

## New dual-fuel vehicles are environmentally friendly

The keys to a pickup truck that runs on both gasoline and compressed natural gas were presented to Transportation and Highways Minister Harry Lali June 16, marking a major step in the ministry's move to operating its entire vehicle fleet on alternate fuels.

"This vehicle symbolizes our commitment to reducing greenhouse gas emissions and taking climate change seriously," said Lali, who took delivery of the F-150 truck from Rob Roberts, Ford Canada's Pacific regional manager, during a ceremony at HMCS Discovery in Stanley Park.



### Keys to Change

Rob Roberts of Ford Canada gives Transportation and Highways Minister Harry Lali the keys to a new alternate fuel truck in Vancouver June 16.

"This year we've ordered 150 cars and trucks that will be able to use either propane or natural gas as well as gasoline. These vehicles are better for the environment, more fuel efficient and represent a big step towards the ministry's changeover to alternate fuel vehicles."

The truck was one of 117 vehicles ordered from Ford. The ministry also purchased 33 vehicles from General Motors. The ministry will receive all 150 vehicles by mid-August.

The cars and trucks will replace aging vehicles in the Ministry of Transportation and Highway's light

fleet of 532 vehicles, which are used across the province for things like avalanche control, maintenance evaluation and project management.

Lali said major car manufacturers have just recently started producing alternate fuel vehicles that meet the ministry's needs. He noted plans are under way to order hybrid electric vehicles.

The ministry's order includes seven cars and 143 trucks, most of which were manufactured to run on alternate fuels as well as gas. Thirty-nine vehicles can use compressed natural gas and 86 can use propane. The remaining 25 vehicles will be converted after delivery.

To learn more about topics in this article, visit the following Web sites:

- Ford's alternate fuel vehicles, <http://www.ford.ca/english/LearnAbout/ConsumerEd/Environment/Commitment/CleanerVehicles/Default.asp>
- Natural gas vehicles, [http://www.bcgas.com/home/ngv\\_benefits.html](http://www.bcgas.com/home/ngv_benefits.html)
- Auto propane, <http://www.propanegas.ca/propane/frame1.htm>
- Greenhouse gas emissions, <http://www.env.gov.bc.ca/epd/epdpa/ar/climate/bcggap.html>

# Message from the ADM



Assistant Deputy Minister  
Dan Doyle

Our success as a ministry depends on our combined contributions, regardless of our individual positions or our job descriptions.

Although I am based in Victoria, I frequently travel throughout the province and am fortunate enough to meet a variety of ministry staff and see our progress on a number of fronts.

When I reflect on our efforts in this regard, I am very proud and appreciative for the hard work and dedication of each and every employee.

There are a lot of people in the ministry who deserve special recognition for the extra efforts they are making to ensure the success of our organization.

In no particular order, then, I would like to mention a few people:

**Greg Stewart**, senior marine engineer, Region 3, marine engineer and owner's representative for the Kootenay Lake Ferry Project

Greg has performed an excellent job at efficiently operating the Kootenay ferry system. His practical and progressive point of view made an important contribution to the construction the new Kootenay Lake Ferry Osprey 2000 and the success of this project.

**Teresa Nye**, postal clerk, support services, finance and administration branch

Teresa has been keeping the mail coming and going from my office for a long time and always has a ready smile and nice greeting.

**Lenora Fillion**, assistant to the regional director, Region 4

Lenora provides invaluable help to the regional director and is always a pleasure to deal with. She is extremely well-organized and deals effectively with a wide range of people and issues. I understand that Lenora's skill at keeping things on-course has affectionately earned her the title, "Queen of the Bring Forward."

**Bob Corder**, manager, finance and administration, Region 4, manager of the Best Practices Project

The ministry executive initiated the Best Practices Project to review and improve finance and administrative practices, processes, models and principles within the highways operations department. Bob was instrumental in managing recent business practice improvements to the ministry's purchasing card and expenditure and non-expenditure reconciliation processes. Bob's team is also reviewing the ministry's electronic forms, cost tracking and distribution, financial analysis and external reporting processes.

**Mary Koyl**, director, aboriginal relations branch

Mary's branch provides advice and assistance in the areas of treaties, consultation, road tenure and road research and ensures the ministry is always prepared for tough aboriginal issues such as road blockades.

**Marilyn Wargo**, manager, human resources branch

Marilyn is a very special individual who has phenomenal people skills. She really goes to bat for all of us when we need help in the human resource area.

**Robbie Osborne**, project manager, Region 2, project director for the Glenrosa Interchange Project

A ministry employee since the mid-'60s, Robbie led the project team in the region's first ever design/build project,

working closely with the contractor to complete the project's design and construction. Robbie brought the project in on time and on budget.

**John Bodnarchuk**, district highways manager, South Island district

John is responsible for public safety on about 1,620 lane kilometres of highways, in an area that includes 15 municipalities, two regional districts and six major Gulf Islands. John has helped in changing the way maintenance contractors operate and is currently negotiating with his local road and bridge maintenance contractor and BCBC to reduce the number of maintenance yards in his district from six to two. This initiative is aimed at reducing yard costs and allowing the sale of the valuable properties.

**Howard Hunter**, provincial approving officer, Region 1

Howard is an independent statutory decision-maker who has the authority to review and approve subdivision applications. Howard's long-standing experience with the ministry and his meticulous attention to detail make him extremely good at fully and fairly assessing a large variety of very complex issues. Howard also maintains good working relations with approving officers at other levels of government throughout the province.

## Region 5, Strategic Renewal Project Team

Last August, an expanded regional management team began assessing the organizational structure of the region and developing ways to meet the challenges of a quickly changing world. The initiative included tours of the region to meet with ministry staff, promote a team approach and gain staff support. As a result, regional activities are now governed by a mission statement that

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## Streamkeeping improves community relations



### Planting good relationships

Vancouver Island Highway project staff worked closely with community members to not only enhance the local environment, but to forge lasting working relationships as well.

Building highways can also build inroads to better community relations.

Such is the case during construction of the Vancouver Island Highway, giving project staff ample opportunity to work with local streamkeepers to improve aquatic habitat. In the process of

enhancing the environment, the ministry also forged better relationships with its stakeholders.

"There was a recognition that highway construction has an impact on habitat, so we made a conscious decision to work toward reducing the loss," says VIHP's communication manager Jack Stuempel. "Wherever possible, the planning and construction phases of the Island Highway have been aimed at creating a net gain in habitat."

In those instances where environmental impact was unavoidable, VIHP provided mitigation or compensation, he added.

To achieve its goals, project staff formed an unprecedented series of partnerships with the public during

planning and construction of the highway. In the Comox Valley for example, politicians, streamkeepers, environmentalists and citizens joined highway employees on three liaison committees, formed to represent three local watersheds. As a result of the meetings, MoTH worked with a habitat committee to conduct stream and habitat surveys.

Creating and enhancing aquatic habitat ensures a bright future for hundreds of tiny streams that host coho, chum, pink and chinook salmon, as well as steelhead and cutthroat trout.

Improvements include creating deep ponds, new tributary channels and using tree roots, logs, willows, bull-rushes, and shrubs to enhance spawning and fry-rearing grounds.

At one location, a specially engineered culvert serves as a fish ladder designed to help fry move against the current. Rocks and centre wells create swirls in the water, enabling fish to rest in the currents.

"From a stream enhancement point of view," says Frank Shepherd of the Little River Enhancement Society, "this culvert is a thing of beauty."

As a result of its streamkeeping initiatives, the ministry's community relations improved and media coverage of VIHP activities became more positive. Soon, the highway project was accepting public accolades from former critics.

At Morrison Creek, for example, members of a local streamkeeping committee invited the media to see habitat improvements completed with ministry support. The group was formed two years earlier after heavy rains washed silt and other construction debris into streams near the highway.

After touring the site, a local newspa-

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### Message from the ADM (cont'd)

provides a clear focus, guides decisions, effectively uses resources, improves communications within the organization and realizes future potential. These guiding principles have also been incorporated into the region's annual performance agreement. My hat goes off to the entire team of **Dirk Nyland, Gerrit Apperloo, Reg Fredrickson, Don Ramsay, David Belford, Gail McFadden, Glenn Rickard, Mac Godo, David Fisher, Bob Pratt, Shawn McKinley and Bob Penner.**

**Simon Leung**, acting senior highway safety engineer

Simon is responsible for the ministry's

road safety initiatives and is continually coming up with new ideas and approaches to make our highway system safer. Simon spearheaded the implementation of continuous shoulder rumble strips (SRS), an audible delineator device that warns drivers they are drifting onto the shoulder area. He is also developing a number of new initiatives with ICBC to reduce roadside hazards.

There you have it. Just a few of my many heroes in this ministry.

I know there are many more of you out there and I want to thank you for making the Ministry of Transportation and Highways not only a leader in its field, but a great place to work, too!

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## Value analysis and value engineering – what are they?

by Lee Shanks

There are new buzzwords floating around the government today and as time goes on, you're going to be hearing them more often. But what do they mean and where did they come from?

Value analysis and value engineering (VA/VE) evolved during WWII, when shortages of materials and labor forced the introduction of various substitutes. At the time, managers of the General Electric Company noted that these substitutes often reduced costs while improving the product. From there, a gentleman by the name of Lawrence Miles developed a system of techniques, which he called value analysis, that made significant improvements in a product by using proven, cost-effective substitutes.

By 1964, the process was known as Value Engineering and many industrial companies were adopting formal VA/VE programs for themselves.

So, what are they? Value analysis and value engineering are, in short, knowing when and how to get the best 'bang for your buck'. Value for money is achieved when the required functions of a program, project, system or component are obtained at minimum life cycle costs (both capital and operating costs considered).

### Road Runner

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or sent c/o Road Runner, 5-B 940 Blanshard St., Victoria, B.C. V8W 9T5

Much of the early work on assessing value was done late in the life of a project – often on completion. But that timing wasn't always the best. To be effective, VA/VE must be done early in the life of a project, after there is sufficient engineering knowledge, but while there is still opportunity to implement any suggestions into the final designs.

For the transportation sector in B.C., a two – stage sequential procedure has been adopted. The VA procedure is now applied to analyzing a project during the planning and evaluation phase, when there has been sufficient planning and design input to identify a preliminary scope. The VA process, then, helps to define the 'what'. There is greater opportunity for cost savings at this earlier phase in the lifecycle of a project.

The VE process looks at the 'how' of a project – how it will be built, what materials will be used, etcetera. It is carried out during the design and engineering phases to analyze and modify systems, components, materials and methods.

The MoTH process for VA/VE studies in transportation projects has different types of value review, depending on the phase of the project lifecycle. The usual review points are:

- Project value analysis in the planning and evaluation phase, and
- Project value engineering in the design and engineering phase.

The MoTH VA/VE model provides for variable levels of effort to reflect the potential for enhancing value.

Kristina Stevens, director of the investment management branch, said ministry experience has shown that using VA/VE on capital projects has resulted in some projects requiring very little change.

"As well, there is a number (of projects) where significant cost savings were realized as a result of the exercise," she said.

Examples of successful proposals resulting from VA/VE include modifying an interchange design to avoid an expensive partial land taking; changing a planned bridge structure to a box culvert; and, eliminating one leg of a planned interchange based on low traffic volumes.

"Numerous, smaller safety and efficiency improvements have also been proposed and implemented based on VA/VE exercises," she said.

The first stage, however, is determining which projects require VA/VE studies. The Treasury Board requires every project with total capital costs in excess of \$5 million be subjected to VA/VE. MoTH guidelines require consideration of VA/VE for all projects with a total cost greater than \$500,000. The VA/VE review will be carried out if determined to be 'reasonably beneficial'.

If you would like a copy of the MoTH VA/VE policy and guidelines manual, a list of VA/VE consultants, or more information on the VA/VE process, please contact Bruce Tutt in the investment management branch.

Additional information on VA/VE can be viewed at

<http://www.value-engineering.com/weblinks.htm>

### Streamkeeping...

(Cont' from page 3)

per called the stream work "a magnificent example of environmental engineering," and one of the group's members, Larry Peterson, said despite his past criticism of some highway projects, "the ministry deserves a lot of credit for this, they've done a marvelous job."

For more information on environmental activities on the Vancouver Island Highway Project, see their Web site at <http://www.th.gov.bc.ca/bchighways/vi/hp/vihpenv.htm>

# Putting the wheels in motion on a new policy

by Alan Callander, Provincial Cycling Co-ordinator

February 17 was a significant day for both the Ministry of Transportation and Highways and the large number of people who rely on their bikes for work, recreation and pleasure.

On that day, Minister Harry Lali announced a new cycling policy for the ministry, the creation of a provincial cycling co-ordinator position and a provincial cycling advisory committee.

The new policy was written after lengthy consultation with stakeholders. It stipulates that a review process will be put into action when planning new and upgraded highway projects to make sure that cyclists' needs are met. Refusal to accommodate cyclists will be permitted only if – through evaluation and consultation – it's found there are reasonable grounds for that exclusion. An evaluation can be applied on existing routes to determine if there are ways to improve cycling conditions.

To accommodate the safety and travel requirements for different types of cyclists, the ministry will plan, design and build depending on the type of cyclist and facility.

Also included in the new policy is a provision to ensure that all signing and marking of provincial roads is uniform and easily identifiable.

Alan Callander, policy analyst for the highway planning and major projects department, has been named the ministry's cycling co-ordinator. Alan has been with the ministry since 1992 and has worked on the cycling policy and cycling issues since 1994.



The cycling co-ordinator is responsible for the policy itself, including implementation and ensuring it remains



## Wheely big winners

The Bike to Work Week draw held in June attracted more than 100 entries. Al Moir, senior manager of financial planning and reporting, and Jody Manning, receptionist for the Office of the Superintendent of Motor Vehicles, were two of the lucky ones to win the coveted Bike to Work shirts. Al and Jody were presented with their prizes by Alan Callander, policy analyst for the systems planning and policy branch, and provincial cycling co-ordinator. Also winning shirts but not pictured were Andy Braacx, a design technician in the South Coast region, and Ron Pelensky, area manager of roads in the Williams Lake area.

current. He is also responsible for facilitating and providing support for cycling consultation between ministry staff and cycling stakeholders, as well as researching developments in cycling.

The co-ordinator is also the administrator of the advisory committee which will assist the ministry by providing an opportunity for the ministry and cycling interests to share information and coordinate efforts to provide better cycling infrastructure.

In recognizing the increasing number of cyclists on the road, the minister proclaimed June as Bike Month. The campaign encouraged more people to bike to school, to shop, to work, or just to bike for fun.

For several years, the first week of June has been Bike to Work Week but this year, that was extended for the entire

month. Bike to Work is promoted in Victoria, Nanaimo and the Lower Mainland.

The changes in policy and the proclamation of June as Bike Month makes cycling an increasingly viable transportation option in B.C. and encourages would-be cyclists and long-time enthusiasts to try out new cycling facilities.

For more information on the policy and other cycling information, check out the ministry's cycling internet page at

<http://www.th.gov.bc.ca/bchighways/cycling/bicycle.htm>

To view the Ministry's Cycling Policy, go to

<http://www.th.gov.bc.ca/bchighways/cycling/policy.htm>

# REGIONAL ROUNDUP

## REGION 1

### On the road again

#### Pavement Marking Operations hits the road for another busy summer

by Amy Sept

For many of us, summer months mean golfing, barbecues and trips to the beach. But for the folks at pavement marking operations - formerly known as centreline crews - hot summer days mean it's time to get to work.

"During the seven months crews are on the roads, they probably put in the equivalent of a whole year's work," said Mark Pratt, manager of PMO.

Pratt says crew members work day and/or night depending on traffic, nine to 12 hours a day, five to seven days a week. Crews can't paint when it is raining, so they finish as much work as they can while the weather is good.

Pratt says the ministry's nine crews cover the entire province and are responsible for the yellow centre lines, the white shoulder markings and other markings on ministry highways and projects.

"We do repainting as required on the highways, and put down new lines on contract maintenance work and new projects as required," said Pratt.

There are seven 'long-line' crews - one per region and one that goes wherever needed - that paint all highway lines. The remaining two crews do thermoplastic application, as well as cross-hatch and gore painting.

"Last year, the long-line crews painted over 26,000 kilometres of white and yellow paint. Over 11,000 square metres of cross-hatch painting was accomplished, while the thermoplastic crew laid down over 22,000 square metres," said Pratt.

Murray Friberg works on one of the

crews and says he's happy performing a public service.

"The fact that we're out there performing a safety service for the public and doing it with the expertise we've gained over the years is one of the best parts of the job," Friberg says.

"As a crew, we have good times and bad times, but the camaraderie is also one of the pluses of the job. In some cases, you live, eat and sleep with the crew for five weeks at a time."

Friberg admits there is always a risk painting because they're often working in high speed, high volume traffic. He says safety has improved with signage and lane closures, but adds there is always room for more improvement. "If I could say one thing to B.C. motorists, it would be to slow down, especially in a construction zone or any other signed roadwork."

The minister shares Friberg's concerns and this summer is initiating a campaign to encourage commuters to be



A painting crew works their magic on the new Millstream Connector in Langford.

aware of both highways and pavement marking crews. Focused primarily on the July, August and September long weekends, a series of 30-second radio ads will be broadcast across the province asking motorists to consider the safety of those maintaining provincial highways.

## REGION 2

### Lifting the load on seasonal restrictons

by John Hallam, area manager, South Okanagan

Road-friendly log trucks. To some, that may sound like an oxymoron. Everyone knows that logging trucks - in fact, all traffic - can have a detrimental effect on roads.

Well, that may change. The South Okanagan District is co-sponsoring a test project with the Forest Engineering Research Institute of Canada (FERIC)

and Riverside Forest Products (RFP) to test 'variable tire pressure' log trucks, commonly known as CTI, or 'Central Tire Inflation'.

For this type of testing, loaded log trucks with low tire pressure were run on a local, seal-coated road and the effects on road structure were monitored. The objective was to create as

Continued on page 7

**REGION 2**

large a tire print as possible, thus spreading weight over a larger area and doing less – or zero – damage to the road structure. Normal log trucks (tandem/tandem configuration) with tires filled to the usual pressure of 100 lb./sq.in. have a small tire print, exerting a concentrated down-force on the road and causing stress to the surface.

During testing, tridem/tridem configuration trucks were used, meaning there were more tires on the unit. With lowered tire pressure – sometimes as low as 40 lb./sq.in. – and more tires, the weight was spread over a larger area, exerting less stress on the surface.

Monitoring began Feb. 20 on Philpott Road, just off Route 33 east of Kelowna, with trucks hauling as of March 13. During testing, trucks with tridem/tridem units and, when road strength improved, tandem/tandem configurations, hauled full log loads on Philpott between midnight and 6 a.m. Both types of truck were equipped with CTI.

Test equipment, including a frost probe, moisture sensor and a Benkleman Beam, were supplied and installed by the Thompson-Okanagan geotechnical and material engineering section under the direction of Dick Weichel, regional roadway design technician. RFP supplied the log hauling equipment and test truck for the Benkleman Beam testing, while FERIC crews did the field cross sectioning for surface distortion and Benkleman Beam testing.

Special seasonal weight restrictions had to be placed on the Benkleman Beam testing section to allow CTI-equipped trucks to operate.

Hauling continued until all wood was depleted, and results will be analyzed over the next year. Once the report is in, it's hoped that seasonal strength loss restriction could be better managed and, in some cases eliminated altogether with the better- use of road monitoring equipment and CTI-equipped log haul trucks.

**REGION 3****Good Samaritans in the amazing Amazon**

by Amy White

**Traversing the amazing Amazon**

During a recent 10-day visit to the Amazon Basin, Dave Byng, highways manager for the East Kootenay district, spent a majority of his time living on a boat (pictured above). Villagers would travel for hours -- sometimes by bull cart like the one Dave is pictured in (right) -- to receive dental care from the members of Samaritan's Purse, a non-denominational international relief organization.

Dave Byng, highways manager for the East Kootenay district, wasn't used to looking at the south end of a north-bound bull, but when you're in Brazil and it's the only mode of transportation, you make some concessions.

Dave recently spent two weeks in the Amazon Basin as part of a nine-member Canadian team for the non-denominational, Christian international relief organization Samaritan's Purse.

The team – including a dentist, a dentist, an orthodontist, a doctor and three American nurses living in the Amazon who do this work on a full-time basis – landed in Santarem, a city of about 250,000, in mid-May. Santarem acts as one of the service centres for some 30,000 remote villages located on the Amazon and its tributaries.



With very little in the way of established roads, they set off down river in a boat laden with medical supplies and equipment and, for the next 10 days, were kept busy as they stopped in several villages to offer medical assistance. In one village, they saw 120 patients in the span of a day as people travelled up to four hours by dugout canoe and bull cart to see them. While in Brazil, the group also helped to construct a church

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## REGION 3

### Amazon *(Continued from Page 7)*

for one village, and installed water filters in homes for another.

It was the experience of a lifetime, Dave says.

"I learned a lot – one person really can make a difference," he said. "It was such a great feeling to be able to touch peoples' lives in a meaningful way."

Dave recalled one instance where a villager – being taught basic dentistry by the team so as to continue on after they left– thanked them so profusely for coming to help them that tears were streaming down his face... yet all Dave could think about was what he was getting from the experience.

"The gratitude really got to me – really touched me," he said. "Here's this guy thanking us for leaving our jobs and our families and travelling so far to help them, and yet I thought we were the lucky ones for having been able to go there and experience this."

It was very humbling, he added.

The group also encountered a few harrowing experiences, including a couple that involved very poisonous snakes, Dave said.

"We were also occasionally travelling by ox cart - called bull carts here - and they use Brahma bulls. Some of those bulls were better suited to the Calgary Stampede," he said.

Dave can also brag now that he's eaten piranha, although he admits it's not much to brag about.

There were long days, tough travelling conditions, rough living conditions and tremendous heat day and night, but Dave says he'd love to do it all again.

"If I could choose one thing that I learned while there, it's that the efforts of a few can change the lives of many," he said. "It was certainly worth repeating."

### Groundwater causes dual landslides

*by Cindi Trowbridg*

Highway 6 in the Slocan Valley was closed for three days in mid-April after 150,000 cubic metres of sand, silt and gravel came tearing down a slope in two consecutive landslides.

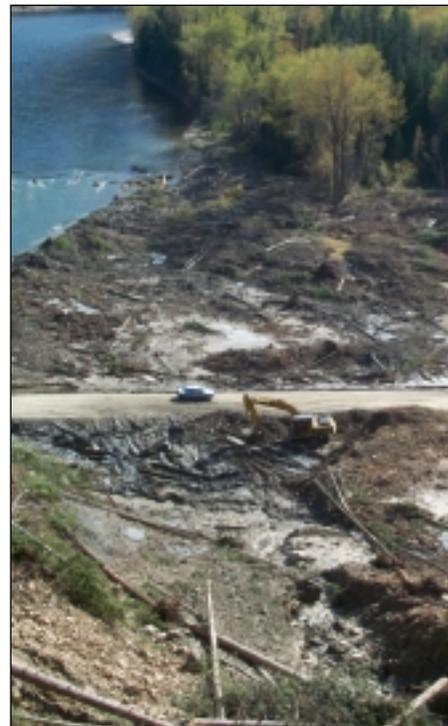
Drivers were forced to detour as much as 200 kilometres via Highway 31A in order to skirt the destruction, while crews worked frantically to reopen the highway and reestablish electricity and phone lines.

The first slide hit on April 13, blocking the north/south corridor through the valley. On April 14, a second slide occurred at the same site. The slides ran 320 metres from the start zone, blocking the Slocan River for a short time.

Electrical and long-distance phone services were severed for two days and a helicopter was required to establish new lines.

Due to the area's instability, crews could not start major clean up work until April 16, with single-lane traffic opening a day later.

Ministry geotechnical staff Mike Walsh and Chad Tenney, as well as district highways manager Jacques Dupas, area manager Brent Bailey and assistant



Devastation caused by two slides in mid-April.

area manager Gerald Vaughan-Irving worked long hours under unfavourable conditions assessing the site to ensure the safety of workers and the public.

The slides were caused by groundwater. Culverts and an earth and rock berm have since been installed.

## REGION 4

### Rolling out the rocks in northern B.C.

*by Ron Wiebe*

High-quality gravel is a scarce commodity in Peace country. In an area dominated by muskeg, transporting this basic construction material to a distant site can add significantly to the cost of a project.

The added shipping charge is only the tip of the iceberg. Transporting heavy loads by truck also takes its toll in wear

and tear on our highways – damage that means future maintenance and repair. Adding heavy trucks to the traffic mix also creates safety concerns.

In search of cost-saving measures, staff of the South Peace district pursued the idea of moving aggregates by rail to

*Continued on page 10*

## REGION 5

## Nisga'a Highway upgrade into second construction season

by David Belford

With a rumble and a roar, upgrade of the Nisga'a Highway rolled into its second construction season this spring, with noticeable progress being made on two sections.

The long-awaited road that will link Greenville to Mill Bay in north western B.C. will help join the last of four main Nisga'a First Nation communities. The 24-kilometre, two-lane road will join an existing road between Mill Bay and Kincolith, providing the first opportunity for residents and visitors to access the area by vehicle. A final decision on the construction team is expected soon, with preliminary work to start this fall.



On the W.D. McKay to Zaulzap section of the highway – about 20 kilometres east of the Village of Lakalzap (Greenville) – construction of two new bridges over the Ansedagen and Kwinyarh Creeks is almost finished.

Contractors have completed the cast-in-place concrete abutments and are placing pre-stressed concrete box stringers and parapets, and the road base is being brought level with the bridge decking.

The bridges are 11 metres wide and 26 and 32 metres long, respectively. Replacing the original log stringer bridges with two-lane deck tops will improve safety along this section of the Nisga'a Highway and site foreman Bob Blackburn is pleased with the way things have progressed to date.

In order to minimize impact to the rich, salmon-rearing environment, pile driving crews began work in February. Prior to construction starting, the ministry created 1,337-square metres of spawning channels and juvenile rearing habitat, and more than 18,000 coho were relocated to nearby streams and ponds.

At the same time, the section of highway from Sand-Gainor Bridge to the renowned Lava Lake is progressing on schedule. The Nisga'a Highway brings visitors right to the heart of this, the youngest lava flow in the country. The vast lava beds are an exceptional contrast of the breathtaking scenery surrounding them. A right of way has been cleared and crews are drilling and blasting rock to be used as fill when realigning this 4.6-kilometre section of the highway.

The ministry is managing the projects on behalf of the BC Transportation Financing Authority, with Highway Constructors Ltd. hiring labour.

## REGION 6

## New approach may eliminate washboarding

An innovative approach to road stabilization should provide long term benefits for local road users in one area of the North Island.

North Island DHM Mike Proudfoot says new solutions are needed to eliminate repetitive washboarding on the Head Bay Forest Service Road between Tahsis and Gold River.

"The route is heavily used by industrial traffic, local residents and tourists, and the steep terrain contributes to conditions that are difficult to control using conventional methods," Proudfoot says. "We're trying something new here that we hope will produce a safer, smoother driving surface and improved travel time."

Crews will test the effectiveness of two products: magnesium chloride and B.C. Stabilizer, which is a B.C.-developed product containing asphalt and a byproduct of paper mill operations. On the Head Bay project, it will be mixed with gravels and then compacted. Magnesium chloride, a proven dust suppressant, will be used to stabilize the road materials to form a hard surface.

Proudfoot credits geotechnical staff Mike Symons and Ludvik Mazuch for providing technical input for the \$150,000 rehabilitation project, which should be finished by mid-July. Project manager Doug Wright is coordinating preparatory works with Mainroad North Island Contracting.

In addition to applying the stabilization products, innovative construction techniques will be used to enhance and strengthen the roadbase on four hills.

Crews will also seal-coat the road on

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## REGION 4

### Rolling out the Rocks...

(Continued from Page 8)

stockpiles at strategic locations closer to the projects. That scheme got a further boost with the 1998 announcement of the oil and gas initiative and its associated program of road improvements.

With the northeast coal project winding down over recent years, BC Rail happened to have a surplus of coal cars. Further innovation, supplemented by trial and error, allowed the district to work out an efficient system of loading and unloading the material, saving about \$1.25/tonne over conventional shipment.

To implement road improvements under the OGI and Northern Roads Initiatives, some 420,000 tonnes of gravel – 50 cars per day – is making its way by rail from Teko pit (at the confluence of the Peace and Pine Rivers near Taylor) to stockpiles in Fort St. John and further north.

The savings translate into more dollars on the road, and a boost to the provincial economy through increased activity in the oil and gas sector.

## REGION 6

### New approach...

(Continued from Page 9)

two of the hills to see how the surface stands up to heavy truck traffic. Western Forest Products, the main industrial user of the road, will help by widening the road on one of the hills.

Tahsis Mayor Sylvia McNeil welcomed news of the work, saying she supported any attempt to find a solution to the perennial washboarding problem.

## The future is now: are you ready?

by Barry Wilton, Director, Human Resources

Each year, about 1,250 regular employees leave the B.C. government, most under 55. That means retirement has not been a driving factor in turnover rates, but that will soon be changing.

Time marches on and for many people working within the ministry, it means retirement may be looming on the horizon. Once those retirees have gone, where will replacements come from? What about all the corporate knowledge that will be leaving with them? What will the impact be on public service?

A recent study of the public service by BC Statistics reveals the details of this trend:

Currently, 23 per cent of the B.C. government's workforce is under 35. Twelve years ago, that number was 35 per cent.

The average age in the Ministry of Transportation and Highways is 47.

Over the next 12 years, the number of people leaving government due to retirement will be triple today's rate

Over the next seven years, the number of managers retiring will double.

By 2008, more people will be leaving the B.C. workforce than will be entering (i.e. all of B.C., not just the government).

The accumulated effect is that the public service faces significant changes at an ever-increasing rate over the next 10 years. In addition to the direct impact, there is also a significant, indirect effect. Retirees are often senior staff, usually replaced by in-service personnel. As a result, the 'promotion domino effect' will impact on many other jobs in the public service.

Last year, the auditor general's office released its audit on training in the public service. It linked the audit with what it called "the management of human capital" – the training and development of

staff to meet the needs of government, today and in the future. The audit identified the weaknesses and vulnerability of government programs, given the level of training and development undertaken across the public service in recent years.

The response has been further examination of demographics at the occupational level – implementing new training programs and promoting youth employment, co-ops and intern programs that establish relationships with potential future regular employees.

In specific response to this problem, the Ministry of Transportation and Highways has committed resources to internal training programs and is reviewing specific succession planning issues in districts, project management and other professional/technical areas. The ministry's Engineer-in-Training program is also a key component of succession planning.

The goal is to maintain the necessary expertise to meet the future needs of ministry programs. This is not always easy to do in today's changing environment. Workplaces and the delivery of government programs are changing quickly – skills and technology used today will not necessarily be those needed for the future.

Keep in mind it's not just organizations that need to take stock of their employee skill levels and the future needs of the company. It's just as important for individuals to do the same. Do you have the right skills and knowledge for your career and our changing environment?

For more information on preparing your career for the future, visit the [Human Resources intranet site](#).

For more information about succession planning, view Auditor General George Morfitt's report at:

<http://www.oag.bc.ca/PUBS/1999-00/report-3/sec-2.htm>

# Communicating in the Kootenays

by Cindi Trowbridge



The Osprey has landed  
The Kootenay Ferries' Osprey 2000 was launched on July 1 long weekend in Nelson. It will be commissioned July 29.

Inland ferries are important to the people of the Kootenays, so when it came time to build the Osprey 2000, hundreds of eyes turned toward construction in Nelson. With various lakes scattered throughout the region separating one community from another, these ferries provide a vital link.

Communications with both media and the public were a challenge for the ministry. A ferry has not been built on the shores of Kootenay Lake since the MV Anscomb in the mid-'40s, so every detail is combed over thoroughly. Construction of the Osprey started in November, and the new ferry goes into service this summer.

With regional communications co-ordinator Cindi Trowbridge leading the way and assistance from local communications consultant Margaret Birch, Youth Employment Program ministry communications student Amy White and various project staff, the ministry shared information about ferry construction

with about 2,000 residents of all ages. That process included two open houses, 19 community presentations, 37 construction-site tours and knocking on doors adjacent to the project site. Communications staff held information sessions for several elementary school students and youth groups, and preparing appropriate material was a special challenge. PowerPoint presentations and a specially created crossword puzzle were well received.

Media interest has been significant and positive, including media from Vancouver, Penticton and southern Alberta. Twenty-one interviews and many site tours for photographs have been accommodated, while the project web site and newsletter provide the public with a ready source of information.

The Osprey 2000 was launched July 1, and will be followed by a July 29 open house to celebrate its commissioning.

## Six years to the top – and she barely looks old enough!

There's a new executive assistant in the deputy minister's office, but that new face is a familiar one to the ministry.

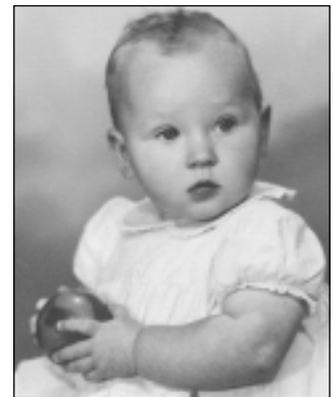
Liz Kenny originally joined the Ministry of Transportation and Highways in December 1994 as an auxiliary employee with the finance and administration branch. Just two years later – in early 1996 – she became a regular employee with the deputy minister's office.

Another move in May 1997 found Liz working in the BC Transportation Financing Authority as executive secretary, where she provided administrative support to the vice president of project development and financing.

They say 'third time lucky', and in March 2000 – with a horseshoe over her door, a penny in her pocket and the expertise to back her up – Liz returned to MoTH as the senior executive assistant to Deputy Minister Claire Dansereau, where she continues to work today.

Liz brings with her a warm personality, enthusiastic approach and a terrific sense of humour. If you have the opportunity to stop by her desk, be sure to ask her about Millionaire Max.

Liz Kenny:  
you've come  
a long way,  
baby!



## New Places, New Faces

The following individuals have been confirmed in their new positions to June 10, 2000

<b>EMPLOYEE</b>	<b>LOCATION</b>	<b>POSITION</b>	<b>EFFECTIVE DATE</b>
Linda Ashby	Vancouver Island Region	Regional Financial Analyst	April 3
Miriam Basic	HQ Information Systems	Enterprise Work Group Administrator	May 15
Karen Border	Central/North East Region	Regional Office Assistant	June 5
Shauna Carlson	Thompson-Okanagan Region	Regional Financial Clerk	May 1
Rick Chaffee	Central/North East Region	Regional Construction Aide	April 17
Jon Conquist	HQ Systems Planning and Policy	Manager, Highway Planning	March 1
Barbara Curtis	HQ Human Resources Branch	Employee Development Assistant	May 23
Eric Deibert	South Coast Region	Traffic Operations Technician	March 27
Jay Dunbar	South Coast Region	Regional Project Manager	May 1
Helen Evans	Central/North East Region	Regional Project Manager	March 20
Suzanne Evans	Kootenays Region	Project Management Technician	April 10
Jason Furness	South Coast Region	Electrical Design Technician	May 15
Robert Gordon	HQ Freedom Of Information	Information Access Coordinator	April 3
Valerie Hanson	HQ Human Resources Branch	Health and Safety Assistant	April 17
Maurine Karagianis	Minister's Office	Special Assistant	March 9
Liz Kenny	HQ Deputy Minister's Office	Senior Executive Assistant	March 6
John Lord	Kootenays Region	Senior Instrument Person	May 29
Margery Loverin	Stikine District	Office Assistant	May 1
Navin Madhopuri	Minister's Office	Scheduling Support	March 9
Malcolm Makayev	Cariboo District	Area Manager, Roads	May 1
Julian Malinsky	Thompson-Okanagan Region	Area Manager, Roads	May 1
Michael McGee	Motor Carrier Commission	Policy and Adjudicative Manager	April 3
Peter McPherson	HQ Communications Branch	Senior Communications Coordinator	April 14
Tim Meszaros	Central/North East Region	Geotechnical Engineer, Pavement Design	April 3
Jim Paquette	HQ Information Systems	Business Systems Analyst	April 10
Jenny Pleice	HQ Communications Branch	Administrative Assistant	June 12
Pierre Rasoldier	Central/North East Region	Transportation Traffic Engineer	March 6
Shilo Reavie	Coquihalla Toll Plaza	Manager, Coquihalla Toll Plaza	May 12
Jeffrey Saby	Thompson-Okanagan Region	Area Manager, Roads	May 29
Kimberly Shenton	HQ Finance and Administration	Financial Systems Analyst	March 13
Michael Walsh	Kootenays Region	Regional Geotechnical and Materials Eng.	April 25
Marilyn Wargo	HQ Human Resources Branch	Manager, Human Resource Operations	May 1
Jeanne Wilson	Thompson-Okanagan Region	Financial Officer, Sign Shop	April 4
Alfred Wong	HQ Information Systems	Network Analyst	March 20
Ben Wu	Central Kootenay District	Engineer in Training, Geotechnical	May 30
Lionel Lafrance	Thompson-Okanagan Region	Engineering Assistant, Construction	Oct. 27, '99
Vondie Larsen	Thompson-Okanagan Region	Survey Crew Chief, Construction	May 15