

Sample mathematical sciences projects involving service-learning (Hadlock, 2005, p. 4).

<b>Project Description</b>	<b>Associated Course(s)</b>
Design and build handicap access ramp	Algebra (slope and angles)
Tutor individual clients on "everyday" mathematics	Finite mathematics
Assist in the teaching of a consumer mathematics unit at an agency preparing people to own houses	Mathematics for liberal arts
Collect data and develop straight line approximations	College algebra
Compile visitor information and present data using tables and graphs	College algebra
Tutoring and running special math events	Mathematics for teachers
Develop cost and revenue functions for various programs	Precalculus for business
Analyze deployment of vans and identify opportunities for improvement	Graph theory, discrete mathematics
Design efficient snow plow routes for the city	Discrete and combinatorial mathematics
Analyze the consequences of constructing traffic bypasses around the city	Discrete and combinatorial mathematics
Analysis of traffic congestion on state highway	Statistics, operations research, senior thesis project
Conduct survey, compile data, perform analysis, and present results	Statistics
Statistical analysis of data on fish populations	Statistics
Quantitative analysis of risks from transportation of hazardous materials through the city	Environmental mathematics
Development of questions to be used in math contests for high achieving students	Number theory, discrete mathematics
Analyze implications of alternative investment strategies for an assistance fund	Mathematics of finance

Hadlock, C. (Ed.). (2005). *Mathematics in Service to the Community: Concepts and Models for Service-Learning in the Mathematical Sciences*. Washington, D.C.: The Mathematical Association of America