

Information meeting about the REM in Pierrefonds-Roxboro – Highlights and answers to questions

Date and time: February 11, 6:30 to 8:30 p.m

Location: Online via the icastPro platform

Highlights of the meeting

- 306 participants
- About thirty questions were received beforehand or asked during the evening.
- Approximately 150 questions and comments received in writing during the evening
- Four stakeholders attended the information meeting and question and answer period:
 - o Myriam Vallière, Community Relations Advisor, REM
 - o Giovanni Cipolla, Deux-Montagnes Segment Director, NouvLR
 - o Marc Lafortune, Engineer and Highway Manager, CIMA+/Hatch
 - o Jean-Philippe Pelletier, Delivery Director Deux-Montagnes, REM
 - o Pierre Guillot-Hurtubise, Facilitator

Meeting agenda:

- Presentation on the REM and the work
- Question period: answers to questions submitted beforehand and those asked by participants during the evening (through a question module).

Content of the presentation:

- Background
- The REM in Pierrefonds-Roxboro
- Ongoing work and work in 2021
- Permanent noise barriers
- Communication tools

Main topics during question period:

- Height and configuration of the railway (new overpasses and elevated structure)
- Work and mitigation measures
- Permanent noise barrier walls
- The REM operating period



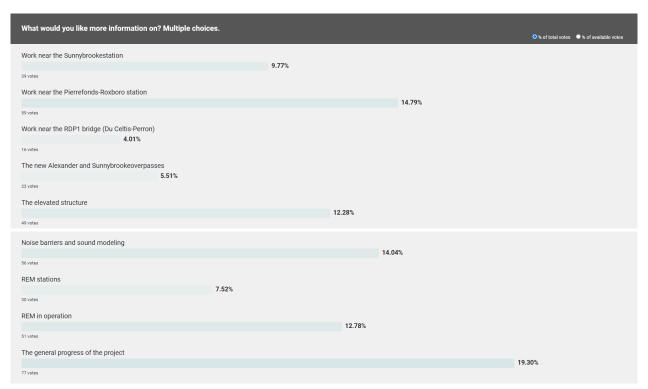
Documentation

A video recording of the information session and the documentation presented during the meeting are available at the following link: https://rem.info/en/events/virtual-information-meeting-pierrefonds-roxboro

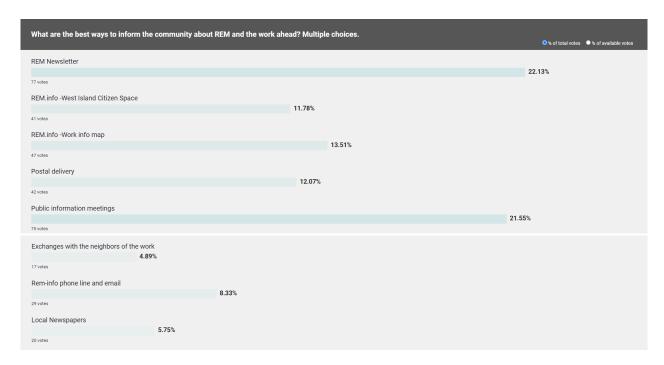
Poll results

During the evening, three questions were asked to the participants. Here are the final results at the end of the voting:









Written answers

Many questions were asked during the evening and our team could not answer all of them. Here are our answers to the remaining questions. Note that similar questions have been grouped together by topic for ease of reading.

Height and configuration of the railway

With the elimination of grade crossings for the REM, where will the track height change and how will it be reconfigured?

Slides 23 to 27 of the presentation given during the information meeting show where the tracks are elevated in the boroughs of Pierrefonds-Roxboro and Dollard-des-Ormeaux. The cross-sections presented also further illustrate the new configurations: https://rem.info/sites/default/files/2021-02/REM_Rencontre_PR_20210211_VF_ENG.pdf.

Will the elevations of ground-level tracks be the same as they are currently?

 In locations where tracks will remain at ground-level with the new configuration, the elevations will be the same as they are currently.

Why do the tracks go up and down in the borough? Why not just have an elevated structure everywhere, all the way to the Mont-Royal Tunnel?

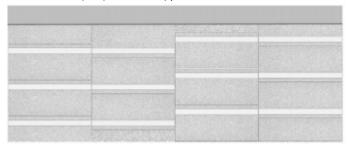
For economic and landscape integration reasons, our goal is to maintain the railroad tracks at their original height whenever possible. That's why between Alexander Street and Des Sources Boulevard, the REM will gently slope to ground level, between the two new overpasses.



However, because of the short distances between the grade crossings from 11th Avenue to
Des Sources (11th Avenue, Pierrefonds-Roxboro Station, Gouin, Des Sources), the designers to
had to plan the network as an elevated structure in this section.

How high will the retaining walls be and what will they look like?

 The height of the retaining walls will vary between 1.5 and 6 metres, depending on the sector. They will be made of textured concrete (with lines, see image below provided for information purposes only).



Are you considering lowering the overpass on Sunnybrooke Boulevard to reduce the height of the station and tracks?

 In order to build the Sunnybrooke overpass with the necessary clearance for road traffic beneath the structure, we plan to lower the boulevard by 1.2 metres. We do not plan to lower it further or reduce the height of the station and tracks.

Given the height of the stations and their proximity to residences, what measures will be implemented to ensure residents' privacy?

- The stations are made of glass walls featuring narrow striated patterns. This will provide privacy for surrounding residences.
- Outside the stations, the REM is not stagnant; it will travel at an average speed of about 50 km/hour, therefore private yards will not be visible for extended periods of time.

Could we see a site plan of the right-of-way for the two sets of tracks, so we can see how far the new tracks will be from our houses?

- We will see if it is possible to produce a tool that would meet this request; for the moment, no site plan is available for consultation.
- The doubled REM tracks will be approximately 4 to 15 metres from residential property lines.
 For specific information about your property, contact the Community Relations Office at info@rem.info.

Will the tracks be elevated behind the Briarwood Pool (intersection of Pavilion and Hunter Streets), and could a station be added in case the pool is eventually converted to an access area for the Cheval Blanc Nature Park?

- The railroad tracks will be at around level in this location.
- There are no plans within the current project to add stations between Pierrefonds-Roxboro and Île-Bigras.



Work: impacts and mitigation

What work will be done this summer at Sunnybrooke Station?

Station and elevated structure construction will continue in the coming months (construction
of the pillars and station structure). For more details, see the Works info section of the REM
website.

What measures will be implemented to reduce noise and dust during construction?

- Mitigation measures will be implemented to minimize impacts at the source. First of all, work methods are selected to reduce impact on neighbouring properties around the work sites (drilling method, low-noise equipment, work vehicles equipped with white noise back-up alarms, etc.). Additional mitigation measures are used on an ad hoc basis, according to requirements and type of work (temporary and/or removable noise barriers, watering on hot days to reduce dust, etc.).
- Monitoring by environmental experts will take place throughout the work.

Will there be blasting?

No blasting is planned for elevated structure construction.

What impact will your work have on the foundations of homes near the elevated structure?

- The main activity that could generate vibrations will be pile driving for elevated structure pillar foundations. The pillars will be approximately ten metres apart. This activity is also timelimited.
- In order to carry out our work, several monitoring measures are adopted to ensure that we
 do not compromise the integrity of the surrounding infrastructures (houses, water lines, etc.) in
 any way.
- Our work must also comply with certain conservative vibration limits, set by relevant authorities.
- Lastly, we inspect the homes near our work sites to ensure that we have comprehensive information about their general condition before and after our work.
- You may still feel vibrations, since humans can perceive even very low levels of vibration.

What are your working hours?

Regular working hours are weekdays, from 7 a.m. to 7 p.m. Worker or equipment activity may
occur before and after those times to prepare or clean up the site. Activities outside of
regular working hours may be required on an exceptional basis.

Will traffic obstructions on Alexander Street and Sunnybrooke Boulevard be scheduled at different times?

- Yes. There will be no concurrent traffic obstructions on Alexander Street and Sunnybrooke Blvd.
 - Traffic obstructions will be staggered to minimize impact on traffic.

Will we be able to travel freely on 11th Avenue and Gouin during the work, or will there be traffic obstructions? Will the Gouin and 11th Avenue grade crossings both be closed to traffic at the same time or will the closures be staggered?



- There are no significant traffic obstructions currently planned in this area.
- Partial lane and sidewalk obstructions will be required to build the elevated structure and connect to existing services (water, sewer, etc.). Appropriate signage will be installed when required.
- As with any construction site, a traffic management plan will be filed and coordination is carried out between all projects and responsible authorities to minimize impact on traffic.
- There are no plans to block off Gouin Boulevard and 11th Avenue at the same time. Traffic obstructions on these roads will be staggered to limit the impact on traffic.
- Our teams will also monitor traffic conditions.

Will citizens be informed of the trucking routes that workers will use to access work sites?

- The Works info available on the rem.info website shows the planned traffic obstructions and detour routes for motorists, pedestrians and cyclists, but does not show the trucking routes.
- Those routes are established in collaboration with the City of Montréal and each borough, in order to minimize impact on residential neighbourhoods.

What arrangements have been made to ensure pedestrians/cyclists can move about safely near work zones?

As with any work site, before the work is carried out, a traffic management plan is submitted
and coordination is ensured with the responsible authorities to minimize impact on traffic as
much as possible, and to ensure the area surrounding our work sites remains safe.
 Appropriate measures (detour, signs, etc.) are implemented if necessary.

We are concerned that we will lose a portion of our land when you double the tracks. Can you give us more information?

- Certain citizens were notified that we needed to take back the entire width of our railroad right-of-way in order to double the tracks.
- When the existing rail fence is replaced, it will be moved to the boundary between rail
 property and the bordering residential properties.
- This work will begin on May 1.
- Those affected should remove any equipment or personal property that is attached to the existing rail fence.

In the railroad right-of-way behind my house, there is poison ivy and poison oak. Is there anything that can be done to get rid of it?

- Our environmental experts will study the site before work begins.
- Appropriate measures will be taken to deal with this type of problem and ensure the health and safety of our workers.

Will trees be cut down in Des Arbres Park to widen the Rivière-des-Prairies bridge between Montreal and Laval islands? On which side will the railroad tracks be widened at this location?

No, there are no plans to cut down trees in Des Arbres Park. We will only remove dead trees
from the site. The new track will be located to the east, right next to the existing bridge, in the
railroad right-of-way.



By whom and how are complaints assessed and handled?

- A community relations office is responsible for following up with citizens' complaints. The
 relevant teams (construction, design engineering, traffic management, real estate) are then
 called upon to find potential solutions to the issues raised, if possible.
- The community relations office team are then diligent in providing feedback to citizens regarding their complaints.

Access, traffic and parking around the stations

What consideration has been given to improving pedestrian safety at the corners of Jean Brilliant, 8th Avenue, 11th Avenue and Commercial Streets?

- When the Pierrefonds-Roxboro Station is opened, its main access will be via Gouin Boulevard. The existing sidewalk along the Jean-Brillant Avenue parking lot will be connected to a new sidewalk leading to the station, and a new bike path beneath the elevated structure, from the station to 11th Avenue, is planned as part of the project.
- We are working closely with the City of Montréal and the borough to ensure that access to the station is seamless and safe for both pedestrians and cyclists.

Once work is complete, will access to the new Sunnybrooke Station remain the same as access to the old Sunnybrooke Station?

- The main access to the station will be via Sunnybrooke Boulevard and the park-and-ride lots on either side of the station. Pedestrian access will be from Gouin Boulevard West and Cérès Street.
- These accesses are indicated on the site plans available on our website, on the Stations tab: https://rem.info/en/stations.

How many parking spaces will be available in Sunnybrooke and Pierrefonds-Roxboro, and where will they be located?

- The number of parking spaces available at both stations will be similar to what is available now. There will be universal access spaces, carpooling spaces and spaces with charging stations for electric cars.
- Parking lot locations at the Sunnybrooke and Pierrefonds-Roxboro stations are shown on the site plans available on our website, on the Station tab: https://rem.info/en/stations.

Parking is a serious problem in Roxboro, and the REM isn't even here yet. With the exo train, users would park illegally on nearby streets, blocking residential streets and turning the neighbourhood into a parking lot. Is there a plan to prevent this from happening again in Roxboro once REM is in operation?

- Our vision for the entire project has been to maintain the current parking capacity, and to work with our partners to develop alternatives to vehicle use around the REM stations. This implies improving local public transit networks and active transit options (for pedestrians, cyclists, BIXIs, etc.) near the stations.
- Our ridership, traffic and bus feeder traffic studies show that the current plans will meet anticipated needs.



The management of local streets remains the responsibility of municipal authorities.
 Municipalities have the authority to intervene if issues are identified.

There is no proper bike path to downtown at this time. Are there any plans to build a dedicated bike path parallel to the railroad tracks?

- Within the context of the REM project, we do not plan to build a bicycle path parallel to the railway line that would provide access to downtown. That would be more of a municipal responsibility.
- However, REM will develop some bicycle paths around the stations to connect to certain arteries. For example, a new bicycle path will be created between 11th Avenue and the Pierrefonds-Roxboro Station.
- Other paths are also being studied around the stations, in collaboration with the City of Montréal.

Since the track will be at ground level between the RDP1 bridge and Des Sources Blvd, will there be a path between Du Celtis and Pavillon to access bus 205 from Pavillon Street?

- A path beneath the REM track will be built in the Des Arbres Park sector, at the end of Perron Street.
- Access will also be possible from Des Sources Boulevard, from the path built beneath the elevated structure.

Sound modelling and permanent noise walls

Will the noise barriers installed be temporary only for construction or will the be permanent and remain in place once the REM is in operation?

These are permanent walls for the operation phase of REM.

Where will the permanent noise walls be located?

Slides 37 to 42 of the presentation given during the information meeting show where the noise barrier walls will be located. The cross-sections also illustrate their position in relation to the tracks in the Pierrefonds-Roxboro and Dollard-des-Ormeaux boroughs: https://rem.info/sites/default/files/2021-02/REM_Rencontre_PR_20210211_VF_ENG.pdf.

You mention that the train will run on tall pillars. What mitigation measures will be implemented to minimize the impact of train noise, given the increased frequency of passage and greater propagation of sound at height?

 The height of the REM tracks was considered in the sound modelling, which determined the locations where significant impacts are anticipated according to the MTQ's road noise policy and where mitigation measures must therefore be implemented.

You plan to install noise barrier walls along the route at specific locations. Why not install them along the entire route, wherever there are residences? Why prioritize some residences over others?

 Noise barrier walls will be built in locations where the model indicated there would be significant noise impact.



Since the primary source of noise comes from the interaction between the wheels and the rail, noise barrier walls are generally installed within the REM corridor, near the rails. The proximity of the noise source to the noise barrier increases its performance.

What noise standards do you have to meet? What is the maximum allowable decibels under your contract?

- REM construction and operation are governed by a regulatory framework established by the Government of Québec. The Order in Council establishing the REM's conditions for authorization (French only) mandates the use of a sound model of the REM in operation, implementation of the required mitigation measures wherever impact will be significant, and implementation of an ambient noise monitoring program.
- In the sound model, the noise impact of the REM in operation is evaluated at sensitive receptors, i.e. residential, recreational and institutional (school, hospital, etc.) buildings located along the route.
- To evaluate the noise impact of passing cars, the analysis grid used is that found in the Ministère des transports' <u>Policy on road noise</u> (French only), which requires the implementation of mitigation measures when the noise impact evaluated at sensitive receptors is <u>significant</u>.
- The impact is considered significant when the difference between the actual and projected noise levels has a strong or medium impact, according to the Ministère des Transports du Québec's analysis grid:

Actual noise level (average over a 24-hour period)	Increase in noise level before generating a significant noise impact and requiring the implementation of mitigation measures*
Between 45 and 51 dBA	From 11 to 5 dBA - for a maximum of 56 dBA
Between 52 and 61 dBA	4 dBA
62 dBA	3 dBA
Between 63 and 69 dBA	2 dBA
From 70 dBA	1 dBA

The analysis grid is based on a 24-hour cumulative exposure. The criteria to be met are
therefore based on the cumulative noise over a whole day, rather than on a single isolated
passage of an REM car.

What is the number of decibels expected after noise barrier walls are installed.

- There is no single value, since there are several elements to consider when determining the decibel level emitted by an REM car: the speed, whether the train is stopped, whether the train is arriving at a station, the topography (below-grade, at-grade or elevated), the sector, etc.
- Therefore, it is not the single value that is considered, but rather the impact in the environment based on a set of elements integrated in the sound modelling.



The noise reduction achieved by noise barriers varies from case to case. The sound modelling
will soon be available on our website and it will be possible to see the effect of the noise
barriers in each sector.

Since the modelling is based on theoretical data, are there any plans to document the actual noise generated after the REM is in operation?

- During REM operation, a sound monitoring program will be implemented to ensure that
 mitigation measures are effective and noise levels do not exceed the predictions outlined in
 the detailed model. If this monitoring program reveals significant impacts, additional
 measures will be implemented.
- In accordance with the environmental Order in Council and commitments made by the project office, ambient noise will be monitored during the summer period after the 1st, 2nd, 3rd, 5th and 10th year of REM operation. Sound will be completely re-modelled on the 10th year.

The REM operating period

We hear all kinds of things about the Sky Train or Toronto light rail train not being made for winter. How will the REM be different?

- To ensure efficiency during Québec winters, REM cars have been specially adapted to the climate of Greater Montréal. Those adaptations focus primarily on the major components of the 212 REM cars:
 - o Double-glazed windows for enhanced thermal insulation
 - o Heated front windshield to prevent snow and ice build-up on the glass
 - o A high-performance heating / air-conditioning system
 - Heated door thresholds and floors
 - Heated automatic couplers These couplers, on each end of the train cars, are used to "link" two trains together to create four-car trainsets
 - o A specific selection of undercarriage materials (bogies, sandboxes ...)
 - A snowplow installed at the front of the trains to clear snow accumulations
 - An ice scraper on certain pantographs. This scraper will be used to remove ice buildup on the catenary that supplies electricity to the system.
- The tracks will also be equipped to cope with the winter. For example, powerful switch heaters powered by natural gas will be installed to clear snow and ice from the switches.
- In order to ensure reliable service, we are also counting on the test phases that will be conducted prior to commissioning the REM. This is why we first tested a REM car in one of the best climatic chambers in the world, in Vienna. The objective was to demonstrate that the car design was valid by verifying that the comfort of future passengers would be optimal and no climatic conditions would impact critical features. The REM car was subjected to operating conditions comparable to those in Montréal: heavy snow, freezing rain, frost, ice, high winds, sudden temperature changes, etc. Multiple scenarios were examined during these tests, which lasted about a month. The overall test results were very satisfactory: the car and its features performed as expected at temperatures ranging from -38 °C to +38 °C, under all weather conditions.



- Next, it will be important to test all the components of the system to see how they interact with each other. In fact, we are among the first in the world to set up a representative segment, i.e. a segment that includes all the components that will be in the 67-kilometre network, to test the system. So, more than a year before commissioning, we are already testing the components on 3.5-kilometre stretch of the network.
- To learn more about REM in the winter, you can read the news on our website: https://rem.info/en/news/rem-and-winter.

Will users who board at Pierrefonds-Roxboro be able to get to Fairview-Pointe-Claire? If so, how?

- Absolutely, you will be able to reach any station in the REM network, regardless of your originating station.
- Users who board at Pierrefonds-Roxboro would take the REM toward downtown, and then transfer at the Bois-Franc Station. From there, they can catch the next train toward Anse-àl'Orme and get off at Fairview-Pointe-Claire Station.

Do you plan to install more electric charging stations at REM stations?

- Electric charging stations will be installed at each station with park-and-ride lots.
- For example, at the Pierrefonds-Roxboro Station, there will be 15 parking spaces equipped with charging stations for electric cars, and the Sunnybrooke Station will have 10 charging stations.

How much will a REM ticket cost?

- The Autorité régionale de transport métropolitain (ARTM) is responsible for setting the fare schedule for all transit networks in the greater Montréal area. The ARTM's evaluation is underway and we will have more details on the type of subscription once their analysis is complete.
- Our intention remains for the rates be comparable to what is currently paid for an equivalent distance.

Will there be controllers in the stations? Since the network is automated, what happens if there is a breakdown or other problems?

- The network will be equipped with information screens so that users remain informed of the next REM cars arriving, and what their destinations are, for example.
- Although the REM is an automated network, there will be employees throughout the network who have direct communication with the control centre. Safety inspectors will also be dispatched.
- There will also be camera surveillance coverage at all REM sites, including in the cars, in and around the stations, as well as communication equipment (similar what is in the Montreal metros) in the cars and stations with a direct line to the control centre surveillance unit.

When the REM is in operation between Du Ruisseau and Brossard, will there be shuttles or other mitigation measures to transport us from Pierrefonds-Roxboro/Sunnybrooke to Du Ruisseau?

Indeed, Mobilité Montréal is planning mitigation measures for transit to the REM network.
 Details of those routes will be available on the Mobilité Montréal website, in due time.



Is the plan to connect Bois-Franc to the orange metro line still on the table?

- The Autorité régionale de transport métropolitain (ARTM) is still analyzing this option.

Ridership and capacity during operation

Does the project have clearly stated goals for increasing usage or number of users? Traffic will not be the same with telecommuting.

- The vision for the CDPQ Infra project is long term: we are talking about a 100-year perspective decades during which mobility needs will continue to grow, efforts to reduce the carbon footprint generated by transportation will intensify, all in within the context of travel that is accessible and swift.
- We are currently building a transportation network for future generations, so the current context cannot define our vision for the future.

What is the expected increase in ridership at Pierrefonds-Roxboro?

 Our ridership studies conducted in 2018 estimated a morning peak ridership of 2350 at Pierrefonds-Roxboro Station. When REM is commissioned, the estimate for the same period is about 3300.

Low capacity is also a concern. Why didn't you order more cars?

The Deux-Montagnes line capacity will increase significantly. While REM cars are smaller than the MR-90, it is important to note that the REM's frequency will be much higher than that of the current line (every 2 min 30 seconds between Central Station and Du Ruisseau, and every 5 minutes between Du Ruisseau and Deux-Montagnes). The high frequency means that many more seats will be available. The REM has a capacity of 42,120 passengers during the morning rush hour, from 6 to 9 a.m. For more information, see our article: The REM, seating and capacity.

If a new branch of the REM is created in Laval and joins the Deux-Montagnes line, will there be an impact on the frequency of service on the Deux-Montagnes line and on its capacity?

- If a new REM branch project were to move forward in Laval, we would have to increase the
 frequency of trains in the central corridor and distribute this frequency among four branches
 instead of three as is the case today, on the REM network under construction.
- However, this scenario is currently quite hypothetical at this point.

Other sectors of the REM route

You talked about the colour themes for the interior and landscaping around the stations in the borough of Pierrefonds-Roxboro. What about Deux-Montagnes?

 In both Deux-Montagnes and Pierrefonds-Roxboro, the colour theme for the interior and landscape design is blue, a salute to the nearby rivers.

How is construction progressing in Ville-de-Mont-Royal?

- Station construction is well underway; we are currently working on installing the glass walls and on the interior design of the station. You can check the progress on the site camera:



https://www.devisubox.com/dv/dv.php5?pgl=Project/interface&sRef=3OF57G2X6&nStarting Site=EVZX35BW2&sStartingImage=igROURzQt3xrABc-pmFrnGBaLTs=

Other

Does the project have clearly stated goals for reducing carbon emissions?

Once in service, REM help reduce greenhouse gas (GHG) emissions by 680,000 tonnes over 25 years in operation. 250,000 trees will be planted to offset the GHG emissions produced during the construction phase In addition to these 250,000 trees, once the REM construction work is completed, the same number of trees that were cut in temporary construction zones will be replanted, and an additional 10% will be planted in the municipal territory or borough where the trees were cut. The planting strategy will be carried out in close partnership with the municipalities and boroughs.

Does the project have clearly stated goals for recovery of costs?

- CDPQ's projected return is between 8% and 9% over the long term. This is not an annualized return, but a projected return over a long period of operation. This level of return is well-aligned with CDPQ depositor objectives, which are just over 6%, and corresponds to an expected return on investment made solely in the form of share capital. This range is also consistent with the market for greenfield-type investments that have a similar risk/return profile, financed without recourse to debt.

How will you dispose of old trains?

- Commuter train operator exo began transporting the 58 MR-90 cars from the Deux-Montagnes line to its garage in Saint-Jérôme in early January. From there, they will be transported by rail to the Pointe-Saint-Charles workshop and stored temporarily.
- Since this was exo's only electrified train line, they could not reassign these cars to their other lines. Last fall, the process of identifying potential buyers was launched.

There is talk of increasing property taxes for properties adjacent to the REM. That is not acceptable. Please find a different solution.

Property taxes are not the responsibility of the Réseau express métropolitain project office, but of the municipalities. The market value of your property and the tax rate affect the amount of property taxes you will have to pay. Please contact your municipality's administration for any questions in this regard.

Regarding the possible decrease in value of houses near the REM, you claim that this will not happen since the REM will run where the Deux-Montagnes line already runs. But you are forgetting an important factor: REM frequency. What are your thoughts?

- We are aware that the arrival of the REM will transform neighbourhoods with a high-frequency transportation option that, in the case of the Deux-Montagnes branch, replaces a heavy train on a century-old rail line.
- However, there is no reason to believe that the value of the houses will be affected.



To date, communication seems inadequate regarding the work in the borough of Pierrefonds-Roxboro. The legal and official notices and the information available on the website cannot be the only way to obtain information about the REM project. Would you consider developing a plan to distribute fact sheets to affected parties in a timely manner, informing them of issues that directly affect them and inviting them to visit the website and sign up for alerts and newsletters?

- Indeed, we are increasing the number of communication channels through which we inform the community about the REM work.
- With the work in the borough of Pierrefonds-Roxboro starting in early 2021, we first worked with the borough and the local and regional press to inform the community of the launch. The virtual public meeting held on February 11 also allowed us to reach more than 300 residents affected by the project.
- Mailings allow us to target communications to residents near our work sites, while digital communications allow for a more mass distribution.
- Interested citizens can contact our community relations team at 1 833 736-4636 or by email at info@rem.info.