

SUSTAINABLE TRAVEL AND MOBILITY GUIDE



McGill

SUSTAINABILITY
AT MCGILL



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INTRODUCTION

Travel and mobility play an important role in supporting the University's mission. They are a means to generate positive impacts and an opportunity to consider and mitigate negative impacts – for our community and for the communities and environments with which we engage. Sustainable travel at McGill University refers to travel-related decisions and activities that take full account of present and future **environmental, social, and economic impacts** in our local and host communities, while supporting the University in delivering its mandate.

Becoming a truly sustainable institution relies on the participation and commitment of our entire community, especially when it comes to individual activities with a high degree of individual choice, like travel and mobility. The guidance in the Sustainable Travel and Mobility Guide, and the many McGill-specific resources provided in the Appendix, will help you to reduce some of the negative impacts from travel by encouraging you to factor sustainability into your travel decisions.

This Guide is best practice for all University travelers – students, faculty, and staff – and applies to travel **within and outside of Montréal**. While the guide primarily targets **university-related travel**, since travel of this type relates directly to McGill's mission, the guidance provided in the “Local Travel & Mobility” section is useful for commuters as well.

Following several rounds of consultation with students, faculty and staff, this Guide was developed in tandem by the Office of Sustainability, Procurement Services, and Utilities and Energy Management. We appreciate and rely on the commitment of our community in aligning University-related travel with our [Sustainability Policy](#), [Procurement Policy](#), and [Vision 2020 Sustainability Strategy](#).



Defining Travel and Mobility

As a research-driven institution with an international population, three campuses in Québec, and numerous research and field stations, our community has many reasons to travel. We categorize our travel-related activities into two main types: travel and mobility.

University-related Travel refers to travel for university-related reasons, and is typically eligible for reimbursement by the University. This includes travel for research, fieldwork, conferences, lectures, recruitment, meetings, events, and travel by our varsity sports teams. It consists of transportation arrangements by various modes, vehicle rentals, and accommodation.

Local Travel and Mobility refers to commuting: the regular (and often daily) movement of our community members between their home and their place of work or study, as well as trips between our campuses. Mobility is typically not eligible for reimbursement, while local travel between campuses can be.



Environmental, Social, and Economic Impacts of Travel

Traveling sustainably requires one to consider the environmental, social, and economic impacts of our actions. By choosing more sustainable travel and accommodation choices, you can mitigate the negative impacts that your actions and purchases have on local employment and businesses, as well as cultural and environmental heritage. Of course, traveling more sustainably can also help minimize emissions to air, water and soil, reduce light and sound pollution, and mitigate detrimental effects on biodiversity.

Greenhouse gas (GHG) emissions from travel and mobility – including **university-financed air travel, sports team travel, the inter-campus shuttle bus, and commuting** – **accounted for 26% of McGill's overall emissions in 2017**. As one of the long-term targets in our [Vision 2020 Climate & Sustainability Action Plan](#) (2017-2020), McGill committed to achieving carbon neutrality by 2040. We know that managing our travel footprint and reducing negative impacts from travel will be critical to our success.

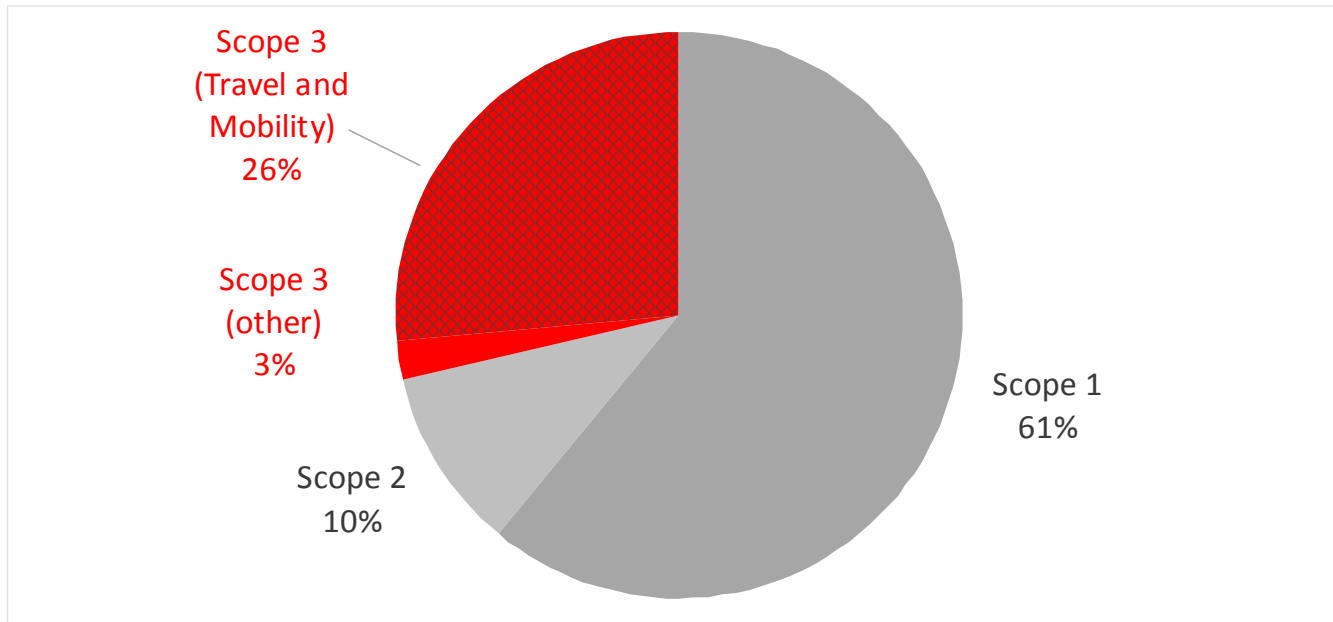


Figure 1. McGill University's greenhouse gas emissions breakdown by scope¹ and activity for 2017

¹ GHG emissions are categorized by scope: Scope 1 (direct emissions), Scope 2 (energy indirect emissions) and Scope 3 (other indirect emissions). An organization has the most ownership and control over Scope 1 and 2 emissions; Scope 3 emissions are also significant due to supply chains, travel, waste, and leased facilities.

BEST PRACTICE 1: CHOOSE TO TRAVEL LESS

Traveling less is the most effective way to curb our travel footprint and reduce GHG emissions, and will often mean developing alternative plans, such as leveraging communication technologies. Using and requesting virtual options not only helps reduce our emissions; importantly, doing so also helps improve accessibility for researchers and students with fewer resources around the world by signaling the need for meeting and event organizers to offer virtual and online platforms. Traveling less, being mindful of the number of travelers, and bundling trips together are cost-effective measures as well.

Guidance

1. **Look for opportunities to avoid University-related travel.** Actively identify events where you could benefit from the activity using virtual and online means of attendance and communication.
2. **Make use of online programming and technologies.** Conferences and events often host at least some programming online. Contact event organizers to inquire about virtual options. Video-conferencing and other tools can help replace a portion of meetings and other events requiring travel.
3. **Consider how many people need to attend the event.** Reducing the number of people who are traveling can often reduce the travel footprint, especially for air travel. If fewer people are attending, create processes to share knowledge and research.
4. **Combine multiple trips.** If you often travel between the same locations, or have events and meetings in the same region, take action in advance and plan to combine trips, especially for air travel.
5. **Collaborate with local networks.** Consider “hub-and-node” event design – local events held in tandem with a larger central event – and reach out to your local networks.

BEST PRACTICE 2: CHOOSE TO TRAVEL SUSTAINABLY

If you decide to travel, you can reduce your travel footprint by choosing the most sustainable mode and route (itinerary) for the distance and number of travelers. While certainly not the only sustainability consideration, **greenhouse gas emissions** are one way to compare the sustainability of different travel modes because they are linked to fuel consumption and combustion technology. Modes with a lower carbon footprint are often more cost-efficient and accessible as well.

The emissions associated with different forms of transport depend on many factors including fuel type, vehicle model and age, technology, class of travel, passenger load, local energy grids, and distance travelled. Average “carbon intensity” factors, calculated as tonnes of carbon dioxide equivalent² per passenger kilometer (tCO₂e/pass-km), are available and provide a useful comparison when planning a trip and deciding on travel mode – refer to Figures 2, 3, and 4.

LOCAL TRAVEL AND MOBILITY

Local travel and mobility within Montréal and southern Québec includes commuting to and from our campuses, travel between our campuses and affiliate locations, fieldwork, sports teams travel, meetings, and collaborating with other Montréal-based institutions; it does not include air travel, which is not generally a sustainable option for local trips. This guidance also applies to travelling locally once you have reached a non-local destination.

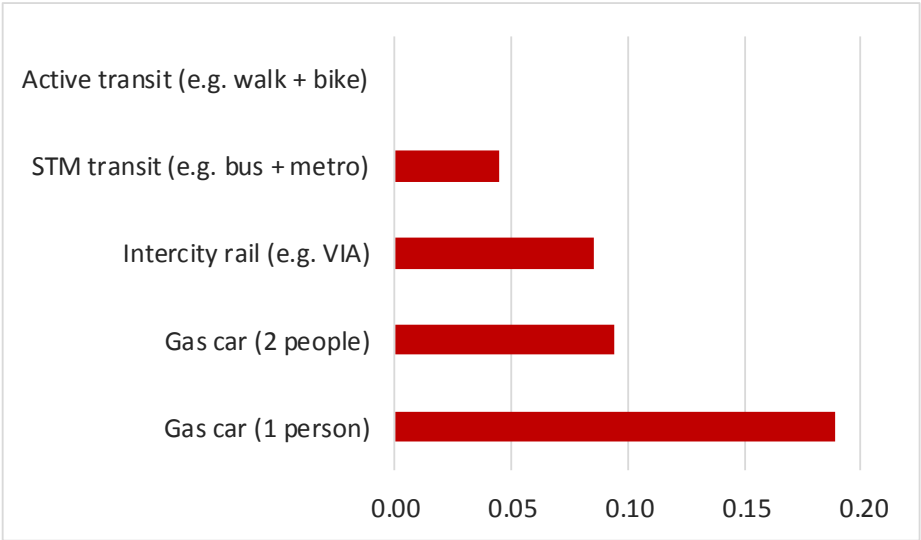


Figure 2. Comparison of Montreal-Specific Local Travel Modes³ (kgCO₂e/passenger-km)

² Carbon dioxide equivalent is used to convert the global warming potential of the Kyoto Protocol GHGs – carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride, and nitrogen trifluoride – into a common unit.

³ Emission factors sourced from Environment Canada’s National Inventory Report (2017), the Office of Energy Efficiency (2017), STM’s Rapport de développement durable (2017), and the US Environmental Protection Agency’s GHG Emission Factors Hub (2015).

Guidance

1. **Whenever possible, prioritize active transit⁴.** Active transit is the most sustainable form of transportation from an environmental, social and economic perspective: reduced fuel consumption, greenhouse gas emissions, air pollution and road congestion, improved health through physical activity, and more affordable and accessible for individuals.
2. **Where active transit is not an option, choose public transit⁵ over private vehicle journeys.** McGill offers an inter-campus shuttle bus between the downtown and Macdonald campuses. Société de transport de Montréal (STM) coverage is extensive, and paratransit service is offered to those with accessibility needs.
3. **If journeys require private vehicles, reduce single-occupant vehicle journeys and maximize carpooling.** Fewer vehicles with more passengers lowers the carbon intensity of travel significantly while also reducing congestion, noise and air pollution.
4. **If renting or choosing between vehicles, prioritize fuel efficient and alternative fuel models,** such as electric and hybrid vehicles or top-performing vehicles for fuel efficiency. There are electric vehicle charging stations located in the Bronfman and McIntyre garages downtown and at the Macdonald and Gault campuses.
5. **Help facilitate active and public transit.** Be understanding of the time required to travel to meetings or events using these options, ensure reimbursements for public transit are provided, and help raise awareness and provide resources.



⁴ Active transit refers to “human-powered transit” and includes activities like walking, cycling, using a wheelchair, rollerblading, skiing, and skateboarding.

⁵ Local public transit options include buses, light rail and rapid transit (e.g. trams and subways), commuter and national rail, and ferries. Fortunately, Montréal’s transit system has wide coverage, including a specific airport bus route, and is more affordable than other similarly sized Canadian cities.

NON-LOCAL TRAVEL

University-related travel to northern and western Canada and international destinations often requires air travel. The emissions generated from one traveler's return flight in business class between Montréal and Tokyo are 4.79 tCO₂e⁶. Compared to the global average annual emissions per capita in 2014, which were 6.29 tCO₂e⁷, this single return flight accounts for 76% of this amount. It is clear that reducing air travel, and making sustainable decisions when we do fly, i.e., choosing economy class, is critical to our efforts to become a more sustainable institution.

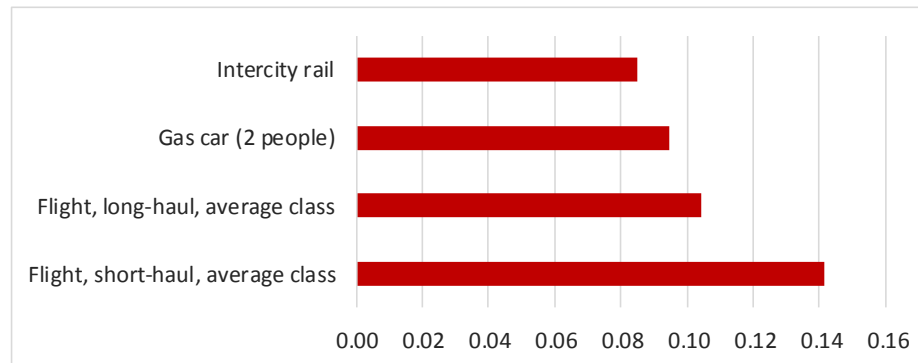


Figure 3. Comparison of Average North American Non-local Travel Modes⁸ (KgCO₂e/km)

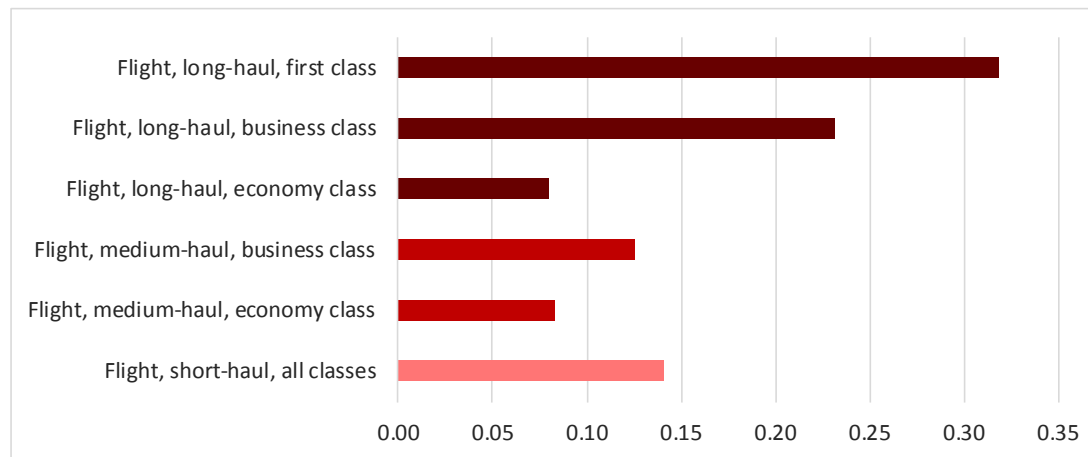


Figure 4. Comparison of Flight Classes for Air Travel (KgCO₂e/passenger-km)

⁶ Conversion factors 2018. Department for Business, Energy & Industrial Strategy (BEIS). Available online: <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2018>.

⁷ CAIT Climate Data Explorer. Total GHG Emissions excluding land-use change and forestry per capita, 2014. <http://cait.wri.org/historical/>.

⁸ Emission factors sourced from the UK's Department for Business, Energy & Industrial Strategy's 2018 conversion factors (2018), Environment Canada's National Inventory Report (2017), the Office of Energy Efficiency (2017) and the US Environmental Protection Agency's GHG Emission Factors Hub (2015).

Guidance

1. **Prioritize rail over air travel for shorter trips.** The carbon intensity of short-haul air travel (<490 miles) is disproportionately higher because a greater portion of emissions are generated during the take-off and landing cycle. Rail travel is an excellent option, especially within Europe, Japan, and eastern North America.
2. **Choose car travel over air travel when traveling with a group.** Renting one or more vehicles and maximizing the occupancy of each, especially if you choose alternative fuel or fuel-efficient options, reduces fuel consumption and GHGs per traveler significantly compared to air travel.
3. **Choose economy class.** Business and first class seats offer more space and services, which translates into a greater share of weight per passenger and, consequently, increased fuel consumption and emissions. Booking seats in a fare class greater than economy (or lowest logical airfare) requires the prior approval of the Dean or Vice Principal/Provost⁹.
4. **Fly direct.** As mentioned above, take-off and landing cycles contribute heavily to flight emissions, so choosing direct flights or a route with fewer connections is often more sustainable. Also, direct flights mean less distance traveled.
5. **Use public transit for travel to and from transport hubs.** Taxis and private vehicles are often used for travel to and from airports and train stations, but many cities offer affordable and efficient public transit designed for airport service.
6. **Fill out expense reports in a bit more detail.** To calculate the University's annual emissions, we currently rely on expense reports for air travel data. Take a few moments to fill these out clearly, especially for trips with flights. Include all destinations visited for multi-leg journeys in the "Destination" field, and indicate the airport as well (e.g. "Montréal to NYC (JFK) to Santiago (SCL) to Los Angeles (LAX) to Montréal (YUL)").
7. **Consider purchasing third party offsets.** Choose carbon offset¹⁰ projects that are certified (e.g. Gold Standard) by a reputable third party, demonstrate proven additionality and permanence, and have systems in place to reduce leakage.

⁹ From McGill's [Procedures for Travel and Other Reimbursable Expenses](#)

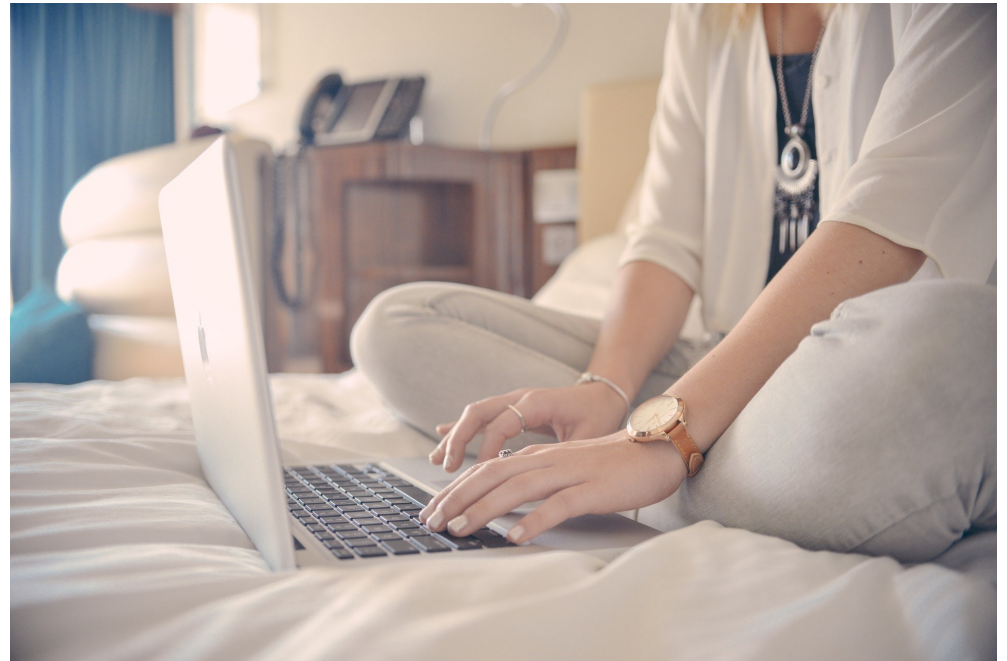
¹⁰ A carbon offset, measured in tCO₂e, is a credit for emissions reductions achieved by one party that another party can purchase and use to compensate – or "offset" – their GHG emissions.

BEST PRACTICE 3: CHOOSE ACCOMMODATIONS WISELY

Accommodation services generate multiple social, environmental and economic impacts. The provision of clean and comfortable spaces requires energy, clean water, food and other services that provide local employment but also generate impacts on local resources: water (from wastewater and pollution), air (from solvents, aerosols, detergents, vehicle emissions and heating/cooling), soil (from waste management), and even in some cases changes in land use and the affordability of local housing. Research and favour more sustainable accommodation.

Guidance

1. **Look for more sustainable lodging options.** Some hotels and guesthouses take tangible steps to reduce their environmental impacts. Research carefully, and refer to credible sustainability ranking and certification schemes where available (see Appendix for examples).
2. **Inquire about their commitment to sustainability.** If a trusted certification or ranking is not available, make inquiries. Do they have a policy or strategy for addressing social, environmental, and economic criteria? Have they implemented any sustainability initiatives? Be aware of greenwashing and marketing gimmicks.
3. **Choose accommodation that reduces daily travel.** If possible, choose lodging in a neighbourhood that will allow you to use active or public transit to get to events and meetings.
4. **Be a conscientious visitor.** You can take small actions to reduce the impact of your stay. Turn off lights and A/C when you're not in the room, opt out of having your linens and towels changed daily, make use of low-flow showerheads where available, bring your own toiletries to mitigate single-use plastics, and unplug small appliances and electronics you don't plan on using. If you are so inclined, take time to learn about the local history and culture and enjoy locally produced food, too.



BEST PRACTICE 4: SUPPORT SUSTAINABLE TRAVEL EFFORTS

The following steps help build a culture of sustainable travel at the University and improve the accuracy of our own travel data, which we rely on for annual GHG inventory reports, tracking and communicating progress, and external data reporting like AASHE's STARS¹¹ program.

1. **Spread the word.** Lead conversations about sustainable travel habits in your unit. Let others know about McGill's sustainability strategy and carbon neutrality target, and share these Guidelines with them.
2. **Plan sustainable events that factor in travel considerations.** If you are planning an event, make use of [McGill Sustainable Events'](#) guidance (there is a section specific to travel) and consider getting your event certified.
3. **Work with your team towards a Sustainable Workplace Certification.** With increasing levels of ambition from Bronze to Platinum certification, the [Office of Sustainability's workplace program](#) addresses travel. The Silver level features actions related to videoconferencing and strategic meeting planning to maximize active and public transit, while the Platinum level promotes active and public transit for mobility and encourages the purchase of offsets to compensate for air travel emissions.
4. **Engage with Transportation Research at McGill (TRAM).** The [TRAM research group](#), a multidisciplinary team in the School of Urban Planning, conducts diverse research on transportation systems, active transit, and travel behaviour. They also collect and analyze data on the travel and commuting habits of the McGill community – take advantage of the opportunity to provide feedback if you receive the survey, and check out past results on their [website](#).
5. **Set specific travel guidelines or targets for your team.** These Guidelines provide strategic advice for all travelers in the McGill community. Your own team may have insights and ideas for travel specific to your unit.

¹¹ McGill reports to the Association for the Advancement of Sustainability in Higher Education's (AASHE) Sustainability Tracking, Assessment & Rating System (STARS) and has set a long-term target of achieving a Platinum STARS rating by 2030.

APPENDIX: RESOURCES

BEST PRACTICE 1: CHOOSE TO TRAVEL LESS

- The University IT Knowledge Base lists publicly available [video-conferencing facilities](#).
- Teaching & Learning Services offers the [MS-74 innovative classroom](#) space featuring a range of technologies – including video-conferencing with external participants.
- Other video-conferencing facilities may exist within your department or faculty and be available upon request.
- The IT Knowledge Base provides instructions for using the existing [Skype for Business and Adobe Connect](#) platforms.
- Share knowledge and resources in a shared online hub like OneDrive, Documentum D2 and Yammer.

BEST PRACTICE 2: CHOOSE TO TRAVEL SUSTAINABLY

Local Travel

- Use this [map of bicycle racks](#) near the downtown campus to help plan your trip.
- McGill offers a discounted annual membership to the [BIXI bike-share program](#) and there are stations all around the downtown campus.
- A small [self-serve bike fleet](#) is available for loan – free of charge – at Laird Hall on the Macdonald Campus to folks with a valid University ID.
- The FLAT Bike Collective, run by student volunteers, offers the space, tools and know-how to teach you how to repair your bike – free of charge.
- McGill's [adapted transport service](#) is free to students & staff with mobility impairments.
- Visit the STM website for information about their [paratransit program](#).
- Refer to the University's [campus access guides](#) to familiarize yourself with the accessibility of different buildings.
- Our [inter-campus shuttle bus](#) provides free transportation between the downtown and Macdonald campuses, and the bus features equipment to transport two bicycles.
- Compare the fuel efficiency of vehicles using Natural Resources Canada's [fuel consumption ratings tool](#) and factor this into vehicle rental decisions. One rule of thumb is to select the smallest vehicle appropriate for the intended use and group size.
- Travel Services provides resources for [booking rental cars](#) within and outside of Canada.
- The [747 bus](#) provides easy access between downtown and the P.-E. Trudeau airport.
- Visit Parking and Transportation Services' [Transport website](#) for a wealth of information on how to get to, from, and around our campuses.

Non-local Travel

- McGill offers a [discounted rate for VIA Rail](#) to students traveling for University-related purposes, and to faculty and staff for any travel for themselves and up to three people.
- Compare the fuel efficiency of vehicles using Natural Resources Canada's [fuel consumption ratings tool](#) and factor this into vehicle rental decisions.
- Consider booking air travel through [Vision Travel](#) for discounted airfare. Data for flights booked via the Platform is accurate and helps support our GHG inventories, and allows us to gather data on travel needs towards optimizing pricing. In addition, when booking via Vision, travelers can view and compare GHG emissions for different flight options.
- Roughly compare the travel time and emissions of planes, trains and automobiles for several [popular VIA Rail routes](#).
- For information on reputable third-party carbon offset providers, please contact the [McGill Office of Sustainability](#).
- Visit [McGill Travel Services' website](#) for more helpful information.

BEST PRACTICE 3: CHOOSE ACCOMODATIONS WISELY

- McGill's Travel Services has negotiated [special arrangements with hotels](#) near the downtown and Macdonald campuses – including many within walking distance. There are also reduced rates available for hotels throughout Quebec.
- Check out the rating of your accommodation options under the following programs:
 - ♦ [Green Key Global](#)
 - ♦ [Green Globe](#)
 - ♦ [Trip Advisor's Green Leaders](#)
- University staff can take advantage of [preferential hotel rates in Canada](#) through the Canadian Association of University Business Officers (CAUBO).