

Questions and Answers from June 2, 2020 webinar

MORE BANG FOR YOUR BUCK: OPTIMIZE YOUR CITY INFRASTRUCTURE BUDGET IN A POST-COVID WORLD

Q - You recommend *starting with the data we have...* How much data did you have at the City of Montreal when you started?

A - Let's say we had about 70% of the data. When we integrated the data in the modeling platform, we first filled in the gaps with deductions and uncertainty ranges. Then, we were able to identify the critical data that needed to be identified and we prioritized which inspections we had to do.

Q - How did you manage to coordinate the work between the city departments, local agencies, and other outside organizations, such as gas and electricity, that have networks running under the streets?

A - With the platform, we were able to make a 5-year plan that was shared with everybody. So, as an example, the electric utility company knew in advance where and when we were planning works so they could plan accordingly. The water department in Montreal was the project champion, the other departments followed their lead.

Q - We invest \$375M on our roads annually. How can we tell if this is the right budget to maintain the long-term working condition of the roads and avoid creating a maintenance deficit?

A - Yes, you can find out the proper amount you need to invest. With the platform, you can first simulate the aging of your infrastructures to find out how much it cost and the risk from short to long term, based on how the decision are made today. For the city of Montreal, it was about 700 million dollars per year. Then, you test different scenarios to find the best options to maintain the service level at the lowest costs. Montreal was able to prioritize the interventions and flatten the curve. It resulted in over 200 million dollars of savings in capital and maintenance investment for them.

The platform ensures not only that you invest the right amount of money, but also that it is well invested, year after year.



Q - How long is the implementation of this software and how much time does it take to get actual savings *in the books*?

A - You first start with a specific sector or borough and you can get some results in less than 2 months. After, you extend the implementation to rest of the city. Depending on the context of your city, it can take from 6 to 12 month for a complete implementation.

Q - We have a good asset management system already installed, what more would this modeling software bring?

A - With the budget you are spending now, are you sure that in 5, 10, 20 years, you will have enough budget and that you won't have accumulated a huge maintenance deficit? The DIREXYON modeling platform allowed Montreal to achieve strategic planning for its infrastructures and know what to expect from short to long term. You can also group all assets networks in one simple plan.

Q - Were you able to adapt/utilize this platform across multiple city agencies, or was it only applicable to streets/sewers/water?

A - Yes, since the DIREXYON platform is agnostic. City of Montreal Real estate group is also using the platform for their building maintenance investments. Some cities also deal with external concessions for water and they use the platform to synchronize work. Other clients also use the platform for their vehicle fleets and Playgrounds/Park investment and maintenance planning.