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Department of Transportation's  
Project Management Office

# Project Management Communicator

*Project Management - It's how things get done!*

## Walking the Talk

by *Lora Hollingsworth, P.E.*  
*Director, Office of Design*

It's that time of year again. No, not for taxes, even though it is that time too! It is time to start the strategic plans for next year. What, you may ask, is a strategic plan? It is an exercise of identifying what we are going to do in a given period of time, writing it down, and identifying major milestones to lead us to the desired goal. Putting these goals on paper, with a timeline is a very valuable tool both at work and personally. You can actually measure to see how you are doing.

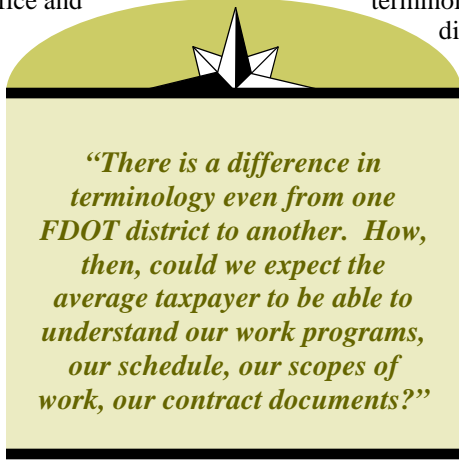
Take your New Year's Resolutions for example. We are in the second quarter of the year. Are you on track with your resolutions? Do you remember what they were?

Every year at tax time, I would agonize over getting all the information together in time to file. For years, I promised I would not wait until the last day to get my taxes done. So, last April, I made a plan to have everything in one place. I'd write my often overlooked deductions down and I'd keep my paperwork together. That was what I said I'd do and I did write it down! I made a place to collect the information. This was the extent of my tax strategic plan. But, I acted on what I'd committed to and tried very hard. Did I succeed? I don't know. Things are easier to find now and it is all in one place so I did make improvements. I forgot something on my plan...**dates!** I did not give myself a way to measure if I succeeded or not (besides the April 15 deadline).

Well, there is always room for improvement. Next year's plan is to have my taxes completed by April 1. Now, there is a goal that is measurable!

*Dianne Perkins (850) 414-4784*

From a purely selfish perspective the timing of the Governor's Plain Language Initiative couldn't have come at a better time. Being brand new to the Florida Department of Transportation, Central Office and Tallahassee as the new Director of the Office of Design, I find myself surrounded by a whole new set of acronyms in a brand new culture. I've lived through (and even promoted) change many times throughout my personal and professional life, so the transition is no surprise to me, but it can still be a daunting task.



*"There is a difference in terminology even from one FDOT district to another. How, then, could we expect the average taxpayer to be able to understand our work programs, our schedule, our scopes of work, our contract documents?"*

As the City Engineer for a central Florida community before joining the FDOT and coming to Tallahassee, I was often identified with the FDOT by my coworkers, City Manager or City Commissioners because of some of the projects that I managed from the "local stakeholder" side of the business. Other department directors would occasionally ask me to interpret the FDOT's use of fiscal year and translate it into a "City fiscal year equivalent" so that we might appropriately align our utility projects with or ahead of planned FDOT road projects. The debate was always entertaining.

Some may think that the engineering or transportation industry is the same no matter

where you go. Such has not been my experience. Language can become very specific to a group or an office, even within the same profession. There is a difference in terminology even from one FDOT district to another. How then, could we expect the average taxpayer to be able to understand our work programs, our schedule, our scopes of work, our contract documents? Does a Mom-and-Pop operation understand a taking, setbacks, variances, exceptions, protracted schedules, or blanket exemptions? My biggest disappointment is that it would take an executive order to force us to do what we should have always been doing.

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*Good plans shape good decisions. That's why good planning helps to make elusive dreams come true.*

*Lester R. Bittel, The Nine Master Keys of Management*

# Communication

## Walking the Talk (continued)

by Lora Hollingsworth, P.E.  
Director, Office of Design

I know the FDOT has high standards. That's what attracted me to this organization. I also know that we can lose our edge if we get too focused on one area. We need to regularly review our standards to make sure they continue to communicate what needs to be communicated. When we add more and more detail without reviewing our work product and culling out the obsolete and unnecessary, we can become bogged down in pages of useless filler. We should be striving to be clear and concise, lean and effective. We lose our credibility when we continue with a legacy that has outlived its useful life. We can't assume our audience knows what we're talking about. And we can't rely on a chapter full of acronyms and abbreviations to clarify what should be clear. There comes a point when they lose their meaning and as a result we lose our credibility.

As I learn my way through the maze of policies, procedures, processes, products and services that are housed in the Office of Design, I have the opportunity – the obligation – to look at everything with fresh eyes. I challenge us all to do the same.

"We've always done it that way" is my absolute least favorite sentence, especially when "it" is clearly an obsolete function. At the same time, "customer service" is a way of life for me – it's not just a phrase. A few others that are on my least favorite list include:

- The customer doesn't understand "laid back"
  - "I'm old school" is a good explanation for solid values, but is not an excuse for not trying new things or not having an open mind
- Change is inevitable – managing change is more effective than resisting it.**

*"As I learn my way through the maze of policies, procedures, processes, products and services that are housed in the Office of Design, I have the opportunity – the obligation – to look at everything with fresh eyes. I challenge us all to do the same."*

And so we move into a new era, with transportation needs far outweighing our revenues. As project managers we serve as we oversee. We are accountable to the taxpayers and the motoring public to ensure that we're doing the right projects the right way – on or ahead of schedule, on budget, minimizing change orders, managing scope creep.

A service-first philosophy coupled with plain language has always made for a winning approach and always will. This approach is more than an option - it's a requirement for successful project and program management.

*Lora Hollingsworth started with the Department November 17, 2006). She is the Director of the Office of Design which is composed of the State's Roadway Design, Structures, Project Management, Surveying and Mapping, CADD Systems and Specifications/Estimates Offices. She has had to deal with the FDOT from the outside, dealing with the Department in many areas from hurricane clean up to local agency program projects. She has a broad knowledge of transportation systems and understands the importance of inter-governmental coordination.*

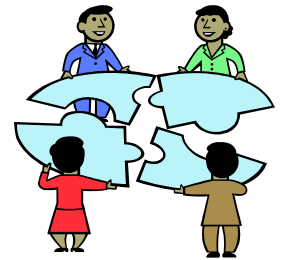
"Outstanding leaders go out of their way to boost the self-esteem of their personnel. If people believe in themselves, it's amazing what they can accomplish. High expectations are the key to everything." - Sam Walton



# 2007 PM Conference

*Something for Everyone!*

by Louis Reis, State Project Management Engineer



Here I am writing an article in March, that you will read in April about a conference that will take place in June. In case you haven't figured this out yet, this article is about the upcoming **Project Management (PM) Conference** that will be held on **June 6-8, 2007**, at the **Caribe Royal Resort and Convention Center in Orlando**.

When the Project Management Office (PMO) initially started to plan the Project Management Conference we were directed to make the conference relevant to all aspects of Florida Department of Transportation (FDOT) project management. What this means is that we needed to have topics that would be of interest to project managers from Planning through Maintenance. So, for the past couple of months, a group of Central Office staff representing offices from Planning through Maintenance, as well as Multi-Modal and Professional Services, have been working with me to develop an agenda for this conference.

The PM Conference will consist of 44 hours of presentations broken into four separate rooms. This does not include the opening general session which will start the conference at 1:00 PM on June 6, 2007. In addition to the presentations there will be a **Technology Room**, where various computer applications will be displayed and conference attendees can have direct informal interaction with the technology and area experts.

To refer to the 44 hours of presentation as "just presentations" is a misnomer. The presentations will consist of regular presentations, as well as formal training sessions, case studies, and interactive panel discussions. Many of the presentations and case studies focus on one or more of the

knowledge areas identified in the Project Management Institute's "Project Management Body of Knowledge." Therefore, a presentation based on one phase of a project would still have relevance to the other phases. For example, a case study on a design project that focuses on communication and coordination with local officials and developers, would still be relevant to other phases since we all have to coordinate with local governments and private developers regardless of what phase our project is in the project life.

*"... the biggest question facing the attendees to the Project Management Conference is not "is there something on the agenda for me?" but "which presentations am I going to have to miss?""*

In addition to the conference presentations, and Technology Room applications, the conference will also host the second semi-annual **Excellence in Project Management Awards**, to be held at a luncheon (included in the registration) on Thursday, June 7, 2007. These awards are given to Project Managers, Offices (both Consultant and FDOT), and Transportation Projects that have shown excellence in the area of project management.

If you are interested in viewing the agenda, checking out the hotel, or registering for the conference you can go to the following web-link:

<http://www.dot.state.fl.us/projectmanagementoffice/PMConference2007/>

As I look at the agenda again before closing this article I have come to the conclusion that the biggest question facing the attendees to the Project Management Conference is not "is there something on the agenda for me?" but "which presentations am I going to have to miss?" There really is that much **"good stuff"** on the agenda.

*Goals that are not written down are just wishes. Author Unknown*

*Goals are dreams we convert to plans and take action to fulfill. ~Zig Zigler*

*Arriving at one goal is the starting point to another. ~John Dewey*

# The Tool Box



## Value Engineering: A Tool in the Project Management Tool Box

by Kurt Lieblong, State Value Engineer

The practice of Value Engineering (VE) emerged in the transportation industry during the 1970's. The Federal-aid Highway Act of 1970 authorized the Secretary of Transportation to require VE on any federal-aid project on the federal-aid system. The National Highway Systems Act of 1995 established a program requiring Value Engineering on all National Highway System projects with a total cost of \$25 million or more and the VE analysis had to be performed during design.

The passage of SAFETEA-LU had a subtle change to the Federal Requirement for Value Engineering on federal-aid projects. The word concept was added as an acceptable project phase to perform VE studies. This one word allows agencies to conduct the VE study during the planning phase of a project and still receive credit for performing a VE study. The reason for giving this brief history of VE in transportation is to not only point out that there is a federal requirement, but that the Federal Government has recognized that VE is an effective tool when successfully applied to projects.

Obviously, there are pro's and con's to the timing of VE studies. A few upside reasons to conducting VE studies during conceptual phase is that the opportunity for change is greatly

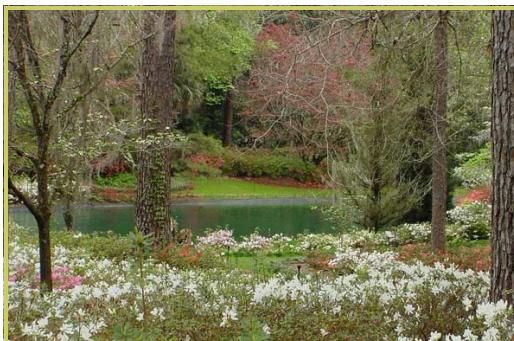
increased, the team has fewer limitations as to what to study, fewer commitments have been made, and the impact of the recommendations can be much greater. The downside is that there is less information for the team to study and savings are difficult to attach to the recommendations. The upside to VE studies later in development is that there is more information to analyze and the cost of the project is more refined. The downside is that opportunity for change is reduced, the team has more constraints and more commitments have been made.

*“The word concept was added as an acceptable project phase to perform VE studies. This one word allows agencies to conduct the VE study during the planning phase of a project and still receive credit for performing a VE study.”*

The Department has used the VE process over the years to analyze not only projects, but also processes and standards. During the last 10 to 15 years the program has focused on using VE during the concept and early design phases of projects, but with the rising costs there has been studies performed recently in the late stages of design.

In future issues of the Project Management Communicator we will bring you case studies of actual projects that were improved by the effective use of the Value Engineering process.

**Kurt Lieblong is the State Value Engineer . Reach Kurt at [kurt.lieblong@dot.state.fl.us](mailto:kurt.lieblong@dot.state.fl.us)**



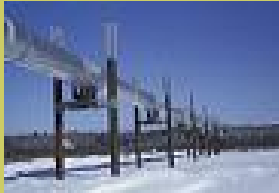
**If we had no winter, the spring would not be so pleasant; if we did not sometimes taste of adversity, prosperity would not be so welcome.**

**~Anne Dudley Bradstreet**

# Guest Corner

## *Alaskan Mystery*

by Bob Weinstein



*“ The 800-mile Alaska Pipeline was a project without a plan or method. This remarkable story presents some valuable lessons from the biggest and most expensive private enterprise in American history. ”*

The building of the Alaska Pipeline from Prudhoe Bay on Alaska's Northern Coast to the Port of Valdez is the biggest and most expensive private enterprise in American history.

The story begins in 1968, when the Atlantic Richfield Company struck oil in the North Slope, at Prudhoe Bay. It was the largest oil field ever discovered in North America. Several oil companies joined in and started drilling their own wells. But they all faced the same problem: how to get 10 billion barrels of oil out of Alaska. They were soon to learn that there was no simple solution.

The Arctic Ocean was frozen solid most of the year, and there wasn't even a road within 400 miles of the wellheads. Much of the country was untamed and wild, and had never even been mapped. It was literally a no-man's land--which elevated it to a compelling challenge for big business and adventurers alike. But more than anything else, greed was the driving force for building the pipeline.

Building the Alaska Pipeline was one of the most difficult and dangerous projects ever undertaken, and the story has all the ingredients of a great novel, film and even TV miniseries. It is a human drama of epic proportions, with all the spellbinding components that stir emotions--big business, politics, corruption, danger and adventure. It attracted thousands of people from all over the world and all walks of life. They traveled to the frozen wilderness to work for the project, make their fortunes or just watch the events ringside and be able to say that they were an eyewitness to history in the making.

A Fairbanks police officer likened the building of the pipeline to the California Gold Rush at the turn of the 20th century. Alaska was the last American frontier, and Fairbanks was turned into a boomtown, filled with pipeline workers spending money as fast as they made it.

The Alaska Pipeline is also a story about extraordinary project management. Its star was a confident, experienced, tough and unstoppable senior project manager (PM) named Frank Moolin. Chroniclers of the event unanimously agree that Moolin was the heart, soul, spirit and seminal force behind the sprawling project. Without him at the helm, it would have floundered and failed.

When Moolin was hired by Alyeska--the company formed to design and build the pipeline--he had a reputation as a veteran big-project construction engineer and PM who knew how to get things done. He had just finished building BART, San Francisco's rapid transit system.

Looking back on the disorganized beginnings of the project, one wonders why Moolin undertook a project without a clearly defined plan outlining obstacles, contingency scenarios, problems, timetables and a host of other variables that are routinely accounted for to assure the success of a project of this dimension.

It's hard to believe, but the Alaska Pipeline project was launched with little more than a goal and no clear roadmap for achieving it. From the outset, the project's critics insisted that it was impossible to build an 800-mile pipe through the heart of America's last untouched wilderness. In many respects, they were right. Initially, no one knew that it could not be built using conventional methods.

Over-optimism on the part of management and stakeholders has doomed countless projects. Yet it didn't stop Moolin. Judging by his reputation, it probably was the project's outrageous scope combined with the daunting odds of succeeding that fired his adrenaline.



## Guest Corner

### *Alaskan Mystery (continued)*

by Bob Weinstein



Frank Moolin

#### Breaking All the Rules

Despite the odds and naysayers' predictions, the oil companies officially announced their plans to begin the pipeline in February 1969. The estimated cost was **\$900 million**, and completion was targeted for 1972.

To start, \$100 million worth of steel pipe was ordered from Japan. But the recklessly irresponsible oil companies didn't have any design drawings or construction permits. They figured that confidence and technical know-how would overcome all problems in their way. All they had going for them were deep pockets to finance it. They left all the project details to their PM, Moolin.

Initially, the oil companies had considered sending in icebreaking tankers, nuclear-powered submarine tankers and 12-engine jumbo jet tankers to the frozen wasteland to get the oil out. When they thought about the great distance, however, they concluded that it wasn't practical. The only solution was a pipeline. The most direct route was an 800-mile path hacked through the Alaskan wilderness, which involved crossing three mountain ranges, 800 streams, numerous rivers and active earthquake zones.

A herculean task for sure. If those daunting obstacles weren't enough, the oil companies were stopped in their tracks by environmental groups and outraged Alaskans who had no intention of allowing the pipeline to be built on their land.

The Wilderness Society lead the fight against federal approval of the pipeline, much of which would cross public land. Still waiting for Congress to settle their ancestral land claims from the Alaska Purchase in 1867, Native Alaskans faced a new outrage. An entire village, Stevens Village, was located directly in the proposed path of the pipeline. Native Alaskans and environmental groups wasted no time suing the oil companies in federal court. They won, and the pipeline was stopped until their concerns were addressed.

Environmentalists held the winning hand and were instrumental in the passage of the National Environmental Policy Act. Under the NEPA, the

government was required to evaluate environmental threats and alternatives before a project on public land could be authorized. The NEPA had the power to stop a project indefinitely until grievances were settled.

Unstoppable oil company decision-makers figured they'd lay the pipeline underground the same way they'd built pipelines throughout the world. It's as basic as digging a ditch: dropping the pipe in, connecting and welding it, then burying it. They never considered that it might not work in the Arctic. Geologists pointed out that beneath an insulating cover of vegetation, a large portion of Alaska rests on permanently frozen ground called permafrost. In some places it's gravel; in others it's ice. When ice-laden permafrost thaws, it turns into mud that can't support any weight.

Here's what would happen: As hot oil flowed through the buried pipe, it would thaw any ice-rich permafrost along the way. The unsupported pipe would eventually buckle, break apart and start leaking oil. To prevent this from happening, the oil companies were ordered to drill more than 15,000 soil samples along the route to locate all the areas of ice-rich permafrost. As a result of geological testing, the oil companies were told that some 400 miles of the pipeline must be built above ground.

By the summer of 1973, the permafrost problem had been solved, and the oil companies were given the green light. Finally, at the end of January 1974, Moolin's construction crews--which totaled some 20,000 men and women--began the preparatory work. Soon the real work began, along with endless problems to boot.

First, a supply road was built through the northern half of Alaska, from the Yukon River north of Fairbanks to Prudhoe Bay. Along the way, construction camps were set up to house the workers, which was no simple feat. Road-building equipment had to be hauled in, and temporary housing had to be set up on frozen ground.

By the fall of 1973, a 360-mile gravel road was completed. Moolin intended to start construction on the pipeline the following spring. By March 1975, 3 million tons of pipe, machinery, spare parts, fuel and food were hauled in, and the pipe-laying began. An extraordinary PBS documentary about the building of the pipeline has

# Guest Corner

## *Alaskan Mystery (continued)*

by Bob Weinstein



pointed out that Moolin was the glue that held the Alaska Pipeline project together. He was responsible for motivating his workers and keeping morale high throughout the grueling building process.

An assistant PM who worked closely with Moolin said that he instilled a sense of mission in every worker. If each person didn't pull his weight, the entire project would fall apart. So every worker gave 100 percent because they didn't want to let Moolin down. It's easy to understand when you consider that Moolin set the pace, working tirelessly. The assistant PM described Moolin as "totally driven and very demanding."

For two years, this tough PM practically lived in a helicopter, trying to keep the problem-ridden project on track. Twelve pump stations had to be built so that 800 miles of pipe could be welded together 40 feet at a time. Since a little more than half the distance passed through unstable permafrost, 420 miles of pipe had to be built above ground and insulated to keep the oil flowing in cold weather. If that wasn't difficult enough to execute, the last 1,000 feet of the pipeline had to scale a sheer cliff. The project almost stalled at that point, because no one wanted to risk their life--until a veteran worker volunteered to do the job.

In August 1975, Moolin had 27,000 workers on the job, and he was hell-bent on having 400 miles of pipe in place by the end of the year. Reaching that goal under normal conditions is difficult enough, but in Alaska, it's almost impossible. During the winter, it's not unusual for temperatures to plummet to minus 45, even minus 60 degrees. On the precarious North Slope, the wind-chill temperatures can reach 115 below zero. On this stretch of barren land, the sun is never seen for most of the winter because it's nighttime most of the time.

By mid-December, working conditions were intolerable. Just 25 miles short of Moolin's 400-mile target, extreme weather conditions stopped the welding for six weeks, and many welders threatened to quit. Moolin was not going to let anything stop him--not the weather, not overworked welders, not brutal weather conditions, not even rumors that a few of the major oil companies financing the project faced bankruptcy.

Moolin was unstoppable. A little more than 20 months after the pipeline project began, Moolin's 800 miles of pipe was in place and ready to be tested. On June 20, 1977, the valves at Prudhoe Bay were opened, and the first Alaskan crude oil began to flow. The final tab on the Alaska Pipeline project was \$8 billion, 10 times the original estimate.

Moolin was honored by his peers for pulling off the hardest construction project in history. Sadly, the Alaska Pipeline was Moolin's last project. He died a few years after it was completed, at the age of 48. Close friends and co-workers said his hard-driving, relentless style contributed to his early death. But no one knows for sure.

One thing is certain: Moolin deservedly achieved legend status and will never be forgotten. Beyond creating boundless wealth for the American oil industry, his pipeline put Alaska on the map, catapulting it from poverty to riches. With total recoverable reserves estimated at 13 billion barrels, Prudhoe Bay provides about 20 percent of the United States' yearly supply of crude oil and is the largest oil field in the nation.

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### *Just An Opinion*

It seems that almost all of the fundamentals of good project management were broken from the start: lack of proper planning, inadequate research and design, underestimation of effort, lack of understanding of risks, disregard for safety. The project came in a whopping ten times over budget and was late. Yet it is still regarded as a success. The project manager was obviously a very driven, committed, competent individual. The project clearly relied on his personal leadership and drive. This is too often the case. In the project management discipline we need to continually strive to introduce standards, frameworks and sustainable, repeatable practices that ensure more projects enjoy success. One lesson that is worth noting from the story is that Frank Moolin, as the project manager, clearly took the responsibility and accepted accountability for delivering the result.

# A Look Ahead



## Upcoming Events

### Public Involvement in Transportation Decision Making

April 10-12, 2007

Orlando

Public Involvement is much more than posting notices and holding public hearings. It is about being sensitive to disparate needs and conflicting priorities. It is about giving the public an opportunity to influence transportation decision making. This course is a joint effort among FTA's Office of Planning, NTI, the Federal Highway Administration's (FHWA) Office of Planning, and the National Highway Institute (NHI) and was recently updated to reflect changes in the Federal Transportation reauthorization.

[http://www.ntionline.com/  
CourseInfo.asp?](http://www.ntionline.com/CourseInfo.asp?)

### Joint AASHTO / FHWA

### Right of Way and Utility Subcommittee Conference

April 29-May 3, 2007

Rosen Shingle Creek

Orlando, Florida

Visit the website at:

[http://rightofway.transportation.org/?  
siteid=61&pageid=1773](http://rightofway.transportation.org/?siteid=61&pageid=1773)

### "Champions through Teamwork"

### 2007 Annual Maintenance Conference

May 3-4

Orlando Lake Buena Vista  
Embassy Suites

For more information,  
contact Jim Hannigan or  
Liz Yates at 1-800-749-2967

### DBE

Match Maker Conference

May 17

FDOT Central Office  
Auditorium  
Tallahassee

9:00 am to 12:30 pm

May 23-25, 2007

### Growth Management Site Impact Workshop

Jacksonville Urban Office

Contact: Gary Sokolow

[gary.sokolow@dot.state.fl.us](mailto:gary.sokolow@dot.state.fl.us)

### FLUG

(Florida Local User's Group)  
CADD Training Conference

May 30-June 1  
Cape Canaveral

Radisson Resort at the Port

For hotel and agenda visit:

<http://www.flugsite.com/Events.cfm>

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