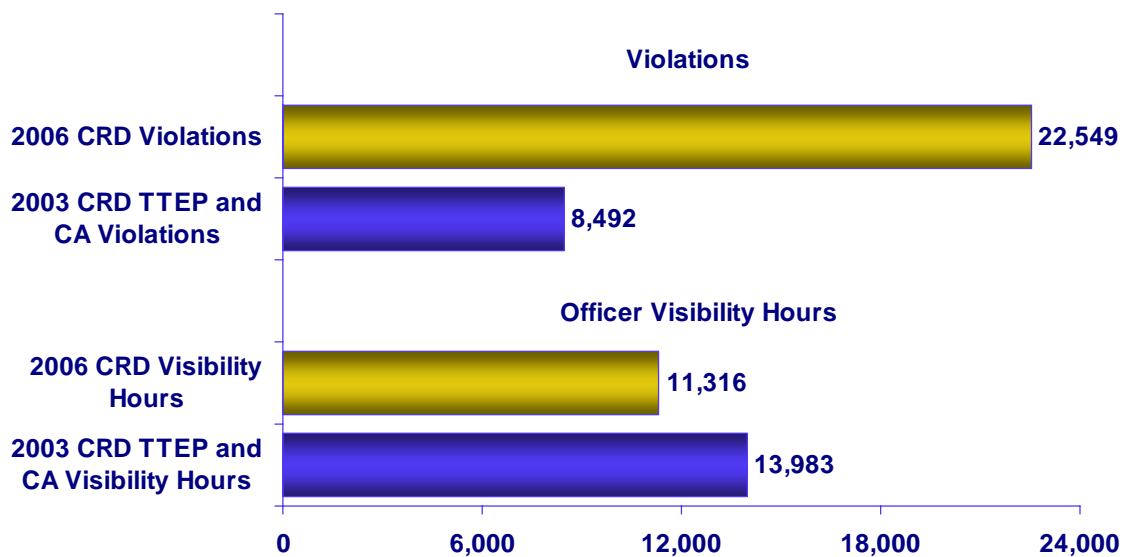
Comparison of CRD IRSU versus previous overtime model

Slightly less visibility and more than twice the output

Compared to the previous enhanced enforcement model of 2003, the CRD IRSU provided 81% of the officer visibility hours (11,316 hours compared to 13,983) but issued more than twice the violations.⁴ Officer visibility hours refers to the time that CRD IRSU officers were actually on patrol, thereby removing time spent on administrative and other non-enforcement tasks.

Higher Productivity

*Comparison of 2003 CRD TTEP and CRD 2006 IRSU
Violations and Officer Visibility Hours*

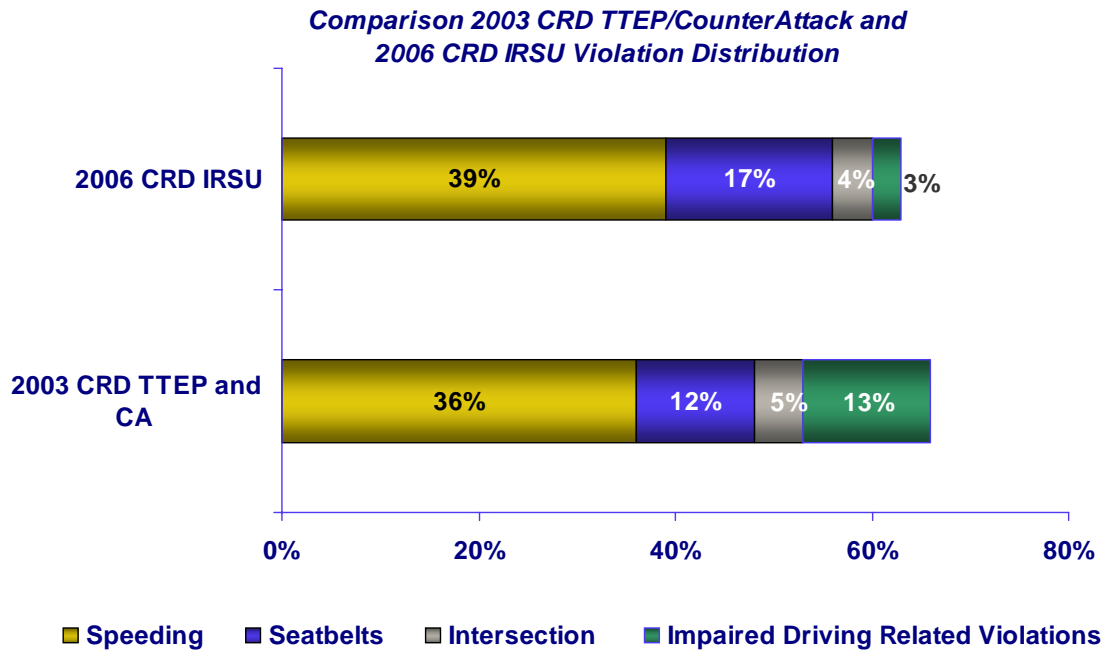


⁴ No officer visibility hours were reported by the CRD IRSU for September 2006 despite significant violation output. To calculate the yearly total, the monthly average for the other 11 months during the year was entered as an approximate measure to complete the 12 month cycle.

Similar violation distribution

Comparing the two models in terms of the proportion of violations issued shows marginal differences. The CRD IRSU issues a similar percentage of speeding violations, and slightly more seatbelt violations. The 2003 Counter Attack and TTEP model issued a greater percentage of impaired driving violations (13%) compared to the CRD IRSU (3%).

Same Targeted Enforcement Distribution



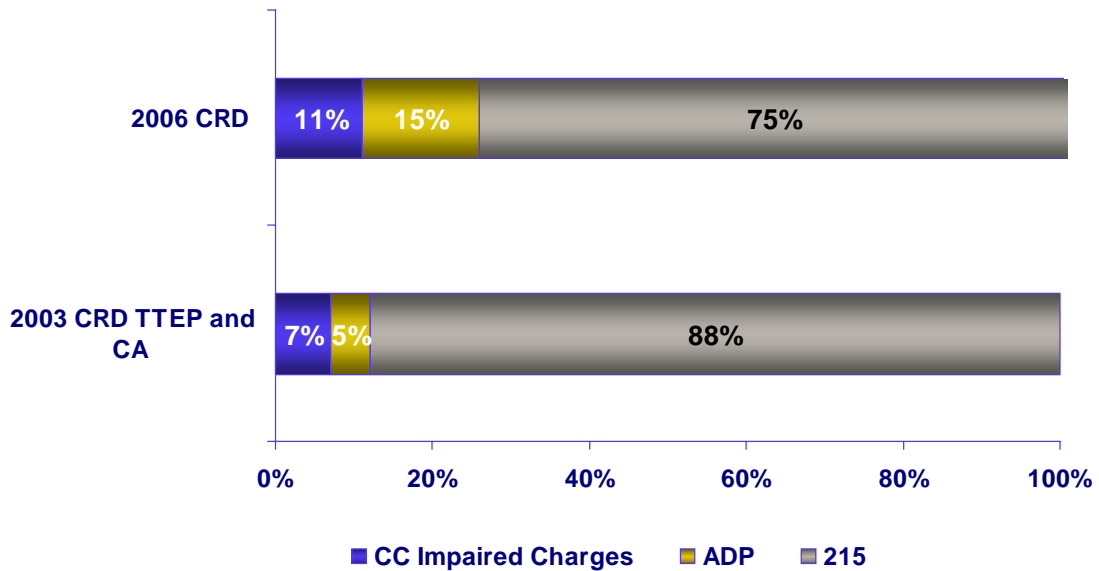
Impaired drivers given more severe sanctions in 2006 compared to 2003

When an impaired driver was detected, the CRD IRSU was more likely to pursue a severe sanction as opposed to a 24-hour suspension. Almost 90% of impaired driving related violations were 24-hour suspensions under the 2003 model, compared to 75% for the CRD IRSU model.

That is, in 2006 the likelihood of an impaired driver being proceeded with by way of a criminal code charge or an ADP (administrative driving prohibition) was approximately double that of 2003 (26% of impaired violations compared to 12%).

Distribution of Impaired Driving Related Violations

Comparison of 2003 CRD TTEP and CRD 2006 IRSU Impaired Driving Violations

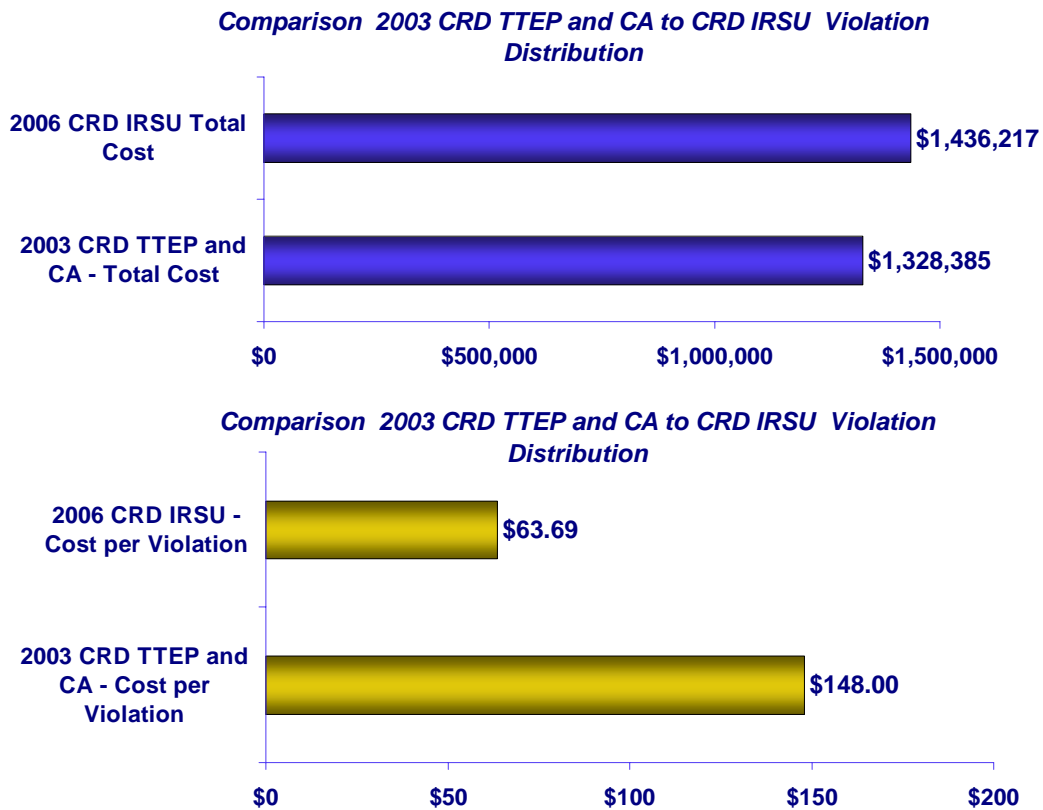


The 2006 CRD IRSU is more cost efficient than the 2003 overtime model

Based on the cost of \$95 per officer hour, the cost of the 2003 TTEP and CA model in the CRD region was \$1,328,385. The cost of the CRD IRSU in 2006 was \$1,436,217. Since the CRD IRSU was far more active in enforcing traffic violations, the CRD IRSU comes out far ahead in terms of the cost per violation ticket.

The CRD IRSU cost per violation ticket was \$63.69 while the cost per violation ticket of the 2003 model was \$148.00.

Comparison Cost per Violation Issued



Chapter 3 – Estimating Collision and Injury Prevention

This chapter examines the number of collisions and traffic related injury collisions at a sample of key high crash locations patrolled by the CRD IRSU to determine the effect of enhanced traffic enforcement on collision and injury prevention. The analysis only examines areas where the CRD IRSU targeted enforcement was carried out – it does not examine the entire Capital Regional District.

The unit was provided 130 high collision sites (10 sites per participating municipality) to patrol. Of these sites, the top 15 sites were selected for analysis. The 15 sample sites represent the top ten intersections and top five corridors from the list of 130. In sum, 60% of collisions occurring at the 130 sites occur at the 15 sample sites.

The data is drawn from the Traffic Accident System (TAS) database and was collated by ICBC. The total numbers of collisions and injury collisions were compared across a six-year period (2000-2006) at the specific sites.

Fifteen sites were chosen for analysis because of the analytical difficulties associated with examining traffic corridors which requires significant manual coding to complete.

The 15 most prominent high-crash sites represent the sites with the largest number of collisions (5 highest crash zone corridors, 10 highest crash zone intersections) in the CRD. In fact, 60% of all collisions in the high collision sites provided by ICBC to the CRD IRSU in 2005 occurred at these 15 sites. These sites are listed below.

Capital Regional District Integrated Road Safety Unit Evaluation

1	Douglas St (Corridor)	9	Goldstream (Intersection)
2	McKenzie Ave (Corridor)	10	McKenzie Ave & Quadra (Intersection)
3	Bay St (Corridor)	11	Tillicum (Intersection)
4	Cook St (Corridor)	12	Admirals and Island Hwy (Intersection)
5	Hillside Ave (Corridor)	13	Blanshard St & Cloverdale Ave (Intersection)
6	McKenzie Ave & Trans-Canada Hwy (Intersection)	14	Douglas St and Finlayson (Intersection)
7	Hillside Ave & Shelbourne (Intersection)	15	Bay & Cook (Intersection)
8	Patricia Bay Hwy & Sayward (Intersection)		

The key findings of the collision analysis were:

1. There were fewer reported collisions at the targeted sites in 2006 than in any year between 2000 and 2004.
2. Total reported collisions in 2006 were 9.1% less compared to the 2000 to 2004 average, and 5% less compared to the 2003 numbers.
3. Reported injury collisions at the targeted sites in 2006 were 8.7% lower than the 2000 to 2004 average⁵.

While these findings suggest a positive outcome, it must be cautioned that the results are based on a preliminary examination. TAS data is considered by some analysts to be inconsistent as it only reflects police-reported collisions. Over time, policy changes and/or resource constraints may limit the ability of police to attend to all traffic crashes, meaning collision statistics contain an unknown degree of error.

Police generally attend collisions where a person has been injured, making the injury related data more robust.

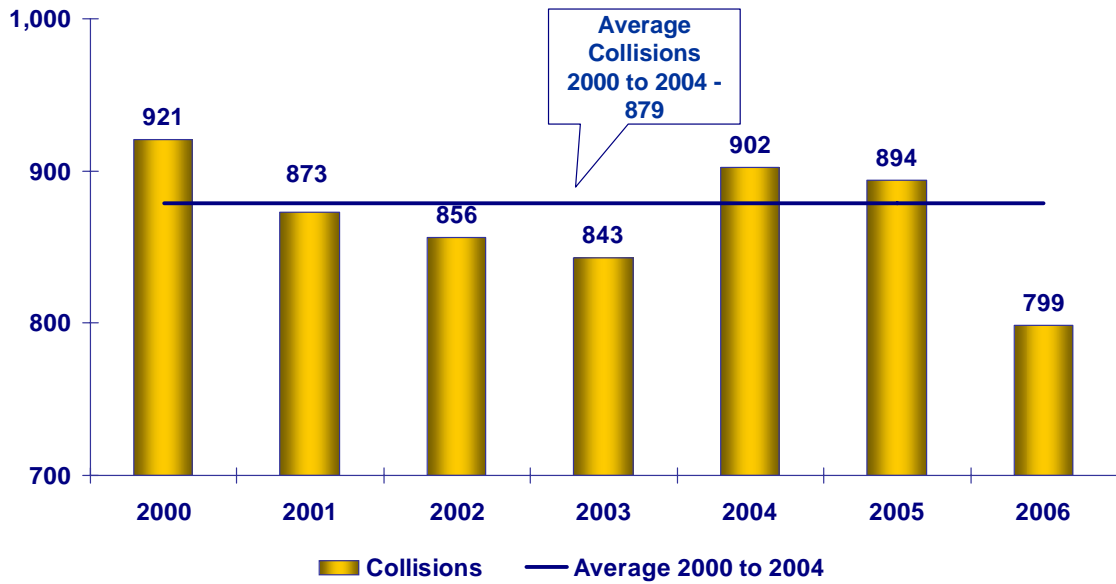
Fewer total reported collisions in 2006 than in previous years

Compared to the 2000 to 2004 average, collisions in the 15 high crash zones measured were 9.1% lower in 2006 (decrease of 80 collisions). Compared to the 2003 year, collisions were 5% lower in 2006.

⁵ Since 2005 was the year the IRSU was implemented, this year was excluded from comparative analysis.

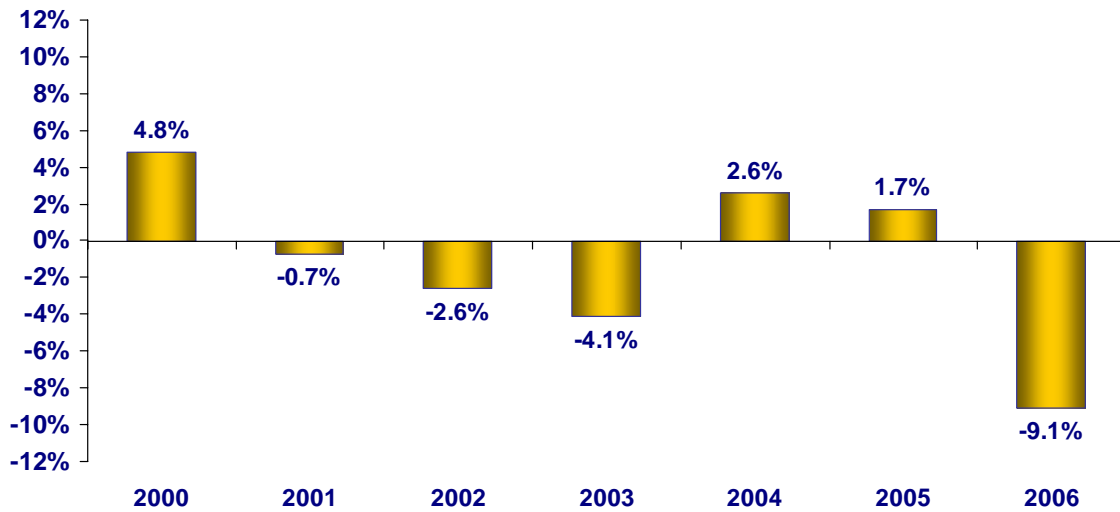
Collisions in CRD High Crash Zones

Total Collisions in the 15 High Collision Sites 2000 to 2006



Fewer Collisions

Total Collisions in 15 High Crash Zones Identified for Enhanced Enforcement by the CRD IRSU Compared to 2000-2004 Average



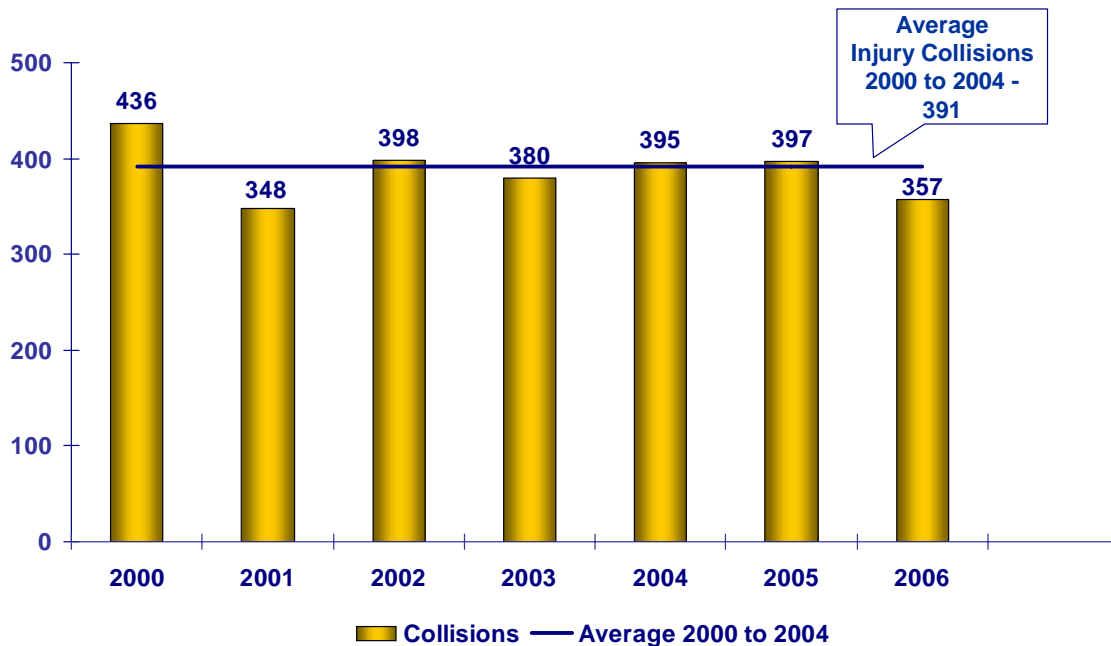
Fewer reported injury collisions in 2006

There were 34 fewer reported injury crashes in 2006 (357) at the 15 high crash sites, compared to the 2000 to 2004 average (391). This translates to an 8.7% decrease from the previous 5-year average.

Injury collisions – when compared to the 2000 to 2004 average – vary substantially. The 2006 figure is the lowest of all years examined, except for the 2001 year where injury collisions were 12% lower than the 2000 to 2004 average.

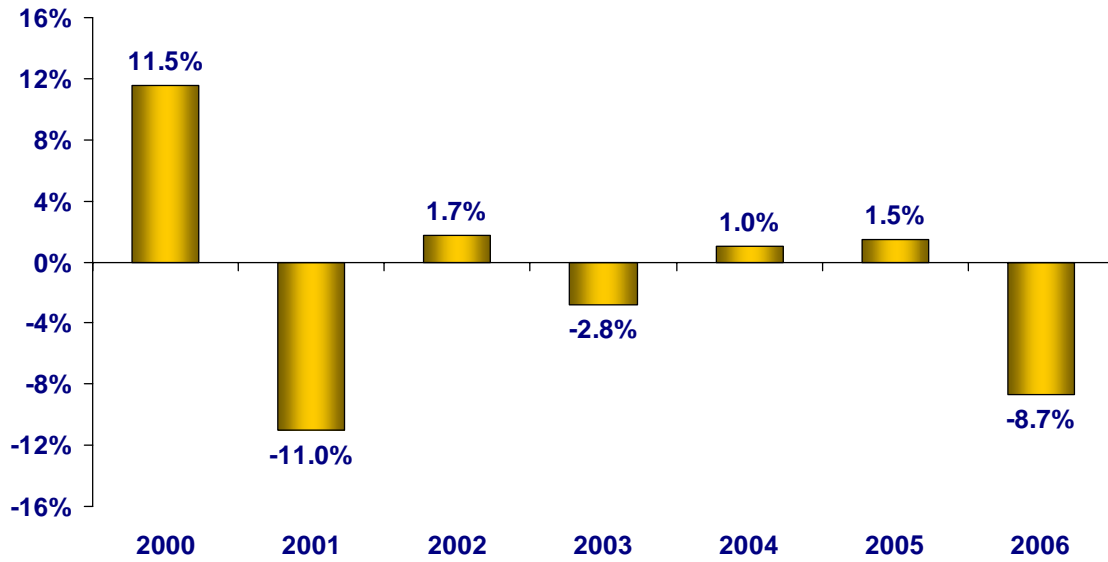
**Injury Collisions
in CRD High Crash Zones**

Injury Collisions in the 15 High Collision Sites 2000 to 2006



Fewer Injury Collisions

Injury Collisions in 15 High Crash Zones Identified for Enhanced Enforcement by the CRD IRSU Compared to 2000-2004 Average



Chapter 4 – Estimating Economic Benefit

This chapter estimates the economic benefit realized by the CRD IRSU operations. The estimate considers the cost and the benefits (e.g. savings and revenues) achieved by the program to the province overall.

The cost of the CRD IRSU to the province is \$1,436,217 in 2006.

The benefits to the province of the IRSU operation are estimated from four separate areas in a simplified, yet conservative analyses:

1. An analysis of traffic ticket revenue generated by the unit;
2. The value of the federal contribution to the program;
3. A basic analysis of the Driver Point Premium to provide an estimate of the revenue ICBC may receive as a result of CRD IRSU traffic enforcement; and
4. A basic analysis of cost savings generated by possible reduced collisions.

Financial Cost Estimations

To estimate the economic value of the CRD IRSU's work, cost estimators were developed. The method of calculating these estimators and the benefit received is presented below.

Traffic fine revenue –

According to the Ministry of Local Government 2006 report for the Traffic Fine Revenue System (TFRS) – \$50.2 million in Traffic Fine Revenue was generated in 2006. The number of violations issued in 2006 was 599,660 according to the contraventions database maintained by ICBC. For estimation purposes, revenue per violation ticket issued is therefore considered to be \$83.71 (total revenue/number of violations issued). It is acknowledged that this is an oversimplification, however, it is still considered useful for the purposes of estimating benefits.

Based on the CRD IRSU output of 22,549 violations, the economic benefit through the Traffic Fine Revenue System is estimated to be \$1,884,576 (\$83.71 per violation), or \$1.31 for every dollar invested by the province.

Federal contribution –

Based on federal-provincial cost-sharing arrangement under the Provincial Police Services Agreement, the federal government provides a 30% contribution for each dollar invested in police operations in the province.

In real terms, this means an additional \$615,522 (or 30% of entire budget of \$2,051,073) was invested into the IRSU. This means that for every dollar invested by the province, an additional 43 cents was contributed by the federal government.⁶

Driver point premium –

According to the ICBC Annual Report, the Driver Point Premium generated \$17.5 million in 2006. Based on the number of violations written in 2006, the estimate revenue to ICBC from a violation is \$29.13 (DPP revenue/number of violations issued). Driver point premiums are issued by ICBC to drivers with a high number of demerit points (penalties start for drivers with 4 demerit points). Again, it is acknowledged that this is an oversimplification, as not all tickets issued to all drivers will result in revenue. However it is still considered useful for the purposes of estimating benefits.

Based on the 22,549 violations issued by the CRD IRSU, the economic benefit to ICBC through the DPP system is estimated at \$656,852, or 46 cents for every dollar invested.

⁶ For each dollar of the IRSU's budget 70 cents is provided by the province and 30 cents is provided by the federal government. Therefore, for every whole dollar provided by the province another 43 cents is contributed by the federal government.

Collision related savings –

Another positive economic benefit realized through enhanced traffic enforcement is collision reduction. Each collision reduction translates into savings for police, insurance, and for society overall. Based on an analysis of TAS data, this evaluation found a nine percent decrease in collisions at the 15 sample sites – or 80 fewer collisions (see Chapter 3).

To estimate collision reduction savings, the reduction in collisions was multiplied by the Ministry of Transportation estimate of cost per property collision of \$7,340. This estimate resulted in the economic benefit of collisions avoided at \$587,200⁷, or 41 cents for every dollar invested.

The estimate of cost savings would increase substantially if even just a few serious injury crashes were prevented.

⁷ Ministry of Transportation figures estimate a property only collision as costing \$7,340. The cost associated with an injury collision is estimated to be \$99,999.

Total Estimated Economic Benefit

In 2006, the province invested \$1,436,217 in CRD IRSU operations.

Overall, an economic benefit of just under \$3.75 million – or \$2.61 for every dollar invested – is realized through CRD IRSU enhanced traffic enforcement operations.

Item	Estimated Total benefit	Investment Ratio (\$ benefit per \$1 invested)
Traffic Fine Revenue	\$ 1,887,576	\$ 1.31
Provincial contribution	\$ 615,522	\$ 0.43
Driver Point Premium	\$ 656,852	\$ 0.46
Collision reduction	\$ 587,200	\$0.41
<i>Total</i>	<i>\$ 3,747,150</i>	<i>\$ 2.61</i>

Chapter 5 – Recommendations for Improvement

Members of the Joint Management Team, the former and current Officers in Charge, IRSU police officers, and administration staff were interviewed for the evaluation. They were asked to provide input regarding the effectiveness and operation of the IRSU, including integration. From these interviews, a number of themes were identified for organizational improvement. These are described below with corresponding ideas for improvement.

These improvement ideas are organized into five areas:

- ⇒ Policies, Plans, Protocols, and Roles;
- ⇒ Data Provision and Analysis.
- ⇒ Communications;
- ⇒ Finance;
- ⇒ Human Resources; and

Policies, Plans, Protocols, and Roles

The CRD IRSU was the first Integrated Road Safety Unit in the province. As the first of its kind, a number of aspects of its operation had to be developed as the IRSU began operation. As there were no formal policies or procedures in place for this type of unit, some aspects had to be decided by the individuals involved, without the benefit of existing protocols.

It was only recently that the Joint Management Team formalized a meeting structure and formally recorded decisions. There was no formalized approach for meeting with the Officer in Charge to review the progress of the unit. There are few written guidelines concerning the relationship between the fiscal agent and the JMT.

Further, when individuals associated with the unit changed, there were significant changes to plans, procedures and expectations, and these changes were not always

clearly communicated. For example, there have been a number of changes to the enforcement strategies that officers were tasked with, depending on the OIC.

Overall, the IRSU could benefit from the development of a series of policies, plans, protocols, and role definitions. Increasing the formalized approach of the IRSU has three main advantages. First, this would provide a consistent basis for the operation of the unit as even when the individuals associated with the unit change. Second, an increased formal approach provides individuals within the IRSU more clarity as to what they should be doing and when they should be doing it. Third, such an approach helps to ensure that the organization – and everyone within it – is moving toward core goals to ensure the highest levels of accountability, effectiveness, and efficiency.

Some recommendations for increasing the formalized approach of the unit are listed below.

1. **Create a CRD IRSU Governance Guide or Manual**

The MOU successfully creates the CRD IRSU and ensures consistent funding to the unit. However, no documentation is available defining the roles and responsibilities, and accountabilities of officers and the JMT. There is little documentation detailing the relationship and formal reporting procedures between the JMT and the Officer in Charge. There is no listing of the information the fiscal agent (RCMP) is required to show the JMT for efficient budgetary oversight, and there is no written protocol for resolving emerging staff or media relations issues.

The CRD IRSU may benefit from a central document that outlines the roles and responsibilities of the different parts of its structure. This document does not need to detail every aspect of the unit's operation, but would provide form to the substance of the unit. Some key areas addressed by a governance guide, or manual, could include: how often the JMT formally meets; what the relationship between the JMT and the fiscal agent in terms of reporting and budget development is; how governance and policy decisions are made; how decisions are recorded; how the Officer in Charge communicates with and reports to the JMT; and how the effectiveness of the unit is measured.

2. Renew the strategic plan

The existing CRD IRSU strategic plan was developed during the initial stages of organizational development.

Governance Initiative

Redeveloping the strategic plan with a clear focus on achievable goals and associated performance measures will ensure the highest levels of clarity, transparency, and accountability for the unit while enhancing the effective functioning of the unit.

3. Develop an updated enforcement plan

An enforcement plan guides the Officer in Charge in leading officers. It also assists the JMT in understanding where and what traffic enforcement is taking place in the region. The plan could also address the question of special operations in locations outside the CRD.

Operations Initiative

Formally recording the principles upon which enforcement strategies are created and a corresponding set of performance measures to ensure enforcement is being carried out would be beneficial. For example, it is generally accepted that the IRSU should provide an enforcement presence in each participating municipality, as well as targeting specific intersections and corridors. A performance measure that presents coverage by municipality per quarter would inform the JMT as to where enforcement is taking place, and would assist Officers in Charge in ensuring coverage is equitable.

4. Develop formal criminal interdiction protocols for CRD IRSU officers

A significant issue for officers is the relationship between the CRD IRSU and their local police agencies in the case of criminal interdiction. There can sometimes be conflict between expectations of the IRSU and other police agencies regarding the responsibilities of IRSU officers in the case of criminal interdiction.

Operations Initiative

It is important that the JMT define the protocol for dealing with criminal interdiction cases, and communicate this protocol to the IRSU officers and to other local police agencies. The JMT members – as Deputy Chiefs of Police – can also ensure these protocols are followed in their home jurisdictions.

Data Provision and Analysis

The CRD IRSU is a data-driven enforcement traffic unit. However, there has been difficulty receiving timely data upon which the unit can base its enforcement strategy. As well, when data has been provided, it was not always summarized or presented in a clear and appropriate manner for police to readily use. In addition, there have not been regular updates so that the unit can measure its progress in preventing traffic injuries and collisions.

5. MOU to clarify data provision

To address the lack of consistent data provision to the unit, it may be beneficial to more formally specify the data requirements of the unit. This may take the form of detailing the data provision relationship in the Memorandum of Understanding. This means that specific data provision protocols should be written into the MOU to ensure that ICBC provides appropriate data to Police Services Division, and the information can be detailed for the CRD IRSU office.

6. Increase the use of data for accountability

To monitor the success of the CRD IRSU in achieving both its outputs (violations issued) and its outcomes (collision reductions), a more active partnership is required. This partnership involves ICBC (who maintain collision databases), Police Services Division (who could provide data analysis and tracking of violations and collision reductions at targeted sites), and the CRD IRSU.

The method of evaluating program effectiveness, including performance measurement, and accountability could be included in the MOU or formally documented separately.

Finance

The fiscal agent for the CRD IRSU is the RCMP. This arrangement provides many advantages and a few disadvantages for the operation of the unit. Some of the advantages include: a significant federal contribution to the operation of the unit, stable accounting and fiscal controls, and administrative support.

There are also some disadvantages in that some flexibility is lost due to federal regulations and purchasing guidelines. These disadvantages include: no input by the JMT in budgeting, no signing authority for the Officer in Charge, and limiting purchasing options due to RCMP guidelines.

Finding ways to address these issues could provide the IRSU with more flexibility while maintaining accountability in the operation of the unit.

7. Develop written protocol for budget formulation and approval

Governance Initiative

Budgetary issues are often complex and subject to a number of special rules and regulations. The unit may benefit from the development of a budgetary protocol that allows partners at the JMT level to improve the budget process, ensure their input, and resolve issues as they may arise.

8. Investigate flexible financial arrangements for capital purchases

Governance Initiative

RCMP guidelines can make it difficult for the unit to purchase specific types of equipment and in a timely manner. For these reasons, consideration could be given to developing financial arrangements that would allow the JMT the limited authority to make capital purchases based on the needs of the unit.

Human Resources

Attracting highly qualified employees is a challenge for most organizations in the current social and economic climate, and the policing community faces the same challenges. Staffing shortages may make it difficult to provide officers to the integrated unit. For the

CRD IRSU, the human resource challenge is more complex than just hiring the best employees due to some unique circumstances. First, working for the CRD IRSU is technically a RCMP secondment for all employees of independent municipal police departments, due to the fact that the RCMP serves as the unit's fiscal agent. Second, there are different employee-employer relationships for different officers. This relationship is governed by union contracts for independent police officers, while the RCMP operates in a non-union environment.

9. Examine staffing protocols as detailed in the MOU

Consistent staffing of the IRSU unit can be a challenge. Leave, illness, injury, and other circumstances can result in continuous shortages and staff turnover. Given the structure of the integrated unit, finding new secondments from municipal police departments or transfers within the RCMP structure can prove difficult. One way to ease the pressure may be to include staffing protocols in the MOU to increase the flexibility partners have in staffing. For example, if the RCMP is unable to fill a vacant position in the IRSU unit within a specified time, independent police departments could fill that position from within their ranks. This could make it easier to ensure the IRSU is fully staffed.

**Governance
Initiative**

10. Ensure the CRD IRSU is an attractive option for officers

It is important that the CRD IRSU is seen as an attractive option for officers. In order for this to occur, the unit must be able to communicate and demonstrate some of its benefits to potential candidates (e.g. training, opportunity to work in an elite unit). The CRD IRSU gives officers the opportunity to improve their skills and promotability. The unit may want to supplement their secondment posting with a list of potential courses they could receive if they are selected to work with the unit.

**Governance
Initiative**

This would have a number of advantages. First, it encourages officers to want to join. Second, it supports the CRD IRSU as an elite traffic enforcement unit. Third, it provides the member with significant skills and knowledge that can be brought back to their home department or detachment at the end of their secondment.

Communications

Effective organizational communication provides many advantages. In terms of proactive communication (or communication initiated by the unit), the unit can educate the public by providing clear, consistent messaging through the use of earned (or free) media, public appearances, or press releases. Proactive communication strategies can also include the development of regular public communication tools, like quarterly reports, or an annual 'State of CRD Road Safety' report. In terms of reactive communication (or responding to questions initiated from outside the unit), the unit can mitigate or avoid issues by having an issues management strategy in place.

In short, effective communications strategies will allow the CRD IRSU to increase its profile, detail its successes, support public awareness and education, as well as diffuse, or potentially avoid, difficulties should controversial issues arise.

11. Develop proactive and reactive media relations plans or protocols

The CRD IRSU may benefit from the development of proactive and reactive communication plans.

Operations Initiative

The proactive plan would be concerned with public awareness, complementing other road safety campaigns, such as the CRD Traffic Safety Committee, and the work of ICBC Loss Prevention public awareness initiatives.

The reactive plan, or issues management strategy, would set out protocols for dealing with negative or unexpected 'hot button' issues and identifying key individuals in the JMT who can address challenging issues.

12. Further develop inter-departmental communication

Operations Initiative

It seems that some local police agencies do not have a full understanding of the roles and functions of the CRD IRSU. Detailing the mandate and role of the unit, and communicating this with the local police agencies could improve this situation. Increased communication may also result in better recruitment and inter-departmental co-operation (particularly in the area of criminal interdiction).

13. Communicate with other IRSU units

The IRSU model is used in other areas in the province. The CRD unit may find it beneficial to communicate with other IRSU units on operational or policy issues such as co-ordinating performance measures, facilitating data analysis, or establishing corresponding public education campaigns. In addition, information can be shared between Officers in Charge that may result in better operations and/or enforcement outcomes.

**Operations
Initiative**

14. Develop quarterly communication tool

It is important that the work and successes of the IRSU be communicated to its stakeholders. The unit could investigate methods communicating to the broader policing community their successes over time (e.g. key stories, significant impacts). The target of this publication could be Police Services Division, ICBC, the JMT, the RCMP, CRD IRSU officers, municipal police departments, community, public safety and health and service organizations, the media, and other IRSU units.

**Operations
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Chapter 6 - Concluding Comments

The CRD IRSU is a specialized integrated unit conducting enhanced traffic enforcement in order to help prevent and reduce serious traffic injuries and fatalities. The unit is dedicated to strategic enforcement and not responding to calls for service or collision investigations. The unit is strictly focused on the enforcement of traffic laws.

This evaluation found that the CRD IRSU is more productive and efficient than the overtime model. The unit creates strong value for the province for ICBC and the public. The CRD IRSU is a sound model for enhanced enforcement and improving road safety.

The five key areas which could be addressed to improve the IRSU even more are:

1. Codification of plans, procedures, protocols, policies, and roles;
2. Increasing data provision and analysis;
3. Enhancing and capitalizing on communications opportunities;
4. Adding flexibility to the financial arrangements that govern the unit; and
5. Developing human resource protocols better suited to the integrated model of policing.

One point clearly identified is that members of the JMT, the RCMP, leadership, and the officers of the IRSU are all highly dedicated, capable individuals who are more than able to address the issues and challenges identified in this report.

Because the success of the CRD IRSU rests on the ability of the individuals involved, there can be no doubt of its continued success in the future.