

**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):

www.umasstransportationcenter.org

D. START DATE (Per NETC Agreement):

3/1/2015

E. END DATE (Per NETC Agreement):

12/31/2016

F. ANTICIPATED COMPLETION DATE:

12/31/2017

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

H. REPORT PERIOD:

October 01, 2016 to December 31, 2016

I. ACCOMPLISHMENTS THIS PERIOD:

Our graduate student has completed her thesis work. That work forms the base information for this research project. The literature search and data are directly transferrable and her results and conclusions should transfer as key parts for a model under this research.

We have brought in two new researchers: Dr. Michael Knodler, Associate Professor at UMass will be providing direction and support for the project; Cole Fitzpatrick, Research Fellow here at UMass will be applying his expertise to move the project forward.

We all met recently and decided on a revised strategy.

1. The first step is to get an extension until 12/31/17.
2. The next step is to give up on our subcontractor, who has not been responsive.
3. Cole Fitzpatrick will meet with members of the technical committee to brief them on progress.
4. We will then pull already developed model parts into a comprehensive model.
5. The model will be tested in Maine.
6. The final report will be written.

J. PROBLEMS ENCOUNTERED (If any):

We were again forced to stop formal work on the project in January and are now working toward getting a project extension. Our graduate student finishing her degree work in the fall and our subcontractor not performing were issues.

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 – 100% complete.

Task 2: Determine Gaps in Existing CM's – 90% complete.

Task 3: Develop a Transportation CM Framework for Each NETC Member State – 30% 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: 40 %

N. ACTIVITIES PLANNED FOR NEXT QUARTER:

Waiting on approval of contract extension

O. FINANCIAL STATUS:

As of: December 31, 2016

Total Project Budget: \$ 100,000

Total Expenditures : \$ 47,808

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.