



COLLECTIF
RÉCOLTE

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Decision Support Guide for Food Transport Vehicles

Chapter V: Evaluating the effects and impacts
of a pooled transportation project

produced as part of the
Local and Integrated Food System in Montreal (SALIM) program
with the support of Montreal in common

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ABOUT THIS GUIDE

The goal of this guide is to support community organizations and social economy enterprises in their transportation projects, with the aim of facilitating the distribution of fresh, healthy, local food, particularly to vulnerable populations.

Published chapter by chapter, this evolving publication guides you through every stage of your transportation project, from assessing your needs, to selecting your vehicle, to the steps required to initiate and operate a shared transportation project.

This guide has been created as a means of sharing the lessons learned about shared transportation from the Local and Integrated Food System in Montreal (SALIM) program. To ensure that its content is tailored to the needs of our partners, we conducted a survey in the spring of 2023 to better understand the technical specifications sought after when purchasing a truck. Our support for the CDC du Plateau-Mont-Royal in getting the SALADE project off the ground and the completion of a shared delivery vehicle pilot project in the West Island of Montreal within L'Aube Food Hub involved extensive research and discussions with insurers, dealers, and companies specializing in the transportation of goods.

Would you like support for a pooled transportation project?

Collectif Récolte is a social enterprise that leverages collective intelligence and community mobilisation to catalyze solutions for local and sustainable food practices.

We envision a just food ecosystem that supports thriving local economies, healthy communities and resilient natural environments.

We support change agents in various initiatives and approaches across Quebec. We offer support tailored to your needs and based on the achievements you have already made.

Discover our [range of services!](#)

Chapter 5 - Evaluating the effects and impacts of a pooled transportation project

This final chapter of the guide aims to equip project leaders with tools **to measure the concrete impacts and benefits** of their pooled transportation initiative. It presents **simple methods for evaluating the economic, environmental and logistical impacts** of a project, including time and cost savings, reduction of greenhouse gas (GHG) emissions, volumes of food transported, and improving coordination between partners.

This chapter also highlights the importance of **collecting field data** and **consulting with the various groups involved**—producers, organizations, drivers, managers—in order to fully understand the real benefits of the project.

This chapter of the guide will help you with your evaluation process by answering your questions about pooled transportation, whether it involves shared trucks or grouped transport, and by suggesting **key indicators to monitor** and **methods for measuring them**. Finally, **practical monitoring tools** are also provided in the appendix to help you document, analyze, and promote the progress made collectively.

From the same publication:

Chapter 1: Estimating your transportation costs

The first chapter gets readers thinking by addressing key questions such as “Do I need a refrigerated truck?” or “Should I buy or lease a truck?” Suggested answers to these questions are provided, comparing the different options. The chapter concludes with a checklist of criteria to consider, enabling readers to assess their needs and make a more informed choice.

Chapter 2: Buying a truck

The second chapter deals with buying a truck and covers topics such as technical specifications, the pros and cons of popular truck models, subsidies and financing, and regulations. It concludes with a ready-to-use questionnaire to facilitate the purchase process at the dealership.

Chapter 3: Various pooled transportation models

Chapter 3 aims to mobilize and inspire actors in Quebec's food systems who wish to explore different transportation pooling models by presenting the options available, the advantages and the challenges. To do so, it draws on a few examples of pooled transportation already in place in Quebec. The information in the main examples has been reviewed and validated by the project leaders cited.

Chapter 4: Starting and running a pooled transportation project

The fourth chapter provides practical support to organizations looking to implement a shared transportation project. It sets out a structured approach, from needs assessment to operational planning, including partner mobilization and implementing coordination tools. The chapter also presents best practices for organizing routes, managing the truck, and ensuring effective communication between members. It concludes with advice on monitoring the project's progress on a daily basis and adjusting its operation according to the realities on the ground.

This document has been written for the purpose of sharing collective learning. You are welcome to share it, quote from it and make good use of it for non-profit purposes. However, we ask that you cite the report as a reference when using the information it contains.



Guide reference: Collectif Récolte (2026). Chapter V - Evaluating the effects and impacts of a pooled transportation project - In Decision Support Guide for Food Transport Vehicles. SALIM program. - Local and integrated food system in Montreal. <https://ressources.recolte.ca/en/ressource/decision-support-guide-for-food-transport-vehicles/>

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CHAPTER 5

EVALUATING THE EFFECTS AND IMPACTS OF A POOLED TRANSPORTATION PROJECT

You have implemented your pooled transportation project and now want to understand what it has really changed?

This chapter guides you through the key steps for measuring the effects, documenting the benefits, and demonstrating the added value of your approach to your partners and funders.



Note to readers: The lessons learned, tools, and suggestions in this chapter are based on Collectif Récolte's experiences in supporting their partners in the field. Some interpretation may be involved and the information presented does not claim to cover all the realities experienced in every context. The information presented reflects the state of knowledge at the time of publication. This information is subject to change depending on various factors, including conditions on the ground, the emergence of new shared logistics projects, market conditions, technological advances, and legislative and regulatory changes.

This guide is intended to be an evolving support tool. Readers are encouraged to adapt it to their needs while referring to it.

WHY AND HOW TO EVALUATE AND MEASURE THE EFFECTS AND IMPACTS OF A POOLED TRANSPORTATION PROJECT

Now that you have planned and implemented your pooled transportation project (Chapter 4), it is time **to evaluate its concrete effects**. This step will enable you to **demonstrate** the positive impact of your initiative **to your funders and partners**. To achieve this, you will need to **measure and analyze various indicators relating to different aspects of the project**, such as financial gains, the efficient use of resources, and environmental benefits.

Evaluating a project means understanding what it has really changed for your organization, your partners, and your territory.

Evaluation allows you to:

- verify whether the objectives have been achieved;
- identify the economic, environmental, and social impacts of the project; and
- draw useful lessons to improve future steps.

In concrete terms, this means observing how pooled transportation has **optimized resources, reduced costs, simplified logistics, and strengthened collaboration between stakeholders**.

Evaluation is not a final step, but rather a **learning loop**: It helps to highlight the results achieved and guide your organization's future decisions. This principle is based on the Results-Based Management (RBM) approach that Collectif Récolte adopts in all its planning, evaluation, and impact measurement processes for the initiatives it implements.

To explore these issues in more detail, we invite you to consult our *Guide pour l'évaluation, la mesure d'impact et la captation d'apprentissage dans des projets de mise en marché et d'approvisionnement alimentaire - Leçons apprises et recommandations issues du programme Système alimentaire local et intégré de Montréal (only available in French)*.

KEY STEPS FOR PLANNING THE MONITORING AND EVALUATION OF PROJECT EFFECTS AND IMPACTS

Evaluating a pooled transportation project is a gradual process. The aim is to collect the right data, at the right time, and from the right people. The main steps to achieve this are as follows:

Step 1 – Select and prioritize the indicators to be monitored

Begin by identifying the most significant and realistic results that you want to measure based on your objectives and capabilities. Then select a few simple indicators that everyone can understand and determine which ones are priorities for your initiative.

Step 2 – Create “with” and “without” pooled transportation scenarios

To measure real gains, you need to be able to compare with a baseline situation. Imagine what it would be like if each partner managed their own transportation: costs, time, kilometres travelled, emissions, etc. This scenario serves as a point of comparison.

Step 3 – Determine the calculation methods and data required

Specify how each indicator will be calculated and what data will be needed (e.g., distances, hours, volumes, costs). Verify that this data is accessible or easy to collect. If some data is too difficult to obtain, adjust your indicators to remain realistic.

Step 4 – Create or adapt data collection tools and share responsibilities

Set up simple tools such as a roadmap, truck logbook, tracking table and online form. Also, define who collects what and how often, e.g., drivers, managers and partners. Sharing roles makes the process more efficient and sustainable.

Step 5 – Analyze and use the results

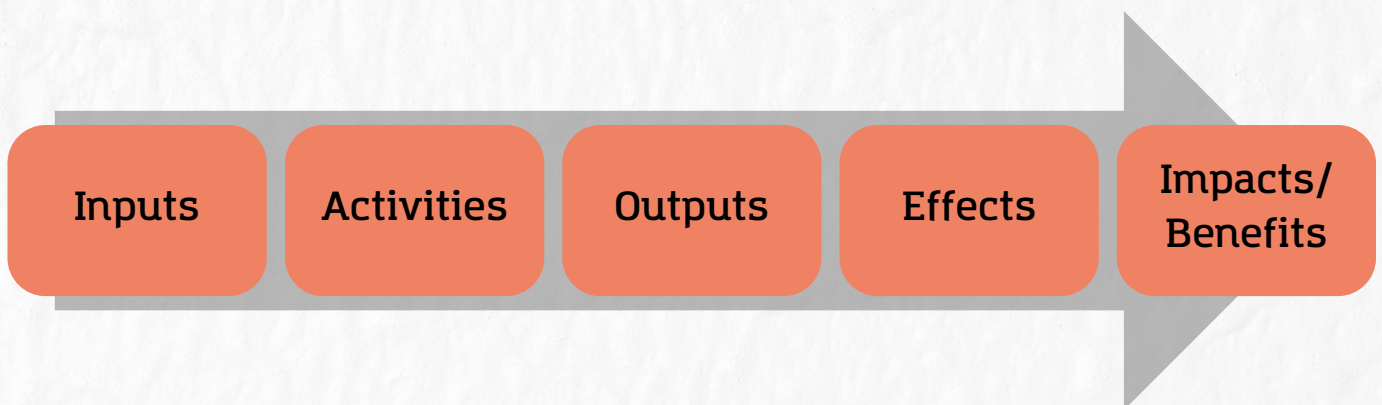
Once the data has been collected, take the time to interpret it. What does it reveal? What lessons can be learned? What adjustments are needed? Evaluation only makes sense if the results are used to improve project planning, management, and communication.

10 Select and prioritize the indicators to be monitored

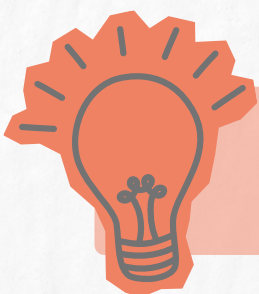
1.1. The “typical” results chain for a pooled transportation project

Before choosing what to measure, it is useful to understand **what you are trying to demonstrate**. In a pooled transportation project, indicators should be used to track both **immediate effects** (or project performance) and **longer-term effects** (or impacts).

To structure your indicators, visualize a typical **results chain** for a pooled transportation project. Here is a typical model for reference:



1. **Inputs:** resources mobilized (trucks, coordination time, partners).
2. **Activities:** actions carried out (routes completed, loading/unloading, logistics coordination, route planning).
3. **Outputs:** products or services resulting from the activities carried out (shared trips, deliveries made, coordination provided).
4. **Effects:** direct results (cost reduction, reduction in the number of trips, fuel savings).
5. **Impacts/Benefits:** longer-term changes observed (increased cooperation, strengthening of the local food network, reduction in GHG emissions, sustainability of the model).



This approach is based on Results-Based Management (RBM), which Collectif Récolte uses to structure the evaluation, impact measurement, and learning capture processes in its projects.

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Select and prioritize the indicators to be monitored

1.2. Two types of pooled transportation

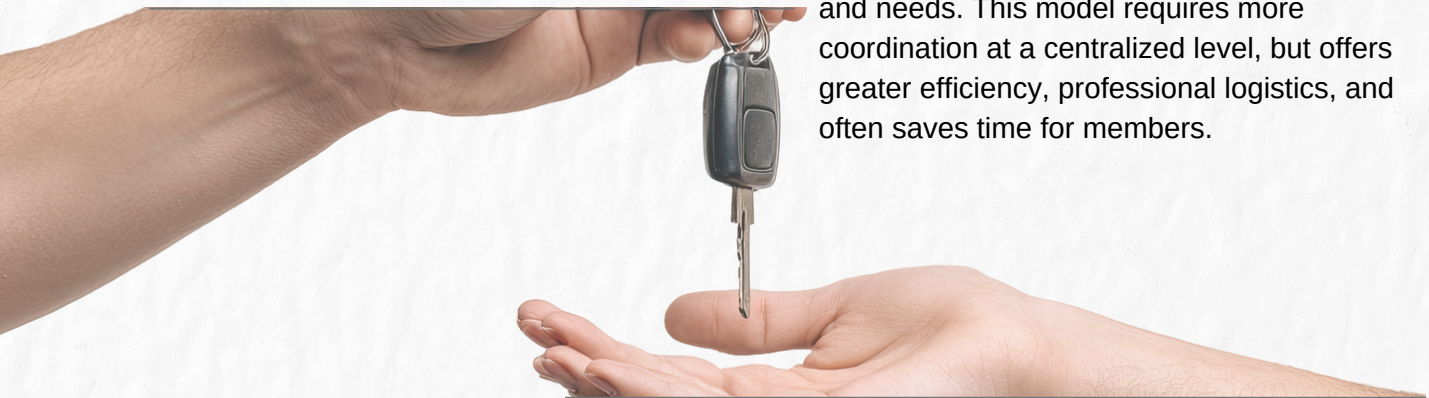
When considering the pooling of transport resources, you will probably have come across different pooling models. We have detailed the various models in [Chapter 3 of this guide](#). In this chapter, we distinguish between two main types of pooling: **vehicle sharing** and **grouped transport**. These share the common idea of **grouping together goods** from several shippers and/or recipients to **optimize transport costs**.

Vehicle sharing

Pooled transportation through vehicle sharing is when several organizations, companies, or institutions use the same vehicle or fleet of vehicles to optimize their use and manage their respective trips. It is a collective management system where members organize themselves to plan trips and share costs. A pooling structure (tools, processes) is set up and used by the members. This model is only beneficial for members who are geographically close to each other.

Grouped transport

In the case of grouped transport, coordination is no longer provided directly by users, but by a third party, often a cooperative, a non-profit organization, or a specialized company. This model consists of grouping the goods of several producers or businesses into planned transport routes, often in an optimized transport loop. The third party is responsible for collecting the products, planning the routes, and distributing the goods. Users do not have to manage the logistics themselves, but they do have to coordinate their service requests and needs. This model requires more coordination at a centralized level, but offers greater efficiency, professional logistics, and often saves time for members.



1.3. Suggested indicators

The choice of indicators depends on the type of pooled transportation approach implemented: **vehicle sharing** or **grouped transport**. Some indicators apply to both models, while others are more specific to a particular context.

The tables below provide a selection of useful indicators for assessing the **direct effects** and **impacts** of a pooled transportation project. We will return to this in subsequent sections, covering the data to be collected and calculation methods.



Select and prioritize the indicators to be monitored

Effect indicators (E.I.) - project performance

		DEGREE OF RELEVANCE OF THE INDICATOR ACCORDING TO THE TYPE OF SHARED USE	
INDICATOR	DESCRIPTION	SHARED TRUCK	GROUPED TRANSPORT
E.I.1 – Number of kilometres travelled	Measures logistics performance and route optimization	★★★★	★★
E.I.2 – Cost per kilometre	Evaluates the profitability of pooling	★★★★★	★★★★★
E.I.3 – Total number of trips made	Indicates the intensity of use of the service	★★★★	★★★★★
E.I.4 – Total volume transported (kg or m³)	Measures the capacity actually used	★★★★★	★★★★★
E.I.5 – Vehicle occupancy rate	Indicates filling efficiency (reduction in empty trips)	★★★★★	★★★★★
E.I.6 – Number of user organizations	Reflects the level of collaboration	★★★★	★
E.I.7 – Coordination/logistics management time	Shows whether pooling resources improves efficiency	★★	★★★★

Impact indicators (I.I.) - observed changes

INDICATOR	DESCRIPTION	SHARED TRUCK	GROUPED TRANSPORT
I.I.1 – Reduction in total cost	Measures the overall savings generated by pooling	★★	★★★★★
I.I.2 – Reduction in management time	Possible if pooling replaces several small individual trips	★★	★
I.I.3 – Kilometres avoided (Reduction in total kilometres travelled)	Indicates the reduction in travel and fuel consumption	★	★★★★★
I.I.4 – Reduction in greenhouse gas (GHG) emissions	Depends on the type of vehicle, trips avoided, and total kilometres travelled	★★	★★★★★

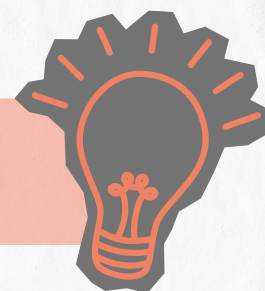
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Select and prioritize the indicators to be monitored

INDICATOR	DESCRIPTION	SHARED TRUCK	GROUPED TRANSPORT
I.1.5 – Improved coordination between stakeholders	Can be assessed through a survey or feedback	★★★	★★★
I.1.6 – User/partner satisfaction	Provides a qualitative overview of members' experience	★★★	★★★

Practical tip: These indicators can be combined in a dashboard or **results matrix** to track the project's progress over time.



20 Create “with” and “without” pooled transportation scenarios

To accurately assess the benefits generated by a pooled transportation project, it is essential to compare the situation **with pooled transportation** to a situation **without pooled transportation**.

This comparison forms the basis of your calculations and allows you to measure the real effects of pooling: cost savings, reduction in kilometres travelled and fuel consumption, time savings, reduction in GHG emissions, improved logistics coordination, etc.

In many projects, there is no historical data available for a situation without pooling. In this case, a **fictitious scenario** must be constructed, based on realistic assumptions that have been validated with the partners. This scenario becomes your **baseline**, i.e., your reference point for measuring the effects and benefits of the initiative.

2.1 Building credible scenarios

To be useful and credible, a scenario must be:

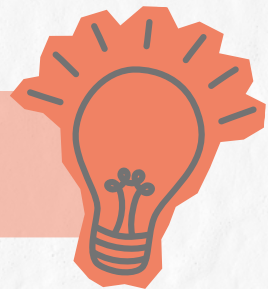
- **realistic:** based on plausible practices;
- **documented:** based on known or estimated data;
- **collectively validated:** discussed with partners;
- **transparent:** all assumptions must be explicit.

02 Create “with” and “without” pooled transportation scenarios

It must enable the estimation of:

- individual kilometres travelled;
- the costs assumed by each partner;
- the amount of time spent working.

Practical tip: Partners know their habits and constraints better than anyone else. Their participation is essential to avoid errors and refine the scenario.



2.2. Assumptions for creating a realistic “without pooled transportation” scenario

If you do not have access to historical data, you can build a fictional scenario by “unbundling” your current data. The goal is to reconstruct what each organization would have done **if pooled transportation did not exist**.

Here are some assumptions to explore with partner members in relation to the “without” pooled transportation scenario:

Each organization would have delivered its own products.

- You therefore need to know the production locations and delivery locations.
- For greater accuracy, you can also check what type of vehicle would have been used.

It is likely that individual members would have made a looped tour.

→ You must therefore explore together what would be the “logical” loops for each member: Departure → successive deliveries or pickups → return to the starting point.

Deliveries or pickups would probably be made less frequently, as a farm would not make several trips for small volumes.

- You must therefore survey member partners on what would be a realistic frequency of trips.

02

Create “with” and “without” pooled transportation scenarios

The “without” scenario therefore represents:

- several individual vehicles;
- repeated round trips or loops;
- higher overall kilometres travelled and travel time.

2.3. Assumptions for creating a realistic “with pooled transportation” scenario

1. In the shared truck model

The scenario most likely consists of several trips with the same vehicle. Once again, it will be necessary to estimate what each organization must do:

- Each organization delivers its own products.
- Each organization must provide a human resource to drive the vehicle.
- Each organization delivers at a different frequency and at different times (e.g., food must be picked up on Monday morning, deliveries must be made on Thursday before 3 p.m., etc.).
- Each organization has a different volume of goods to transport.

This scenario therefore represents:

- a single vehicle;
- repeated round trips;
- fewer overall kilometres travelled, if the truck’s capacity allows for fewer trips.



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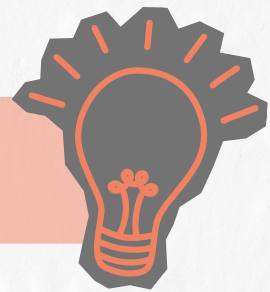
Create “with” and “without” pooled transportation scenarios

2. In the grouped transport model

The scenario probably consists of one or more loops optimized for several partners.

- Each organization must communicate its service requirements to the coordinating third party (frequency, times, volumes).
- Each organization contributes proportionally to the volume occupied in the truck, the kilometres travelled, and the overall fuel consumption.
- Calculate the kilometres of the transport loop with all pick-up and delivery locations.

Practical tip: A simple diagram (e.g., using Google Maps) can illustrate the difference between “with” and “without” pooled transportation.



This scenario therefore represents:

- a single vehicle;
- an optimized transport loop;
- fewer overall kilometres travelled;
- generally longer coordination time.

All these assumptions must of course be adjusted according to the realities of the project. The scenarios may be slightly more complex than the typical scenarios described above.

Example of a “grouped transport” scenario - L’Aube Food Hub

L’Aube Food Hub’s truck manages the distribution of orders for 18 member farms to 61 customers throughout Montreal (2025), from the West Island of Montreal.

Scenario “with” grouped transport:

- Farms located in the Outaouais region share transportation to the drop-off point in Montreal (a loop managed by the farms);
- The farms in the West Island bring their products to the same drop-off point, from where the L’Aube truck departs;

02

Create “with” and “without” pooled transportation scenarios

- The truck makes three different delivery loops per week to deliver food to 61 customers using optimized routes developed with the help of the route planner developed by Coop Carbone (see Chapter 4, Section 4.3).

The “with” scenario therefore corresponds to the sum of the trips from the farms to the depot and the three loops made by the truck from the depot. The scenario is repeated approximately every week during the growing season, so the calculation can be based on one or a few “typical” weeks.




Scenario “without” grouped transport:

- Each farm delivers food to the customers it serves (according to the sales register).
- It is unlikely that individual farms will make more than one trip per week for these journeys, with the exception of farms that have large volumes to distribute.
- Fictitious loops are calculated for each farm.

The typical scenario “without” grouped transport is therefore the sum of the fictitious loops for each farm.




The calculations indicate that, between 2021 and 2025, L’Aube’s grouped transport has avoided more than 21,000 km of travel.

Examples of typical scenarios

SCENARIO <u>WITHOUT</u> POOLING	SCENARIO <u>WITH</u> SHARED TRUCK	SCENARIO <u>WITH</u> <u>GROUPED</u> TRANSPORT
		
<p>KILOMETRES TRAVELLED: Each partner makes round trips with their own vehicle or truck.</p>	<p>Possibly the same round trips made by each partner, but made by the shared truck, as the partners’ project lacked a vehicle.</p>	<p>The truck makes a loop with several stops, which reduces the kilometres travelled.</p>
<p><i>(Continues on the next page)</i></p>		

02

Create “with” and “without” pooled transportation scenarios

SCÉNARIO <u>SANS</u> MUTUALISATION	SCÉNARIO <u>AVEC</u> CAMION PARTAGÉ	SCÉNARIO <u>AVEC</u> TRANSPORT <u>GROUPÉ</u>
	 <p>Potential savings in kilometres travelled and time if the truck has a larger capacity and avoids the need to make, for example, two round trips with a personal vehicle, or allows for a loop with more stops.</p>	
<p>HR TIME: Each partner must make a resource available to load, unload, and drive the vehicle.</p>	<p>Each partner must make a resource available to load, unload, and drive the vehicle.</p>	<p>Reduces the collective working time of the driver(s) who do the work for all partners.</p>
<p>COSTS: Each partner pays for their vehicle, insurance, fuel, etc.</p>	<p>Potential cost reduction, as each partner does not have to pay for the entire vehicle, insurance, fuel, etc. The difference depends on the total cost for the shared truck and the number of partners involved.</p>	<p>Greater cost reduction due to fewer kilometres travelled, which potentially leads to lower fuel costs (to be validated depending on the type of vehicle, however).</p>

03

Determine the calculation methods and data required to calculate the indicators

Once you have defined your “with” and “without” pooled transportation scenarios, the next step is to determine **how you will measure your indicators**. To obtain reliable results, it is important to specify **what data will be needed** and **what calculation method will be used** for each indicator.

This step helps avoid unpleasant surprises later on, and ensures that the indicators chosen are **realistic, measurable, and suited to your data collection capabilities**.



Determine the calculation methods and data required to calculate the indicators

3.1. Determine the data needed for each indicator

To perform reliable comparative analyses, it is essential to have a **minimum set of data**.

Before embarking on complex data collection, start by identifying your indicators (Step 1) and make sure you **only collect the data you really need**.

Five categories of data constitute the bare minimum for measuring the performance and impact of a grouped transport project:

1. **Distance and route data**
2. **Fixed and variable cost data**
3. **Time data**
4. **Volume and goods data**
5. **Environmental data**

These are relatively easy to collect and can be used to calculate a wide variety of useful indicators.

Distance and route data

DATA	POSSIBLE SOURCES
Departure addresses	Production point, warehouse, or collection point
Destination addresses	Customer or partner addresses (obtained via invoicing or delivery tracking)
Routes or loops	Actual journeys made by the vehicle (from point A to point B to point C, etc.), either round trips, loops, or any other scenario. One way of calculating these routes is provided in the appendix.
Frequency of deliveries	Delivery schedule / Route sheets
Kilometres travelled	Calculation via Google Maps or GIS (geographic information system) tool, or logbook/odometer recording kilometres travelled at each stop (faster to analyze, but requires a high degree of accuracy)
Number of delivery points	Recorded by delivery teams or from delivery slips



Determine the calculation methods and data required to calculate the indicators

Fixed cost data

DATA	POSSIBLE SOURCES
Insurance, vehicle purchase, regular maintenance	Administrative tracking or internal accounting
Vehicle depreciation	Estimated loss of value over a period ÷ kilometres driven Possible tools: <u>CarEdge</u> , manufacturer data, insurer valuations
Depreciation	Accounting standards

Variable cost data

DATA	POSSIBLE SOURCES
Number of management hours	Recorded by teams or estimated (number of deliveries × average management time per delivery)
Number of delivery hours	Recorded by teams or estimated (duration of rounds × number of delivery personnel)
Salaries (delivery + management)	Internal accounting: hourly wage × number of hours worked
Fuel cost	Kilometres travelled × fuel cost per km (Fuel cost/km = fuel consumption L/100 km × price per liter)

Time data

DATA	POSSIBLE SOURCES
Journey duration - hours spent on deliveries	Estimated using Google Maps or logbook recording the time at each stop
Loading and unloading times	Assessed by the person responsible for loading – ideally to be compiled in the sheet or road log
Preparation and coordination time	Assessed by the person responsible for preparation and coordination - ideally to be compiled in a logbook or based on timesheets where applicable



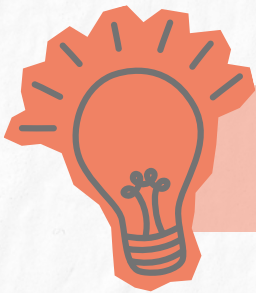
Determine the calculation methods and data required to calculate the indicators

Volume and goods data

DATA	POSSIBLE SOURCES
Quantity transported (kg, volume, or units)	Recorded by teams or based on delivery slips
Vehicle capacity	Vehicle technical specifications

Environmental data

DATA	POSSIBLE SOURCES
Fuel type and average vehicle consumption	Vehicle technical specifications
CO ₂ emission factor	Depends on consumption and fuel type Resource: Search tool for fuel consumption ratings If the vehicle is not listed, multiply the fuel consumption (L/km) by the fuel emission factor: <ul style="list-style-type: none">• Gasoline: 2.29 kg CO₂/L• E10: 2.21 kg CO₂/L• E85: 1.61 kg CO₂/L• Diesel: 2.66 kg CO₂/L• B5: 2.65 kg CO₂/L• B20: 2.62 kg CO₂/L



Practical tip: Each indicator must be associated with a **specific type of data**. If an indicator requires data that you cannot obtain, it must be adjusted or replaced.

3.2. Determine calculation methods

Calculation methods must be **simple**, **transparent**, and **reproducible**. This is not an academic exercise, but a tool to support your decisions.

Here are some examples of methods:



Determine the calculation methods and data required to calculate the indicators

INDICATOR	CALCULATION METHOD	NOTES/DETAILS
I.I. 3 - Kilometres avoided	Kilometres travelled without grouped transport – kilometres travelled with grouped transport	Used as the basis for several other calculations (time, costs, GHGs)
E.I.2 - Cost per kilometre	Total cost of trip (\$) ÷ kilometres travelled (km)	Useful for comparing costs between several transportation models
I.I.4. - GHG emissions reduction	Kilometres avoided × vehicle emission factor	Use the correct factor according to the fuel (gasoline, diesel, etc.)
E.I.5 - Vehicle occupancy rate	Volume or weight transported ÷ maximum vehicle capacity	Key indicator for assessing logistics efficiency

3.3. Check feasibility and adjust as necessary

Before finalizing your indicators, ask yourself the following questions:

- Do you have access to the necessary data?
- Is data collection realistic for your teams?
- Are the calculation methods understandable to everyone?
- Will these indicators really help you make good decisions?

3.4. Document your choices

To ensure consistency in monitoring, note the following for each indicator:

- a unique code so that it can be easily found;
- its definition;
- the required data;
- the calculation method;
- the source of the data;
- the frequency of collection;
- the person responsible for collection.

Practical tip:

We recommend starting simple: Four to six well-measured indicators are better than 18 incomplete ones.





Determine the calculation methods and data required to calculate the indicators

This table will become your **monitoring/evaluation reference** for the entire project.

Indicator	Definition	Required data	Calculation method	Data source	Frequency	Responsible
I.I. 3 - Kilometres avoided	Difference between kilometres travelled without pooled transportation and kilometres travelled with pooled transportation	<ul style="list-style-type: none"> km "without" (scenario) km "with" (actual) 	km without – km with	Logbooks or records / scenarios / GPS	Monthly	Transport coordinator
E.I.2 - Cost per km	Cost per km travelled in pooled transportation	<ul style="list-style-type: none"> Total transportation cost km travelled 	Total cost ÷ km	Budget, invoices, fuel	Monthly	Financial manager
E.I.5 - Vehicle occupancy rate	Truck fill level	<ul style="list-style-type: none"> Total weight or volume delivered Vehicle capacity 	Volume delivered ÷ capacity	Loading records	Weekly	Driver
I.I.4. - Reduction in GHG emissions	Reduction in emissions due to kilometres not travelled	<ul style="list-style-type: none"> km avoided emission factor 	km avoided × emission factor	GHG tool / energy data	Quarterly	Environmental manager
I.I.6 - Partner satisfaction	Level of satisfaction with service	<ul style="list-style-type: none"> Survey results 	Average of results	Internal survey	Semi-annually	Partner coordination

04 Create or adapt data collection tools and share responsibilities

Once you have defined your indicators and established your calculation methods, it is time to put in place the **practical tools** that will enable you to collect data. The objective is simple: To make data collection **easy, regular, and shared** among project members.

The tools do not need to be sophisticated. What matters is that they are **clear, accessible, and adapted to your reality in the field.**

4.1. Choose simple and appropriate tools

Depending on your project, several formats can be used to collect the necessary data:

Roadmap

A document used by the driver to record kilometres travelled, delivery points, volumes transported, and total travel time.

This tool is essential for tracking kilometres travelled, time, and costs.

Truck logbook

A paper or digital logbook that tracks the vehicle's fuel usage, maintenance, incidents, driver observations, hours of use, and truck occupancy rate.

This tool is useful for calculating **costs, efficiency, and fleet management.**

Tracking table (Excel or Google Sheets)

A central tool for compiling data from several weeks/months, tracking indicators over time, and creating a simple dashboard.

Particularly effective for **multi-organization** projects.

Online form (Google Form, Kobo, Typeform, etc.)

Ideal for gathering partner satisfaction feedback, conducting a short survey after a few months of operation, collecting qualitative data (comments, limitations, suggestions).

04

Create or adapt data collection tools and share responsibilities

GPS application or digital tracking (optional)

For projects that wish to do so, simple GPS apps (e.g., [MileIQ](#)) can automate the collection and reporting of kilometres travelled.

→ Only use if teams are comfortable with the tools.

4.2. Define who collects what, and how often

A good tracking system is based on a simple rule: **if everyone is responsible, no one is really responsible**. It is therefore essential to clarify responsibilities:

Possible roles depending on the tasks

DATA TO BE COLLECTED	RESPONSIBLE	FREQUENCY
Kilometres travelled, routes, volume delivered	Driver	For each trip
Fuel costs, maintenance	Manager or accountant	Monthly
Partner satisfaction	Project coordinator	Quarterly or semi-annually
Data for scenarios "without grouped transport"	Partners / producers / organizations	At the start of the project, then annual review
Environmental indicators	Environmental manager or equivalent	Quarterly

4.3. Why sharing roles is essential

Sharing roles makes it possible to:

- avoid overburdening a single person;
- ensure **continuous and reliable collection**;
- empower each member of the project;
- foster **collective learning**;
- facilitate data validation during analysis.

04

Create or adapt data collection tools and share responsibilities

Practical tip: Setting aside a short time for data collection during monthly or weekly meetings helps maintain discipline and quickly detect inconsistencies in the data.



4.4. Think about ease of use

A good tool is:

- easy to understand;
- easy to fill out;
- accessible (paper or digital, depending on the team);
- uniform for all trips;
- compatible with your indicators.

If a tool is too complex, it will not be used.

05 Analyze and use the results

Collecting data is useless if it is **not analyzed and used**. Analysis is therefore an essential step: it allows you to make sense of the figures collected, to understand what is working well and what needs to be adjusted.

Analyzing the results involves:

- comparing data “with” and “without” grouped transport;
- identifying trends (e.g., decrease in kilometres, increase in occupancy rate);
- identifying strengths and pain points;
- understanding the experience of partners (qualitative feedback).



Analyze and use the results

The ultimate goal is to transform this information into **concrete decisions**:

- adjust route planning;
- improve coordination and communication;
- optimize costs or schedules;
- promote the results to partners and donors;
- demonstrate the project's impact in your reports or public communications.

In other words, **if you collect data but don't use it, it's useless**. Analysis is what allows you to move from simple measurement to **collective learning** and continuous improvement.

IN CONCLUSION

This guide was designed to support organizations, farms, and community groups that want to develop or improve a pooled transportation system. Throughout the various chapters, you have explored the key steps: assessing your needs, choosing a suitable vehicle, understanding pooled transportation models, organizing your operations, and finally, measuring the effects and impacts of your project.

Setting up pooled transportation is a process that requires coordination, communication, and active collaboration between partners. But it is also an approach that can generate significant gains: cost reduction, resource optimization, lower GHG emissions, better access to local food, and stronger territorial networks.

Evaluation plays a central role in this process: It not only demonstrates the results achieved, but also allows us to learn together, make necessary adjustments, and strengthen the sustainability of the project.

Data that is collected but never used does not create value. It is the lessons learned, the discussions, and the decisions made together that transform a project into a sustainable initiative.

We hope that this guide will help you move forward with confidence in your approach, strengthen your partnerships, and support the development of a more efficient, more inclusive, and more sustainable food system in your region.

Appendix

Creating roadmaps for grouped transport using free and easy-to-use tools

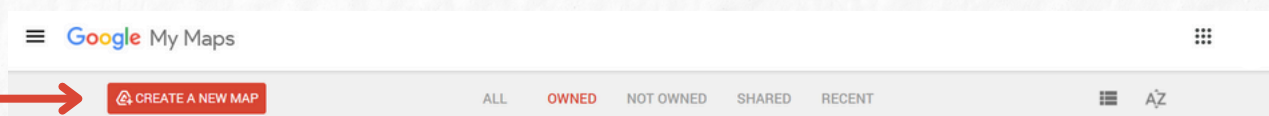
This section details the processes, methods, and tools needed to design maps and plan routes. Some more specialized tools may be considered; we present a few of them in section 4.3 of [Chapter 4](#) of this guide.

Guide to using Google MyMaps and creating maps

Several tools and software programs are available to help you create maps of grouped transport routes, which are often complex and intended for a professional audience of geomaticians and geographers.

Step 1: Creating a MyMaps map

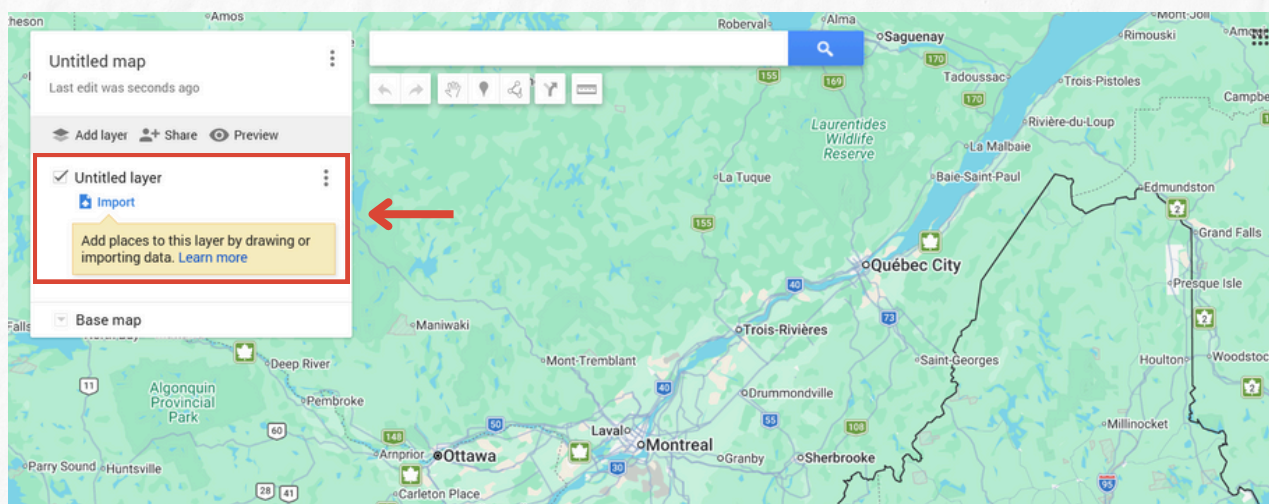
First, go to the [Google MyMaps](#) interface and create your first map. The application will then create a blank map, accessible from the MyMaps interface and saved to your personal Drive. You can now add different types of *layers*.



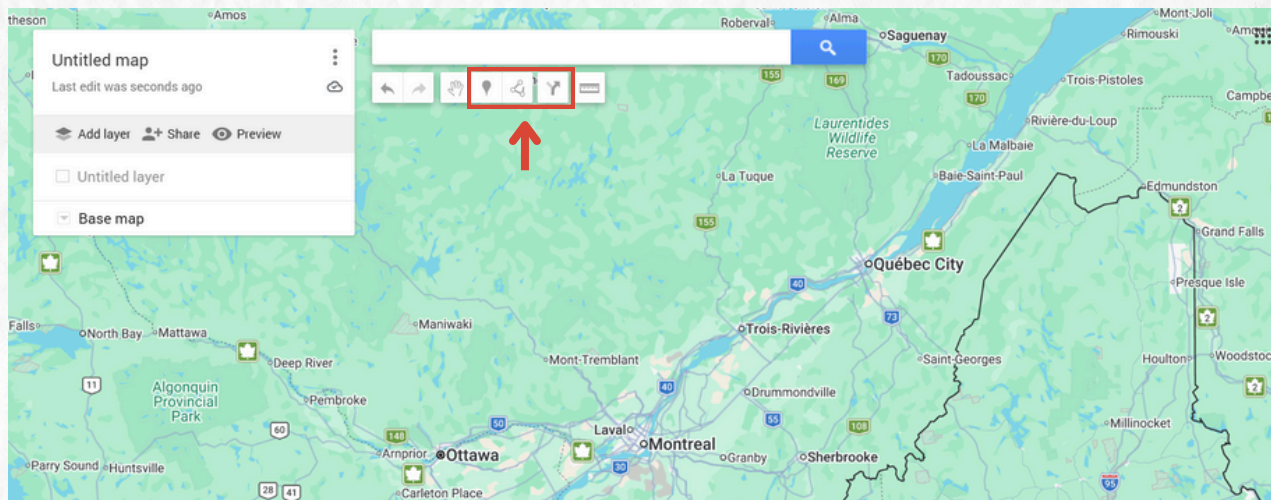
Step 2: Add layers

First, it is important to understand what layers are and what forms they can take. A layer is simply a layer of geographic information consisting of points, lines, and polygons. These three shapes allow you to represent reality cartographically. MyMaps allows you to display up to **10 layers of 2,000 elements each**.

By clicking on “Import” in the layers section, you can import layers using CSV, XLSX, or Google Sheets formats, as well as KML/KMZ (a type of geographic file) by following a few rules.



It is also possible to manually create point, line, and route layers using the *Add marker*, *Draw a line*, and *Add directions* functions located under the search bar at the top of the page.

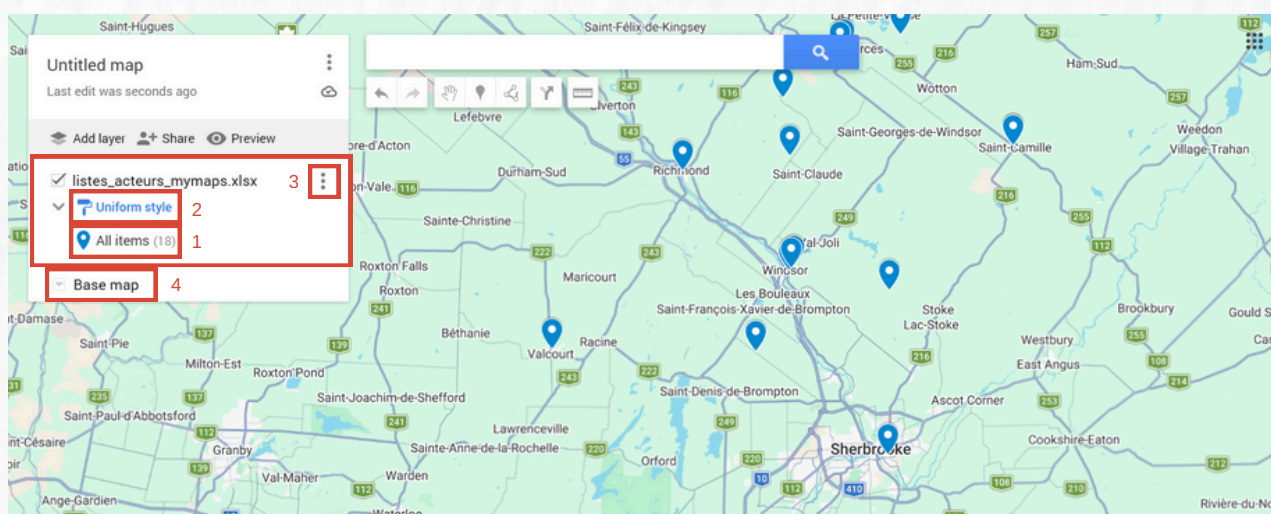


Point layers represent specific locations. In the context of route calculation, these are production, storage, and distribution locations. To create these layers, you can select a file that contains at least addresses or geographic coordinates.

Line layers represent boundaries, obstacles, or roads. These types of layers are used to visualize calculated routes. For these, you can select a route in KML format.

Polygon layers represent areas. In the context of grouped transport, these are not very useful but can be added to maps to provide more context for readers. Polygons also require the use of KMLs.

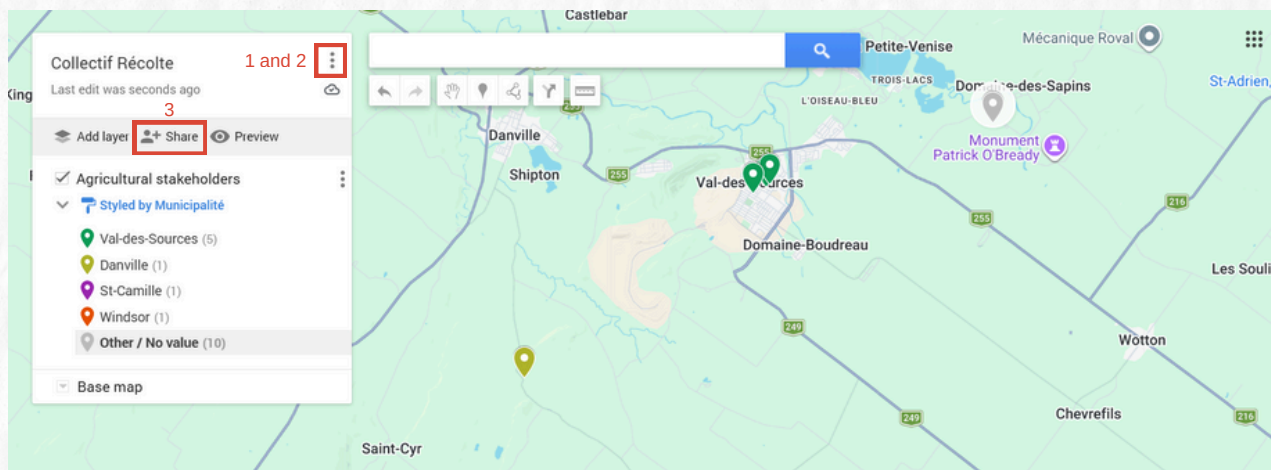
Finally, feel free to change the symbols of the layers by 1) using more appropriate colours and icons; 2) grouping entities according to different symbols; 3) renaming the layers; and 4) changing the base map.



Step 3: Sharing and saving the map

Another advantage of Google MyMaps is that it makes it very easy to share the maps you create. The tool allows you to:

- export layers in KML and KMZ formats, allowing you to continue working with more specialized tools;
- easily print the entire map on paper;
- automatically save the map to avoid losing your work;
- share an Observer link to the map in order to share the results.



Decision Support Guide for Food Transport Vehicles: Chapter V: Evaluating the effects and impacts of a pooled transportation project

Written by Yani Cournoyer-Dupuis and Réginald Vigile

Edited by Isabelle Vandepias, Dominique Lalonde and Emmie Garneau (Le Point final)

Translated by Lorraine Gagnon

Layout by Karolane Thibault

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Montréal  Canada 



5520 Chabot Street, Suite 401, Montreal (QC) H2H 2S7
514 360-1086 | info@recolte.ca | www.recolte.ca