



New roads out of old >>>

RECYCLING OUR PATH TO THE FUTURE



RECYCLED CONCRETE AGGREGATE – MHCA PHOTO.





Freeland's experience key to future prosperity



Chris Lorenc is president of the Manitoba Heavy Construction Association

BY CHRIS LORENC

The appointment of Chrystia Freeland to lead the federal Finance portfolio elevates the right person at the right time, to deliver what this country needs.

Freeland has proven herself a skillful minister since her first appointment to cabinet by Prime Minister Justin Trudeau in 2015, navigating Canada's global interests through the renewal or signing of new free trade agreements – U.S. Mexico and Canada Free Trade Agreement; Comprehensive Economic Trade Agreement with the European Union – that have secured and vastly expanded markets for our goods and services.

Her experience in the global (Freeland, a Rhodes scholar, is educated in Eastern European studies) and trade-relations arena could serve Canada well. Especially, now.

The country needs a steady and reliable hand on the tiller – the ground is rough economically and on the global trade front. Canada's finances need to rebound from the drubbing the country and all its governments have taken since March.

How do we rebound, balance expenditures against cratered revenues and manage deficits and rising debt? The true strategy

has been to rely upon trade, continentally and internationally. And Freeland's experience in trade and global affairs is critical to that.

Canada is well positioned, in the abstract, to enlarge its global trade profile. But the nuts and bolts of moving trade on the ground need attention.

This country has taken its knocks on the international stage for its ability to ensure that goods move smoothly, efficiently to ports via rail and road. This is something Canadians need someone with Freeland's stature and pull at the cabinet table to attend to now.

In 2008, Canada held bragging rights as a reliable trade partner. It was ranked in the top 10 globally by the World Economic Forum's Competitive Index. Today, that same index has dropped us to 32nd place.

And it's largely because of our lack of investment in trade corridors – the infrastructure that matters most when it comes to doing business with the world.

The difference between then and now is simple: in the early 2000s, the federal government led the way as a role model for the provinces in establishing and enlarging pools of cash dedicated to trade infrastructure – highways, corridors and gateways and port facilities. All are critical to ensuring a connected, efficient network for getting the goods to our key markets.

The Chretien government launched Canada's modern infrastructure investment era with a total \$12 billion through federal cost-shared programming; Paul Martin picked up the standard through a full GST rebate to and the sharing of federal fuel taxes with municipalities for infrastructure. Stephen Harper then upped the ante with even more robust expenditures, notably in his 2007 budget which alone saw \$37.1 billion total tagged for infrastructure.

Today, the world has opened to Canada's producers, entrepreneurs and manufacturers, but frustrations mount – on both sides of the border and ports.

Nationally, trade infrastructure investment has taken a conspicuous back seat in recent years to investment in social infrastructure. No one is arguing the need for investment in climate change technology and adaptation, in housing or communities' internet connections. But these needs cannot be met if there simply is not the revenue filling government coffers to help finance them.

Investment in core infrastructure, specifically trade transportation assets, holds amongst the highest returns to our GDP of any public investment made, repeat economic analyses have documented.

All levels of government reap

the benefits (especially with gas tax revenue sharing to municipalities) from this return on investment, an investment that is enlarged with shared-cost infrastructure agreements that press municipalities and provinces to identify and fund critical assets.

In past economic crises, it was infrastructure investment that kept Canada working.

The economic shutdown the world is experiencing is unique in its origin; we have no idea where the pandemic is taking us or whether the arrival of a vaccine can come soon enough.

But we do know from history – dating back to the Dirty '30s, through the cataclysm of 2001 and the 2008 meltdown – how to stabilize and recover when world events sucker punch global markets, government treasuries, corporate pillars, jobs and family savings.

Freeland branded herself as a champion of global free trade and the prosperity that flows from it when in a celebrated 2018 speech she upbraided Donald Trump and America's "naked protectionism" and tariff assaults.

Now she must make sure Canada can deliver from its end. It is time for a new nation-building trade transportation infrastructure program.

Canada's future depends on it.

“
In past economic crises, it was infrastructure investment that kept Canada working.

–Chris Lorenc

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Getting trade on the road

– it’s about the ride

“ Being centrally located as we are, investment in road transportation infrastructure is key to the success not only of Manitoba’s trucking industry, but also to all Manitobans.

– Terry Shaw, executive director of the Manitoba Trucking Association



The economic returns gained from ensuring transportation infrastructure is up to the job of moving goods and people are well documented – investment in strategic and core infrastructure in Canada returns \$1.30 to \$1.60 for every \$1 invested, depending on the mix of assets analyzed.

But what does that mean, on the ground, on the roads where business is happening every day, around the clock?

It means getting the goods to their markets on time and – most critically – in the condition they were in when they left the production line, so customers get what they paid for and a company’s brand “arrives” intact.

“Price is very reliant on trade transportation infrastructure, especially highways, as for us this is still the most cost effective and efficient method. Therefore, strategic investment in trade transportation is very important,” says Gerry Price, chairman and CEO of Price Industries.

Price ships just 4% of its orders via air, none by rail. All other shipments inbound or outbound move by road.

For the manufacturer of commercial air distribution products, good roads are key to delivering on the company’s commitment to customers. Sometimes road conditions make that a tough proposition.

“In our experience, we have determined that the infrastructure in the United States is far better than in Canada based on our freight claims. In 2019, Canadian freight claims were approximately 81% higher than the claims on shipments sent to the United States,” Price explains. “Anyone who’s ever taken a road trip to the U.S. from Manitoba can attest to the bumpy ride on Highway 75 which becomes smooth sailing the second you cross the border.”

The trucking industry – the carriers that put ‘trade on the road’ – knows well the cost of inadequate transportation infrastructure.

“Being centrally located as we are, investment in road transportation infrastructure is key to the success not only of Manitoba’s trucking industry, but also to all Manitobans,” stresses Terry Shaw, executive director of the Manitoba Trucking Association.

“We have positioned ourselves as a distribution hub with North America’s largest tri-modal inland port and Canada’s first designated foreign trade zone, but if goods cannot be moved safely in and out of our hub, then someone else is going to be more than willing to take over that title,” Shaw cautions.

Mariette Mulaire, president and CEO of the World Trade Centre Winnipeg, says it is infrastructure that helps businesses in a relatively small market at the centre of the

country expand their markets and acquire global reach.

“By investing in trade infrastructure, we are essentially ensuring that Manitoba businesses can reach other markets without being at a natural disadvantage,” Mulaire says. “That leads to more sales, which leads to increased production and more jobs.”

WTC Winnipeg works to help Manitoba companies grow their business beyond the province, and to assist international companies interested in doing business with provincial firms.

“At the end of the day, Manitoba is a small market of 1.4 million people. Reducing the cost in time and money to reach our neighbours ultimately expands our economic reach and generates opportunities that would otherwise not be feasible. It is the job of organizations like the WTC Winnipeg to assist in turning that opportunity into reality.”

Delays and bumpy roads are bad for business and, ultimately, drive up costs, notes Price.

Poor infrastructure can often lead to delays, he says. “For example, within Canada, commutes are longer for drivers due to the lack of freeways and too many single lane highways.”

Price says his firm has discussed this with their carriers and they say it’s challenging to pinpoint overall infrastructure standards across the nation as this would depend on specific municipal, state, and provincial budgets. As a result, Price Industries’ response has been to protect their product against damage as best it can.

“Rather than focus on infrastructure, which is out of our control, we and our carriers have put extensive focus on packaging methods. Our carriers push back on us to ensure we have well-engineered packaging to protect goods while in transport, which adds additional costs to the customer. Our carriers invest in resources to educate customers on the importance of packaging to ensure the risk of damage is minimized, and we make the investment to ensure our goods arrive intact in spite of bad roads in Manitoba and Canada.”

Shaw says poor roads are an issue for the whole supply chain, and Manitoba’s trade profile.

It’s estimated that 95% of all goods – food, clothing, PPE supplies, manufacturing tools and finished products – are shipped by truck at some point in their journey into the hands of consumers, he notes.

If manufacturers cannot ship their goods safely and reliably, then the supply chain is broken.

“As the saying goes, we are only as strong as our weakest link; road infrastructure simply should not be that weak link.”

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Making new roads out of old with recycled concrete



Chris Lorenc is president of the Manitoba Heavy Construction Association

BY CHRIS LORENC

Winnipeggers tossed 50,000 tonnes of household materials into their blue bins in 2019, an act of faith and environmental responsibility.

Many recyclable materials have no markets. Locally and globally, municipalities are grappling with the fact the economics of recycling are in flux – broken some have said. Supply far outstrips demand as we await the technology, political will and public policy key to turning our millions of tonnes of throw-aways into marketable products in a truly circular economy.

Yet Winnipeggers consider the city's blue-bin program a necessary municipal service, because trashing just seems wrong.

The same recycle-for-reuse sensibility is at work on a much larger scale in road, street, sidewalk and laneway construction. For decades some of the concrete pulled up from streets and roads under construction has been hauled to recycling depots of another kind. Crushed, sieved and sorted, recycled concrete aggregates are re-used on rebuilt or new streets, lanes and sidewalks in Winnipeg and surrounding municipalities.

Hundreds of thousands of tonnes of demolished concrete are taken up from city street, sewer and water projects, and also in utilities work and private residential and commercial work.

Contractors take some of that material to processing yards,

where concrete aggregate is extracted and sieved for reuse as road base and sub-base structure materials. More is recovered for use in surrounding municipalities and private-sector uses, such as parking lots.

“Our industry for more than two decades has diverted hundreds of thousands of tonnes of waste concrete every year from the landfill, where it otherwise would have been dumped,” MHCA President Chris Lorenc says. “Recycling of demolished concrete is an environmental imperative and an economic opportunity.”

Recycling in road construction has spawned a sub-industry, creating new businesses and jobs.

Numerous jurisdictions in Canada, the United States and globally recover and write into the road construction specifications how recycled concrete aggregate can be used.

Edmonton, for example, has reused crushed concrete since 1978, having developed an aggressive policy for recycling waste construction materials. The city operates crushing and recycling facilities to recover concrete and actively encourages households to bring concrete removed during construction or renovations to these processing depots.

“In the early 1980s, based on ever increasing aggregate costs, the City determined that old asphalt, concrete and granular materials being removed from capital construction projects were too valuable a commodity to be landfilled,” according to the city’s website.

It also notes more than 99% of all aggregate rubble in Edmonton is recycled.

The progress in Edmonton came about by necessity. Aggregates are the foundation of all built infrastructure. While Winnipeg is blessed with access to high-quality aggregate deposits in the Capital Region, Edmonton is not and was running out of supply. Gravel is expensive.

But the imperative for recycling reflects the need to minimize environmental impact wherever possible, and responsible resource management demands reusing materials. Recycling concrete minimizes the carbon footprint at all stages – at the pits and quarries and on our roads, avoiding the greenhouse gas emissions that accompany the extraction, milling and transportation of sand, gravel and rock.

Other municipalities in Canada are working to increase the tonnage of recoverable concrete used on infrastructure projects. Higher levels of government are encouraging sub-levels to adopt policies and

instruments such as higher landfill tipping fees that promote the practice.

The City of Winnipeg this year introduced new road building specifications. The new specs are intended to lengthen the life of roads, with more durable structures.

But the new specs are making it difficult to incorporate recycled concrete in roads.

Through the construction season – regarded as a test year, to work with local recycled aggregate operators to refine and adjust their processes to meet the updated standards – not one supplier to city roads was able to consistently meet the new specs. The city and the suppliers have worked together, through the adjustment period to refine the material to meet spec, at significant cost to the companies.

But, as of mid-August, some halted deliveries of waste concrete to their yards, which means they are potentially destined for the dump. It also means that those businesses – around for 20 years – may soon be out of business with consequential lost investment and jobs.

This is an untenable situation. If old concrete cannot be recycled, the only option is to extract from finite aggregate deposits more tonnage of virgin limestone, every year. Add to that impact the carbon cost of crushing, processing and transporting the material – including the wear on our roads – from pit to customer. (Other municipalities and the private sector copy Winnipeg’s specs, meaning they too will likely follow suit on effectively eliminating recycled concrete.)

The heavy construction industry doesn’t want that, nor do Winnipeggers, we think.

We all want roads that last, and we can achieve that and use recycled concrete in street renewal projects. The solution is a political one, backed by public policy that recognizes a broader, realistic cost-benefit analysis representing the public’s best interest.

We have asked City Council to develop a formal public policy which leads the development of construction designs, allowing for the re-use of recycled concrete aggregates in roads – meeting equivalent objectives required from virgin aggregate. It should quantify the cost, and economic, environmental and resource-management benefits of using recycled concrete aggregates along with policy instruments and measures related to the collection and disposal of construction debris (including demolished street surface concrete).

The heavy construction industry is trying to be greener. We need the city’s support to succeed.

Environmentally, it’s the only solution.

RECYCLING IN HEAVY CONSTRUCTION

Asphalt – pulled up from streets being renewed, asphalt is crushed to recover the oil to add at the end of the production process of new asphalt, for paving roads; the City permits 15% of recycled asphalt product (RAP) in pavements.

Roofing shingles – old roofing shingles are recycled to recover oil product for use, as well, in asphalt used for paving roads. Shingles are shredded and reduced to a dust-like product called RAS, which is also added at the end of the production process of new asphalt; the City permits pavements to have 3% RAS.

Water – water pumped during dredging of pits and quarries (gravel, rock and sand) is returned to a settling pond, where sediment separates. The water is then used to wash the aggregates for concrete and is again recovered. About 2% of the water is lost in the process in stock piles, etc.

Manitoba Infrastructure

– Rather than recycling concrete aggregates, much of the concrete aggregate is used in place when roads and highways are renewed. This is done through rubblizing – breaking up the old road into small pieces – with heavy equipment the concrete pavement, compacting it and laying new bituminous pavement over top. The result is a smoother pavement surface than would be obtained if a layer of asphalt were to be applied to the unbroken concrete surface. From 2017-20, approximately 884,000 m² of rubblized concrete pavement was used.

– MI permits the use of RAP, but not RAS

POTENTIAL FOR RECYCLING IN HEAVY CONSTRUCTION

Recycling cement from demolished concrete construction materials for use in infrastructure projects is practiced in some jurisdictions (not Manitoba). Recycling cement is valuable as it is cement production that creates the greatest greenhouse gas emissions, notes University of Manitoba Prof. Asia Shvarzman, who also leads the research and innovation division at Antex Western/ACM Technologies.

Recycled glass is also used in some provinces, including Ontario and Quebec, in roadbuilding, with glass powder replacing 30-40% of cementitious materials to produce concrete. Shvarzman is optimistic for the potential, given the economic advantages, in Manitoba for recycled glass in concrete, but it would need a pilot project and producers would require new equipment in their plants.

Recycled plastic is in development around the world as a road-building material, but still in early stages.

Old carpets are also finding a place as a road-building material, in use in the United States, including in North Dakota



“ For decades some of the concrete pulled up from streets and roads under construction has been hauled to recycling depots of another kind. Crushed, sieved and sorted, recycled concrete aggregates are reused on rebuilt or new streets and roads.

– Chris Lorenc



Roundabouts a safer, wiser way to get past intersections



Ron Schuler is minister of Manitoba Infrastructure

BY RON SCHULER

Two years ago Manitoba Infrastructure introduced a new intersection treatment to the provincial highway network: a modern roundabout, constructed at the intersection of Provincial Trunk Highway (PTH) 2 and PTH 3 near the community of Oak Bluff.

While roundabouts have rapidly gained favour as a preferred intersection layout across North America, the idea initially was met with hesitation over concerns that Manitoba drivers wouldn't be comfortable with this form of traffic control. That hesitation quickly turned to praise as motorists became familiar with the roundabout and began to see its benefits.

When used at appropriate locations, roundabouts offer several advantages over conventional traffic signals or four-way stops. First and foremost, is an increased level of safety. With its unique geometry, roundabouts reduce the number of places where vehicles try to occupy the same physical space. These are known as conflict points. Roundabouts offer fewer conflict points compared to conventional intersections

where most dangerous types of collisions occur (T-Bone and head-on collisions). A collision in a roundabout is more likely to be a side-swipe, which typically results in some damage to the vehicles or property, but no serious or fatal injuries.

Roundabouts use geometry to force vehicles to slow down. While other types of intersections may use signage to encourage good driver behaviour, roundabouts use roadway curvatures to lower vehicle operating speeds through intersections. Ultimately this gives drivers more time to react to any potential danger and reduces the severity of any collisions should one occur.

Manitoba Infrastructure conducted a before-and-after study of the PTH 2 and PTH 3 roundabout near Oak Bluff to review near-miss incidents at the intersection as part of the Intersection Improvement Project. After the roundabout was opened, critical and high-risk events (those involving high speeds that could result in serious or fatal injuries) had been virtually eliminated. Medium risk events (those likely to result in vehicle and property damage) were reduced by 56%.

Another benefit to roundabouts

“  Manitoba Infrastructure is committed to continuously improve and introduce new intersection treatments across the province that are most beneficial to moving people and goods safely and efficiently. ”

—Ron Schuler

is their increased traffic capacity compared to traffic signals. Roundabouts keep traffic moving at all times, where traffic signals require at least one direction of traffic to be stopped at any given time. A properly designed roundabout will generally keep the intersection moving, reducing the chances of vehicles such as a semi tractor-trailers having to come to complete stops and then re-starting, and waiting for signal lights to work their way through their full cycle when traffic volumes are low.

Roundabouts help improve fuel efficiency and reduce greenhouse gas emissions caused by idling and acceleration. Studies have shown a reduction in fuel consumption of 25-30% at roundabouts when compared to conventional intersections.

After the success of the PTH 2/PTH 3 roundabout, Manitoba

Infrastructure will be taking steps to implement more roundabouts in the province. We are planning to start construction this fall on a roundabout at the intersection of Provincial Road 213 (Garven Road) and PR 206, north of Oakbank. The project is anticipated to be completed by next summer. This will alleviate operational issues at the intersection as traffic volumes have grown substantially in recent years.

Manitoba Infrastructure is committed to continuously improve and introduce new intersection treatments across the province that are most beneficial to moving people and goods safely and efficiently. Working with design staff to accommodate road users and different roadway settings, Manitoba Infrastructure's goal is to always ensure everyone's safety on Manitoba's roads.



Roundabout at PTH 2 and PTH 3 near Oak Bluff

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Coun. Matt Allard chairs the Infrastructure Renewal and Public Works Committee

Moving Winnipeg toward an active, healthier transportation option

BY MATT ALLARD

The push towards creating a safe and pleasant active transportation (AT) network in urban areas across Canada and the world is one of the defining municipal issues of the early 21st Century.

In 2015, Council and the City of Winnipeg adopted its award-winning Pedestrian & Cycling Strategies, which laid out a high-level vision and plan for creating a variety of active transportation links across the City.

Since then, the City of Winnipeg has worked steadily towards the implementation of this vision at various locations.

This effort has been conducted in conjunction with, and often complementary to, the massive and historic investment in local and regional road infrastructure.

Working backward from the record-setting \$130 million in roadwork budgeted and underway in 2020, Council has since 2014 invested over \$600 million, and is set to nearly double that investment by 2025.

City of Winnipeg policies and budget facilitate the incorporation of active transportation infrastructure into road projects both major and minor when possible, and when our strategies call for it there.

The concept of 'mode shift', meaning the shifting of a greater percentage of our commuting population to forms of transportation other than single occupancy vehicles, is central

to this. Public transit, biking, pedestrianism, car-share and telecommuting all fit into this picture. While we by no means intend to eliminate vehicles from our streets, we can strike a greater balance between different modes of transportation that help Winnipeg achieve our larger objectives.

Continuing to invest in AT is essential for our city as our population grows, and with it, demands on our transportation system. Our arterial road network through established neighbourhoods and core areas are not getting any bigger. We have to find ways of moving more people to their destinations in the same amount of physical space.

Encouraging more active transportation is critical to achieving our climate targets. Climate change is a top of mind issue for Winnipeggers and people all around the world. Walking and cycling are viable options for many people as long as the proper infrastructure is there.

A healthy, happier population is one of many outcomes of safer, more convenient and more pleasant active transportation options. Families, in particular, who want to travel throughout their city and communities with their children and afford them a measure of independence, are asking for us to deliver the infrastructure necessary to do so.

Some advocates recently have been encouraging the City of Winnipeg further to explore a greater "return on investment" (ROI) analysis in our budgetary

decision-making. To that end, Council is directing the public service to prepare a report comparing the economic spinoffs of various types of infrastructure investment. Preliminary data and analysis point to positive things for active transportation. When smaller and more affordable projects create significant movement of people throughout our communities, linking them up more conveniently and accessibly with local business, everyone can benefit.

Further, in our partnership with the heavy construction

to see, we do feel that we are moving forward in a proactive and constructive way...no pun intended.

Guided by our vision document, the work of our public service, record-breaking investments in transportation infrastructure and a more collaborative approach than ever with our industry partners, we believe we can and should continue to link together our growing AT network. When we refurbish our roads to the clean and smooth state that

“ Whether it be for recreation, commuting or connectivity between different modes of transportation, Winnipeg is moving forward to a fast and fit future where bikes, buses, cars, trucks and pedestrians all have high-quality infrastructure

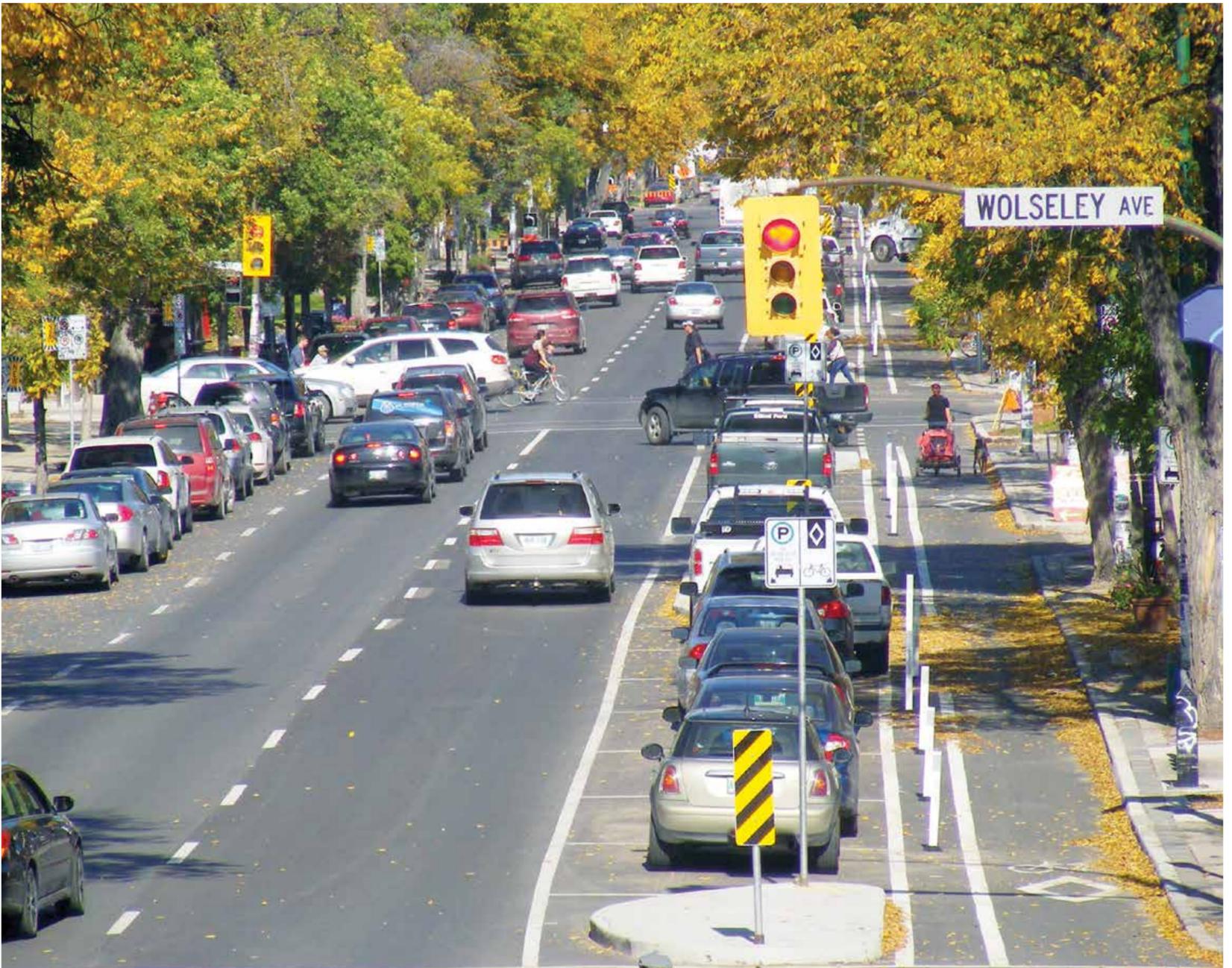
– Coun. Matt Allard

industry, we have created jobs and economic activity with our historic infrastructure investments, especially during the hard economic times brought on by COVID-19. Casting a curb for a bike lane, a residential road or a highway all get money flowing to local businesses and workers alike.

While progress hasn't always been as fast as we might like

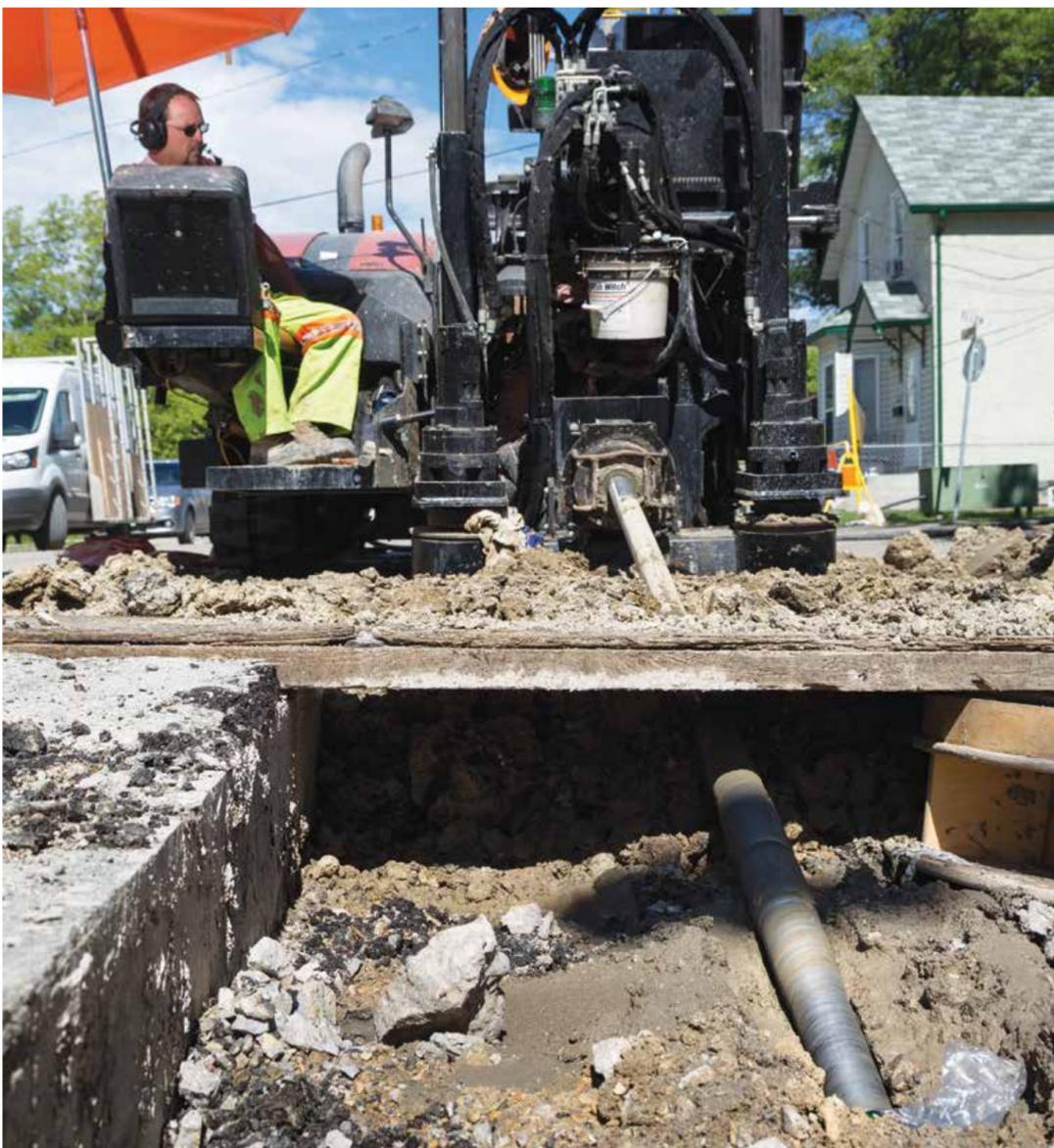
Winnipeggers want and deserve, we also extend the lifespan of those roads by reducing wear and tear.

Whether it be for recreation, commuting or connectivity between different modes of transportation, Winnipeg is moving forward to a fast and fit future where bikes, buses, cars, trucks and pedestrians all have high-quality infrastructure.





Water main renewal mostly an above-ground job



Every year, the city sets out water mains in need of replacement, determined by the number of leaks recorded in sections of a main. This year, Beaver Sewer and Water Services replaced the water main on Alexander Avenue, from Princess to Ellen Street, about 400 metres.

Until just more than a decade ago, water main renewal would require excavation to replace an entire length of pipe, installed 2.1 to 2.4 metres underground. Today, water mains are replaced through “directional drilling”, which involves a heavy equipment operator directing a specialized drill with a directional head to force a rod underground, alongside the old main, up to 100-150 metres in length.

At the end of the length, the rod’s directional head is replaced with a cutting head, and the length of PVC pipe is pulled (or pushed) back through the enlarged new hole. Main diameters range from about 4-50 centimetres.

Directional drilling requires excavating ground for the drilling start and end point, sectional tie-ins and intersections. It allows most of the street to remain open for use by residents while work proceeds. It also involves excavating less concrete, and is frequently faster than full excavation.

WATER AND SEWER FACTS

- Winnipeg has 2,600 kilometres of water “mains” – large pipes carrying water to homes and businesses.
- Cast iron – used from 1890s to 1950s, the City has about 380 kilometres of cast iron mains, which have proven very reliable to this day
- Thinner walled cast iron mains were used in the ‘50s, and some ductile iron pipe accounts for 128 kilometres of mains. These pipes have not performed as well
- Asbestos cement (AC) mains were also installed from mid-1950 to early ‘80s
- Since the ‘80s, the preferred material for water mains has been polyvinyl chloride (PVC), a hard plastic, constituting 1,360 kilometres of pipe.
- Winnipeg’s alkaline soil has proven especially corrosive to ductile iron. Every year, hundreds of breaks occur in water mains, requiring emergency repair.
- The City’s water main renewal program replaces an average 12 kilometres of mains each year, replacing corroded pipe with PVC, a lighter and durable material.

The wastewater system is composed of 1,037 kilometres of “combined” sewers that carry wastewater and surface water in old areas of Winnipeg, and 1,423 kilometres of separated pipes that carry just wastewater to treatment centres. Further, there are 1,173 kilometres of dedicated land drainage sewers, carrying rain or melt from urban areas to the rivers.

Thousands of metres of sewer mains are replaced or repaired each year.

This year’s budget for water main renewal is \$17.5 million, and \$17 million for sewer.

Colin Corneau photos



Jackie Jones is the WORKSAFELY™ education and training advisor at the Manitoba Heavy Construction Association



Bad or distracted drivers risk people's lives, limbs in construction zones

BY JACKIE JONES

There have been a number of alarming crashes in road construction zones this season, involving both commercial drivers and the driving public. The worst of these incidents resulted in the deaths of a 7-year-old and 61-year-old; both were passengers in vehicles appropriately stopped in a construction zone.

Construction zones are hazardous but perhaps nowhere more so than on highways, where the close proximity to vehicles passing at high speeds makes the worksite particularly dangerous.

With more people on our roads this summer due to COVID-19's travel restrictions, the hazards this season are greater for workers who step foot onto highways and roads every day.

When impatient motorists refuse to slow down, or drive too close to other motorists or distractedly, they can easily hit a construction worker, causing catastrophic injuries or death.

Ask any road worker about their job and they will roll their eyes and recall stories about dangerous drivers in highway work zones. No one wants to wait their turn. No one wants to slow down. Everyone gets impatient and some get angry. Many construction workers have experienced narrow misses or even been struck by drivers due to inattention or deliberately.

Jorian Stangl has held the position of a traffic control coordinator with Maple Leaf Construction for the last 5 years.

Stangl shakes her head at the 'near misses' she has witnessed.

"Our flag people deal with verbal and, in some cases, physical abuse daily. Rocks or beverages have been thrown at them."

When asked what

factors seem to play a role in these situations, Stangl said sometimes it's the area. For example, high traffic-volume routes tend to have more frequent incidents with motorists being impatient and irate. Sometimes the time of day, like rush hour or a Friday afternoon before a long weekend, can also play a role. But generally, this kind of behaviour happens on all job sites where motorists are affected, she notes.

Todd Turner, General Manager of E.F. Moon Construction, says education and training of workers is important to construction zone safety. Making the work zone highly visible to motorists, and keeping it neat and tidy, also can help reduce hazards and allow drivers to adjust upon approach.

"The easier you can make the movement of motorists through a work area, the safer it is for everyone," Turner explains. "Motorists can get confused with the number of changes to their usual route. So, it is important to make a road work zone very easy to navigate through."

Ray Bissonnette, Safety, Health and Risk Manager for Nelson River Construction, agrees with Turner. Bissonnette also suggests a module specific to road construction zones could be added into the new driver training curriculum.

"We should be educating our new drivers on the importance of being alert in construction zones," Bissonnette says.

So, what's at risk for motorists not obeying construction zone rules?

You risk a collision involving yourself and/or other motorists. There can be workers on or near the road, operating heavy equipment, working with hand tools on the ground or acting as flag persons.

Road workers could also be hidden

behind equipment, materials, etc. The faster you drive, the longer it will take to stop.

Remember that even if a construction zone doesn't seem to have activity, there may be other hazards such as loose gravel or uneven pavement.

Drivers convicted of speeding through construction zones will be subject to double the fine.

To prevent construction zone injuries and fatalities, WORKSAFELY™ recommends the following driving tips to maintain driver and worker safety:

- Know the work zone signs
- Slow down and pay attention to other drivers
- Stay focused. Avoid distraction
- Expect the unexpected
- Keep your cool. Be patient
- Plan your route to avoid construction zones

"My advice to fellow flag persons and road workers: Hang in there," Stangl advises. "Flag persons are, in most cases, essential for work to be completed safely, but also the first person the public sees when they enter a construction zone. Ultimately, we would like for the motorists to remember that everyone working in a construction zone is someone's loved one."

"They deserve to go home safe to their families!"



“The easier you can make the movement of motorists through a work area, the safer it is for everyone.”

– Todd Turner, General Manager of E.F. Moon Construction



Pictured: Jorian Stangl, Maple Leaf Construction photo



Sinking a shovel in the yard? First find out what's below



Don Hurst is the director of WORKSAFELY™, education and training at the Manitoba Heavy Construction Association

BY DON HURST

The end of summer brings on last-minute yard projects, such as installing a deck, fence or planting trees. Have you ever picked up a shovel and just started digging? Many people do not realize they have to contact Click Before You Dig Manitoba before doing any kind of excavating on their property, which

includes digging into the ground for even a new garden. This is to ensure homeowners do not hit a gas line, electrical, plumbing or other wires.

Avoiding these lines when digging can be harder than you think. As neighborhoods get older and services are added to structures, trenches are dug and soil and sod are laid over the top, and eventually the trench locations are quickly forgotten by the home owner. When the home is sold and passed from one owner to another, the locations of these utility lines are rarely shared with the new owner.

Many people also assume that cables and utility lines are buried deep underground, however, sometimes they are not.

Even nicking a line can cause serious issues.

In 2015, Virden residents were rocked by a gas-line explosion, destroying one house, severely damaging another and sending one man to hospital with serious injuries.

The incident was believed to be caused by a home owner hitting a gas line while pounding metal stakes into the ground while building a fence.

One Winnipegger can relate to that. A few years ago he decided he was going to put in a fence in his backyard.

"I thought I knew where my utility lines were," he admits. "At one point during digging holes with a manual fence post auger, I felt a bit of resistance."

"I honestly thought I hit a rock, so I pulled the auger out and to my horror I looked down, and maybe 18 inches down was a natural gas line!"

Jackie Jones, co-chair of the Manitoba Common Ground Alliance, says there are many ways things can go wrong.

"As in the above experiences, even nicking a gas line could cause a leak and all it takes is one spark and there can be a major explosion," Jones states. "The entire area then must be evacuated and the gas shut off."

"We know that electrocution can be a result of hitting an electrical line," adds Jones. "We have all heard the stories of people having severe burns or who have died because they have hit an underground electrical line."

Property damage to your home or even your neighbors may be a result of digging without knowing where are the underground utilities. Hitting a water line could cause a flood, or hitting a sewer line could lead to pollution.

"If you are planning any projects that require digging, contact Click Before You Dig Manitoba to have utilities owners in the area notified and utility lines marked and located," she advises. If you're hiring someone to do the work, don't assume they've contacted utility owners – ask them!

"Basically, if you do not have a locate you should not dig, whether you are a homeowner or a construction contractor."



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“ If you are planning any projects that require digging, contact Click Before You Dig Manitoba to have utilities owners in the area notified and utility lines marked and located.

– Jackie Jones, co-chair of the Manitoba Common Ground Alliance



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Colin Corneau photo

Protection for workers in a time of pandemic



Jackie Jones is the WORKSAFELY™ education and training advisor at the Manitoba Heavy Construction Association

BY JACKIE JONES

As Manitobans adjust to living and working during the COVID-19 pandemic, companies, too, are looking to adjust to the new normal and protect their workers.

"The psychological health and safety of a workplace contributes to employees' health and overall health of our communities and the success of an organization," says Ela Partyka, program director for the Canadian Mental Health Association. "The context of the COVID-19 pandemic creates additional complexities and challenges due to concerns for health, safety, employment, childcare, and other personal demands."

The COVID-19 pandemic has made it more important for organizations to focus on how they can not only protect their employees' physical health but also mental health, as employees are experiencing anxiety around contracting illness, job security, family health and parenting while working from home, etc.

"Employers can support their employees' wellbeing by implementing health and safety practices in the workplace, providing mental-health resources and demonstrating empathy when addressing workers' concerns," Partyka says. "Open communication

with employees can help them cope better. Businesses could share their COVID-19 prevention in the workplace and provide training, education and updates on government guidelines for businesses."

The past few months have been a stressful time for many and adapting to changes when returning to work might be an additional challenge for some employees. From the beginning of the pandemic, Manitoba's heavy construction industry was deemed an essential service.

Cindy Blair, human resource manager for Borland Construction Inc., says the biggest hurdle at the start of the pandemic was the unknown.

"The start of the construction season coincided with many businesses being shut down for an undetermined period of time," says Blair. "When the province advised that essential work would continue, Borland was ready to navigate the complexities of a pandemic, making informed decisions and taking action based on public health orders and recommendations."

From the start, Borland Construction ramped up communication on the various services it provided to employees that could address mental health concerns and communication plans to mitigate possible exposure to the virus.

"Constant communication with employees, listening to what was causing worry and anxiety and making adjustments to the workplace to ensure our employees well-being continues to be Borland's goal."

Jason Moffatt, Safety Manager of J & G Group of Companies, recalls that one of the main hurdles at the start of the pandemic was trying to gather knowledge about COVID-19 and the requirements that had to be met to ensure the safety of the workers.

"There was a degree of anxiety among a lot of workers, in particular those employees who had prior medical issues," says Moffatt. "Those who were responsible for the care of elderly parents or young families seemed to be the most affected by the COVID-19 pandemic."

"The J & G Group of Companies has been very proactive in evolving policies and procedures to ensure a safe work environment for their employees. These have been accepted by both management

and the workforce as a 'new way of doing business' through these trying times."

Management should be aware there might be anxiety among workers and should encourage them to voice their concerns.

To catch early signs of mental distress, employers should watch for behavioral and performance changes. Demonstrating compassion, empathy and flexibility during this time is important in making workers feel supported and valued.

WHEN ASKED WHAT ORGANIZATIONS SHOULD PAY PARTICULAR ATTENTION TO, PARTYKA SUGGESTS:

Create physical safety – employees need the necessary equipment that protects them from contracting the virus.

Paying attention to the workload of employees – we need to protect employees from burn out. Organizations need to take a serious look at scheduling employees in a way that allows for adequate rest and time off.

Offer psychological protection and support – encourage mutual support within the team and equip managers with skills and time to support their employees, listen to concerns and respond appropriately.

Promote work-life balance – create where possible, time for family time and time off.

Continue clear and consistent communications and expectations – in the environment of rapid change and adjustments to remain responsive, communication and clear expectations are critical. Transparent, clear and continuous communication is vital for effective organization performance.

"Organizations depend on their workforce to continue to operate," stresses Partyka. "Thus, it is in organizations best interest to create a work environment that protects and promotes employee wellbeing and mental health."

Blair is confident the heavy construction industry has responded and adapted quite well. "Workers know that we are in this together and want to do their part to stay well and keep the industry working."

RESOURCES FOR EMPLOYEES:

EMPLOYEE ASSISTANCE PLANS

The CMHA Service Navigation Hub (SNH) provides information on a range of topics related to mental health, mental illness, distress and strategies connected to resilience.

When you connect to the SNH they listen and assess your situation; provide immediate support; educate and provide consultation on your rights and to determine next possible steps of action – whether to proceed with intake to CMHA programs or to refer to appropriate community supports.

You can reach them directly at: 204-775-6442 or email at: hub@cmhawpg.mb.ca

Visit: service navigation hub for more detailed information on the support a Recovery Navigation Specialist can provide as well as other crisis supports within Manitoba.

<https://mbwpg.cmha.ca/news/cmha-manitoba-and-winnipeg-response-to-covid-19/>

<https://mbwpg.cmha.ca/programs-services/community-and-workplace-education/new-cmha-toolkit-supports-employees-and-employers-with-planning-psychologically-safe-return-to-the-workplace/>

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Manitoba Suicide Prevention & Support Line – 1-877-5357170 (1-877-HELP170)

Kids Help Phone – 1-800-668-6868

Manitoba Farm, Rural & Northern Support Services – 1-866-367-3276

First Nations and Inuit Hope for Wellness Help Line – 1-855-242-3310





Winston Maharaj is president and CEO of the Workers Compensation Board of Manitoba.

Let's get Manitoba back to the workplace safely

BY WINSTON MAHARAJ

As the COVID-19 pandemic evolves, employers are dealing with varying levels of change. In the heavy construction industry, many projects have continued over the last several months and workers may not have been as disrupted as other industries. The Manitoba Heavy Construction Association has supported members of its sector by helping them adapt to new safety protocols designed to prevent the spread of COVID-19 in the workplace.

The pandemic has led to adjustments in all industries as employees gradually return to their usual workplaces. Employers have primary responsibility for ensuring workers are safe and healthy, and that duty now includes protection from the hazard of COVID-19. SAFE Work Manitoba can help – with training, tools and information to assist employers and employees in remaining safe during the pandemic.

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Best Practices for a Safe Workplace Course

SAFE Work Manitoba, a division of the Workers Compensation Board, offers a free, online training course called COVID-19: Best Practices for a Safe Workplace. This interactive course provides straightforward guidance to help workers reduce the risk of contracting COVID-19 or spreading it to others – keeping themselves, their colleagues and their customers safe. Complying with provincial health guidelines, it includes advice on applying the “four Ps” of COVID-19 safety in the workplace:

- Physical distancing – limiting close contact with others
- Personal hygiene – ensuring hands and objects are clean
- Physical environment – steps to take to reduce the risk
- PPE – personal protective equipment use

Employers can assign the course to their employees and track course completion. On completion, certificates are provided, which can be posted in the workplace for customers and co-workers to see.

Other COVID-19 Resources

While we learn to live with the pandemic, it is safe to go back to the workplace when proper safety protocols are established and followed. If we all work together, we can protect each other and reduce the spread of COVID-19 in our communities.

For the heavy construction sector, the MHCA Worksafely™ program has provided services and resources that are relevant to your work. SAFE Work Manitoba offers additional resources for all industries, including the free online course on COVID-19 safety in the workplace. At safemanitoba.com you'll also find tip cards on workplace safety and COVID in 19 languages, COVID advice for workplace safety and health committees, ShopTalks on virus prevention, information on mental health resources and much more. Please take advantage of the tools available from both MHCA Worksafely™ and SAFE Work Manitoba to help prevent the spread of COVID-19.

“ If we all work together, we can protect each other and reduce the spread of COVID-19 in our communities.

–Winston Maharaj





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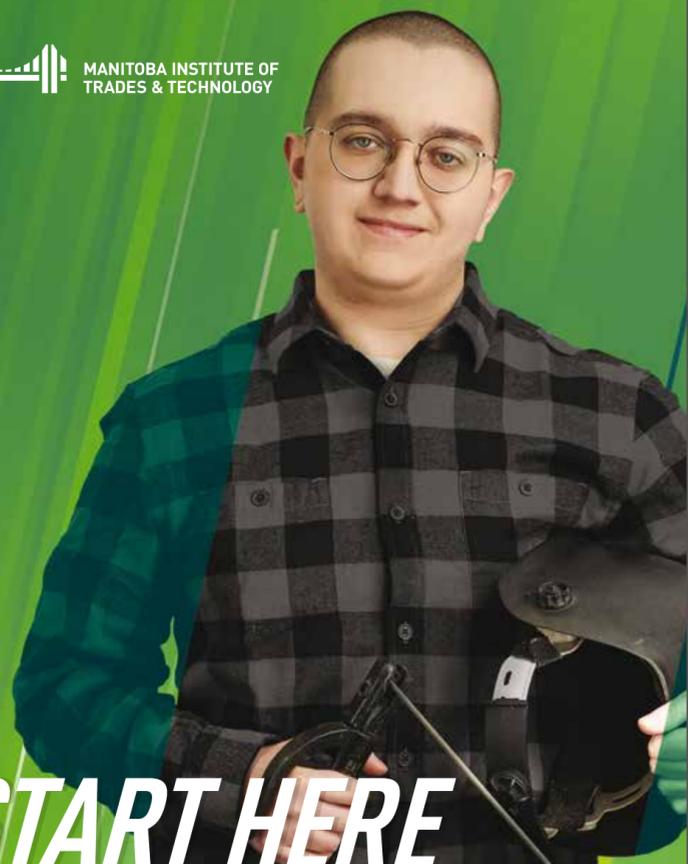


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