

Policy Name:	Tunnel Carts Policy
Originating/Responsible Department:	Office of Risk Management
Approval Authority:	Senior Management Committee
Date of Original Policy:	October 2008
Last Updated:	March 2022
Mandatory Revision date:	March 2027
Contact:	Executive Director, Office of Risk Management

Policy:

Carleton University is committed to the protection of the health, safety, and wellbeing of all members of the University community. The University strives to promote a strong and sustainable culture of a safe and healthy workplace and study environment that will facilitate the awareness of risk, the prevention of injury and illness, in an environment free from violence and harassment.

Carleton University maintains over five kilometers of tunnels, which link all campus buildings and offer an accessible, efficient and safe environment for all members of the campus community. Tunnel carts are used to transport equipment or materials across the campus.

To ensure the safety of operators and pedestrians in the tunnels, carts and the use of carts in tunnels are subject to the requirements of this policy.

Purpose:

The purpose of this policy is to establish the requirements for the safe use of tunnel carts to ensure pedestrian and operator safety in tunnels on the Carleton University campus. This includes the acquisition of tunnel vehicles, preventative maintenance, and operational rules for tunnel carts, and operator training and communication related to carts in tunnels.

Scope:

This policy applies to the operation of carts in tunnels by Carleton University employees, students, and approved contractors and organizations.

Procedure:

Acquisition of Carts and related tunnel vehicles

To ensure that all carts and tunnel vehicles intended for use on the Carleton University campus meet specifications, all new vehicle purchases must be pre-approved by Facilities Management and Planning. Departments must submit planned purchases to the Director, Operations & Maintenance, Facilities Management and Planning.

Identification of Carts

Facilities Management and Planning assigns and maintains the cart numbering system for ease of identification and alignment with unique identifiers for preventative maintenance. Numbers will be located on the front, back, and sides of all carts in a uniform size and location where possible. Additional markings including departmental identifiers may be added to carts, as long as the community can readily identify the cart.

Maintenance of Carts

Facilities Management and Planning have established a comprehensive preventative maintenance program. This includes the requirement for annual, monthly, and pre-use inspections. Facilities Management and Planning is responsible for maintaining the schedule, and completing required maintenance. Departments are responsible for adhering to the maintenance schedule, and ensuring pre-use safety inspections are completed by users. Maintenance includes, but is not limited to, steering, braking, electrical and electrical charging, wheels, tires, horns, and flashing light systems. Facilities Management and Planning will keep maintenance records for all carts.

Operator Training

All new operators must complete mandatory training established by the Office of Risk Management (Environmental Health and Safety) and confirmed by their supervisors/managers. Operators will be expected to know the rules of operation and to demonstrate the safe operation of a tunnel cart in order to complete the training. Refresher training will be required every three years by all operators.

Operator Approval

Approval of operators is the responsibility of the supervisor/manager or department head. Approval includes a review of this policy, and in the case of new operators, completion of initial operator training. The operator and the supervisor/manager or department head must complete a Tunnel Cart Operator Approval Form available at: <http://carleton.ca/ehs/programs/operational-health-safety/tunnel-carts/> and in the Appendix to this policy.

Operator approval should be completed when new operators are added. These must be resubmitted on an annual basis. A copy of all forms must be forwarded to the Director, Environmental Health and Safety.

Reporting Unsafe Operation

Unsafe operation of tunnel carts should be reported to Environmental Health and Safety in ORM for investigation. Reports will be forwarded to the supervisor/manager or department head. In cases of imminent danger, Campus Safety Services is to be contacted.

Roles and Responsibilities:

All members of the university community are responsible for complying with all applicable legislated requirements and University policies and procedures, including the safe use of tunnel carts to ensure pedestrian and operator safety in tunnels.

The Office of Risk Management is responsible for the policy and program development, auditing the process to ensure compliance and safety are maintained, developing and managing operator training for all users, and adhering to Canadian Standards Association standards and best practices for safety training.

Facilities Management and Planning (FMP) is responsible to support the acquisition of new tunnel carts. FMP will deliver a preventative maintenance program for all campus tunnel carts. Cart owners will be expected to work with FMP to ensure that preventative and reactive maintenance activities are completed to ensure safe operation of the vehicles. Service, including required safety repairs is the responsibility of the cart owner. Recommendations for replacement will be provided to the departments based on maintenance records and service reviews. Carts that are found to be unsafe will be locked-out of service until necessary corrective actions are completed.

Departments are responsible to collaborate with Facilities Management and Planning on the acquisition, identification and preventative maintenance of new and existing tunnel carts. Cart owners are required to schedule all necessary maintenance. All work and repairs on carts is to be completed by FMP. Departments are also responsible to ensure all operators are trained and operate tunnel carts safely, including conducting an inspection of their carts prior to use. They will advise Environmental Health and Safety of all new operators, and will provide an updated list of users annually each January.

All tunnel cart operators are responsible to operate carts safely, including completing a pre-use inspection of tunnel carts, and promptly report any hazards to their supervisor/manager.

Contacts:

Executive Director, Office of Risk Management
Assistant Vice-President (Facilities Management and Planning)
Director, Environmental Health and Safety
Director, Operations and Maintenance

Links to related Policies:

Environmental Health and Safety
Carleton University Guideline on Impairment at Work
Risk Management
Hazard Reporting

Operational Rules

1. Pedestrians and persons using wheelchairs or other assistive devices have the right of way at all times in the tunnels.
2. A visual inspection must be performed prior to operating any cart.
3. Cellular devices or radios are not to be used while operating a tunnel cart.
4. Operators will ensure tunnel cart keys are maintained on a separate key ring to avoid damaging ignition
5. Operators will come to a complete stop at all stop signs.
6. Operators will keep to the right except when passing.
7. When passing, operators will reduce speed, ensure others are aware of the cart, sound horn well in advance, maintain safe clearance, and proceed with caution.
8. When turning, operators will reduce speed and ensure safe clearance.
9. When backing up, operators will ensure the area is clear of people and obstructions.
10. When parking, operators will ensure the cart is secured and exits are not blocked. Keys are never to remain in the cart.
11. Operators will not permit passengers to stand on a moving cart or trailer. If the cart is designed to accommodate passengers in addition to the operator, the number of passengers is to be limited to one (1) and the passenger must be seated at all times. It is the operator's responsibility to ensure passengers abide by all requirements.
12. When towing a trailer, operators will ensure the hitch and loads are secure in accordance with MTO requirements for towing.
13. When transporting exceptionally heavy loads, operators will discuss specific requirements with their manager or department head.
14. The use of carts to transport hazardous materials requires the approval of the supervisor/manager or department head. Operators will take the following precautions:
 - Transport at times of low pedestrian traffic
 - Transport the smallest quantity possible
 - Transport with spill clean-up materials
15. Operators will report to their supervisor/manager or department head all incidents involving injury to persons or damage to property.
16. Operators will also report to their supervisor/manager or department head any factors which would affect their ability to safely drive a tunnel cart. These include impairment and substance dependencies or any physical disability that would impact safety.

Tunnel Cart Operator Approval Form

TO BE COMPLETED BY THE OPERATOR

Name:	Banner ID:
Position:	Department:
Phone:	Email:
<p>I have read and understood the Tunnel Carts Policy and have completed orientation/training with my supervisor/manager, in addition to online operator training. I agree to operate the tunnel cart assigned to me in accordance with the rules of operation and I understand that failure to do so may result in the loss of driving privileges and/or disciplinary action. I am aware that I am required to disclose any factors which would affect my ability to safely drive a tunnel cart. I am aware that surveillance cameras are installed in the tunnels for the purposes of safety and security.</p>	
Operator Signature:	Date:

TO BE COMPLETED BY THE SUPERVISOR/MANAGER

COMPLETED (YES/NO/NA)	GENERAL AWARENESS AND KNOWLEDGE	COMMENTS
	General understanding and awareness of the Tunnel Cart Policy, including any additional departmental requirements	
	Understanding of requirement for pre-use inspection prior to using tunnel cart	
	Understanding and awareness of prohibitions concerning cellular devices and radios	
	Understanding of key requirements (key rings, removal of keys when parked)	
	Understanding and awareness of Right Of Way	
	Understanding and awareness of stopping obligations	
	Understanding and awareness of passing and warning requirements	
	Understanding and awareness of cautions for backing up	
	Understanding and awareness of cautions for parking, including requirement to maintain safe egress	
	Understanding and awareness of prohibitions concerning passengers	
	Understanding and awareness of special precautions involved in towing	
	Understanding and awareness of special precautions for carrying heavy loads	
	Understanding and awareness of special precautions for carrying hazardous materials	
	Confirmation that any incidents involving use of tunnel cart is to be reported immediately to the supervisor/manager	
COMPLETED (YES/NO/NA)	DEMONSTRATED ABILITIES	COMMENTS
	Completion of pre-use inspection checklist for specific cart model	
	Start-up of tunnel cart, including verification that horn and flashing light are functioning as intended	
	Forward and reverse motion, with required cautionary procedures	
	Turning of tunnel cart with demonstrated cautionary procedures	
	Parking of tunnel cart with demonstrated cautionary procedures	
	If required to tow - Hitch and unhitch of trailer, and demonstration of safe loading and towing capabilities	

TO BE COMPLETED BY THE SUPERVISOR/MANAGER

Name:	Banner ID:
Position:	Department:
Phone:	Email:
<p>I have reviewed the Tunnel Cart Policy with the individual listed above, and have confirmed his/her ability to operate a Carleton University Tunnel Cart through use of the checklist above.</p>	
Supervisor/Manager Signature:	Date:

Tunnel Cart – Operator Pre-Use Inspection Checklist (sample*)

This inspection is to be completed prior to use of any cart.

If any questions are answered in the negative, the manager is to be advised, and the finding will be discussed with FMP.

Note: How the information is maintained will be the responsibility of each department, but is to be made available upon request.

TO BE COMPLETED BY THE OPERATOR				
Name:	Banner ID:			
Position:	Department:			
Phone:	Email:			
This inspection is to be completed prior to use of any cart. If any questions are answered in the negative, the operator's manager is to be advised, and the finding will be discussed with FMP				
Operator Signature:	Date:			
Item	Description	Status		
Tires				
	Are tires properly inflated and in good condition?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
	Are rims in good condition?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
Vehicle frame and body				
	Does the vehicle exterior appear in good condition?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
	Do all elements appear secure (no loose parts)?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
Lights				
	Is the flashing light operational?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
	Is the brake light operational?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
Horn				
	Is the horn operational?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
	Is the backup alarm operational?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
Brakes				
	Does the brake pedal operate smoothly?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
	Do the brakes operate without abnormal noises?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
Accelerator				
	Does the accelerator operate smoothly?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
Tools				
	Are tools and materials secured from moving when driving?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
Charger				
	Is the cart charger cord, plug and connectors in good condition	Yes	<input type="checkbox"/>	No <input type="checkbox"/>

* Specific checklist items may vary somewhat based on the make and model of the tunnel cart. The Operator's manual should always be consulted.