

The choice of day on which recyclables are collected can have a considerable impact on the operational and financial efficiency of a municipal curbside recycling program. The expert committee has studied the topic and drawn a series of conclusions.

APPROACH RECOMMENDED BY THE EXPERT COMMITTEE WITH REGARD TO CURBSIDE RECYCLING DAYS



THE CURBSIDE RECYCLING EXPERT COMMITTEE

The curbside recycling expert committee brings together waste managers from municipal organizations and representatives from businesses in the sector. Assembled by Éco Entreprises Québec (ÉEQ), the committee sets out recommendations on best practices in curbside recycling for the province's municipalities.





SPREAD WEEKLY COLLECTION OVER FOUR TO FIVE DAYS

To ensure the cost-effectiveness of its operations, a collection contractor will want the trucks and equipment valued at over \$250,000 to be in operation four or five days a week. Every day that this investment sits in the garage is a net loss for the business.

By spreading the collection over four or five days, a municipal organization will reduce the number of trucks and drivers required to cover the territory. Doing so also decreases the risk that the contractor will not be able to operate the trucks on the other days in the week. Contractors will tend to raise the price of the offer in order to take this risk into consideration. The approach therefore fosters a reduction in costs and an increase in the number of bids received, including bids from smaller companies.

On average, a collection truck contains 5.5 tonnes of recyclable materials per trip and generally covers two trips per day. This means that a single truck can collect 44 to 55 tonnes in a four-or five-day week. This tonnage is the quantity generated by a municipality of 11,500 to 14,500 doors.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	VEN 💬 I
MORNING	#1 000 #2 000 #3 000 #4 000			
AFTERNOON	#1 000 #2 000 #3 000 #4 000			

46 tonnes on Tuesday (4 trucks)

In the following example, a municipality of 200 doors and 27,000 citizens collects recyclables on Tuesday of each week. In doing so, it forces the contractor to mobilize four trucks to ensure the service. Each truck covers two trips per day. By spreading collection over four days, the municipality could require only one truck to serve all citizens.

Smaller municipalities that cannot spread collection over at least four days should still try to divide collection over several days according to the number of units. They can contact municipalities in their region to determine and select days that are not reserved for other municipalities. These municipalities should always provide bidders with the option to suggest a collection day.

> ¹ The same principle applies when the collection is spread over eight to ten days in the case of biweekly collection.
> ² Based on generation equivalent to 200 kg/door/year.



Approximately 12 tonnes per day (One truck for the week)

COLLECTION ON FRIDAY? WHY NOT?

Several municipal organizations do not collect recyclables on Friday, specifically because their offices ar provide the afternoon.

But Friday collection can lead to savings since more collection trucks are available.



WHAT COLLECTORS HAVE TO SAY ABOUT OPTIMIZING THEIR FLEETS

"We are always ready to sharpen our pencils for a call for bids but, ultimately, we are going to have to find a way to amortize the purchase price of the trucks. In our opinion, municipalities have everything to gain by providing collectors with as much flexibility as possible, since they will be the ones that benefit from the savings."

> — Jean Delisle, curbside recycling manager Environnement routier NRJ



FLEXIBILITY IN THE FORM OF OPTIONS

Despite the efforts by contractors to maximize the use of their trucks, some days may still be more demanding than others. A municipal organization can capitalize on this availability by asking bidders to suggest their own collection days. The bid could be configured as follows.

Base scenario: Collection over four to five days.

Option: The contractor selects the collection days.

A collector may submit a competitive bid by suggesting that it cover the entire municipality on Wednesday, the day on which all to rucks are free. However, it will be important to ensure that the material recovery facility (MRF) is equipped to face the influx of materials on Wednesdays.

Note that if the bidder is selected for collection on a specific day, then the next call for bids should not require that collection still be on the same day but rather distribute the collection over several days, as in the base scenario.

ABOUT ELECTED OFFICIALS

"Why should we change the collection day? Citizens will not be happy with the change."

By using an approach that includes options, the decision to change the collection day is turned over to elected officials, who will determine whether the savings associated with a new collection calendar warrant the change.

MINOR CHANGES

Adding a clause to allow for minor changes to the sectors upon the approval of the municipal organization besons not provide the same benefits since sector changes are necessarily made once a contract is awarded. The contractor will draft the offer expecting the worst!

CONVINCING RESULTS

By providing contractors with options for the collection day, the RCM saved 5.5% on the contract, which represents savings of approximately \$300,000 annually."

> — Léo Fradette, waste manager Vallée-du-Richelieu RCM



SEPARATING THE SECTORS

When switching from one-day collection to collection over several days, it is essential to divide the municipal organization's territory in a balanced and simple way.

The notion of balance across the territory serves to ensure that the workload between collection days is regular so that one day does not require four trucks while the next only requires one. The municipal manager may assess the territorial balance based on the number of units and the tonnage expected on each collection day. A municipality may also balance the workload by integrating solid waste or organics to the recycling contract. For example, alternating waste and curbside recycling collection from one week to the next may have the trucks on the road 52 weeks per year (26 collections per year per route for waste and recycling). In doing so, the municipal organization will maximize its optimization if the collection containers are compatible for both routes (e.g. bins on wheels for waste and recyclables) so that the same trucks can be used.

Traditionally, some municipalities have divided their territory along the main arteries or neighbourhoods. Many RCMs also segment the territory by municipality. This type of segmentation based on widely known geographic or administrative elements simplifies citizen communication. Municipalities will therefore seek to reconcile the theoretical territorial balance for collection and the geographic and administrative boundaries. In all cases, the segmentation must be clearly explained in the tender documents and include statistics on the number of occurrent units and expected tonnage for each collection sector. This information will enable bidders to accurately estimate the workload on each collection day.

RISKS AND IMPACTS

OF A NON-OPTIMAL APPROACH

Fewer bidders

Some collectors will choose not to submit a bid offer for a contract that mobilizes a high number of trucks only one day out of the week and leaves them in the garage the rest of the time.

Risk premium

Bidders may include a premium to cover the risk of not being able to use their trucks for the remainder of the week. It is important to remember that a side-loading truck costs upwards of \$250,000.

No room for smaller players

The industry's smaller players may not have the flexibility required to mobilize a high number of employees and trucks on a specific day during the week.

INFORMING CITIZENS

Advertisements and articles in local newspaper, personalized letters, hangers on bins and agents in the field are just some of the many ways to inform citizens of the new collection day. This step is critical since there is a significant risk that citizens who do not know that there is a new collection day will be dissatisfied. Therefore, before the change, it is important to plan the communication tools and messages that will be used to reach citizens. It is also relevant to inform them of the reasons for the change of day and the resulting savings for the municipality, if applicable.

Because change management requires effort, it is recommended that this effort be made more cost-effective by awarding long-term contracts, ideally for a five-year period, to minimize the frequency of the changes.



LIMITATIONS

ÉEQ has proceed a series of information sheets on best practices in curbside recycling, specifically on topics including the bidding process. Implementing the recommendations set outhere will increase the probability of receiving a higher number of more competitive bids. A range of other factors impact these aspects, including the number of local contractors, the regional dynamic in which contracts are renewed (multiple concurrent of) and the publication period of the call for bids. For these reasons, it is impossible to guarantee that the application of these recommendations will systematically lead to a higher number of bids or better prices.

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BEST PRACTICES INITIATIVE For effective curbside recycling

