



**Transportation Association of Canada**



**Educational Achievement Award Nomination  
2017**

**Manitoba Infrastructure  
Maintenance Career Training Program**



**Manitoba Infrastructure  
Operational Services Branch  
March 3, 2017**

**TAC Educational Achievement Award Submission  
Manitoba Infrastructure Maintenance Career Training Program**

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## **Introduction**

In the past, the approach to training in the maintenance field operations area had been at best sporadic and reactionary. Previously, the major focus of training had been safety related as a result of changes to Legislation, Regulations or as a result of accidents or incidents. While this is critical, it lacked structure, organization and did not address the growing operational or technological changes in field operations. In addition, there was a very limited view of maintenance work as a career which resulted in a lack of focus on employee development.

In order to address this gap, Manitoba Infrastructure's Maintenance Career Training (MCT) Program was developed with the following objectives:

1. Ensure that staff expertise is consistent in meeting service level expectations
2. Encompass and recognize all training requirements that achieve these expectations.
3. Ensure the right staff are trained at the right time
4. Promote competencies through accreditation/certification
5. Provide staff with the opportunity to succeed and be promoted to higher Maintenance Worker positions by utilizing promotion through certification and qualification.

## **Description of the Achievement**

The MCT program consists of three major components. They are Training Levels, Organization and Certification. A description for each follows.

### Training Levels

The Training Levels have been structured with the needs of the staff and the *Division* in mind. They are progressive in nature to allow employees to build on their experience and expertise. Employees will be required to achieve formal certification by successfully completing all of the essential courses within their current Training Level before continuing or applying for training in the next level.

Level 1 - Orientation/Entry level training targeted at all new hires and students. This training is completed before employees are released into field operations.

Level 2 - Targeted for summer seasonal and entry level non seasonal employees.

Level 3 - Targeted for non seasonal employees who have completed the essential course requirement from Level 2 or have worked for the Department for approximately two or more years without interruption in service.

Each Training Level is intended to encompass and recognize all of the training requirements appropriate for the specific level. Each level has three sections; Orientation, Equipment and Operations. The three sections are defined as follows:

Orientation –Includes specific courses that are designed to develop an overall understanding and knowledge base in preparation for the work that a person would be doing in a specific level.

Equipment – Includes courses that would expose an employee to all aspects of equipment servicing, maintenance and operation for the equipment appropriate to the training level.

Operations – Includes courses that would expose an employee to the actual work they will be expected to perform and would tie in the skills and knowledge developed in the previous two sections.

In addition to the sections mentioned above, courses are also divided into one of four categories. The categories are used to establish relative importance of a specific course within the specific level. The four categories including Core, Required, Specialized and Career Development are defined as follows:

Core – Courses that must be completed before moving to the next MCT level. Once an employee successfully completes the Core course requirement for a given level and corresponding proficiency testing, they are promoted to the corresponding pay classification.

Required – Courses that must be completed in order to receive pay increments.

Specialized – Courses that will be offered as operations require them. These courses will not likely be available to all employees, but rather those whose resource areas require these specific types of training and knowledge.

Career Development – Courses that would be essential for career development and advancement beyond the Maintenance Worker series positions.

### Organization

The Organizational component defines the roles and basic responsibilities for the various levels of staff within Maintenance Operations. Generally, *Field Staff* will annually meet with their supervisor on an individual basis to review current certification, discuss career goals, review available training course opportunities and develop a reasonable training strategy to achieve these goals. The individual training strategy must be in tune with operational requirements and take into account the delivery of services. *Field Staff* then formally request training with their Supervisor recommending the requests for approval. The Regional Maintenance Management teams review the recommendations and approve them based on operational needs, levels of service and resource

constraints. Required and Specialized courses will be available as required to fit the Resource Group or Regional needs.

The organization and delivery of the individual training sessions is based on an annual training calendar concept. This way, training sessions can be pre-scheduled and an annual training calendar produced to facilitate a highly organized, just in time approach while maximizing training resources.

Each Region will have a Designated Training Team that participates in course development and delivers the actual training. The Maintenance Engineers/ Managers will form the Training Council. Their main role will be to approve course content and training materials. They will also play a key role in the approval of testing criteria used in the Certification process. A Provincial Maintenance Training Coordinator oversees and supports the process, assists in the development as well as maintains the training calendar, training materials and training records.

### Certification

The Certification Process is comprised of two elements. Written testing to ensure the desired *learning outcomes* have been achieved. Practical equipment operation proficiency testing to ensure skills have been developed and proper work practices are demonstrated. The employee will need to successfully pass the written and practical testing before certification is achieved.

### **Contribution made to Education/Training**

The program has been designed to grow, evolve and react to the rapidly changing work environment we all find ourselves in. It directly contributes to the success of the workers, management teams and the organization as a whole by providing a highly skilled and fully engaged work force. The ever changing training team researches, develops and delivers the program in a meaningful way ensuring the transfer of knowledge and experience from the senior staff to those just starting their careers as well as incorporating new technologies and ideas. The program has successfully started the cultural change from the old school 'knowledge is power' and safety training to a culture where safety is part of everything we do and knowledge is transferred freely in a positive atmosphere. The positive effects resulting from the contributions of this program to the education and training of our staff will be experienced for many years in the future.

### **Benefits/Payoff**

Benefits are experienced at all levels. The employees are empowered and responsible to participate in their career goals. Supervisors receive the benefit of well prepared and trained employees as well as playing an active role in their development. Management

also benefits from knowledgeable staff through improved succession planning, a flexible work force, increased productivity and work quality as well as a reduction in accidents.

### **Value to the Canadian Transportation Community**

This program promotes trained workers who are fully invested in constantly improving their skill and expertise. There is a distinct focus on uniformity of training and process which results in a more consistent level of service through the Province for citizens, industry and stakeholders.

### **Summary**

The Maintenance Career Training Program is the culmination of research conducted both within the Department and with external Transportation organizations from across Canada and the Northern United States. The program's success relies on equally important contributions from executive management all the way through to the field staff. It is a "living" program that has the ability to adapt and evolve. It clearly defines the expectations of all involved and rewards success. The positive change in culture that is occurring is directly reflected in morale, performance and productivity.