MOVING FORWARD:

SUSTAINABLE TRANSPORTATION STRATEGY 2017-2022



UNIVERSITY of Manitoba



March 2017

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LETTER FROM THE PRESIDENT

I am pleased to introduce the University of Manitoba's first Sustainable Transportation Strategy. This forward-thinking plan supports efforts to expand healthy and sustainable transportation choices for the more than 35,000 staff, faculty, students and visitors we welcome to our campuses every day.

In our strategic and campus plans, we have committed to demonstrate leadership in the three pillars of sustainability: social, environmental and economic. We have stated our intention to be responsible stewards and to consider the generational impacts of our actions. This new transportation strategy moves us forward in those efforts.

To date, our community has successfully initiated the introduction of a universal bus pass (U-Pass) for students, designated twenty-four carpool-only parking spaces (and counting), and improved access to secure bike parking and bike rack options on campus. We also know, through feedback from the University's first comprehensive Transportation Survey, that more than half of our university community members arrive to campus by active and sustainable means.

It is clear that our university community recognizes the value in achieving our transportation and accessibility goals to create and maintain walkable, accessible and connected communities. Looking ahead, the Sustainable Transportation Strategy will continue to guide as we expand our sustainable transportation options.

Thank you to our university community for sharing your experience and expertise as we work together to create a world-class environment for learning, discovery and community engagement.

David T. Barnard, Ph. D. President and Vice Chancellor University of Manitoba



TRADITIONAL TERRITORIES ACKNOWLEDGMENT

The University of Manitoba campuses are located on original lands of Anishinaabeeg, Cree, Oji-Cree, Dakota, and Dene peoples, and on the homeland of the Métis Nation.

The University of Manitoba is committed to a renewed relationship and dialogue with First Nations, Métis, and Inuit peoples based on the principles of mutual trust, respect, and reciprocity. We respect the Treaties that were made on these territories, we acknowledge the harms and mistakes of the past, and we dedicate ourselves to move forward in partnership with Indigenous communities in a spirit of reconciliation and collaboration.

The University of Manitoba is committed to ensuring that First Nations, Métis and Inuit knowledge, cultures and traditions are embraced and reflected in the pursuit of its mission.

ACKNOWLEDGMENTS

The *Sustainable Transportation Strategy* was developed by the Office of Sustainability with guidance from a broad range of partners and community members.

The Office of Sustainability would like to acknowledge the input and expertise provided by the Transportation Strategy Plenary Group, the University of Manitoba's Sustainability Committee, and external partners including the City of Winnipeg and Winnipeg Transit.

Additional input and feedback on the *Strategy* was provided by members of the Manitoba Sustainability Coordinators Network and the Canadian Alliance of College and University Sustainability Professionals.

Thank you also to the University of Manitoba community of staff, faculty and students who provided baseline data and strategy input by completing the 2016 University of Manitoba *Transportation Survey* and participating in transportation open houses.

EXECUTIVE SUMMARY

Our transportation options and decisions impact our daily lives in a variety of ways. The University of Manitoba's *Sustainable Transportation Strategy* aims to expand sustainable transportation options for our University community – from walking and cycling opportunities to carpooling, transit and park and ride options.

The Sustainable Transportation Strategy defines our future transportation system as an equitable, integrated, flexible, responsible and innovative network that meets the needs of our University community. The goals and actions in this document have been strategically aligned with local and regional planning policy, including Taking Our Place: The University of Manitoba Strategic Plan 2015-2020; Visionary (re)Generation Master Plan; Bannatyne Campus Master Plan; and the Sustainability Strategy 2016-2018.

The targets set within the *Strategy* align with targets identified in the *Sustainability Strategy*, and are ambitious goals, requiring strong continued commitment from internal and external partners. The *Strategy* identifies more than 80 mode-specific actions related to pedestrian and cycling improvements, transit advocacy, carpooling initiatives, parking management, and fleet management and business travel. These actions, when implemented, will create a multi-modal system of healthy, safe and sustainable mobility options for the University community.

Viewed at a high level, the Sustainable Transportation Strategy aims to:

- 1. Improve data collection and monitoring, with:
 - · Seasonal and ongoing vehicle, pedestrian and cyclist counts and data collection;
 - Seasonal bike parking audits; and
 - Annual walkability and accessibility audits.
- 2. Strengthen multi-modal opportunities and connections, with:
 - A pedestrian and cycling plan for Fort Garry and Bannatyne campuses;
 - Expanded carpool matching, parking, and incentives; and
 - An exploration of bike fleet and bike rental options on Fort Garry campus.
- 3. Expand access to transportation resources, with:
 - Updated online transportation content;
 - Online route planning and ride-matching opportunities; and
 - Updated Fort Garry shuttle schedule information and exploration of real-time tracking opportunities.

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INTRODUCTION

SUSTAINABLE TRANSPORTATION OVERVIEW

With over 35, 000 students and staff visiting University of Manitoba campuses every day, high quality and accessible transportation options are essential to the operation of our institution. The University has set ambitious goals for our future, with a commitment to creating exceptional campus experiences while ensuring long term service and prosperity. A sustainable transportation system strives to ensure people of all ages and abilities can access our campus, while reducing our ecological footprint and shifting transportation needs and desires. The *Sustainable Transportation Strategy* marks a step forward in the University of Manitoba's journey to lead by example, blazing a trail to a more equitable, connected and sustainable future.

Purpose

The University of Manitoba's *Sustainable Transportation Strategy* will provide detailed strategies and actions to further integrate transportation and land use planning on our campuses. Identified as a "big move" in the University of Manitoba Board of Governors approved *Sustainability Strategy 2016-2018*, policies in this plan contribute to the realization of the University's high-level sustainability goals. In anticipation of significant transportation system improvements in the city of Winnipeg, including rapid transit and active transportation network expansions, the *Sustainable Transportation Strategy* strives to address the present and future transportation needs of the community.

Background

In 2014, the University of Manitoba initiated the Visionary (re)Generation process to develop a new campus master plan for the Fort Garry campus and recently acquired Southwood Lands. On April 12, 2016, the University of Manitoba Board of Governors approved in principle the *Visionary (re)Generation Master Plan*, which took its place alongside the previously approved *Bannatyne Campus Master Plan*.

Outlined in the *Visionary (re)Generation Master Plan* and *Bannatyne Campus Master Plan* is the vision of our campuses as connected networks, strategically linked to the surrounding community. This goal requires the application of land-use planning in unison with future transportation initiatives.

The University's *Sustainability Strategy 2016 – 2018* also identifies the need to shift transportation demand, with key goals and objectives established to guide future transportation initiatives. One of the strategies outlined to meet these goals was the development of a sustainable transportation strategy.

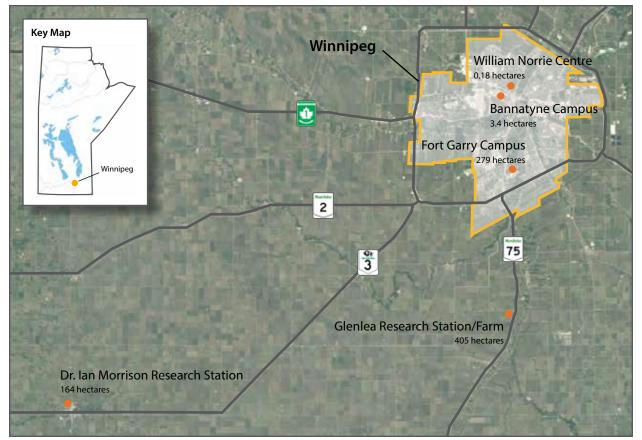
In January of 2016, the University conducted its first comprehensive *Transportation Survey*. Data from this survey was used to establish a baseline for transportation behaviour at the University. More than 4,300 members of the University community completed the *Transportation Survey* and their input has been instrumental in the drafting of the *Sustainable Transportation Strategy* and its associated actions.

GEOGRAPHIC CONTEXT

The University of Manitoba has three campuses in Winnipeg: Fort Garry, Bannatyne and William Norrie Centre, and two research facilities southwest of Winnipeg: Glenlea Research Farm and Dr. Ian Morrison Research Station. Over 29,000 students and 8,900 faculty and staff populate these campuses, making it, in essence, Manitoba's third largest city. The University's ability to move people within the larger Winnipeg context affects the well-being of our community and the effectiveness of our institution. A large volume of daily trips to and from the University must be considered in addition to frequent inter-campus travel.

Manitoba's variable climate plays a significant role in the University's seasonal transportation needs. The University of Manitoba's Fort Garry campus is located in a suburban setting at the southern edge of Winnipeg and has traditionally focused much of its transportation planning around vehicular traffic movement. The University must now plan for both a changing climate and shifting transportation needs to foster a culture that promotes sustainable modes of travel regardless of the season.

While the *Sustainable Transportation Strategy* focuses primarily on actions specific to the Fort Garry and Bannatyne campuses, actions related to our University fleet vehicles and intercampus travel options will also affect those within our community working and studying at William Norrie Centre, Glenlea and Dr. Ian Morrison facilities.



Map of University of Manitoba campuses and research facilities

PLANNING FRAMEWORK



University Policies

Our

Taking

Taking Our Place: University of Manitoba Strategic Plan 2015-2020 lays out institutionwide goals and actions on campus at the highest level. All other University strategies, plans and policies take into consideration the strategic priorities outlined in this document and at this planning level.

Bannatyne Campus Master Plai **Sustainability Strateg** ^{Master} Plan; Indigenous Planning and Design Principl

Climate Change Action Plan

Open Space Strateg

High-Level Planning

Southwood Lands Local Area Plan

Parking Lot Standards

Sustainable Transportation Strategy

Planning documents and policies at this level provide a more defined direction to guide development in strategic areas. Key University policies providing guidance include the Accessibility Policy, Sustainability Policy, Health and Safety Policy, and Enterprise Risk Management Policy, amongst others.

Mid-Level Planning

Once institutional directions and guiding plans have been established, plans are created at this level to address specific areas of development. These mid-level plans enable implementation and development in alignment with adopted guiding plans and directions.

Root-Level Planning

Bike Parking Strategy Root-level planning documents apply a direct focus on detailed aspects within the aforementioned mid- and high-level plans. The Bike Parking Strategy and standards for parking lot design are two examples of documents that will address sustainable transportation aspects at the root planning level.

PLANNING CONTEXT

The Sustainable Transportation Strategy referenced the following plans to shape a comprehensive and connected strategy for our diverse transportation system:

University

- Taking Our Place: University of Manitoba Strategic Plan 2015-2020
- Visionary (re)Generation Master Plan (2016)
- Indigenous Planning and Design Principles (2016)
- Bannatyne Campus Master Plan (2014)
- Sustainability Strategy 2016-2018

The University of Manitoba strives to demonstrate leadership in the three pillars of sustainability: social, economic and environmental, prioritizing walkable, accessible and connected communities. Spaces and transportation options are connected and pedestrian activity is prioritized. Cycling, transit, parking and Transportation Demand Management (TDM) measures play an integral role in the transportation system.

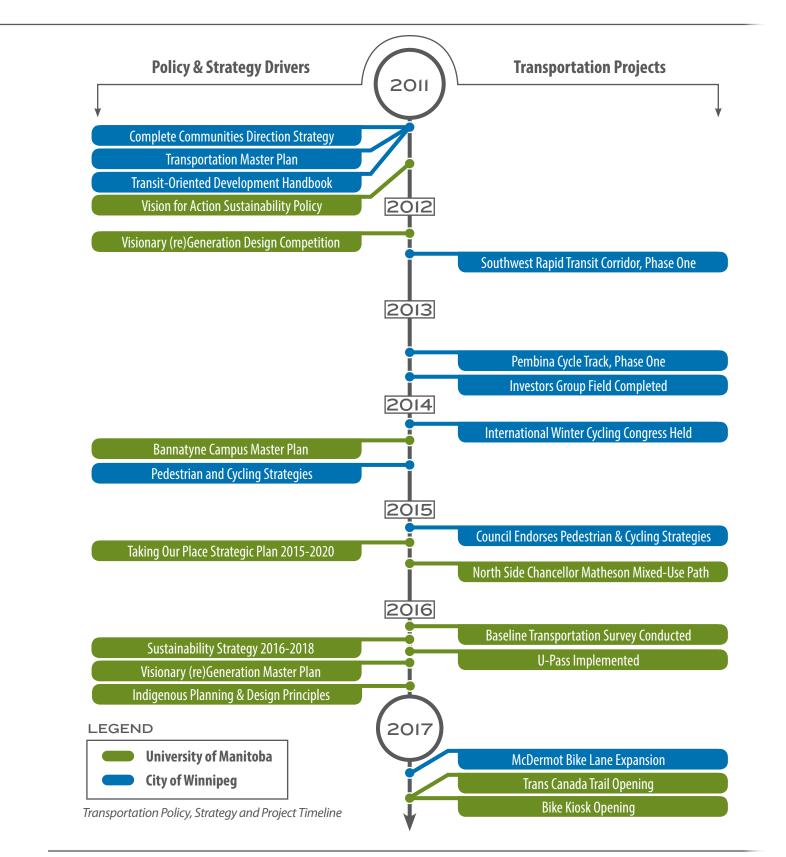
City of Winnipeg

- OurWinnipeg and Complete Communities Direction Strategy (2011)
- Transportation Master Plan (2011)
- Accessibility Design Standard (2015)
- Winnipeg Pedestrian and Cycling Strategies (2014)
- Winnipeg Transit Oriented Development Handbook (2011)

Key directions and themes identified within the City of Winnipeg's transportation strategies and standards include the creation of "complete communities," where safe, accessible, equitable transportation systems support active and healthy communities. The integration of transportation and land-use planning moves towards the creation of regional connections and expanded transportation opportunities. Accessibility, comfort and safety considerations are prioritized to guide transit and active transportation improvements.



Administration Building, Fort Garry campus



STRATEGY DEVELOPMENT

COMMUNITY ENGAGEMENT

The *Sustainable Transportation Strategy* builds on the commitment of the University to develop high quality, collaborative planning processes. In January 2016, the University community was engaged in the transportation conversation through participation in a baseline Transportation Survey. Students, staff and faculty were invited to participate through direct email, e-news stories in UM Today, Student Weekly and Week at a Glance, web banners and buttons, social media, posters, outdoor signage, ads in The Manitoban and in-person at survey lounges.

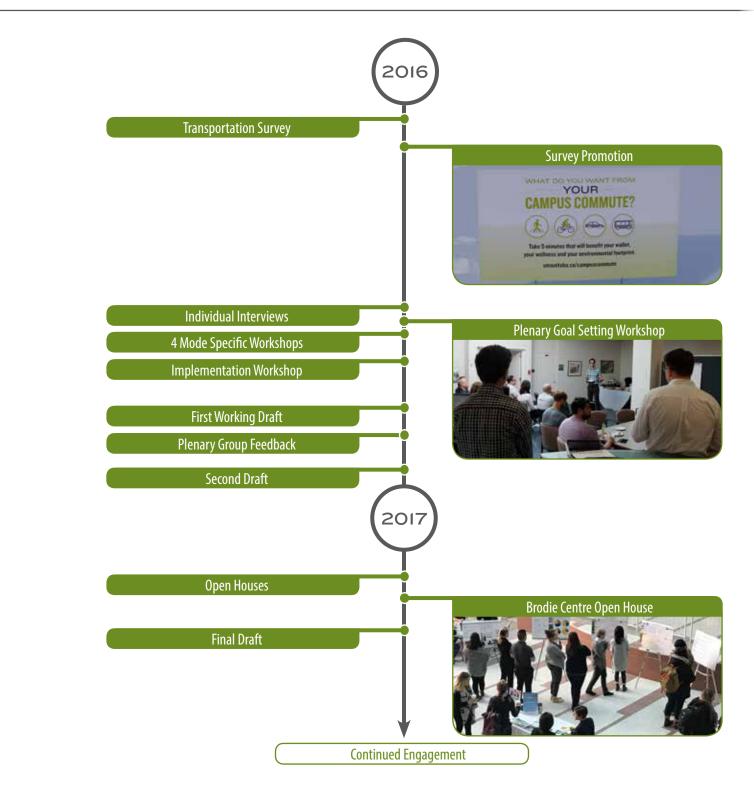
In August 2016, a series of focused workshops were held with University of Manitoba representatives to identify *Sustainable Transportation Strategy* goals and recommendations that would expand transportation options at and to the University. Broader input generated during these workshops was used to identify gaps in existing policy and to further integrate transportation system planning and project implementation at the University.

In January 2017, following initial stages of strategy development, four come-and-go open houses were held on the Fort Garry and Bannatyne campuses. Participants were asked to indicate their preferred areas of action using dot stickers and provide additional comments and suggestions. Over 900 community members participated in the open house events and over 180 comments were collected. This engagement provided additional input on the previously developed strategies and actions, and allowed students, faculty and staff to comment directly on the content of the *Strategy*.

The transportation conversation will continue with the University community through events, working groups, social media and interactive programs such as the Green Office initiative and Living Lab (Sustainability Research in Action).



Transportation Strategy Consultation



Sustainable Transportation Strategy Engagement Timeline

BASELINE STATUS

2016 Mode Share

In January 2016, Green Action Centre was contracted to complete a campus-wide transportation survey for the University of Manitoba. The results of this survey provide reliable baseline data and also help us to understand current transportation behaviours and interests. The *2016 University of Manitoba Transportation Survey* was available from January 18 to February 5, 2016, with 4,384 responses received during that time. Respondents were asked to indicate their primary method(s) of commuting to and from campus.

MODE	FORT GARRY MODE SHARE SEP - APR MAY - AUG		BANNATYNE MODE SHARE SEP - APR MAY - AUG	
Drive Alone	41.8%	46.8%	51.1%	51.3%
Bike	5.1%	14.8%	3.9%	11.2%
Carpool	14.3%	8.6%	13.5%	10.7%
Transit	32.1%	23.2%	24.9%	20.6%
Walk	5.3%	5.3%	6.1%	5.7%
Park & Ride	1.2%	0.7%	0.5%	0.3%
Other	0.2%	0.6 %	0.1%	0.3%

Fort Garry campus: There were 3,193 respondents indicating travel to campus between September and April, and 2,409 respondents indicating travel between May and August.

Survey responses indicate cycling and drive alone rates rise during the May to August term, while walking levels remain constant. Carpooling, transit, and park and ride use decrease during the May to August term. These seasonal fluctuations may be due in part to the change in respondents from season to season.

Bannatyne campus: There were 734 respondents indicating travel to campus between September and April, and 630 respondents indicating travel from May to August.

Biking rates rise from 3.9% from September to April to 11.2% from May to August. Transit, carpooling, and walking rates all decrease slightly during the May to August term. Drive alone rates remain consistent throughout the year on Bannatyne campus.

Mode Preferences Under Ideal Circumstances

Respondents were also asked: "Under ideal circumstances, how would you prefer to commute to and from campus/ work?" Respondents were able to choose up to two preferred modes of travel.

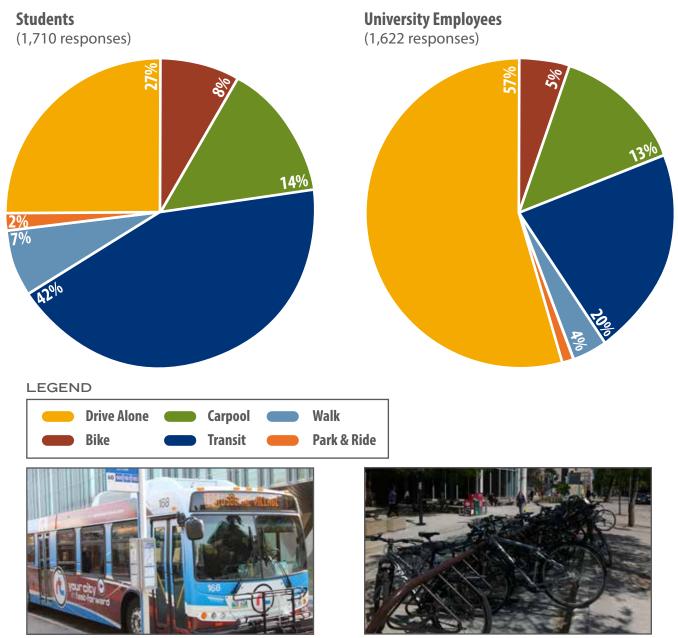
MODE	FORT GARRY PREFERENCES (PER CENT OF POPULATION, MAX TWO PER SURVEY)	BANNATYNE PREFERENCES (PER CENT OF POPULATION, MAX TWO PER SURVEY)	
Drive Alone	36%	41%	
Carpool	38%	36%	
Bike	35%	31%	
Transit	26%	24%	
Walk	14%	13%	
Park & Ride	6%	8%	
Other	3%	2%	

Cycling as a commuting mode exhibited the largest difference between actual mode share and interest in the mode under ideal circumstances, with 35% of Fort Garry and 31% of Bannatyne respondents expressing interest in cycling to campus. On Fort Garry campus, respondents would prefer (under ideal circumstances) to carpool (38%), drive alone (36%) and bike (35%) to work or school. On Bannatyne campus, respondents were interested in driving alone (41%), carpooling (36%) and cycling (31%) under ideal circumstances.

While drive alone rates were among the top three ideal modes on both campuses, preference for driving alone on both campuses is lower than current baseline mode shares, while preference for modes such as cycling and carpooling are substantially higher than current shares. This difference suggests a significant opportunity exists to replace some drive alone trips to campus with cycling, carpooling, transit, walking and park and ride options.

Mode Share by Affiliation

There were significant contrasts in mode shares between the various University communities on campus. In particular, students were most likely to choose transit as their primary travel mode to campus (42%), while faculty, staff and non-University employees were more likely to drive alone (54-71%).



Dafoe transit hub, Fort Garry campus

Brodie Centre bike rack, Bannatyne campus

Non-University Employees Faculty (701 responses) (351 responses) 100 20 6% LEGEND **Drive Alone** Carpool Walk Bike **Transit** Park & Ride

Carpooling rates were similar across all groups (9-14%), while cycling rates were consistent among staff and non-University employees (5%), and higher among students and faculty (8-10%). Walking rates ranged from 3%

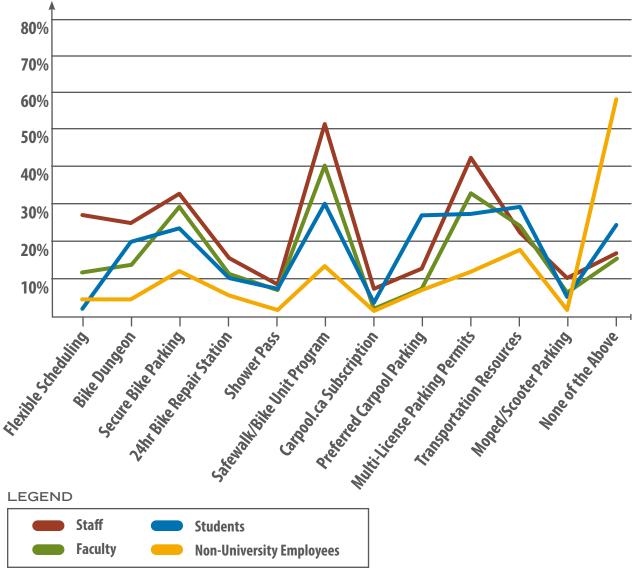
Chancellors Circle in winter, Fort Garry campus

Chancellor Matheson Road, Fort Garry campus

(non-University employees) to 7% (students).

Awareness of Existing Transportation Resources on Campus

The 2016 Transportation Survey also explored respondents' awareness of existing transportation resources at the University. While awareness of initiatives was generally low across all University populations, the most well-known available University transportation initiatives were the Safewalk Program & Bike Unit (39%), Multiple License Options on Parking Permits (33%), and Secure Bike Parking (28%). However, a majority of respondents were unaware of existing resources. Future efforts to develop communication and promotion programs will target increasing awareness of existing and new initiatives to allow commuters to make more informed transportation decisions.



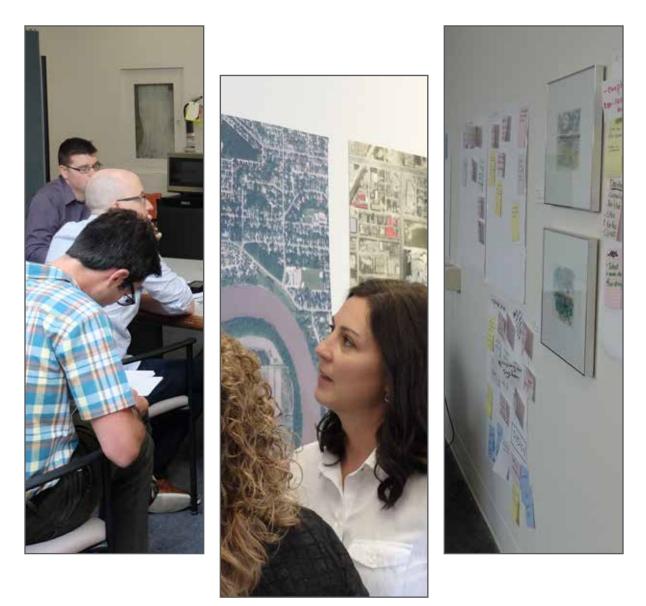
Graph of Awareness of Existing Transportation Resources on Campus

GUIDING PRINCIPLES

VISION

The University of Manitoba's Sustainability Strategy 2016-2018 defines our Transportation and Accessibility Vision as:

"Sustainable transportation options are prioritized and available for all University community members; negative impacts from transportation are continuously reduced."



Sustainable transportation strategy workshop

A SUSTAINABLE TRANSPORTATION SYSTEM IS...

Equitable

The University of Manitoba will develop a transportation system built on choice. Using design best practices and community collaboration, barriers will be addressed, communities connected and access expanded.

Integrated

Investment in transportation systems will close gaps and reduce conflict, working to develop a multi-modal transportation network. Through progressive campus planning and coordinated infrastructure renewal, the University will continue to integrate transportation and land use. Through improved communication, the University will refine internal processes to ensure maximum resource efficiency. New partnerships will be sought with city, provincial and federal governments to improve connectivity and further support transportation systems in Winnipeg.

Flexible

The University's transportation system will respond to challenges identified by community members, adapting to changing conditions and capitalizing on opportunities to improve. Implementation strategies will facilitate the development of creative design solutions that build momentum and contribute to the University's high-level planning goals.

Responsible

Transportation system improvements that reduce our ecological footprint and improve the campus experience will be prioritized. All transportation system improvements will be conscious of a hierarchy that prioritizes walking, cycling, transit and lastly, private automobile use. Investment in the transportation system will factor all costs, giving equal weight to social, environmental and economic impacts. All designs will ensure our campuses are comfortable, safe places, accommodating people of all ages and abilities.

Innovative

As a leading post-secondary institution, the University of Manitoba will design creative solutions to continue to connect our community. Ever mindful of the big picture and our unique context as a winter city, our campuses will build on design best practice, serving as an example of a sustainable transportation system.

STRATEGIES & ACTIONS

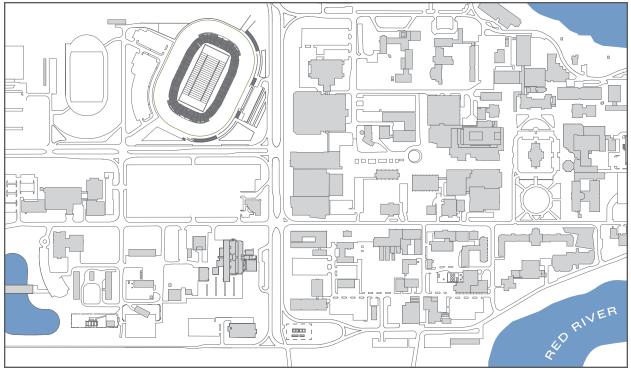
Strategies and actions in the *Sustainable Transportation Strategy* provide specific directions to enable the realization of the University's high-level, sustainable transportation goals. Each strategy and action addresses specific policy gaps and has been developed to meet the *Strategy's* targets.

Sustainable Transportation Strategy actions are organized by mode-specific themes:

Pedestrian and Cycling Improvements
Transit Advocacy
Carpooling Services
Parking Management
Fleet Management & Business Travel

The *Strategy* recognizes the role all transportation modes play in creating a sustainable system. To achieve the goals and targets established in this document, a coordinated effort will be required to jointly address the actions outlined within all themes.

For the purposes of this section, the term "campus" shall apply to both the Fort Garry and Bannatyne campuses, unless otherwise indicated.



Fort Garry campus map

PEDESTRIAN AND CYCLING IMPROVEMENTS

Goals: The University of Manitoba campus is safe and welcoming for those arriving on foot or by bicycle. Short- and long-term bike parking options and other end-of-trip amenities are expanded. Active transportation enhancements physically connect our community to the wider city and the land and water on which it resides.

Strategy 1: Identify high-traffic pedestrian and cycling routes

- Conduct seasonal manual bike and pedestrian counts
- Install electronic counters on high traffic routes; incorporate into new active transportation facilities

Strategy 2: Create pedestrian and cycling facilities on campus to meet current and future demand

- Develop a pedestrian and cycling plan that identifies and prioritizes future pedestrian and cycling infrastructure improvements on campus
- Begin phased construction of active transportation routes and crossings based on priorities identified in the pedestrian and cycling plan
- Implement an integrated and accessible active transportation-friendly wayfinding strategy
- Review new building, landscape and infrastructure projects at the planning and design phases to recommend pedestrian and cycling considerations as appropriate
- Review and update snow-clearing procedures, striving to maintain all-weather high-traffic active transportation routes on campus

Strategy 3: Focus on accessibility for all campus users

- Establish and implement a regular campus walkability and accessibility audit
- Review and update the *Sustainable Transportation Strategy* as required once Transportation Standards are released to accompany the *Accessibility for Manitobans Act*



Curry Place, Fort Garry campus

Strategy 4: Expand on-campus bike parking options

- Conduct seasonal campus bike parking audit
- Continue to implement the University of Manitoba's *Bike Parking Strategy 2015-2018* to expand and update shortand long-term bike parking options
- Install secure, weather protected bike lockers at high-traffic locations on campus
- Expand communication and education around bike theft-prevention techniques and safe cycling skills
- Prioritize snow clearing at high traffic bike racks
- Provide secure, long-term bike parking at student residences

Strategy 5: Provide and promote additional end-of-trip cycling amenities

- Promote and maintain self-serve bike repair stations
- Promote shower-only pass option to staff and faculty on Fort Garry campus and explore shower-only pass options for staff and faculty on Bannatyne campus
- Engage with Indigenous community members; apply Indigenous Planning and Design Principles to install a bicycle kiosk on Fort Garry campus where cyclists can access bike repair advice and assistance



Southwood Lands, Fort Garry campus

Strategy 6: Work with internal and external partners

- Work with the City of Winnipeg to align active transportation plans with the needs of the University community
- Strive to ensure reasonable detour routes are signed and maintained during construction periods
- Explore seasonal pedestrian and cycling connections to the St. Vital neighbourhood
- Work with Winnipeg Transit to increase the number of buses with bike racks on routes leading to campus
- Work with Winnipeg Transit to identify additional sites for transit-owned bike lockers on transit routes leading to campus

Strategy 7: Communicate current and future available route options

- Offer and promote route planning assistance for staff, faculty and students
- Explore partnerships and mobile technology options for route-finding services, bike buddy matching and bike mentor options
- Explore opportunities to initiate a University bike share or bike rental service



Bike parking, Fort Garry campus

TRANSIT ADVOCACY

Goals: Transit is an efficient, affordable mode of choice for students, staff and faculty. Campus shuttle services are predictable and meet the needs of the community. Transit connections between Fort Garry and Bannatyne campuses are fast, affordable and convenient.

Strategy 1: Identify opportunities to improve rider experience

- Access up-to-date ridership data and share data and feedback collected by the University
- · Identify and implement solutions to over-capacity issues on busy transit routes
- Explore transit station opportunities at Bannatyne campus
- Where possible, optimize class start/finish times and expand staff start/finish windows to reduce peak demand for transit

Strategy 2: Create better transit connections within and between campuses

- Identify and implement improvements to the inter-campus route to meet the year-round needs of users travelling between Fort Garry and Bannatyne campuses
- Work with the Fort Garry campus community and Smartpark tenants to ensure the campus shuttle meets daytime travel needs
- Post Fort Garry shuttle schedule and explore options for real-time schedule updates
- Explore shelter options at shuttle stops on Fort Garry campus
- Identify opportunities for additional "Park & Ride" locations leading to campus

Strategy 3: Ensure transit passes are financially competitive with parking passes

- Work with internal partners to offer reduced transit fare options for faculty and staff
- Explore opportunities to offer additional commuter benefits for transit users and other green commuters



Emily Street transit stop, Bannatyne campus

CARPOOLING SERVICES

Goals: Carpooling opportunities and services are expanded. Some drive alone trips shift to carpooling.

Strategy 1: Improve access to carpooling options

- Work with local partners to implement a regional online ride-matching system
- Increase number of subscribers to ride-matching system
- Research and implement best practices in efficient monitoring of carpool parking spaces
- Expand and promote carpool parking options on campus

Strategy 2: Increase incentives to carpool

- Explore opportunities to offer carpooling benefits
- Promote the financial and environmental benefits of carpooling with online tools



U-Lot carpool parking stalls, Fort Garry campus

PARKING MANAGEMENT

Goal: Parking management services support flexible, accessible and multi-modal choices.

Strategy 1: Create financial incentives to shift some trips to carpooling, transit, walking, and cycling

- Offer greater flexibility of parking pass options, including daily, weekly, monthly, term and/or flex pass permits
- Continue to develop funding mechanisms which utilize motor vehicle parking revenues to support sustainable transportation system improvements
- Explore options that ensure equity across transportation modes, including a monthly transportation allowance and gradual elimination of subsidized parking rates
- Shift toward managing parking supply through dynamic pricing

Strategy 2: Reduce demand for drive alone parking spaces; ensure accessible spaces are maintained

- Prioritize accessible parking spaces in all campus parking lots
- Identify current campus parking space/population ratios and establish targets to reduce ratio based on best practices from other leading post-secondary institutions
- Explore the development of a Parking Demand Management Plan to evaluate costs, benefits and opportunities to manage demand for parking

Strategy 3: Design with sustainability in mind

- Install electric vehicle charging stations on campus
- Develop Parking Lot Design Guidelines to improve storm water runoff, pedestrian connectivity and energy efficiency
- Pilot parking lot design improvements in a Fort Garry campus periphery parking lot



Q parking lot, Fort Garry campus

FLEET MANAGEMENT & BUSINESS TRAVEL

Goal: Negative environmental impacts of daytime and long-distance business travel are continuously reduced.

Strategy 1: Reduce the need for personal vehicle use during the work-day

- Conduct vehicle traffic counts on University-owned streets
- Implement a carshare or passenger fleet program on campus; site parking spaces for car share vehicles near residences and other desirable locations
- Launch a bike fleet program for staff to travel around, between and off-campus
- Promote the use of online meeting technology as an alternative to inter-campus and off-campus travel

Strategy 2: Identify efficiencies in the fleet management system

- Inventory all University-owned vehicles
- Work with Purchasing to establish vehicle purchasing guidelines that incorporate fuel efficiency standards
- Initiate fleet life-cycle cost analysis requirement with all University-owned vehicles
- Explore strategies to match supply with demand for fleet vehicles, including the creation of a centralized vehicle management program to increase fleet efficiency
- Establish an Idle-Free Campus policy for all fleet and University-owned vehicles

Strategy 3: Support and encourage sustainable, efficient business travel options

- Review and expand the University's travel and expense tool, Concur, to support sustainable transportation options such as ridesharing
- Review and update the University's Travel Policy to support all modes of travel, including carsharing, public transit, carpooling and cycling

Strategy 4: Off-set unavoidable emissions related to business travel

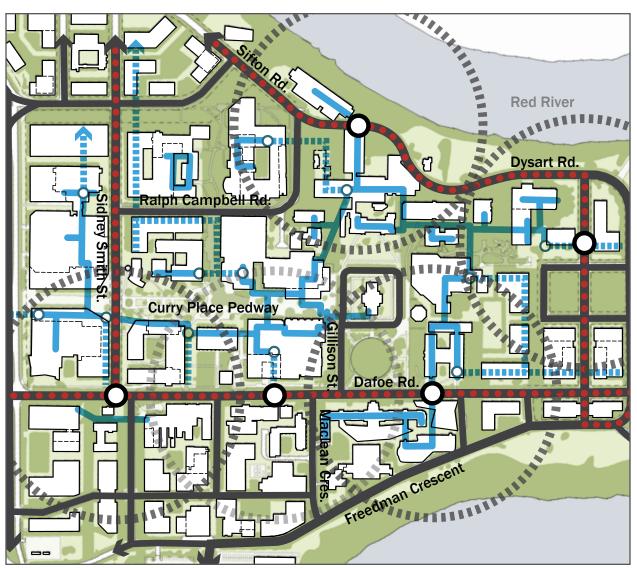
• Continue to develop funding mechanisms which encourage air travellers to pay carbon offset money into a University fund to support sustainable transportation system improvements



University operations vehicles, Fort Garry campus

IMPLEMENTATION

Careful attention has been paid to align the *Sustainable Transportation Strategy* with existing plans at the University, including *Taking Our Place: University of Manitoba Strategic Plan 2015-2020, University of Manitoba Visionary (re) Generation Master Plan, Bannatyne Campus Master Plan* and the *Sustainability Strategy 2016-2018*. As the University of Manitoba continues to evolve in accordance with these foundational documents, the *Sustainable Transportation Strategy* will provide detailed recommendations on how to achieve our long-term, land use and development goals as they relate to transportation and circulation. Implementation of the *Sustainable Transportation Strategy* will adhere to the following principles.



Core campus internal and external circulation network (Visionary (re)Generation Master Plan)

INCREMENTAL CHANGE

Use incremental change to improve integration

The University will improve internal collaboration, particularly amongst units who participate in planning, design and engineering on our campuses. We will work collaboratively to ensure improvements to transportation systems are aligned with long term plans. New designs will be conscious of our unique context as a winter campus and will factor maintenance considerations into new designs. Maintenance projects will be viewed as opportunities, where transportation system upgrades can be integrated into renewal projects to maximize resources.

- Incorporate transportation infrastructure improvements into maintenance and renewal projects
- Develop a list of prioritized and designed active transportation system improvements that can be implemented quickly as surplus funds become available
- Support the phasing of infrastructure improvements, beginning with pilot projects that evolve into long term permanent upgrades
- Build on best practices established at other Universities with similar climates
- Ensure proposed designs for transportation system improvements incorporate maintenance considerations
 including snow removal



Smartpark Event Centre, Fort Garry campus

MONITORING & ACCOUNTABILITY

Monitor our progress and maintain accountability

Understanding transportation behaviour is an essential piece in the effective management of transportation systems and will inform the implementation of recommendations in this plan. The *Sustainability Strategy 2016-2018* set four high-level Transportation and Accessibility targets:

- Target 1: Reduce the drive alone rate of staff, faculty and students by 5% in five years
- Target 2: Decrease the carbon intensity of average passenger trips by 15% from baseline
- Target 3: Increase share of zero-emission, low-emitting and fuel efficient vehicles to 10% of University fleet in next five years
- Target 4: Increase campus walkability

To assist the University in its efforts to meet its transportation targets, ongoing data collection and monitoring will include:

- Bi-annual transportation surveys
- Investment in automated pedestrian and cycling counters
- Reporting on transportation behaviours and alignment of investment with our community's preferred modes
- Development of a Transportation Advisory Committee consisting of University planning and design professionals who can provide fast and coordinated project review to enable transportation system improvements



Duckworth Quadrangle, Fort Garry campus

COMMUNICATION & ENGAGEMENT

Engage our community and improve communication channels

Building on *Taking Our Place* commitments, implementation of the *Sustainable Transportation Strategy* will forge connections through ongoing community engagement.

- Continue to refine engagement processes to increase participation in transportation planning and behaviour change, including but not limited to engagement with Accessibility Services, the Office of Human Rights and Conflict Management, the Indigenous Student Centre and the International Student Centre
- Capitalize on University communication opportunities through partnerships with the Marketing and Communications Office, student organizations, departments and unions to inform the University community of new and ongoing transportation programs and improvements
- Create seasonal and modal messaging through community engagement methods and social media
- Update the University of Manitoba Parking and Transportation web pages to house transportation options and information in one place



Live Well at Work Week engagement, Bannatyne campus

PARTNERSHIP

Solidify our role and pursue new partnerships

As a progressive, post-secondary institution, the University will demonstrate leadership in sustainable transportation system design on its campuses. In addition to improving our campus environments, the University will strengthen relationships with City of Winnipeg departments including Public Works, Winnipeg Transit, and Planning, Property and Development to better integrate and support the broader transportation system.

- Partner with students and staff who have expertise in the planning, design and engineering of transportation systems to further develop our campus as a Living Lab
- Strengthen our working relationship with Winnipeg Transit, sharing transportation data to improve scheduling and route access
- Work with City of Winnipeg Public Works, and Planning, Property and Development to improve quality and connectivity of pedestrian and cycling infrastructure to the University of Manitoba



Transit hub, Fort Garry campus

RISK MANAGEMENT

Compliance and risk management

The University will strive to ensure new transportation system improvements align with University of Manitoba policies, city by-laws and provincial legislation. The University will work to update and refine its own policies to support sustainable transportation choices. This commitment to meet or exceed policy requirements will result in higher quality transportation services on campus for all users, while mitigating potential risks to our institution.

- Work with Accessibility Services and Human Rights and Conflict Management Office to ensure transportation systems accommodate all users
- Develop a strategy to address changes required by the Accessibility for Manitobans Act
- Review and revise University travel and procurement policies to support sustainable travel options
- Partner with Financial Services and Physical Plant to explore opportunities to integrate sustainable transportation design standards into tendering processes



Bike cage, Bannatyne campus

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