

**NEW ENGLAND TRANSPORTATION CONSORTIUM
QUARTERLY PROJECT PROGRESS REPORT**

A. PROJECT NUMBER AND TITLE:

NETC 14-1

Measuring the Effectiveness of Competency Models for Job Specific Professional Development of Engineers & Engineering Technicians

B. PRINCIPAL INVESTIGATOR(S) & UNIVERSITY(S):

Chris Ahmadjian
UMass Amherst

C. WEB SITE ADDRESS (If one exists):

<http://www.ecs.umass.edu/umtc/index.shtml>

D. START DATE (Per NETC Agreement):

3/1/2015

E. END DATE (Per NETC Agreement):

4/2/2016

F. ANTICIPATED COMPLETION DATE:

9/2/2016

The project was estimated at 18 months, however the contracting process took longer than expected. The UMass speed type (spending account) was not created until June 8, 2015.

After scheduling discussions with the technical committee, an amendment of the end date to 9/2/2016 should give adequate time to complete the project.

G. PROJECT OBJECTIVES:

The objectives of this project are:

1. To identify and review existing Competency Models (CM) and matrices that can help in the development of a DOT specific competency model
2. To perform a gap analysis on the existing CM's and matrices to create a DOT specific employee competency matrix
3. To create a CM framework for each of the NETC member states
4. To run a pilot program in one of the NETC member states
5. To determine the financial benefits (return on investment) of having a CM in place
6. To create an implementation plan and technology transfer strategy for the research results
7. To deliver a final report (as required in Task 5)

H. REPORT PERIOD:

June 01, 2015 to September 30, 2015

I. ACCOMPLISHMENTS THIS PERIOD:

The kickoff meeting was held on 9/25/15.

The technical committee discussed the goals of the project, scheduling, and progress on Tasks 1 and 2.

The planned schedule is for completion of:

- Task 1 by mid-November 2015.

- Tasks 2 and 3 – Determine Gaps and Develop a CM Framework - by mid-February 2016.
- Task 4 – Pilot Program - at the end of June 2016.
- Task 5 – Final Report - at the end of August 2016.

Task 1 involves researching existing competency models and matrices. A number of articles and references have been found; however, specific models for DOT's have been more difficult to identify than anticipated. Work on Task 1 will continue.

Task 2 involves determining gaps in existing competency models. The technical committee agreed that a good first step would be to propose standard employment classifications for both technicians and civil engineers within a DOT. The competency model developed will then be based on those standard classifications. Research on existing grades within DOT's is underway. A proposal on standard grades is scheduled for our next technical committee meeting, which will be in November.

Maine offered to host the pilot Program.

J. PROBLEMS ENCOUNTERED (If any):

K. TECHNOLOGY TRANSFER ACTIVITIES: *List any reports, papers, presentations published/presented during the report period or anticipated for the next quarter.*

L. STATUS BY TASK:

Task 1: Research Existing CM's and Matrices – 50% complete.

Task 2: Determine Gaps in Existing CM's – 0% complete.

Task 3: Develop a Transportation CM Framework for Each NETC Member State – 0% complete.

Task 4: Run a Pilot Program in at Least One State – 0% complete.

Task 5: Delivery of a Final Report – 0% complete

M. PERCENT COMPLETION OF TOTAL PROJECT: 5 %

N. ACTIVITIES PLANNED FOR NEXT QUARTER:

Complete Task 1 and offer the results for review by the technical committee

Create standard employment classifications for technicians and civil engineers and present those to the technical committee for review

Determine gaps between existing CM's and standard classifications

Begin development of a CM framework

O. FINANCIAL STATUS:

As of: *Month, Day, Year*

Total Project Budget: \$ 100,000

Total Expenditures : \$ 6,490

Note: This report should not require more than 2-3 pages & should be e-mailed to the NETC Coordinator so as to arrive no later than three (3) working days after the end of each calendar quarter.