

# Teamwork key to future of road building in N.S.

By Ken Cashin  
Special Features Writer

**T**eamwork will be key to the future of road building in Nova Scotia. That's the message coming from both the Nova Scotia Road Builders Association (NSRBA) and the Department of Transportation and Public Works.

"A strong, unified effort from the NSRBA and the Transportation Department will be required to meet the challenge ahead," says NSRBA president, John Flemming.

The challenge Flemming is referring to is the required overhaul of the province's primary and secondary highway systems. A 10-year needs assessment prepared by the Transportation Department in May 2001 indicates that years of declining transportation budgets have led to a massive infrastructure deficit, which has allowed the highway system to deteriorate to the point where it needs \$3.4 billion in maintenance work over the next 10 years to bring it up to acceptable condition.

Although capital spending has increased in recent years, the infrastructure deficit is still large and is expected to remain that way in the near future. For example, although the 10-year needs assessment recommends that the province spend about \$340 million a year to fix up the roads, in 2003 the budget for road repairs was \$110 million. That number, though, is way up from 1999's budget of \$40 million.

Flemming says that despite the immensity of the challenge the NSRBA and the transportation department will work together to maintain the best system of roads and give taxpayers the most value for their money.

The NSRBA is already teaming up with transportation and other provincial government departments, municipalities, and industry members in a number of key ways. The association sits on various specification committees to discuss regulations and is continually striving to introduce cost effective, innovative road-building technologies and solutions.

"Our association has a well-established history of leadership and professionalism," says Flemming. "We've taken a proactive approach to providing technical insight. We're constantly looking for new ways to build better, longer-lasting roads."

The Transportation Department and the NSRBA share the same goal, says Flemming, who points out that the department is also seeking innovations, such as the use of recycled rubber and asphalt.

"A well-constructed and adequately-maintained highway system is what we're all after," he says. "It would have far-reaching benefits for the entire province."

Flemming says better highways would allow goods to be transported to market in a safer and more timely manner. Greater investment in our highways, he says, would allow companies to produce products at a lower cost, which would lower commodity prices and lead to regional economic growth.

"We must have adequate infrastructure in place to support growth and investment in Nova Scotia," says Flemming.

On the bright side, he says, the province is moving ahead with a much-needed, \$60-million project to fix its many aging steel truss bridges. Also, he says, a section of the 101 Highway between Mount Uniacke and Ellershouse is now complete and, this year, \$20 million will be spent fixing Highway 103. He adds that initial work will begin this year on new, twin-lane lanes for Highway 125 in Cape Breton.

In the years ahead, the NSRBA says it will focus on more municipal and private road building. It will also try to raise public awareness about the need for better roads and highways.

"The public makes a lot of noise about health and education and the politicians listen," says Flemming. "If Nova Scotians made as much noise about the state of the roads as they do about other issues... then a lot more would get done to fix the roads."

Like the NSRBA, in the coming years the province, too, is expected to focus on more than just the primary highways. As part of its Road Improvement Money (RIM) program, in the next two years the province plans to improve the rural road infrastructure by investing \$12.5 million.

"Government views the NSRBA and industry as partners in the job of building the best possible transportation network in Nova Scotia," says Ron Russell, Minister of Transportation and Public Works. "A close working relationship has been important in the past and will continue to be as important in the future."

The department's business plan indicates that it will continue to invest in the province's rural roads. Through its RIM program, which began four years ago, the department has invested about \$10 million a year into secondary and local roads. The program invests dollars in small asphalt jobs, graveling, ditching and guardrail work. By the end of this year, \$51.5 million will have been spent on local roads over the last five years.

"Transportation is the cornerstone of economic development," says NSRBA's John Flemming. "Without adequate transportation infrastructure our communities, our province and our country will not grow and prosper. The economic prosperity of Nova Scotia will depend on the adequacy of its roads and highways. They need a lot of work and the time to start is now."



Road builders in Nova Scotia represent a very diverse group and a large, important sector of the economy. The Nova Scotia Road Builders Association is over 100 members strong. It represents contractors working in the province engaged in road, bridge, heavy, marine, sewer and water main construction. The interests of suppliers to the industry are met through associate membership.

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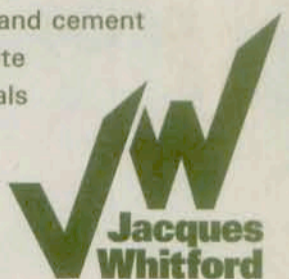
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# Working as one to build better roads

Road builders represent large, vital sector of N.S. economy

By Ken Cashin  
Special Features Writer

**I**F THERE'S ONE THING EVERY Nova Scotian values, it's our roads. In one way or another we all use them practically every day. We depend on them, for almost everything.

Our streets, highways and byways are the links that join our communities together and weave our social fabric. They're our most basic, vital network, enabling our businesses to operate, our institutions to function and our economy to stay healthy and grow.

While we all understand the importance of our roads, many Nova Scotians may not be aware of the effort and range of expertise needed to build and maintain them.

In addition to construction and engineering, many and various types of goods and services are required from a multitude of suppliers.

Road builders in Nova Scotia represent a very diverse group and a large, important sector of the economy.

The Nova Scotia Road Builders Association (NSRBA) is over 100 members strong. It represents contractors working in Nova Scotia engaged in road, bridge, heavy, marine, sewer and water main construction. The interests of suppliers to the industry are met through associate membership.

"As road builders, we try to produce a product that will last and minimize future costs," says NSRBA managing director, Steve Williams.

"We do this by working together and proactively with the provincial departments. We're always looking for new



Members of the Nova Scotia Road Builders Association which gathered in Halifax for a meeting recently are, back row, from left: Ron Christianson, director, John Flemming, president, Wally Caldwell, vice-president, Andrew Lake, director, and Barry Hurter, immediate past president. Front row, from left: Bob Bernier, director, Steve Williams, managing director, Brian Meahan, director, and A.G. MacDonald, director. Missing from photo were: Don Maillet, director, Paul White, director, and Carl Baillie, director.

ways to build better roads and better maintained roads. We're continually trying to develop and implement new technologies, new solutions and innovations."

The NSRBA was formed in 1947 in

*"Our strength comes from the input provided by our members. We encourage them to work together and share ideas and expertise. We invite them to participate in helping our industry move forward to meet the challenges of building and maintaining the roads in Nova Scotia."*



The Transportation Department is spending \$19 million on major highway construction work on Highway 103 this summer, including the widening of the 103 to Tantallon and continued work on the Barrington Exchange.

Halifax to deal with the problems facing the industry after the Second World War, which were high costs for labour, equipment and materials. The original group of contractors who formed the association wanted to have a permanent organization similar to the Ontario Road Builders Association.

They felt that a close relationship with the provincial department for highways would be to everyone's mutual advantage. They formed the NSRBA to advance the interests of the province's road builders and help raise industry standards, encourage efficiency and, by the exchange of ideas and expertise, help members keep up to date in their practices.

Although its membership has grown steadily over the years and broadened to include associate members as dis-similar as accountants and cellular phone companies, the association still has the same basic goals. Its primary aim is to improve conditions and the terms of contract for contractors.

Many of the association's early traditions are still going strong, including the annual meeting and business convention, held every winter, and the long-

standing curling bonspiel. The NSRBA is also starting new traditions, like their yearly golf tournament, held every summer. The second annual Scotia golf tournament takes place July 9.

Managing director, Steve Williams, says communication is the key to the association's longevity and success. Williams says the NSRBA has always encouraged an open dialogue between its members and maintained good relations with government. The membership, he says, benefits from open and frequent communications with the provincial department of transportation. He points out that many environmental problems have been avoided by the effective work of NSRBA committees with the Nova Scotia Department of the Environment and Fisheries and Oceans Canada.

"Our strength comes from the input provided by our members," says Williams. "We encourage them to work together and share ideas and expertise. We invite them to participate in helping our industry move forward to meet the challenges of building and maintaining the roads in Nova Scotia."

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# NSRBA building better roads for Nova Scotia

Innovations in road building products make for longer lasting roads

By Ken Cashin  
Special Features Writer

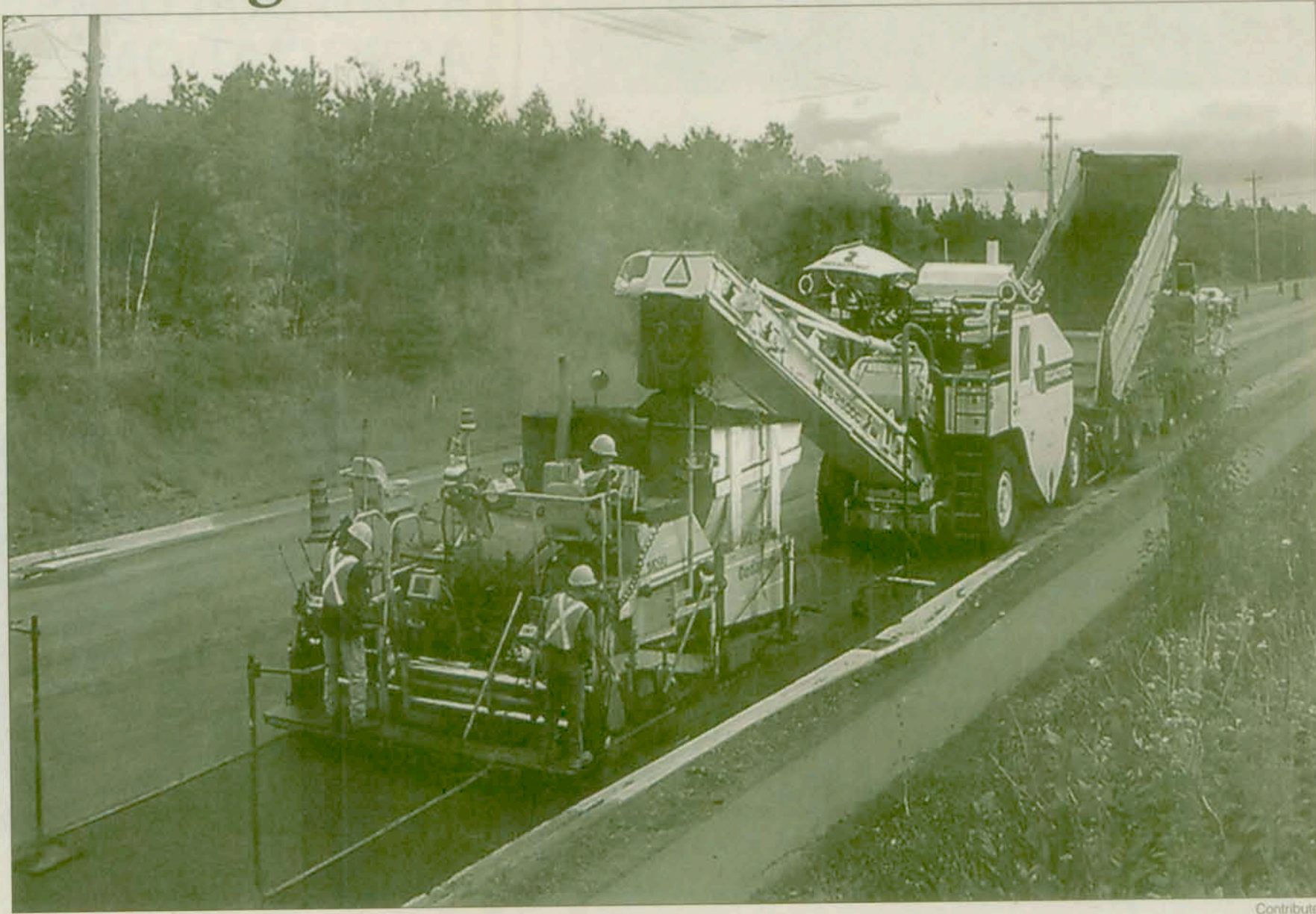
Road building in Nova Scotia is changing. Although to the general public the process of road building may look very much like it always has, road builders throughout the province are utilizing many new and innovative technologies. Driving these innovations is the need for better and longer-lasting roads — a need that was outlined in the provincial Transportation Department's 10-year needs assessment of the province's primary and secondary highway systems. One of the key recommendations of the May 2001 report was that new and more cost-effective methods for building roads in Nova Scotia must continue to be explored.

"The Nova Scotia Road Builders Association and the industry are working together to develop innovative solutions for building better roads and better maintained roads," says the NSRBA's Gary Rudolph. "We're continually using new types of equipment, better materials and innovative processes to try to build roads that will last longer and minimize future costs."

Rudolph says many of the innovations centre on new technologies that reuse existing materials. He says that in addition to being more cost effective, these technologies are more respectful of the environment.

A good example is the process of pulverization. With this method, instead of completely replacing a road with new materials, an old road is pulverized or broken up and the existing natural aggregates are reused. Pulverization saves materials and, just as importantly, it saves on the high cost of trucking materials to and from the construction site.

Foamed asphalt is another highly cost-



One of the newest innovative products road builders are using today is called the shuttle buggy. This machine, which goes between the truck carrying the materials and the paver, is used to remix the asphalt in the lay down process. It improves the consistency and quality of the mix and prevents unwanted segregation.

effective new technology that saves on materials and trucking. With this method an asphalt cement mix is injected into existing aggregates to increase a road's structural integrity, so it will last longer.

Other innovations, such as micro-surfacing, help improve road safety. The process puts a thin surface on a road to protect the asphalt from oxidizing and becoming brittle. Over time, pavement can become polished, so methods such as micro-surfacing are used to improve surface texture and skid resistance. Micro-surfacing also alleviates wheel ruts, which reduce hydroplaning.

Some of the new materials include roller compacted concrete, PG binder

and high friction mixes, all of which increase a road's durability.

One of the newest pieces of equipment is the shuttle buggy. This machine, which goes between the truck carrying the materials and the paver, is used to remix the asphalt in the lay down process. It improves the consistency and quality of the mix and prevents unwanted segregation.

in Nova Scotia.

"The need for better maintained roads is so great that we can no longer build roads the old, traditional way," says Rudolph. "We have to use innovative solutions and improve the roads that are already there. We have to use cost effective solutions to build better, longer lasting roads."

Rudolph says the new technologies are going a long way toward the much needed improvement of the road system

in Nova Scotia. "The need for better maintained roads is so great that we can no longer build roads the old, traditional way," says Rudolph. "We have to use innovative solutions and improve the roads that are already there. We have to use cost effective solutions to build better, longer lasting roads."

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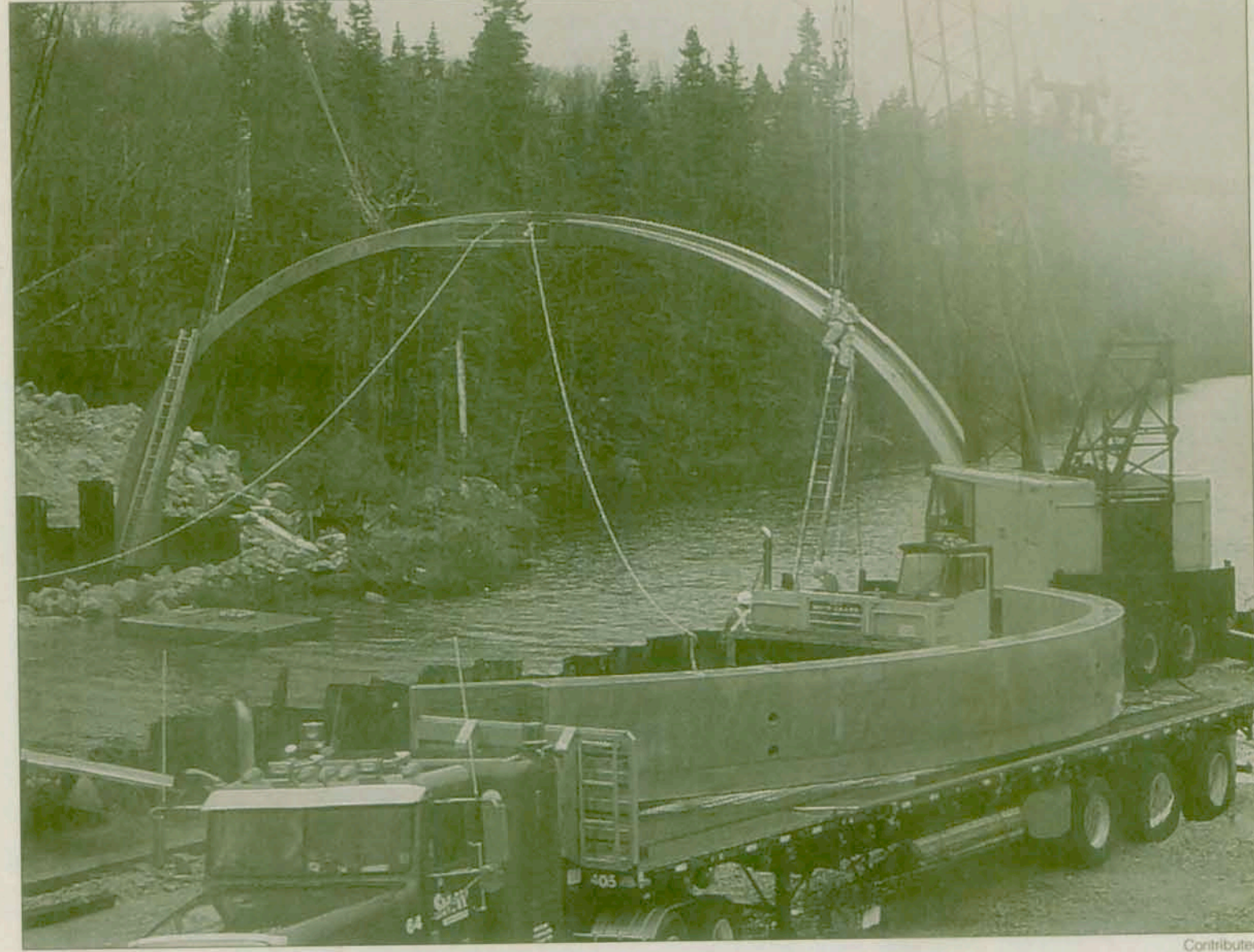
# Ancient trails form many of today's major highways

The following are excerpts from *Great Roads - A History of the Nova Scotia Road Builders Association*:

Throughout Nova Scotia, ancient trails formed the basis of later major highways. Take Highway 2, for example. In 1762, soldiers cut a road along an existing trail from Sackville to Truro and Onslow, then on to Port and then to Annapolis. This was Cumberland, but nothing more was done on the route for several years. In 1765, soldiers cut the first section of what would be Highway 3. Highway 3 was also slow in getting started. As far back as 1758, \$50 was spent on labour trying, unsuccessfully, to make a path from Cape Breton to Halifax. A road along the South Shore was first considered in 1785 when a sum was voted to open a route joining several scattered settlements. The expenditure of over \$1,000 achieved little more than blazing the trail. In 1790, Bishop Inglis, journeying from Halifax to Shelburne, reported roads — only a few passable by horse — linking a number of South Shore communities.

The Cumberland Post Road, Truro to Annapolis, followed a similar route to the later Highway 4. The road from Truro through Onslow to Tatamagouche was started in 1763, using Acadian labour. At Annapolis, the road had run from the old Acadian settlement of Beaubassin across the marsh to Point de Bute and then to Annapolis. This was used from 1686 to 1751 and many portions of it can still be traced. From Truro to Antigonish the original road was generally so soft that even in mid summer the horses sank to their knees in mud and water. Highway 7 from Dartmouth to the tiny settlement of Cole Harbour. It was later abandoned and reopened in 1802.

The first road recorded in Cape Breton was made in the 18th century when Count Raymond opened a road from Louisbourg to St. Peter's. Eighteen leagues (about 50 miles) in length, it cost 100,000 livres to build. Traces of this old route can still be found. By 1800, however, the roads constructed by the French had been largely overgrown by brush and less than 10 miles of passable roads remained in the whole island.



Nova Scotia's road builders are making use of new and better technology in an effort to build better roads and bridges.

# New tech making roads better

## Recycled rubber, foamed asphalt now being used

By Ken Cashin  
Special Features Writer

In an effort to build and maintain the roads in Nova Scotia in the most cost effective way, new technologies are continually being developed. To build better roads that will last longer and minimize future costs, the Nova Scotia Road Builders Association (NSRBA) and the Transportation Department are continually using new types of equipment, better materials and innovative processes.

Highlights of recent projects using innovative new technologies:

◆ **Pilot project for recycled rubber in Pictou County** — The tender has been awarded for a project that will see a mix of recycled rubber and asphalt laid down on the Graniton Road in Pictou County this year as part of a 3.3 kilometre pilot project put forward by the Department of Transportation and Public Works and Michelin Tire of Canada.

◆ **The end product is expected to be more durable than conventional asphalt and less prone to cracking.** This will be the first use of rubberized asphalt on Nova Scotia roads. The product is used across North America.

◆ **Foamed asphalt** — In the last three years, road building in Nova Scotia has seen more and more use

of foamed asphalt. It is expected that four new tenders for this type of work will be awarded this year.

◆ **Foamed asphalt** — a process whereby existing pavement and gravels are pulverized and injected with liquid asphalt to provide a strong sub-base, which is then overlaid with asphalt. The process increases the strength of sub-base. The result is the same strength of pavement at a lower cost. The Transportation Department is continuing to evaluate the results of these kinds of technologies.

◆ **The Transportation Department**, recently purchased new software to manage the province's bridges. Also new is the department's ARANS vehicle, which uses a computer and laser to monitor the wear and tear on pavements.

◆ **RWIS stations** — The province's

RWIS (Road Weather Information System) stations provide the latest data on pavement and air temperatures. Information is used to assist department staff with decisions on salting. The technology allows crews to put down salt before the roads begin to freeze, resulting in better use of salt and less product on the road. Technologies under development include anti-icing measures such as pre-wetting of salt and the use of brine on roadways.

◆ **Weigh-in-motion stations** — Another new technology is the province's new weigh-in-motion stations, which use sensors located in the roads to weigh trucks. The technology allows underweight trucks to avoid stopping at scale houses, which saves valuable time. It is expected that this will help at areas such as the Canso Causeway.

# Voice from the past

The following letter is taken from the May 4, 1912 edition of *The Halifax Herald*.

**Roads need work**

To the editor:  
Sir, — The above subject is one of vital importance, especially in Nova Scotia, where so much depends on the carriage highway.

It occurred to me that it would be a good idea to engage a competent roadmaker, one who is thoroughly trained both in theory and practice, for, say two months this year, to attend all exhibitions and fairs in Nova Scotia and give practical demonstrations and lectures to the rural citizens, so that the work in future may be done in the best manner possible.

As conditions are different according to locality, material at hand, labor, etc., the services of an expert would be a far-reaching effect and results would far exceed the outlay. Enquiries are constantly coming in from touring auto parties as to the state of our roads, etc. and, this class alone would add greatly to the revenue of the province were we in a position to tell them the roads were good, which, at present, it is impossible to do.

The farmer would save 100 per cent in wear and tear on his team and be able to carry much larger loads than at present.

The good roads movement is now a very live issue; let the outsiders see that we are up and doing. There is no time to lose; get the thing going, stir up public opinion; do it now.

G.M. Robinson

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**Highway 101 gets a twin**

Attending the official opening of the newly twinned section of Highway 101 at the Royal Canadian Legion in Mt. Uniacke last month were (top photo, from left): Ron Russell, Nova Scotia Minister of Transportation, Scott Brison, MP for Kings Hants, and Tony Valeri, Federal Minister of Transportation. Bottom photo, from left, are: Mark Parent, MLA for Kings North, Brian Hermiston, Chamber of Commerce, Bob Lancashire and Dr. Ian Vengang-Stuart from the 101 safety committee, Anne Cameron, Joan Tracey and Leo Glavine, MLA for Kings West.



The newest section of twinning on Highway 101 was officially opened last month. Work has begun on the next section of twinning from Ellershouse to Avonport. The project is expected to be complete by 2007-08.

## Road-building roots go deep

The following are excerpts from *Great Roads — A History of the Nova Scotia Road Builders Association*.

**Romans hit first road**  
Internationally, the first road builders of lasting note were almost certainly the Romans. Over two millennia ago, starting in the reign of emperor Claudius I, Rome was gradually connected by paved roadways to many parts of what is now Europe and Asia. These immense works were the most solid structures of their kind ever built and many formed the foundations of modern roads.

Their engineering appears to have been simple but effective. A prominent landmark was chosen in the desired direction and the road placed on a straight line without consideration to intervening obstacles. After digging two shallow parallel trenches to mark the width of the road, they excavated the space between to a solid foundation. In this excavation they placed four layers of road materials to a total thickness of about three feet.

*"Make first repairs on the worst places by laying Fascines in the hollow places and over them large stones, broken with an Iron Mall, and then cover the whole with earth, which is to be taken from a Trench on either side of the road which will become a Drain to carry off the water and thereby preserve the work Compact and Firm."*

First, two courses of large flat stones; next, a nine-inch layer of broken stones; then a six-inch layer of brick, stone and pottery fragments. Lime mortar was used as a cementing medium in each of these three layers. The six-inch surface layer was made up of large, irregularly shaped stones closely jointed and fitted together. The opinion seems to have been that they were extremely durable but lacked something in riding quality. Following the fall of Rome, Europe's roads fell into disrepair. Until the 18th century no serious attempt was made to sustain anything more than crude tracks, or to replace public highways.

In 1770, permanent construction was attempted on the Halifax to Windsor road according to the following instructions: "From Sackville Bridge to Windsor, a trench to be dug on the upper side of the road, when necessary on both sides, to be rounded in the middle, at the hollow places to be bedded with stones where they are to be had, to be brushed and gravelled; all bad hills, where they may be judged necessary, to have the tops taken off and carried down into the hollow to make an easy ascent; the trees and brush to be cut down twenty feet wide on each side of the road from the centre, all short turns and bad hills to be altered where judged necessary."

Gradually cart roads were opened throughout the Annapolis Valley, usually in response to public demand. A contemporary source contains the following road building instructions: "Make first repairs on the worst places by laying Fascines (long bundles of wood) in the hollow places and over them large stones, broken with an Iron Mall, and then cover the whole with earth, which is to be taken from a Trench on either side of the road which will become a Drain to carry off the water and thereby preserve the work Compact and Firm."



Photos contributed

### Paving the way to better roads

A road crew re-surfaces a section of roadway in Halifax County. To build better roads that will last longer and minimize future costs, the Nova Scotia Road Builders Association and the Transportation Department are continually using new types of equipment, better materials and innovative processes.

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## Need for safety paramount in road-building industry

Road crews face many dangers while on the job in N.S.

By Ken Cashin  
Special Features Writer

Workplace safety is important in all fields of work and on every type of job site. In the road building industry, however, the need for safety is paramount. Road building crews work with hot, heavy and potentially very dangerous equipment and are often required to be in extremely close proximity to fast moving traffic — sometimes only a few feet away. Road workers not only have to watch out for themselves, at all times they must remain alert to the actions of motorists.

In an effort to promote safety and raise public awareness about the risks of speeding through road construction zones, once again this summer the Nova Scotia Road Builders Association (NSRBA) and the Department of Transportation and Public Works will promote the Work Zone Safety Campaign. The initiative, first launched in June 2003, will ask motorists to slow down in construction zones.

"If you've never been in the shoes of a road worker, you really don't know what it's like to work on a road construction site," says Don Maillet, NSRBA director of safety. "The workers can't always see the traffic coming because they're working."

### Early roads in N.S.

The following is an excerpt from *Great Roads — A History of the Nova Scotia Road Builders Association*.

...In Canada, all early roads were simply winter highways. Bushes were cut the width of the ordinary sled and to save the work of clearing them, the road was placed to avoid all larger trees. In summer, these trails were used as bridle paths and it wasn't until the 18th century that any real attempts were made to build roads fit for wheeled vehicles.

For centuries before the European settlers arrived, the Mi'kmaq people had maintained elaborate networks of inland trails throughout Nova Scotia. For early European settlers, the sea was the province's highway. The first formal road of any type was built at Port Royal in 1606. Samuel de Champlain, describing his first year at the settlement, wrote: "During the winter, in order not to be idle, I undertook to construct a road along the edge of the woods leading to a little river which is like a brook and which we named 'Le trottoir' for the reason there were many of these fish. I asked the Sieur de Fontenacourt for two or three men whom he gave me to assist in making the road. I got on so well that in a short time I had it cleared. It extends as far as the troutery and is nearly 2,000 paces (a little less than a mile) long and served as our promenade under the shade of trees I had left standing on both sides."

For more than a century after the break-up of the first settlement at Port Royal, scattered clusters of inhabitants lived along the coastline, physically close but isolated in terms of overland connections. Towns such as Liverpool, Lunenburg and Shelburne were founded and grew to prosperity without inland communication routes.

By the Acadian Expulsion in 1755, however, passable roads had been made from Minas west to Annapolis Royal, and east to Windsor, then on to Halifax. A history of Kings County mentions a number of small roads in and around Kentville and Cornwallis. A road 15 feet wide was cut from Windsor to Halifax in 1749 to accommodate troops going to and from Fort Edward, and for driving cattle to market in Halifax from the Minas area. What would eventually become Highway 1 was started with Acadian labour and finished by English soldiers. According to Murdoch in his History of Nova Scotia, soldiers also cut the first road from Dartmouth to Halifax in 1764.

Over the next century and a half, the Halifax to Windsor road was a source of debate and controversy, as well as the destination for vast sums of money. At times the amount spent to maintain it caused uproar from citizens in other parts of the province...



Public Archives of Nova Scotia

### Early road builders

Road workers were busy clearing and grubbing the Little River Road to Springhill Athol Road, Cumberland County in the late 1920s or early 1930s.

Road construction sites are very, very dangerous places — for the workers as well as the motoring public.

"For the safety of all concerned it's critical for motorists to slow down, use caution, and obey the construction zone warning signs. Accidents can happen very easily and people can get killed."

Bernie Clancey of the Department of Transportation and Public Works, agrees. He says work zones are dangerous for drivers, as they present unexpected conditions for motorists and a lot of new information.

"It's easy for motorists to be distracted when they drive through construction zones," he says. "They must remember, though, to keep their mind on their driving. We advise motorists to keep their hands on the wheel, their eyes on the road and their mind on the safe operation of their vehicle."

The Work Zone Safety Campaign, also known as the orange zone program, is being given full support by the RCMP. Drivers face fines and four demerit points if caught speeding in a work zone. The campaign begins in June and will

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**Facts and figures**

- The province of Nova Scotia maintains 23,000 kilometres of roads and 3,800 truss bridges.
- A 10-year needs assessment prepared by the Nova Scotia Department of Transportation and Public Works in May 2001 concluded that the province's roads and bridges need \$3.4 billion in capital construction work over the next 10 years to maintain the system at acceptable levels.
- The Transportation Department's 10-year needs assessment recommends that about \$340 million is needed per year over the next 10 years just to maintain the system adequately.
- In 2003 the province spent \$110 million to fix up the roads.
- The needs assessment determined that the province needs to spend \$56 million a year over the next 10 years just on its bridges, which have an average age of 56 years, compared to the national average of 27 years.
- About \$9 million will be spent on steel truss bridges this year, part of a five-year, \$60-million government program to replace about 66 structures across the province.
- The province's infrastructure deficit is a result of years of declining budgets. Although capital spending has increased in recent years, the deficit is large and will remain that way in the near future.

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# Working together to protect the environment

By Ken Cashin  
Special Features Writer

Road building in Nova Scotia is changing in many ways. Every year newer and better construction methods are introduced and innovative technologies are explored in the effort to build and maintain the best system of roads and give taxpayers the most value for their money.

Perhaps the most significant change to the way roads are built, however, is the role of the environment and the efforts of the road-building industry and government to protect it.

"The environment is the utmost concern nowadays," says Carl Baillie, director of the Nova Scotia Road Builders Association's environment committee. "Considerations like silt control fences, erosion traps, fish habitat protection and water quality are a major part of how roads are built. These items are now put in tenders routinely, whereas they didn't appear 10 years ago."

*"The industry has learned a lot over the years. Sometimes a little change can make things go a lot easier."*

Baillie says the effort to protect the environment adds cost to projects, but it's a cost that is needed and one that project owners are increasingly more willing to pay. He points out that the government gets less volume of tenders, but the work completed is better.

Working together with government to help protect the environment is a key concern for the NSRBA and its members, says Baillie. He says the association's environment committee meets regularly with the provincial departments of environment, transportation and fisheries, as well as with municipalities, to discuss environmental issues relating to road building throughout the province.

The NSRBA is also actively involved in joint committees with various government departments and municipalities. A joint committee with fisheries, labor, environment and HRM was held recently to discuss new regulations. "Our lines of communication are always open," says Baillie. The joint



Road workers from Transportation and Public Works repair guard rails near exit 3 on the 103 highway in Halifax County May 12.

committee, he says, operate like round-table discussions and provide the departments and municipalities with the opportunity to hear the NSRBA's input on regulations before they're enacted. "For example," says Baillie, "if they want to put an environmental technology in place it may work, but it may not, so they ask for our opinion. They ask us to see if it makes sense. We make suggestions to help them and they do the same

for us — they help us work with any new regulations. They help us over the hurdles. It's a very positive relationship." Baillie adds that the lines of communication with the public on environmental issues are also more open than before. New regulations, he says, such as those on pit quarries, are making it easier for the public to find out about projects that may impact them. He says the new regulations are

making sure that project owners provide more public notification about pending operations and conduct more public consultation. He says contractors now have more opportunity to talk to the public and hear their concerns, which helps mitigate any problems. Baillie says one of the public's main concerns has always been the noise from construction. He points out that whereas at one time project owners would clear

all the trees leading to a construction site, now they take steps to reduce the noise by doing such things as leaving buffer zones of trees. "To make construction sites less visible, he says, instead of putting in a straight drive way up to a site, twisted ones are made. "The industry has learned a lot over the years," says Baillie. "Sometimes a little change can make things go a lot easier."

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## Department of Highways takes control of the roads

The following is an excerpt from *Great Roads — A History of the Nova Scotia Road Builders Association*. In 1926, the Department of Highways replaced the Highways Board as administrator of the province's highways. The Minister of Highways was J.P. Cahan as the Deputy Minister. In his first

report, the Department stated that the construction of secondary roads was the most serious problem. Staff were enthusiastic about the performance of five 10-ton heavy tractor grader outfits they had recently purchased. "Work with heavy tractor grader outfits can be done at less than one-third the cost heretofore. Under ordinary circumstances, earth

can be removed for six to fourteen cents per cubic yard, at the same time eliminating to a large degree the necessity of grubbing by hand. Trees up to five and six inches in diameter at the base are easily removed by the grader, and much larger trees can be uprooted with little expense by the grader." The Department also tried calcium

chloride to prevent dust and help preserve the road surface but felt that the cost — \$200 per mile — precluded its widespread use. Preliminary experiments were conducted using salt, which was cheaper, as an alternative. In 1927, the Department introduced standard safety and direction signs for the first time, marking 279 miles of main highway during the year. In 1932, the highway from Baddeck to Cape North and Pleasant Bay, returning via Cheticamp, was named the Cabot Trail in honour of John Cabot, who landed at Cape North on June 24, 1497.

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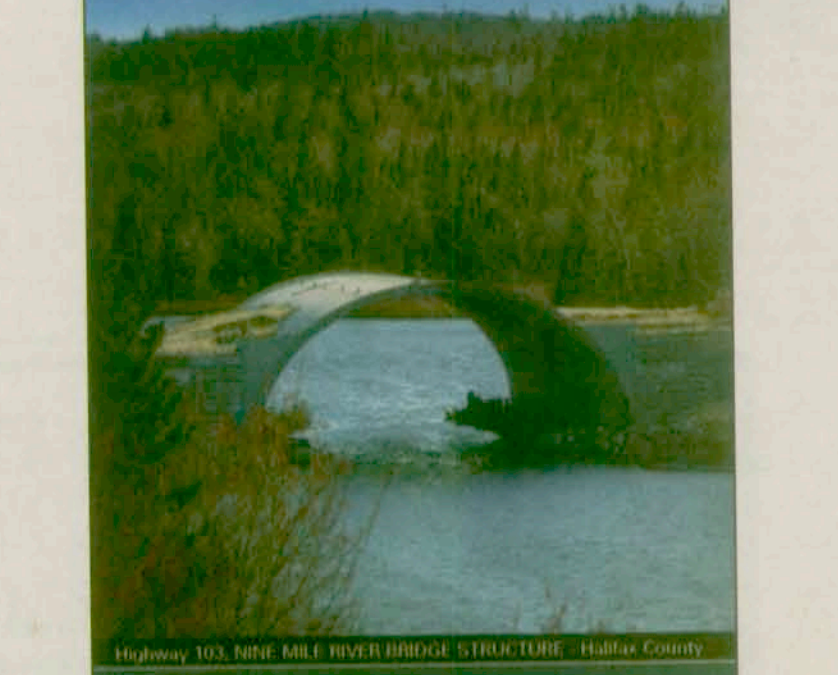
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