BC Ministry of Transportation & Highways

Trans Canada Highway – Freeway Service Patrol
Operations & Procedures

Submitted by:
John O’Laughlin, Director, Incident Management Services
Parsons Brinckerhoff Farradyne
Seattle, Washington, USA

Jessie Bains, P.Eng., HOV Operations Engineer
Ministry of Transportation & Highways
Lower Mainland District
New Westminster, B.C.

TABLE OF CONTENTS
1.0 INTRODUCTION ................................................................. 4
2.0 OPERATOR’S MISSION ........................................................ 5
3.0 ADMINISTRATIVE PROCEDURES ........................................... 7
  3.1 DAILY SHIFT RESPONSIBILITIES .......................................... 7
  3.2 FREEWAY SERVICE PATROL AND VIDEO MONITOR POLICY ...... 7
    3.2.1 Incident Sites .......................................................... 7
    3.2.2 Service Patrol Duties .................................................. 7
    3.2.3 Service Patrol Training Requirements ......................... 9
    3.2.4 Operating Procedures .............................................. 9
    3.2.5 Service Patrol Equipment ....................................... 9
    3.2.6 Vehicle Availability, Maintenance, and Appearance ........ 12
    3.2.7 Vehicle Operation ............................................... 11
    3.2.8 Dress ................................................................. 11
    3.2.9 Hours of Work ................................................... 13
    3.2.10 Staffing .......................................................... 13
    3.2.11 Telephone Contact List ...................................... 14

  3.3 Provincial Highways Condition Center .................................. 16
  3.3.1 Traffic Operations Center ........................................ 16
  3.4 Media Relations ......................................................... 18

4.0 MANAGEMENT OF SPECIFIC INCIDENTS ................................ 16
  4.1 GENERAL ................................................................. 16
    4.1.1 Motor Vehicle Accident ........................................ 16
    4.1.1.1 Minor Property Damage .................................... 20
    4.1.1.2 Hazardous Materials and Commodity Spills ............. 21
    4.1.1.3 Abandoned Vehicles ......................................... 22

  4.2 CYCLISTS & PEDESTRIANS ........................................... 20
  4.3 ANIMALS ..................................................................... 20
  4.4 PARKED MOTORISTS .................................................. 24
  4.5 OVER-SIZE VEHICLES .................................................. 21
  4.6 STALLED VEHICLES ................................................... 25
    4.6.1 General .............................................................. 25
    4.6.1.1 Stalled Car Blocking A lane Of Pavement or Ramp (Motorist Prestent 25

  4.7 DEBRIS ................................................................. 22
  4.8 RADIO COMMUNICATIONS PROCEDURES ......................... 23
    4.8.1 Documentation .................................................. 27
    4.8.1.1 Monitoring ..................................................... 27
    4.8.1.2 Operating Procedures ..................................... 27
5.0 INCIDENT PROCEDURES

5.1 ROADWAY DAMAGE REPORTING AND REPAIR

5.1.1 Emergency Repairs (Sign Down, Light Poles Down, etc.)

5.1.2 Scheduled Repairs

5.2 LAW ENFORCEMENT CLOSURES

6.0 MAINTENANCE PROCEDURES

6.1 SNOW REMOVAL AND SNOW CLOSURES

6.2 ROADWAY OR RAMP CLOSURES

6.2.1 Bridge Damage or Collapse

6.2.2 Special Events Impact on Traffic

6.3 MOTORIST ASSISTANCE AND WRECKER REQUESTS

6.3.1 Transporting Motorists or Pedestrians

6.4 TRAFFIC CONTROL REQUESTS

7.0 TRAFFIC OPERATIONS CENTER (TOC) SECURITY PROCEDURES

7.1 TOC SECURITY

7.1.1 After-Hours TOC Access

7.2 COMPUTER SECURITY

7.2.1 Computer Software Policy

7.2.2 Computer Virus

APPENDICES

A. TCH-HOV MAP AND EMERGENCY TURNAROUND LOCATIONS

B. TELEPHONE CONTACT LIST

C. EXCERPTS FROM THE MOTOR VEHICLE ACT & REGULATIONS AND HIGHWAY ACT
1.0 INTRODUCTION

The Freeway Service Patrols (FSP) and Traffic Operations Center (TOC) for the Trans Canada Highway (TCH) High Occupancy Vehicle (HOV) system is an important step in comprehensive freeway management. This manual provides the procedures for operators to be successful in achieving proper performance.

The key objective of any Incident Management Plan is to keep traffic disruption to a minimum. The TCH HOV area has the following tools to ensure that goal is met:

- 20 CCTV cameras strategically positioned at 11 locations throughout the corridor provides coverage of approximately 80% of this TCH-HOV facility;

- A Traffic Operations Center (TOC) equipped with a control room where CCTV monitors are in place to oversee highway traffic flows and detect incidents and potential disruptions;

- Two service patrol vehicles, one of which will be a wrecker, shall be available during peak periods to respond to accidents or other incidents that require on-the-spot assistance.

Each of these tools must be used to its fullest capability at all times. Consistent performance is required regardless of the time of day or day of the week. If handled properly, the investment will pay excellent dividends by reducing delays and increasing safety on this corridor. The public will quickly recognize the need and determine the positive nature and impact of this program which benefits all motorists. As employees in the first program of this type in British Columbia, each of you are key to its success. Please review this manual and become familiar with its policies and procedures.
2.0 OPERATOR’S MISSION

The operator’s primary mission is to assure the safety and convenience of the motoring public. The operator must understand the system, be able to make sound decisions, and quickly implement the proper procedures for routine and emergency actions. This is accomplished through a thorough understanding and working knowledge of incident response policies and procedures. Timely and accurate responses to all reports of incidents and requests for information, services, or equipment is required at all times.

The operator must provide quality information in a prompt and courteous manner to the public, public agencies, and response personnel. When a situation arises that the operator cannot resolve, the BC MoT Contract Area Manager (as identified in Appendix B) shall be advised immediately and appropriate response or direction will be provided.
3.0 ADMINISTRATIVE PROCEDURES

3.1 DAILY SHIFT RESPONSIBILITIES

At the start of each shift, each operator will:

- Discuss any ongoing incidents or issues with the operator going off-shift.
- Access and read all new memos or directives. Log all personnel on shift.
- Scan all monitors to determine traffic conditions and verify the status of any incident.
- Verify all cameras and monitors are working properly.

At the end of each shift, every operator will:

- Verify that the incident logs are completely up-to-date.
- Advise the incoming operator of any pending issues.
- Leave the work area in a clean and orderly condition.
- Make sure all customer inquiries received during their shift have been handled.

All operators may be assigned additional duties as necessary.

3.2 FREEWAY SERVICE PATROL AND VIDEO MONITOR POLICY

Video monitors in the TOC allow the operator to detect, verify, manage, and document traffic incidents. They also allow the operator to provide concise traveler information on a timely basis.

VIDEO CAMERAS MUST BE PROPERLY OPERATED AT ALL TIMES to maintain proper performance and credibility. The following procedures will be adhered to unless specific approval to the contrary is granted by the BC MoT’s, Area Manager.

3.2.1 Incident Sites

When incidents have been detected via the monitors or when a report of an incident has been received, the operator must determine what resources are needed and that information is to be conveyed to the RCMP dispatchers. After initial evaluation of the scene, the cameras may be used...
to monitor incident related congestion. Upon RCMP request, the camera may also be used to verify further details of the scene. Care will be taken to avoid close-up views that may contain injured persons, vehicle license numbers, or other identifiable characteristics that would allow viewers to determine the parties involved.

### 3.2.2 Service Patrol Duties

The Freeway Service Patrol vehicles will patrol the facility. Drivers will stop for all vehicles stopped on the shoulder or roadway. Vehicles in hazardous positions will be towed or pushed to the nearest safe location by the service vehicle.

Drivers are required to provide jump starts, gas, water and minor repairs such as assistance with changing flat tires when the vehicle is on the shoulder or other safe position.

Drivers will also remove all debris from the roadway and clean up small amounts of spilled motor oil, antifreeze and fuel from damaged or disabled vehicles. Drivers will assist the RCMP in traffic control or other requested assistance. Drivers may transport a motorist or pedestrian from the freeway to the closest location, where necessary services are readily available, in order to make their own arrangements. This service may be provided when initial efforts by the FSP to fix the problem or a cellular call for assistance are unsuccessful. Any service requiring transport of a person from the freeway shall be documented in the vehicle log book and at the TOC. The time and location of pickup/dropoff shall also be logged. Picking up of pedestrians along the freeway for any other reason than to assist stranded motorist is not included within the scope of this service patrol. If individuals are observed on the freeway without a vehicle, then the communication center shall be advised and the RCMP will be contacted for appropriate response.
3.2.3 Service Patrol Training Requirements

All vehicle operators will be trained to operate the towing equipment by the contractor prior to assignment to the FSP. They will also possess a level one first aid certificate and a valid driver's license.

After assignment to the FSP, the following training will be provided by the contractor:

- Incident management goals and objectives
- RCMP operation guidelines for assisting at accident scenes
- Service patrol vehicle operations
- Service patrol equipment use
- Use of push bumpers
- Radio and communication procedures
- Traffic control for incidents
- Deployment of incident signs
- Hazardous materials recognition course
- Clearing debris from roadway
- Public relations
- Documenting the incident
- Use of portable changeable message signs
- Providing information for motorists
- Traffic Center operations
3.2.4 Operating Procedures

Operating procedures will be developed with the input of the contractor personnel for items not covered in this document. The BC MoT Contract Administrator has final authority on procedural changes or additions provided that they do not cause additional expense for the contractor. When a situation is encountered that the contractor or its operators are unsure of what procedures to follow, BC MoT or the RCMP will be contacted for assistance.

3.2.5 Service Patrol Equipment

The contractor will provide one tow vehicle fully equipped for towing passenger vehicles, vans or pickup trucks. One pickup truck, minimum 1/2 ton 4 x 4 will also be provided. Both will be painted to comply with the MOT fleet operations policy, shall be identified as a freeway service patrol vehicle and will have the following equipment:

- Roof mounted full size arrow board
- Heavy duty front push bumper
- Jump packs for jumper cables front and rear
- Jumper cables
- Two fire extinguishers (10 lbs.) One dry chemical and one CO2
- Level 1 first aid kit
- Two disposable blankets
- One (1) case of flares
- One heavy duty push broom
- One short handled, flat shovel
- One 10 litre or larger fuel can
- One 10 litre or larger water can
- Two long neck medium funnels
• Radio equipment for communication to and from the Provincial Highways Condition Center and the Cariboo Interchange operator
• Pinch (pry) bar
• Rechargeable flashlight with red traffic wand
• All weather tires
• Tire chains
• Cellular telephone
• 35 MM camera and colour film
• Duct and electrical tape
• Binoculars
• Plastic garbage bags
• Hand Cleaner
• Paper towels
• Area maps
• Two spare bulbs for arrow boards
• Floor jack
• 4-way tire iron
• Basic tool kit (pliers, screw drivers, adjustable wrenches, utility knife)
• Absorbent pads or bulk material for vehicle fluids clean up
• Stop/slow paddle

The contractor may carry additional equipment upon approval of the BC MOT Area Manager.

The following additional equipment will be assigned to the pickup:

• 20 tube delineators
Portable roll-up type signs (ACCIDENT AHEAD, RIGHT LANE CLOSED, LEFT LANE CLOSED)

Both vehicles shall be maintained in a clean and orderly condition at all times. The passenger area of the vehicles shall be clean and available to transport one passenger. Passengers will be limited to those on official business or those being transported from the freeway as part of normal operations. All equipment will be clean, operational, and available at all times. Fuel and water cans will be full at the start of each shift and be refilled within two hours of use.

3.2.6 Vehicle Availability, Maintenance, and Appearance

Should one of the vehicles become damaged or disabled, it shall be returned to service within two hours or be replaced by a similar vehicle with similar equipment. Vehicles with visible body or equipment damage will not be allowed. All maintenance and repairs required on the service vehicles will be conducted by the contractor or his representative during non scheduled hours.

At least one of the two vehicles will be on the freeway at all times during the designated hours of operation identified in Section 3.2.9, Hours of Work.

3.2.7 Vehicle Operation

Vehicles will be operated in a safe and courteous manner. When responding to an incident, they will be driven within the speed limit and may use the HOV lanes. Vehicles may use the turnaround provided the movement is done safely without creating hazardous conditions for the operator or motorists. Drivers will adhere to the specific techniques provided in the training program for performing required tasks.

3.2.8 Dress

Each driver will be equipped with:

- clean/reflectorized Type 2 orange coveralls
• name tags and logos on all apparel
• reflectorized rain gear
• rubber and leather gloves
• eye protection (safety glasses)
• safety toe boots
• hard hats

Drivers may carry additional equipment or apparel provided it is approved by the BC MoT’s Area Manager. All equipment and dress apparel shall meet WCB regulations.

3.2.9 Scheduled Hours of Work

<table>
<thead>
<tr>
<th>DAY</th>
<th>OPERATIONAL HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday to Friday</td>
<td>5:30 a.m. — 9:30 p.m.</td>
</tr>
<tr>
<td>Saturday and Sunday</td>
<td>7:00 a.m. — 11:00 p.m.</td>
</tr>
</tbody>
</table>

3.2.10 Staffing

Sufficient number of trained incident response service patrol operators will be provided by the contractor to cover all scheduled shifts.

An additional staff member is required to monitor the existing camera system console and advise field staff of incidents as well as relay traffic communication to relevant agencies and the Provincial Highways Conditions Center.

A record or log of all personnel on shift as well as all incidents shall be recorded by the staff member monitoring the camera system.
All staff members will be neat, well groomed. They will be physically capable of performing all duties as described in the duties section.

All drivers will have a criminal background check conducted by the RCMP prior to employment as a Freeway Service Patrol Vehicle operator. Drivers will be free of all felony convictions, and any assault, theft, or driving while intoxicated convictions.

3.2.11 Telephone Contact List
A list of key personnel, and agencies for all types of contingencies will be maintained at the Traffic Operations Center (TOC). When new personnel and numbers are received, they will be added to the list. The telephone list will be kept up to date by the contractor and made available to BC MoT and the RCMP upon request. Refer to Appendix B for a list of contact names and phone numbers.

3.3 PROVINCIAL HIGHWAYS CONDITION CENTER
Upon detection of an incident, the dispatcher will have the option to contact the Provincial Highways Condition Center to inform them of site-specific incidents. The dispatcher will monitor the estimated time delay to the traveling public and update the Provincial Highways Condition Center, should the incident require updates. Any minor or moderate delay may not, at the discretion of the dispatcher require any contact with the Provincial Highways Condition Center.

3.3.1 Traffic Operations Center (TOC)
The TOC is located at the Pitt River Bridge Control Tower and includes the CCTV monitor covering the twenty camera locations. These monitors oversee the TCH traffic flows and enable the operators to search for incidents and potential problems or delays. The operators will notify the
proper authorities of any incidents/delays seen on any monitors and keep a daily log of noted incidents.

An aerial orthophoto of the entire TCH route including roadway stationing will be prominently displayed over the monitors to allow the operators to identify incident locations relative to surface landmarks, such as interchanges.

During the shift, the operator will be able to direct the service patrols to any area appearing to have slower than normal traffic through use of the CCTV monitors and inform the RCMP of the nature of the problem for immediate action.

The operator shall also be responsible for answering telephone calls from motorists and updating the Provincial Highways Condition Center.

The operator will monitor traffic flows as follows:

- Note gaps between vehicles in the immediate vicinity of the camera as a gauge of headways/density. These gaps could be timed to calculate delays. Headways of less than 1.5 seconds would indicate slower speeds and higher densities associated with congestion and the potential formation of queues.

- Look for brake lights on vehicles moving away from the cameras (if possible with the black and white monitors).

- Develop a sense of “normal” extent of traffic slowdowns.

If vehicular delays become excessive, action such as activating the CMS signs to read an appropriate message may be implemented. This confirmation may be through a visual interpretation of the queue lengths on the monitors or through a site tour by the service patrol. The dispatcher shall use good sound judgement in exercising the use of the CMS signs for this
purpose. If in doubt, then the Contractors Operation Manager or MoT’s Area Manager should be consulted.

3.4 MEDIA RELATIONS

All notifications for traffic diversions or closures will be channeled through the MoT Provincial Highways Conditions Center for dissemination to applicable media agencies. If inquiries are received directly from the media, they may be provided with information that has been or can be verified by camera or service patrols. The same information will be provided to the MoT Provincial Highways Condition Center for consistency purposes.
4.0 MANAGEMENT OF SPECIFIC INCIDENTS

4.1 GENERAL

To maintain a successful and effective Incident Management Plan, all service patrol operators must meet specific criteria and be knowledgeable about the resources available to them. It is important for the team members to understand the importance of effective and efficient incident management.

An incident can be defined as an accident, vehicle breakdown, spill, or other event that impedes the normal flow of traffic. This impedance can be as major as blockage of all or part of the roadway or as minor as a momentary distraction for the motorist. Unlike recurring congestion (i.e., morning and afternoon rush hours), whose time span and location are usually predictable, the time and location of congestion created by incidents are completely unpredictable.

The amount of traffic congestion caused by an incident is highly dependent on the duration of the incident, the number of lanes that are blocked, and the volume of traffic at the time of the incident.

4.1.1 Motor Vehicle Accident

If the service patrol locates a motor vehicle accident or if the dispatcher detects an accident on the CCTV camera monitors, the RCMP will be notified immediately and informed as to the nature and details of the accident.

An incident debriefing will be held following any major incident and any suggestions for Incident Management improvements will be discussed and may be implemented with approval of the MoT’s Area Manager.

All service patrol operators members have been trained for lane closure set-ups and understand their role in implementing a safe secure site.
The service patrol will proceed to the incident site to assist the emergency services in any way possible to make sure their entrance and exit to and from the incident site is completed safely. The service patrol operator will place delineators as needed. Adequate space at the site must be provided to ensure parking areas for emergency vehicles.

The service patrol operator will assist at a freeway accident scene by immediately providing emergency first aid after positioning the service patrol vehicle as a buffer vehicle to protect the accident scene, supplementing or providing traffic control at the scene, removing damaged vehicles from the roadway, assisting in extricating injured motorists as directed by emergency service providers, providing and/or coordinating communication at the scene as specified in the accident plan, and providing the TOC with motorist information and traffic reports.

For major accidents, where the vehicles cannot be moved under their own power, the disabled vehicles should be either removed from the TCH entirely or off the road lanes and shoulder.

Where required, service patrols will assist in the set-up of a lane closure around an accident.

4.1.1.1 MINOR PROPERTY DAMAGE ACCIDENTS

The service patrol operator will instruct motorist(s) to drive their vehicle(s) onto the road shoulder or an exit ramp to exchange information and to wait for the RCMP. If the vehicles are not driveable, the service patrol will move them safely onto the roadway shoulder, following receipt of permission from the vehicle owner or authorization from the MoT or RCMP.

The service patrol operator will sweep up the accident debris and open the traffic lanes as quickly as possible. With the aid of the on-site RCMP officer documenting the incident, and/or facilitating clearance and traffic control, the wrecker will remove wrecked vehicles from the shoulder or off ramp. The service patrol operator will assist in getting the wrecker into the traffic flow through use of the flashing arrow board display and manual traffic control.
4.1.2 HAZARDOUS MATERIALS AND COMMODITY SPILLS

All spills will be treated as per the “Federal and Provincial Regulations for Transportation of Dangerous Goods” and the “North American Emergency Response Guidebook for First Responders”.

If a spill is detected, notify the RCMP and BC MoTH.

a) Hazardous Material (large scale)
   
   Upon notification, the RCMP and MoT representative, if available, will proceed to the spill site to evaluate the site conditions, identify the type of material, if possible, by confirmation of the of the dangerous goods placard located on all four sides of all hazardous material carriers, or by the manifest, and notify the appropriate emergency contacts.

   The TOC will then notify the MoT Provincial Highways Condition Center who will notify the Provincial Emergency Program (PEP) Agency. The PEP will then confirm with the TOC, the contact name and telephone number of the PEP representative who will report to site. As soon as the chemical spill has been identified, the dispatcher will then instruct the service patrols to re-route the traffic as necessary. The changeable message sign (CMS) boards will be programmed to notify the motorists of the situation prior to their entry to the spill zone. Once the spill has been cleaned up to the satisfaction of the MoTH and PEP representatives, the service patrols will open the traveled lanes and report to the TOC.

b) Hazardous Material (small scale)
   
   The service patrols will contain any spilled material as per the MOT Road and Bridge Maintenance Contract.

c) Commodity Spill (dumped load)
In accordance with the Motor Vehicle Act, all obstacles which impede traffic movement are to be removed immediately upon the notification or approval of the District Manager, Transportation (DMT), MoT’s Area Manager or assigned designate.

On notification of a commodity spill, the dispatcher will notify the MoT Provincial Highways Condition Center and await the DMT decision. The dispatcher will then implement the appropriate response for removal. The service patrol will assist in traffic control and cleanup.

Note: If requested, the RCMP will secure the commodity spill site to prevent the public recovery of goods.

4.1.1.3 **ABANDONED VEHICLES**

The following procedures apply for the removal of an abandoned vehicle:

- **Night-time Operations:** Dispatcher will notify the RCMP who may have the abandoned vehicle removed immediately.
- **Day-Time Operations:** Dispatcher will notify the RCMP and if the abandoned vehicle is not obstructing traffic, the vehicle will be removed no later than dusk.

The dispatcher shall telephone the RCMP to have the abandoned vehicle towed off the highway right-of-way if it is a hazard. The dispatcher is also responsible for recording the description of the vehicle, license plate number and location to which the vehicle was towed.

If the vehicle is off the paved surface, not affecting the traveled lanes, the RCMP will arrange for towing within the next 24 hour period.

**Note:** At any time during the day or night, any abandoned vehicle found obstructing traffic will be ticketed by the RCMP and removed immediately, as per the Motor Vehicle Act.
Regulation Chapter 318, Section 188 (see Appendix C). The service patrol will provide traffic control and may remove the vehicle to the shoulder or an off ramp if requested by the RCMP officer.

4.2 CYCLISTS & PEDESTRIANS

Under the Motor Vehicle Act, the Trans Canada Highway is considered a designated restricted zone for all cyclists and pedestrians. A service patrol will respond to all notifications of these incidents and assess the compliance of the offender, calling upon the RCMP for assistance, if required.

If deemed appropriate, service patrols may pick up the cyclist or pedestrian and transport them away from the restricted zone. The service patrol operator may advise them of the restrictions but will not direct them to comply. Any transport of pedestrians shall be reported to the TOC dispatch.

4.3 ANIMALS

Live animals on or around the roadway may be reported to the SPCA. All road kills will be removed as per the Mot Road and Bridge Maintenance Contract. In the case of a seriously injured animal, the SPCA and RCMP will be advised immediately.

4.4 PARKED MOTORISTS

Motorists temporarily parked along the highway shoulder will be given assistance and/or inform the motorist that it is unlawful to stop or park on the freeway except for emergency purposes. Refer to Appendix C, Section 16 of the Highway Act, regarding Removal Of Vehicle from Highway. The FSP patrol operator shall call the RCMP in cases involving any dispute regarding removal of vehicle from the TCH.
4.5 OVER-SIZE VEHICLES

Over-size vehicles require a permit from the Mot Weigh Scale to travel on any Provincial Highway. In the event of an accident where the lane width is restricted or the number of lanes is reduced, the TOC will notify MPSSG Regional Manager of Compliance, Perry Dennis. This procedure will ensure all over-size vehicles are directed to an alternate route. Refer to Appendix B for list of names and phone numbers for emergency response contacts.

TOC will also provide notification to the Provincial Highways Conditions Center and request they call Motor Vehicle Branch regarding routine maintenance related lane and/or shoulder closures that would restrict the roadway width required for any over-size vehicles.

4.6 STALLED VEHICLES

4.6.1 General

If a vehicle mechanical problem is identified on the highway via the CCTV monitors, the TOC will notify the service patrol to proceed to the incident.

The following procedures shall apply on arrival of the service patrol:

- For a major mechanical problem, e.g. slipping transmission or blown engine, the operator shall allow the motorist to use the operator's on-board cell phone to make his/her own towing arrangements; and

- For a less serious mechanical problem, e.g. broken water hose, flat tire, dirty fuel filter or empty gas tank, an attempt to correct the problem shall be made, even temporarily, to get the motorist off the highway under his/her own power.

Where debris on the roadway results from the mechanical problem, the operator shall implement the necessary procedures for spills. General “rule-of-thumb” as practised in U.S. jurisdictions,
which operate similar Freeway Patrol Services, is that operators should not spend more than 10 minutes with these situations.

4.6.1.1  STALLED CAR BLOCKING A LANE OF PAVEMENT OR RAMP (MOTORIST PRESENT)

The following procedures shall apply on arrival of the FSP vehicle:

- FSP pulls behind the vehicle and informs the motorist that the vehicle will be pushed to the highway shoulder, assuming the motorist is in agreement;

- Motorist is told to close the hood, put the vehicle in neutral, unlock the steering wheel and listen for instructions;

- A similar procedure applies even if the motorist is reluctant to drive on a flat tire; and

- The FSP operator is prohibited from working on vehicles while on the traveled laneway and can do so only when the vehicle is safely relocated to the shoulder.

The above procedure applies only to cars, vans and small pick-ups. All large trucks must be towed off the roadway by a large tow truck dispatched by the RCMP. The exception to this rule is when the large truck has air for operating the brake system and can be towed from the traveled portion of the roadway by the FSP. Where the motorist refuses to allow the vehicle to be pushed or towed to the shoulder, the TOC will be notified and the RCMP contacted for further action.

4.7  DEBRIS

The service patrol will respond to all incidents involving stalls, breakdowns, debris spills or MVA’s. The operator will remove all debris from the roadway unless it is unsafe to do so or the debris is too large. Additional wreckers will be mobilized by the RCMP if warranted to handle large-scale incidents.
4.8 RADIO COMMUNICATIONS PROCEDURES

Operators at the TOC are responsible for keeping appropriate managers and field units informed. They are also the link to the Provincial Highways Condition Center which in turn are the main contact to all municipal, provincial and federal agencies that participate in emergency response. Therefore the TOC main responsibility regarding major incidents, is to contact the Provincial Highways Condition Center.

4.8.1 Documentation

Maintaining records of all incidents and transactions is essential and therefore required. When radio is used for dispatching the service patrols, the time and information will be logged. The time the information was received either from the cameras or a telephone call will be entered into the log. The time the vehicle operator acknowledges, the time they arrive at the scene, any requests for further assistance, and clearance from the scene will also be logged at the time the transmission is made. Telephone calls, incoming and outgoing, will also be documented to include details of the call. The availability of the driver’s will also be tracked. When they sign out at any location for any reason, it will be logged. The time they return to the vehicle will also be logged.

Driver will also log information pertaining to every incident they respond to regardless if they locate it or not. The minimum required information is what type of incident, the location, the license number(s) of the vehicle(s) involved, and the management required to rectify the incident.

4.8.1.1 MONITORING

Maintaining consistent monitoring of the radio system is required. The volume on talk will be kept at sufficient levels that allow the operator to hear incoming radio calls.

The dispatch operator at the TOC will inform the service patrols when they will be away from the console.
4.8.1.2 **OPERATING PROCEDURES**

Radio traffic will be kept to the minimum necessary. Messages will be clear and concise. Each radio transmission received and each message sent will be acknowledged by the field unit. Call signs will be used for every radio conversation.

Operators will conduct themselves in a professional, responsive, and helpful manner. The radio will not be used for anything other than official business. Operators should be aware that the public, news media, or other agencies may monitor radio frequencies.
5.0 INCIDENT PROCEDURES

5.1 ROADWAY DAMAGE REPORTING AND REPAIR

Roadway damage reports are vital to maintenance in order to make repairs. Operators will obtain as much information as possible whenever they become aware damage has occurred. This damage will then be rectified as per the Road and Bridge Maintenance Contract.

5.1.1 Emergency Repairs (Sign Down, Light Poles Down, etc.)

Reporting parties will be encouraged to provide as much information as possible. Date, time, location, type of damage, calling party information, whether or not police or other agencies are investigating, are all required details. If emergency responders cannot effect minor repairs, then the contractor or MoT’s Electrical Branch can repair the damage on a scheduled basis. If emergency repairs are required, ask the response agency to stay at the location until the contractor can respond or send assistance. The name and badge number of the officer should be provided to the responding personnel.

5.1.2 Scheduled Repairs

All details of highway damage will be included in the incident report. The same data is required for both types of repairs. When updated information is received at a later time, immediately forward it to the appropriate organization.

Damage may be reported to the TOC for roadways that belong to other jurisdictions. If it is a probable emergency repair based on the caller information, the information will be taken and forwarded to the Provincial Highways Condition Center who in turn will contact the appropriate municipality and other emergency response agencies, as required.
5.2 LAW ENFORCEMENT CLOSURES

Law enforcement actions occasionally reduce capacity or require closures of roadways for reasons other than collision investigations. Some types of closures are:

**Suicides:** Bridges and overpasses are sometimes used by suicidal subjects to threaten or commit suicide. Closures may occur for that roadway as well as roadways below the structure. Length of closures are difficult to estimate.

**Armed standoffs on or near a freeway:** Police may request to close ramps or freeways when confronted with armed suspects in stopped vehicles or barricaded in structures near a freeway. When this occurs, a command post is usually established by the lead agency.

**Searches for fleeing suspects:** Searches for fleeing subjects will sometimes result in roadway closures. Police dogs are susceptible to traffic and handlers may request road closures to increase safety for the dogs and handlers.

**Hazardous materials incidents:** Fire departments or police may require closures when hazardous materials are known or suspected. Illegal drug manufacturers transport dangerous substances in cars or vans in amounts that can be extremely explosive.

Changeable Message Signs should indicate congested areas and to expect delays.

Contact with the police agency involved should be maintained.

Cameras will be used primarily to determine the extent of congestion and may be used to assist police with law enforcement issues at their request.

The impact of incidents on other routes should be considered and information should be provided to the appropriate agencies.
6.0 MAINTENANCE PROCEDURES

6.1 SNOW REMOVAL AND SNOW CLOSURES

When snow and ice problems occur, the operator will advise on-duty personnel in the affected area when snow removal is being done. Service patrols will be advised of hazardous areas and will be available for traffic control for snow removal. Abandoned vehicles will be removed by the RCMP and all disabled vehicles will be removed to the nearest safe location to allow for snow removal.

If emergency road closures are implemented by law enforcement, the call sign and the name of the officer who closed the roadway will be included in the incident log. The MoT Area Manager and the Provincial Highways Condition Center will be immediately informed of the road closure.

6.2 ROADWAY OR RAMP CLOSURES

Accidents and incidents, whether man-made or acts of nature, can result in road closures. Notification of personnel can vary depending on the type and projected length of closure. Information received will be evaluated and forwarded immediately to the appropriate agencies.

Details of the incident will be as complete as possible. Periodic updates will be sought from the responders to keep key personnel and the public advised.

The operator is to determine what CMS signs should be used in notifying motorists of the closure and is responsible for recording each incident in the Incident Log. Emergency response agencies in adjacent communities that are effected by the backups will also be notified through the Provincial Highways Condition Center.
6.2.1 Bridge Damage or Collapse

In the case of bridge or overpass damage, the MoT Area Manager, in consultation with the Ministry's Bridge Engineer, will determine load restrictions prior to reopening the roadway. Emergency load restrictions will be forwarded by the MoT Area Manager, to the Provincial Highways Condition Center, and to the TOC, in writing.

With regard to bridge damage or collapse, adjacent communities may need notification so restrictions can be posted at “decision points” or on CMS as soon as possible. Alternate route designations are to be provided and disseminated to the public.

6.2.2 Special Events Impact on Traffic

Events such as bicycle races, marathons, movie or commercial filming projects, motorcycle rallies, and parades will not be allowed on the TCH. When these events are held on facilities adjacent to the TCH, they may impact traffic on the TCH. Event sponsors are required to have adequate traffic control to handle closures and detours. Permit holders and event participants must comply with the conditions of the permit and adhere to all laws. CMS signs to assist in event traffic control may be used if they improve safety or reduce congestion. Consultation with MoT Area Manager is required for implementation of CMS signs for these nonemergency, scheduled events.

6.3 MOTORIST ASSISTANCE AND WRECKER REQUESTS

Service patrols helping stranded motorists will determine what type of assistance is necessary and summon the proper aid. If it is determined that a tow is needed, they will be asked to follow a standard format for requesting assistance. They will inform the driver that the RCMP will send a tow truck. If the vehicle driver has a preference for a particular tow company or is an automobile club member, that information will be provided to the dispatcher as well. The tow request will be
forwarded to the RCMP for response. Ascertain, if possible, an estimated time of arrival (ETA) and the name of the tow company for the motorist.

If the motorist requests a telephone call, the operator will place the call and relay the message.

The operator will record the following information for tow requests into the Incident Log:

Direction/Date/Time: ______________________________
Travel Lanes or Shoulders Impacted: ______________________________
Number of occupants: ______________________________
Tow preference: ______________________________
Auto club member #: ______________________________
Vehicle description:
  Color: ______________________________
  Year: ______________________________
  Make: ______________________________
  Model: ______________________________
  License #: ______________________________
  Province: ______________________________

6.3.1 Transporting Motorists or Pedestrians

When the need arises to transport someone for any reason, the driver will inform the communications operator the reason, the location, going from and to as well as the vehicle mileage. The driver will advise when clear and the ending mileage.

6.4 TRAFFIC CONTROL REQUESTS

Emergency traffic control requests are often received from the RCMP or other response agencies and will be handled as follows:
1. Ask for the name, call sign, and location of the officer in charge.
2. Log the caller's name and telephone number.
3. Log the type of incident, direction of travel, and the lanes involved.
4. Determine what type of traffic control is requested and who is now at the location.
5. Request the officer standby for the contact with the service patrol.
6. Use the appropriate traffic control devices and CMS signs.
7. Monitor the incident through radio and cameras.
7.0 TOC SECURITY PROCEDURES

7.1 TOC SECURITY
The TOC Control Room is “off limits” to visitors unless approved by the Contractor’s Operation Manager, MoT representative or in case of an emergency being reported by the public. All visits to the TOC control room shall be recorded in the log book. Visitors must at all times be accompanied by a TOC employee while present within the facility. Unless previously approved by the Contractor’s Operation Manager or MoT’s Area Manager, visits during non-business hours will be restricted to official business only.

7.1.1 After-hours TOC Access
Response agencies requesting access to the TOC after business hours shall be instructed to contact the Ministry’s Area Manager for approval.

7.2 COMPUTER SECURITY
All TOC computer systems are subject to a variety of problems that can degrade performance or compromise the integrity of the system. There are safeguards that every employee must take to maintain the system in proper working order. There are also ethical and legal issues related to equipment use by employees. The following policies and procedures outline the proper use of computers.

7.2.1 Computer Software Policy
“Software piracy” is the illegal copying or use of copyrighted software programs. Laws prohibit reproducing, transmitting, transcribing, storing in any retrieval system, or translating material into any language by any means without the written permission of the author.
Employees are not to use computer software in violation of the law. They are not to copy, possess, or use illegally copied (pirated) software on any contractor- or MoT-owned or issued computer equipment. This policy includes any copyrighted software that is restricted to a single site.

### 7.2.2 Computer Virus

A computer virus is a computer program written to alter the way a computer operates without the permission or knowledge of the user. A computer virus may become active when an infected program is executed or the computer is started from an infected disk. Once activated, the virus spreads by attaching copies of itself to other files.

To safeguard against virus, ALL TOC STAFF will use the anti-virus program on files received from outside sources, new programs, and files imported from floppy disks. Backing-up data on a regular basis will allow storage of files away from the possibility of virus contamination.

If a virus is suspected, stop using the computer and advise the Contractor’s Operation Manager. If records or property of MoT are effected, notify Mot’s Area Manager.
# APPENDIX A

TCH HOV MAP AND EMERGENCY TURNAROUND LOCATIONS
(Km from Horseshoe Bay)

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>KM LOCATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Turnaround</td>
<td>27.5</td>
</tr>
<tr>
<td>Grandview Interchange (Exit 28)</td>
<td>28.0</td>
</tr>
<tr>
<td>Willingdon Interchange (Exit 29)</td>
<td>29.0</td>
</tr>
<tr>
<td>Emergency Turnaround</td>
<td>31.0</td>
</tr>
<tr>
<td>Sprott Street Interchange (Exit 32)</td>
<td>32.0</td>
</tr>
<tr>
<td>Kensington Interchange (Exit 33)</td>
<td>33.0</td>
</tr>
<tr>
<td>Emergency Turnaround</td>
<td>35.0</td>
</tr>
<tr>
<td>Gaglardi-Cariboo Interchange (Exit 37)</td>
<td>37.0</td>
</tr>
<tr>
<td>Emergency Turnaround</td>
<td>39.0</td>
</tr>
<tr>
<td>Brunette Interchange (Exit 40)</td>
<td>40.0</td>
</tr>
<tr>
<td>Emergency Turnaround</td>
<td>42.0</td>
</tr>
<tr>
<td>Cape Horn Interchange (Exit 44)</td>
<td>44.0</td>
</tr>
<tr>
<td>Port Mann Bridge</td>
<td>45.0</td>
</tr>
<tr>
<td>152nd Street Interchange (Exit 48)</td>
<td>48.0</td>
</tr>
<tr>
<td>Emergency Turnaround (km 50)</td>
<td>50.0</td>
</tr>
</tbody>
</table>
Break in Median Guardrail for Emergency Vehicle Access

- Limits of Highway 1 HOV Laning Project
- Symbol for break in median guardrail for emergency vehicle turnaround
- Kilometer number in brackets at emergency turnarounds

Trans-Canada Highway HOV Lane Project
Emergency Vehicle Turnarounds
<table>
<thead>
<tr>
<th>Name or Agency</th>
<th>Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC Ambulance Service (GVRD)</td>
<td></td>
</tr>
<tr>
<td>Ambulance Dispatch – Emergency</td>
<td>911</td>
</tr>
<tr>
<td>Ambulance Dispatch – Non Emergency</td>
<td>872-5151</td>
</tr>
<tr>
<td>Charge Dispatcher (24 Hrs)</td>
<td>708-7500</td>
</tr>
<tr>
<td>BC Provincial Highways Condition Center</td>
<td>660-9770</td>
</tr>
<tr>
<td>BC MoT Area Manager</td>
<td></td>
</tr>
<tr>
<td>Brad Grunberg</td>
<td>660-8322</td>
</tr>
<tr>
<td>(880-4804)</td>
<td></td>
</tr>
<tr>
<td>BC MoT Electrical Branch</td>
<td></td>
</tr>
<tr>
<td>Burnaby Fire Department (911 Emergency)</td>
<td>294-7190</td>
</tr>
<tr>
<td>Coquitlam Fire Department (911 Emergency)</td>
<td>942-4404</td>
</tr>
<tr>
<td>Surrey Fire Department (911 Emergency)</td>
<td>543-6700</td>
</tr>
<tr>
<td>MPSSG Regional Manager of Compliance</td>
<td>307-3631</td>
</tr>
<tr>
<td>RCMP Port Mann Freeway Patrol</td>
<td></td>
</tr>
<tr>
<td>Main Office (Business Hrs)</td>
<td>526-9744</td>
</tr>
<tr>
<td>Vancouver Dispatch (24 hrs)</td>
<td>666-5343</td>
</tr>
<tr>
<td>HOV Patrol – Charlie 11 (Unmarked)</td>
<td>(862-4346)</td>
</tr>
<tr>
<td>HOV Patrol – Charlie 12 (Marked)</td>
<td>(862-4347)</td>
</tr>
<tr>
<td>Mundies Towing</td>
<td>526-3227</td>
</tr>
<tr>
<td>Coquitlam Towing</td>
<td>939-6474</td>
</tr>
<tr>
<td>North Burnaby Towing</td>
<td>298-1733</td>
</tr>
</tbody>
</table>

**APPENDIX C**

**EXCERPTS FROM**

THE MOTOR VEHICLE ACT & REGULATIONS

AND

THE HIGHWAY ACT