

Project Management

Client Centered

TLI Solutions, Inc. (a TechLaw Company) delivers objective leadership. Our professional project management can help ensure the success of your ideas, plans, and initiatives. It might seem unusual for a company that is essentially focused on the objective and finite details of project management, but our approach is creative and collaborative, which keeps clients involved with the process and the outcome. We build teams of people who have the right attitude and *can-do* spirit.

TLI Solutions, Inc. (TLI) delivers effective project planning, management, and execution. Our approach is creative and collaborative. We begin our work by clearly defining existing parameters. We creatively plan solutions and work with a focus on the applied realization of goals. Our unique processes and technology combined with our experienced staff (many are certified Project Management Professionals) are applied to each project to ensure effective project execution in terms of scope, schedule, and costs.

Our staff is a unique group of experienced, creative problem-solvers who are high-caliber project management leaders. Our approach to building a team has been to start with people who have the right attitude and can-do approach. We have spent our professional careers getting things done and have found the right people to be the foundation of our company.

Rapid Planning and Execution Emergency Response

Fire on the Mountain, Cerro Grande

On May 4, 2000 in the late evening, National Park Service fire personnel at Bandelier National Monument New Mexico ignited a prescribed fire with an approved plan. The fire grew beyond the expected containment areas and within days destroyed over 400 homes and burned 46,650 acres. By May 13, President Clinton issued a major disaster declaration. To this day

the fire remains the most costly federal fire disaster. Things were about to get worse... monsoon rains were forecast to begin in less than 60 days.

An interagency rehabilitation team was assembled to minimize secondary damages such as flooding and to promote healthy forest re-growth. TLI consultants were called to develop and manage the plan for the rehabilitation effort. This required a truly creative effort that would rely on fast action and tight coordination.

The Problem: The canyon slopes were vulnerable and the towns of Los Alamos and White Rock were in danger of flooding. Time was of the essence. It was vitally important to beat the monsoon rains and protect the steep barren slopes over the town. The U.S. Forest Service determined that aerial hydro-seeding would solve the problem; however no campaign of this magnitude had ever been attempted. There were no resources capable of delivering this service safely and in time.

The Solution: This would be the largest aerial hydro-seeding campaign ever attempted. Not having the resources in place capable of delivering this service in time, TLI consultants developed the Project Management Plan, wrote the procurement, evaluated bid responses, and assisted the U.S. Forest Service in evaluating the offers. The project management included finding and selecting the contractor and competitively awarding the contract in only nine days. To meet the schedule, it was

necessary to have the planes run continuously with only a 90-second turnaround for fueling and reloading.

Results: After 30 ten-hour days of continuous hydro-seeding staged, the Los Alamos Municipal Airport with zero safety incidents, was inundated with 3,000 community residents attending the open house to thank the team for their efforts. The project was executed according to plan, on-budget, and on-time.

Environmental Risk Management

Saving Time and Money

The Los Alamos National Laboratory (LANL) located in Northern New Mexico, is home to a world-class scientific research institution with



a dedicated mission of National Security. TLI has been assisting LANL in areas related to the core mission, and to the important activities of environmental restoration (ER), waste management, and decontamination and decommissioning.

TLI has developed cost and schedule estimates for LANL for the estimated \$1.5B (life-cycle) ER Project, and in doing so, developed the risk and contingency management processes and methodologies to help answer another key question; what is the potential range of environmental cost liability at LANL?

The Problem: A point estimate predicts the future costs of complex projects, but cannot predict the range of potential out-year liabilities in an integrated, risk-based format that can be used to mitigate those costs. A systematic approach was needed.

The Solution: Develop a defensible and quantifiable prediction of the risk and the management of future

environmental liabilities. Create a sound technical approach and make it easy to understand. Above all, add tangible value that can help save taxpayers money and reduce risk to the workers, the public, and the environment.

Results: Using off-the-shelf software tools such as Crystal Ball[®], Primavera Project Planner[®](P3[®], P3e[®]), Pertmaster[®], and custom internally developed Comprehensive Cost Estimating System in an integrated approach, TLI has reduced the time it takes to perform *what-if* analyses on the remediation alternatives by half, and increased the identification of common risks to avoid or mitigate potential future cost overruns.

Implementing Project Management Culture

A Motivational Approach

LANL had a clear goal; systemize the project management processes to meet a specific requirement called out in the laboratory maintenance and operation contract, a mandatory deliverable from the University of California (UC) to the U.S. National Nuclear Security Administration (NNSA). At issue was how to manage the Nuclear Weapons Program at LANL; a tall order for a group of hundreds of scientists, engineers, and technicians that had to change to a project management culture for defining and reporting results.

The Problem: It doesn't take a rocket scientist to do project management, but what if that is all you have to work with? Nothing against rocket scientists, but this was asking a bit much to impose on their obvious capabilities as world-class brains. TLI was asked to develop the policies, procedures, process instructions, and desktop instructions and make sure that translated into the daily operations and culture of the \$225M/year program. Plan it, do it, train it, and verify acceptance.



Most of all, don't overly impact what these scientists do best (i.e., science).

The Solution: Build an acceptable project management system at LANL for daily use. To that end, TLI personnel who had previously worked at Boeing in their Quality Assurance (QA) organization had experienced a similar situation. Could the QA approach work on project management? Not only did it work, it became a standard method of how to run large, complex, non-construction projects at LANL.

TLI developed an ISO 9000-based project management documentation structure and trained over 500 UC staff to make project management part of the daily culture in one of the nuclear weapons programs. To make it easier on the LANL staff to achieve, TLI also developed the web-based Work Package Generator software tool so that the technical staff members that are closest to the work can easily document what they need to do, when they can get it done, and what it will take to get there.

Results: The NNSA verified that the UC contractual milestone was successfully achieved. A culture of cooperation was established saving thousands of man-hours per year with the use of clear guidance and new systems. Rocket scientists were now smiling.

Global Material Protection Control and Accounting

Getting Things Done Around the World



Oak Ridge National Laboratory (ORNL), run by the University of Tennessee and Battelle (UT-Battelle, LLC) is a multi-program National Laboratory that is tasked by the NNSA to assist in international activities to control the proliferation of nuclear materials. The Material Protection, Control &

Accounting Program helps to support Russian nuclear sites by providing technical and program assistance as part of a joint U.S.-Russian team.

The Problem: To help the Russian sites control their own future, ORNL needed to understand the breadth and depth of the nuclear asset base and communicate solutions to NNSA and to the Russian team members.

The Solution: TLI consultants evaluated the existing asset documentation processes, and proposed a novel approach to the Materials Protection, Control, and Accounting (MPC&A) team; use systems architecture modeling tools to portray the relationships between assets existing in Russia (hardware, software, portals, detectors, surveillance equipment, people, roles, training, documentation, procedures, and contracts) to do an all-Russian view of the magnitude of the nuclear asset base.

Results: TLI aided ORNL in completion of the MPC&A Operations Criteria document, later known as the Sustainability Guide. At the International Joint Institute for Nuclear Research in Dubna, Russia, Mr. Marc Zoicher presented configuration management topics at the international workshop on sustainability. TLI support has led to ORNL's development of the MPC&A Modeling Center at ORNL, now supporting other clients in the Department of Homeland Security, and the Defense Advanced Research Projects Agency.



TLI significantly reduces management costs, direct costs, and even shortens schedules. We back this claim with hard data. Let us prove it for you.

Training, Communication, and Implementation

We believe that people must first understand an idea before they adopt its goals and procedures necessary to advance the idea. TLI develops training courses and provides training in various formats (live, video, computer-based) to all levels of personnel on project management policies and procedures including project controls staff, project leads, and executive management.

Cost Estimating

TLI has cost estimators with experience in conceptual, parametric, and activity-based estimating, with specific strength in the following applications:

- a. Environmental Restoration and Impact
- b. Site Operations
- c. Weapons Programs
- d. Manufacturing: Aerospace Industry (Boeing)
- e. Software Development
- f. Training
- g. Independent Cost Estimate Reviews (ICERs)

Product Development and Integration

TLI personnel have experience performing and managing software implementation including implementing project management software like Primavera Project Planner (P3®) and Microsoft Project for the Enterprise and computerized maintenance management software like MAXIMO.

Business Process Management

Our personnel developed formal standard policies and procedures for Business Process Management (BPM). These policies and procedures addressed all aspects of program and project management from project scheduling and estimating to change control and configuration management.

Independent Assessments

In addition to Independent Cost Estimate Reviews, TLI personnel are experienced in independent review and analysis of project management systems, business systems, Department of Energy Order 413.3 Gap analysis, and formality of operations. We can provide project management maturity assessment to help increase the value of your existing project management offices.

Quality Assurance

TLI personnel have experience in implementing software quality assurance including QC-1 requirements in both the government and commercial sectors.



Risk Management Solutions

TLI personnel can help you tailor a risk management program and plan specific to your organization's needs. TLI has produced and implemented dozens of risk management plans, Contingency Management Plans, and risk mitigation strategies for projects ranging from complex environmental cleanup to operational impacts. At the data level, TLI personnel can help to quantify cost, schedule, and mission risk probability using Monte Carlo techniques, simulation, and modeling software (Metis® Crystal Ball®). Let us help you manage risk.

Resource Analysis / Evaluation

TLI can deliver a qualified outside perspective on your resources and recommend ways to improve your bottom line or mission success. Using our Role-Based Analysis methodology, we can help you pinpoint resource bottlenecks and provide solutions to get your project, product, or program on track.

SOFTWARE AND TOOLS

- Microsoft Project
- Primavera Project Planner (P3 and P3 Enterprise)
- Metis Modeling
- MAXIMO (Computerized Maintenance Management Software - CMMS)
- RACER (Remedial Action Cost Engineering and Requirements)
- MCACES (Micro-Computer Aided Cost Engineering System)
- Classified Document Handling
- Metis® Crystal Ball®
- @Risk

Our people, processes, technology, and experience are applied to every project to ensure effective project execution in terms of scope, schedule, and costs, with improved visibility of the entire project for *your* management team.

We have a broad range of strengths that effectively support the realization of effective change. Beyond any specific services, our greatest value is as a partner in *managing* change.
