

Nichols Consulting Engineers

RFP No. HWY-306435-DT

Title Page



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This report is a summary of the work that was completed for RFP No. HWY-306435-DT, for the Montana Department of Transportation (MDT). The project is entitled: Cooperative Training Program.				
The MDT, in conjunction with its partners in the contracting and consulting communities, wanted to investigate the feasibility of sharing training resources to promote mutual staff development and the wise use of resources. They envisioned the development and delivery of core courses of common interest in the areas of design, construction, and inspection of highway projects. The intent of the project planning group was to develop skills being lost through turnover in both the public and private sectors.				
Nichols Consulting Engineers (NCE), together with its partner in this project, the Council for Adult and Experiential Learning (CAEL), worked with stakeholders within Montana and with subject matter experts across the country to respond to the tasks specified in the scope of work. These included: a) a review of the literature, identification of possible models, and a survey of state practices, b) a needs assessment of each of the three primary constituents, c) the creation of a database of available training resources, d) the development of a business plan that included feasibility analysis, recommended organization structure, determination of resources needed to support the plan, development of an implementation plan, and identification of mechanisms for expansion.				
The deliverables for the project were provided in two stages. First provided were the results of the survey, several models for program approach, the results of the corporate-level needs assessment, and the database of training resources. Second, an array of possible business models were submitted.				
This report includes each of the elements mentioned above; sample marketing and operating agreements from other organizations were provided to MDT.				
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Overview

This report is a summary of the work that was completed for RFP No. HWY-306435-DT, for the Montana Department of Transportation (MDT). The project is entitled: Cooperative Training Program.

The MDT, in conjunction with its partners in the contracting and consulting communities, wanted to investigate the feasibility of sharing training resources to promote mutual staff development and the wise use of resources. They envisioned the development and delivery of core courses of common interest in the areas of design, construction, and inspection of highway projects. The intent of the project planning group was to develop skills being lost through turnover in both the public and private sectors.

Nichols Consulting Engineers (NCE), together with its partner in this project, the Council for Adult and Experiential Learning (CAEL), worked with stakeholders within Montana and with subject matter experts across the country to respond to the tasks specified in the scope of work. These included:

- A review of the literature, identification of possible models, and a survey of State practices
- A needs assessment of each of the three primary constituents
- The creation of a database of available training resources
- The development of a business plan that included
 - o feasibility analysis
 - o recommended organization structure
 - o determination of resources needed to support the plan
 - o development of an implementation plan
 - o identification of mechanisms for expansion

The deliverables for the project were provided in two stages. First provided were the results of the survey, several models for program approach, the results of the corporate-level needs assessment, and the database of training resources. Second, an array of possible business models were submitted.

This report includes each of the elements mentioned above; sample marketing and operating agreements from other organizations were provided to MDT.

We enjoyed working on this project and look forward to following the progress on the recommendations.

Nichols Consulting Engineers Council for Adult and Experiential Learning

Survey of State Practices Summary

The purpose of this task was to survey the other state training offices to locate similar initiatives in the area of public/private partnerships. We also reviewed the literature for examples that exist outside of State Department of Transportation (DOTs).

Approach:

We developed a survey to be sent to each of the states' training directors, and to the Local Technical Assistance Program (LTAP) and Tribal Technical Assistance Program (TTAP) centers across the country. The purpose of the survey was to determine which states had partnership agreements similar to that envisioned by the Montana team. The survey was reviewed by the Project Advisory Team.

The survey was sent electronically, with follow-up phone calls to track missing or bad data. A reminder e-mail near the due date caused a flurry of additional responses.

A copy of the survey is attached in Appendix A.

Results:

There were quite a few phone calls from training directors and from LTAP directors, asking for clarification about "partnership." All of the operations have contracts with suppliers and vendors; the concept of partnership among stakeholders was not familiar, or at least not in practice. From the conversations, we know that some of the training operations are so decentralized that no one really knew the extent of contractual or partnering agreements.

We got responses from twenty-one states and three LTAP centers. Six of the DOTs and one of the LTAPs reported that they have or had partnerships in place. Of those, only two had a formal partnering agreement, and one of those has dissolved. Of the six DOTs, only one agency has a partnering agreement that meets the definitions of MDT. The others reported contractual relationships.

The one agency that meets MDT's definition has a partnering agreement with the Asphalt Paving Association of the state. The agreement supports the materials sampling and testing requirements for certified technicians for both the private and the public sectors. (Note: I have visited the training facility, and reviewed the training and evaluation materials used for this state. While the structure is that of a contract between the State and the APA, it functions as a partnership with fees assessed, joint delivery of training, and collaborative design and continuous improvement.)

The one LTAP that responded affirmatively described a partnership between the DOT and the LTAP center, which is housed at the university. They use the formal agreement to facilitate the development and delivery of courses for specific program areas (maintenance, research, traffic, etc.). In some ways, this resembles a cost-sharing agreement. One of the remarks illustrates the complex relationships. In answer to the funding source question, they answered: "Contribution to match benefit gained – however this isn't a science and that's where trust enters into the partner negotiations."

Analysis of results:

Most of the states, whether from lack of need or a different vision, have not moved towards partnerships as a way to design and deliver training. Some states reported that they gave or sold seats in training courses to consultants and contractors; one reported joint sponsorship of an annual training event.

From the one state that had a successful partnership (formal agreement, collaborative operation of the training service), there was no information about why, after 5 years, the partnership dissolved. The services that had been provided in the state are being reconfigured through a statewide/all agency effort, in the form of a university. Enrollment will probably be open to anyone, but the details of the plan aren't yet clear.

What this means for this initiative is that the Montana Department of Transportation is breaking new ground for most State DOTs and their program delivery partners. The national prototypes for transportation through the National Highway Institute and the National Transit Institute provide examples of working relationships between government and industry, but each is heavily subsidized by the federal government, supplemented by user fees. Unless there is a substantial commitment from the state government, this model probably couldn't be sustained.

Looking at what is in place or being considered at the state level, we found a proposed foundation to support transportation training and research, regional agreements for the training and certification of materials sampling and testing, and a proposal to coordinate those efforts across regions through the Transportation Curriculum Coordination Council (TCCC). The coordinated effort would require hiring an executive director and establishing formal procedures for course development, evaluation, certification, and continuous improvement. There are also very restricted "partnership" efforts around the development and delivery of a single course, which of course, could lead to other things.

Review of the Literature

CAEL has provided several case studies that represent the state-of-the-practice in partnerships for the delivery of training and education. Copies of the case studies are attached in Appendix B.

Since there are no viable examples from the transportation community, we offer these as alternatives from other industries and organizations. The project team will extract those ideas that are congruent with Montana's vision.

Resource Identification Summary

The purpose of this task was to create a database of training and education resources, including colleges, universities, agencies, tribal entities, industry programs, and other private sector services. They are categorized by delivery method, location, cost, etc.

Approach:

In conjunction with NCE, CAEL conducted an Internet search of all academic institutions in Montana and identified courses and programs relevant to the transportation industry. CAEL also identified coursework available through distance-learning venues (CD-Rom, online, videoconference, home study, video, audiotape) from providers outside Montana. Following interviews with industry and union representatives, CAEL researched equipment manufacturers' training programs, agency training programs, and highway industry association programs. This information was then entered into a database and sorted reports were designed to increase ease-of-use.

Results:

Data has been entered into a Microsoft Access 2000 database, which is available on CD-Rom (Access 2000 software is required to access the database). Reports were created based on location, course delivery method, available degrees and broad subject areas. Ultimately, a decision will need to be made concerning continued management of the data; the DOT may decide to manage the data internally or may contract with an outside agent such as CAEL to maintain and update the data.

Analysis of Results:

Training is available in a wide variety of formats from a wide variety of providers.

Recommendation:

Though this database provides an initial step in the development of a more effective delivery system, some sort of joint partnership is needed to solicit, manage, and measure the training needs of unique groups of employees.

Training Program Needs Assessment Summary

The purpose of this task was to identify the training needs of workers (at all levels) in the public and private sector highway construction industry in Montana. This included people in the contracting and consulting engineers communities, as well as in the MDT.

Approach:

Members of the Project Advisory Committee were consulted regarding methodology and contact information. A decision was made in the initial kick-off meeting to concentrate efforts on jobs in construction. The original plan, to send a paper survey to Montana contractors, was changed because members of the committee felt that given the time of year (summer/construction season) the return rate would be poor.

The following methodology was employed:

- In depth phone interviews (45-60 minute) interviews were conducted with contractors of large and small firms, and with staff within the MDT.
- Four in-depth phone interviews were conducted with consulting engineering firms who did business with MDT.
- Because it was difficult to identify consulting engineering firms that work on construction projects prior to the phone contact, the methodology was broadened. Following the suggestion of one of the respondents, we edited the survey, and allowed the respondents to self identify. The Association of Consulting Engineering (ACE-MT) agreed to e-mail surveys to their 40 members. Despite assurances that these firms would be likely to respond, no one returned the survey.
- Interviews were conducted with the four unions representing workers in construction:

Teamsters Local No. 2 American Federation of State, County and Municipal Employees Operating Engineers Local Union No. 400 Montana Public Employees Association

A protocol was developed that served as the framework for the interviews. Respondents were asked questions related to the following:

- The nature of their business and main functions and products
- Changes in the business climate that have affected the business
- The characteristics of the workforce—jobs, tenure, and problems, if any

- What they need from employees to be effective
- How decisions about training are made
- What training is currently available
- How employees gain new skills
- How satisfied they are with the training courses or other skill development options
- How training/education is supported
- Accommodations made for time to train
- Employees targeted for training
- Other: This often included their vision for an effective training effort.

Participants were informed that their responses would be anonymous but not confidential. Additional interviews were conducted with other stakeholders, which included the staff of the professional organizations and the Job Training Partnership Office.

Results: Contractors

For the contractor group, the response to scheduling phone interviews was extremely high. Only two of those contacted were not interested in participating. Only time limited the number of calls that were made. Respondents were interested and willing to share their perspectives.

The Nature of Their Business and Main Functions and Products

The contractor firms that were interviewed were mainly firms with 100-200 employees, although two smaller companies participated in the study. The group included companies that did asphalt and concrete paving, earth work, bridge work, work on utilities and lighting, and asphalt and concrete suppliers. Some specialized in one aspect of the industry; others supplied multiple services and products.

Changes in the Business Climate That Have Affected the Business

There was little variety in the answers to questions related to changes in the business climate.

- There has been more money for highway construction. While there has been a growth in the number of contractors and more competition, the general perception is that there has been enough work for all.
- Technology has resulted in advances in equipment that makes some heavy equipment easier to operate and less dependent on the artistry of the operator. While the advent of computerized equipment requires more knowledge of these systems, except for mechanics, this does not seem to be a challenge to the workforce.
- Hiring and retention is a problem for some companies—hiring more than retention. It is difficult for employers to find people with the skills they need to do

the job, including entry level skills such as the use of basic power tools, experience with off-road equipment, and willingness to travel during the construction season. They cite the fact that young people today do not look to road construction as a career opportunity, although it is well paying. If someone leaves who has been employed in construction, they either leave the field or they move to states where the season is longer. Of those interviewed, however, most had a loyal workforce who returned from year to year, despite the seasonal nature of the job.

• There are problems with the image of construction, and with the apprenticeship programs. There isn't any cross-training that would bring people into the field.

The Characteristics of the Workforce—Jobs, Tenure, and Problems, if Any

For most of the workforce, the jobs fall into 4 categories: administration, operators, truck drivers/ mechanics, and laborers.

- In recent years, there is a growing tendency for those in administrative and supervisor roles to come from the outside, rather than to have moved up the ranks from the road crews. For some, their lack of experience in this area is a detriment. For those who have come up from the ranks, there is a lack (and in some cases resistance) to the increased need for computer literacy. There is general agreement that all supervisors/foremen need supervisory skills, interpersonal skills, communication skills, knowledge about estimating, and in some cases more knowledge about how to work with an increasingly diverse workforce. Supervisors often work well with employees, but not so well with subcontractors.
- Skilled operators are in the shortest supply and most companies groom their own and work hard to retain them. The skills that are needed are for:
 - motor grader operators, paver operators, hot plant operators, crane operators, concrete finishers, and cross-equipment experience.
- CDL truck drivers are needed, and in particular those with off-road skills and experience and the ability to trouble shoot problems, and even to fix them.
- The laborers are the group with the greatest turnover. Several of the employers look to this group to groom and train; they value willingness to work/can do attitude, versatility, skills in operating power tools for work in concrete and metal.
- Versatility is a theme that goes across job titles. Employers want workers who can fill in on crews—and whose skills are broad.
- Among the companies interviewed, most employees have worked ten years or more and range in age from 35-45. Only a small group seems ready to retire. Younger workers are in the shortest supply and various factors are cited to explain this—fewer young people doing road construction and the difficulty of younger workers with young children to travel across the state. Employers who have made accommodations to changing needs of their workforce (family

concerns, mobility issues, travel pay) seem to have the least problem with retention.

What They Need From Employees to Be Effective

Most of the respondents talked about attitudinal factors and the specific skills mentioned above.

How Decisions About Training Are Made

On the whole supervisors/foremen are the main source of recommendations for training, with self-nomination being the second source. There is an increasing trend to use performance evaluation. As mentioned previously, companies see growing their own skilled workers as an important retention strategy—to spot those who have a willingness to work and learn, and to groom these workers for increased skills and compensation. They say there is more interest in training than there are opportunities, with the exception of "soft skills."

What Training Is Currently Available

The employers use a hodge-podge of training resources, mostly using informal on-thejob training/mentoring. They make very independent decisions about what they use for training and how they accommodate it. They are not specific, citing voc/tech courses but not the location.

An oft cited source of training is that offered by the manufacturers of equipment, with trainers from the various vendors brought in to the company or workers sent "to the midwest" to vendor-run schools. Several use the adult education system for computer skills training and two mentioned courses offered by the Montana Contractors' Association (MCA). The following is the list of training resources mentioned, in no particular order. (Note: None of them emerged as preferred sources of training, except the vendor-run courses.)

Operators Training School (thru the Operating Engineers Local) New Horizons Teamsters Hazardous Material Training Mine Safety and Health Training Surveying classes through the Operators Union MSU Havre FMI American Institute of Contractors Doe Leadership Voc. Ed.

OSHA-Competent Person Training Associated General Contractors of America—STP Courses Montana Contractors Association Wyoming Contractors Association **Vendors:** Caterpillar Concrete Pumping School Hudmeister Gamako Blawknox

How Employees Gain New Skills

Most of the employees gain new skills through informal on-the-job training, except as required by law (safety training, certification training). In one case, the employer has created a formal mentoring program that lays out "seat time" and the demonstration of competencies.

Satisfaction with the Training Courses or Other Skill Development Options

Generally speaking, the respondents are not satisfied with the training their employees receive. They feel it is "too basic," "mediocre", not enough, and insufficiently structured or measurable. They do not feel that the training that employees receive prior to being hired is adequate. They see it as too basic, not tailored to the needs of road construction (especially truck drivers). Generally speaking, they see training as too superficial.

How Training/Education Is Supported

The employers interviewed all supported the cost of training for their employees. They do not seem to limit/budget for training, but it is difficult to know how much it is in fact provided/supported, or even how many employees request training opportunities.

Accommodations Made for Time to Train

Formal training happens for the most part in the winter and early spring. Employers bring in employees, pay for their time and the cost of training, or send them to vendor-run programs and conferences.

Groups of Employees that Are Targeted

Most of the employers saw training as an investment in workers and were likely to either target those who had aptitude to gain new skills, willingness to put in the effort it requires, or to develop a set of skills needed by the company. Maintaining certification or training required by law also was a determinant.

Other: This Often Included Their Vision for an Effective Training Effort

Several of the respondents talked about the need to structure the training efforts. The two models most frequently cited were certification programs and/or training attached to a career ladder. Implicit in these models were:

- Programs would be structured, with defined steps and requirements at each step.
- All voc tech programs would have the same syllabus which married the Association of General Contractors (AGC) to the vocational education system in the state.

- Training would include hands-on experience.
- Results would be measurable/testable.
- Competency would be rewarded with increases in compensation.
- Skills would be transferable

Results: Consulting Engineers

Personnel from four small to mid-sized consulting engineering firms who work with MDT were interviewed. Like the contractors, they have experienced a growth in their work as more Federal dollars have come to Montana for highway construction.

Most of those interviewed were involved at the design aspects of highways and had little relationship to construction side with MDT. Some did construction work at the county or municipal level and in other states. There was considerable interest in training and a sense that the skill level of employees needed improvement. The following training needs were identified:

- They are interested in the possibility of having a greater role in construction administration and testing, working as site supervisors, for example in jobs now held by MDT staff. Barring a change in role (which happens on a fill-in basis now) they value training that helps them better understand the rules and requirements and procedures used by MDT. They use as an example the fact that MDT uses Microstation software in specific, unique ways.
- Training that occurs side by side with MDT staff and contractors is also valued, as a way for everyone to "be on the same page" and build relationships.
- Computer-aided drafting and design software
- Project management, which are skills seen as hard to come by in engineers
- Communication and people skills, both for supervisors and in other applications. (e.g. to deal with local stakeholders, in scoping sessions, etc,)
- More training at technician level—surveying, software, etc.

Results: MDT Staff Changes in the business climate

The managers think the work involves more sophisticated construction techniques, such as those required by Superpave. They find it increasingly harder to hire lower level employees. Experienced engineers seem to leave for the private sector. The program has grown much larger over the past 7 years, but they expect a downturn in collections, which will affect the size of the program.

Characteristics of the Workforce

Early retirements affected the age of the workforce, but a "fair portion" have over 10 years of experience. There are not enough temps/entry-level employees because the starting wages are poor. There is turnover in the graduate engineers, who leave after they complete their two years of training.

Employee Effectiveness

Most new employees have little or no experience. They recruit hard within Montana. There was conflicting information about the extent of the literacy and basic math skills of the workforce.

Decisions About Training

A selection committee from the districts nominates training course participants, while supervisor recommendation and self-selection are used in headquarters. They use NHI and American Traffic Safety Services Association (ATTSA) courses for traffic control, flagging, and inspection, relying especially on the manuals and specs provided as resources.

Available Training

They get training from the LTAP center, the courses mentioned above, CD-ROMs, some video, and safety tailgate training. Most training is through on the job training (OJT). In general, they buy the training for the headquarters staff and develop training for the field staff. They are working towards a mentoring/coaching system, especially for project management. They would like training for "site managers" related to contract administration. Training and certification for materials sampling and testing is handled through the Western Alliance for Quality in Transportation Construction (WAQTC) agreement.

For field staff, there are 2 days of training in the basics of plans and specs, safety, documentation, etc. Computer training is available with video support, and on-line.

Training Support

Employees are given time during their work hours to attend training, with some offered overtime. There was conflicting information about the availability of a tuition reimbursement program.

Groups Targeted

No particular group is targeted, except for the rotational program for new engineers.

Analysis of Results:

An opportunity now exists to provide a more structured, system-wide approach to training for those engaged in highway construction. While the "customers" (users of training) have found programs that meet some of their needs, they are looking for improvements that move them beyond disconnected courses and uneven services. They seem to support the implementation of a comprehensive plan and shared strategies.

This cross-sector initiative is an important first step. As with most cross-sector initiatives, there is history of failed attempts, less than positive perceptions of interests, constraints, and motivations. These can be resolved if all the interested parties are at the table. The Cooperative Training Project is missing some of the key stakeholders: representatives from higher education, the unions, LTAP, and other vendors of training/education. Further, participants have to be willing to acknowledge their own self interests and understand that conflict is an inevitable part of the process of coming together—and resolving that which seems irresolvable.

As the initiative moves forward, it may be helpful to spell out for members the continuum of increasing intensity for building relationships and doing work together. The following was taken from the <u>Collaboration Handbook</u>, (Winer and Ray, Amherst H. Wilder Foundation, 1994).

Cooperation:

Shorter-term informal relations that exist without any clearly defined mission, structure and planning effort. Cooperative partners share information only about the subject at hand. Each organization retains authority and keeps resources separate so virtually no risk exists. *(This is the current status of the Montana initiative.)*

Coordination:

More formal relationships and understanding of missions. People involved focus their longer-term interaction around a specific effort or program. Coordination requires some planning and division of roles and opens communication channels between organizations. While authority still rests with individual organizations, everyone's risk increases. Power can be an issue. Resources are made available to participants and rewards are shared. (*This is an intermediate step.*)

Collaboration (Partnership):

A more durable and pervasive relationship marks collaboration. Participants bring separate organizations into a structure with full commitment to a common mission. Such relationships require comprehensive planning and a well-defined communication channels operating at all levels. The collaborative structure determines authority, and risk is much greater because each partner contributes its resources and reputation. Power is an issue and can be unequal. Partners pool or jointly secure the resources and share the results and rewards. *(This is the goal for Montana.)*

Available as Appendix C is a preliminary summary of the activities that are underway; this list includes only those activities uncovered in our interviews. It is intended to be seen as a work in progress, since activities are in different stages of development.

A model for moving forward can build upon these efforts, and expand to meet other unmet needs.

Cooperative Training Program Montana Department of Transportation Business Plan Proposal

Introduction

Nichols Consulting Engineers, together with the Council on Adult and Experiential Learning, have been working on the development of a cooperative training program with the Montana Department of Transportation and its partners in highway construction. A summary and analysis of the activities leading up to this business plan were provided to the advisory team on August 27. Subsequent to the meeting on the 27th, we delivered a table that compared the three program options that we developed for consideration. This document expands on that table. The table is available as Appendix D.

The framework for the organization of both the table and this proposal is the continuum of increasing intensity for building relationships and doing work together. The following terms define three models for building relationships and doing work together. We will explain each model and show how it might work in Montana.

Cooperation: Shorter-term informal relations that exist without any clearly defined mission, structure and planning effort. Cooperative partners share information only about the subject at hand. Each organization retains authority and keeps resources separate so virtually no risk exists. *(This is the current status of the Montana initiative.)*

Coordination: More formal relationships and understanding of missions. People involved focus their longer-term interaction around a specific effort or program. Coordination requires some planning and division of roles and opens communication channels between organizations. While authority still rests with individual organizations, everyone's risk increases. Power can be an issue. Resources are made available to participants and rewards are shared. *(This is an intermediate step.)*

Collaboration (Partnership): A more durable and pervasive relationship marks collaboration. Participants bring separate organizations into a structure with full commitment to a common mission. Such relationships require comprehensive planning and a well-defined communication channels operating at all levels. The collaborative structure determines authority, and risk is much greater because each partner contributes its resources and reputation. Power is an issue and can be unequal. Partners pool or jointly secure the resources and share the results and rewards. *(This is the original goal for Montana.)*

Option A: Cooperation

Feasibility – Since the relationships among the original parties have already been established, this option is virtually in place. If additional stakeholders, such as the unions, tribal colleges, or colleagues in higher education, are brought into the delivery of services, the group will need to orient the new members of the group to the goals, services, and working relationships.

Organization Structure – Nothing needs to change about the current structures.

Program Elements – In order to share the resources that are currently in place, the stakeholders need to:

- post or distribute each organization's training schedule
- either set aside a certain number of seats to be used by the other groups, or arrange a cut-off date by which others could request seats, then manage the internal and external demand for space
- maintain a database of training records for its members/employees
- notify the other groups if there is an intent or interest in developing a new course that might be of interest to another group. The groups may be able to jointly develop new training opportunities, saving time and other resources
- determine which course delivery and collateral materials they own which might be of interest to another group, and permit its use or adaptation
- encourage the use of e-learning alternatives for those topics where there might not be a critical mass for course development or delivery, or for those employees or members who choose that learning mode

Implementation Plan – Since some of the elements of implementation are in place, the stakeholders can take this to the next level by being purposeful about sharing information and resources. This can happen now, even as plans for more collaborative efforts move forward. If the project team is interested in including additional stakeholders, they may need a meeting or a publication (small brochure, newsletter, or flowchart) to explain the intent of the cooperative relationship, and the operating principles.

The existing courses that seem to overlap the needs of the original groups and lend themselves to cooperation include:

- work zone set up and safety
- materials sampling and testing
- construction inspection
- heavy equipment operation (especially for MDT maintenance workers and contractor personnel)
- Civil Rights, as related to highway construction
- Project management
- Erosion and sediment control

- MDT policies and procedures
- Supervision of employees

Mechanisms for Expansion – See Option B: Coordination.

Evaluation Process – A simple survey can be prepared by the advisory team or a person within one of the groups to determine if current stakeholders are satisfied with the additional services they may be receiving. This would be mailed or e-mailed to managers and workers. The customer satisfaction data may be tracked over time.

To gather program management data, it would be helpful if each group established baseline data about training availability and use, and then compared that quarterly with availability and use of the expanded training resources from the other organizations. Analysis of the data could help the organization managers to determine if the problem is lack of availability of appropriate training, or if there are other systemic obstacles to training and performance improvement.

Resources (dollars, staff, technology, training, information, contacts) – Current staff and overhead should cover this option. It would be helpful to have an agreement or letter of understanding among the stakeholders that describes the intent and the operating principles.

Funding Plan – There are minor operating expenses associated with this option. We assume they can be absorbed into current budgets.

Option B: Coordination

Feasibility – The success of this option depends on the commitment among the stakeholders to maintain their relationships, and a commitment to joint problem solving when things go wrong. While all of the people contacted for the report were helpful, and the meetings congenial, we are not able to assess the long-term obligation the stakeholders feel for this initiative.

Organization Structure – This option requires the establishment of an independent organization, with a board or team comprising liaisons from each participating group. The function of the board is to make sure that the supports are in place for the coordination of learning opportunities. These supports include a communication system within the board and an information sharing system for members and employees of participating organizations and service providers. The communication system may include:

- an interactive web site
- an e-mail group or listserv
- a telephone or fax tree, if internet communication is difficult
- a newsletter or quarterly catalog of learning options
- regular meetings or conference calls

Program Elements – Aspects of the program may include:

- joint selection of National Highway Institute (NHI) courses to be requested, annually or semi-annually. This would include a method for MDT to notify the other stakeholders when new courses, not yet in the catalog, are announced.
- joint financing or pay-per-person billing for the selected NHI courses.
- joint delivery of courses that cross organizational boundaries.
- joint development of courses with mutual benefits. These courses will be identified through at least annual needs assessments.
- joint development of support materials (job aids, checklists, handbooks, etc.) that will be used by several of the stakeholder groups.
- maintenance of the database of available courses, in support of e-learning and traditional learning opportunities.
- development of a learning management system that is compatible, if not identical, across organizations.

Implementation Plan

Phase 1: Bring people together

- a. establish leadership group
- b. identify additional stakeholders and invite them to participate

Phase 2: Develop a structure

- a. agree on operating procedures and document them
- b. establish communication options
- c. establish problem-solving/dispute resolution protocols
- d. identify dedicated funding as well as potential discretionary funding

Phase 3: Manage the work

- select courses for development and/or delivery
- agree on development and delivery procedures
- determine interest in non-classroom alternatives
- develop and/or deliver alternatives
- develop marketing strategy and materials
- maintain records of participation, and Levels 1 and 2 evaluation data
 - Level 1 evaluation data is usually gathered at a class. It reflects the participants' reaction to the material, the instructor, the usefulness of the material, and the facility.
 - Level 2 evaluation data reflects the learning that occurred in the class. It is usually collected by some form of a written or performance test.
 - Although not suggested for this effort, Level 3 involves application of the material on the job, and Level 4 involves return on investment.

Phase 4: Evaluate success

- a. track participation by stakeholder; do rough benefit/cost assessment
- b. survey managers, supervisors, participants, funders for satisfaction

- c. document continuous improvement opportunities
- d. decide go/no go for continuing work
- e. celebrate the successes

Mechanisms for Expansion – See Option C.

Evaluation Process – There must be a measure for each of the key activities. The first year, there may be a combination of activity and results measures, while the system gets established. The measures may include:

- number of participants
- number of joint programs
- number of cross-organization participants
- funds dedicated to this initiative
- indicators of management support
- indicators of customer satisfaction
- summary data from Level 1 and 2 evaluations

Resources – The resources required may be new, repurposed, or in-kind from each group. They include:

- time for staff to coordinate the training announcements, applications, notifications, billing, etc.
- marketing budget
- web site development and maintenance
- database maintenance
- course development and delivery expenses
- space rented or in-kind
- training supplies purchased or in-kind

Funding Plan – The funding plan begins with an agreement or letter of commitment from each group contributing resources. The commitment has to be firm enough that all parties are held accountable for the results tied to the resources.

At a minimum, resources include:

- project manager, either hired or reassigned to this effort
- part-time clerical support for distributing mailings and handling
- small marketing budget, including travel for project manager
- overhead/operating costs in-kind, if possible
- funds dedicated to course development
- funds dedicated to development of collateral material
- funds to purchase existing courses

Option C: Collaboration

Feasibility – This is the most challenging option, since it requires significant commitment of planning time, financial resources, changes in organizational practices and perhaps policy, staff dedicated to this initiative, and a willingness to look beyond parochial interests to work for the common good – a quality transportation system.

This option also requires the participation of stakeholders not yet at the table. These include the LTAP, unions, representatives of the higher education system and technical schools, tribal leadership, the State Labor Department (DOL), as well as others who may be identified as the effort advances. Because these are new relationships for MDT and the others involved in the project, we cannot assess the feasibility of bringing these groups to the table.

Organization Structure – This option requires an entity designated as the hub or leader of the partnership. This may be:

- a third party, free-standing organization
- a program housed at a community college or university
- a program managed by an existing not-for-profit or for-profit organization that specializes in staff development and continuing education

Program Elements

- Expansion and Sharpening of OJT: Given our investigations in Montana, we believe that the biggest gain in performance improvement can be made by focusing on the on-the-job training (OJT) approach. Each of the entities interviewed said that they relied most heavily on OJT. With the time constraints of construction work and the remote locations for some of the work assignments, this isn't unusual. The components of a state-of-the-art OJT program are:
 - o assessment of state-of-the-practice for the target audience
 - development of coaching skills
 - o development of supervisors'/lead workers' training skills
 - development of job aids
 - o establishment of a mentoring system, either in person, or e-coaching
- Development of Instructional Modules: With the limited classroom time available, we are also recommending the continuing development of short instructional modules that can be delivered as tailgate sessions, in between assignments, bad weather, ...anytime there is an opportunity to gather a small group that needs a refresher, an introduction, or practice with a specific skill.
- E-Learning: Investment in e-learning options, especially for blended learning (a combination of technology and media with traditional training methods to create maximum impact).

- Leadership Training: To support commitment to continuous improvement throughout the member organizations, we recommend the design and delivery of leadership training for all levels in the organizations.
- Internships and Apprenticeships: To help recruit new people from many disciplines into transportation, we recommend the initiation and further development of internship and apprenticeship programs for each of the member organizations. Involving other employers, public schools, and community groups provides the introduction to transportation as a first, second, or third career, while explaining the role of transportation in one's life, as a side benefit. Joint apprenticeship program through DOL provide structure, funding, and legitimacy.
- Incorporation of Program Elements Outlined in Coordination and Cooperation: This option includes all of the features described in the previous options.

Implementation Plan: Much time and effort has gone into bringing the Cooperative Training Project to the current point. However, if the group chooses to go forward to develop a formal collaboration, it needs to expand its membership and reexamine decisions and assumptions. The following is meant as a guide to developing the collaboration and the decision process. Some of the steps will take a short amount of time, others more, but it will be dependent on a consistent core of members who are willing to see the process through over the long haul.

Phase 1: Bring people together

- Establish the leadership group.
- Choose potential new members (LTAP, unions, representatives of the higher education system and technical schools, tribal leadership, the State Labor Department, as well as others who may be identified as the effort advances.) Criteria might include:
 - Size of collaboration; difficulty; existing relationships; familiarity with purpose, expertise, end users, community; ability to achieve results; ability to attract others; different sector; skills and abilities.
- Choose a convener.
- Involve everyone in the meetings, especially those who are new to the initiative.
- Disclose Self Interests It is crucial in the first stages of collaboration to acknowledge how the collaboration serves the members' self interests, as well as the goals of the new initiative.
- Confirm the purpose and vision of the new initiative; publish desired results internally and externally.
- Develop a strategic plan.

Phase 2: Develop a structure

- Form the simplest structure possible.
- Secure letters of commitment from all of the stakeholders, including commitment to mission, objectives and strategies; time for representative to participate;

expected return; what the organization can commit in terms of funds, expertise, other staff, etc.

- Clarify authority within the new group and among stakeholders. This is especially important for decisions on fiscal issues.
- Agree on decision making, dispute resolution, and problem solving processes.
- Establish communication procedures and information sharing options.
- Decide hiring practices/conditions of employment/signatures for disbursements, etc.
- Create a budget and secure operating and project-related funds.

Phase 3: Manage the work

- Hire an executive director and support staff.
- Locate the program; purchase operating supplies.
- Prepare a business plan/operating plan.
 - Establish project administration requirements.
 - Detail responsibilities
 - Quarterly meetings
 - Newsletter
 - Web site
 - Establish/maintain course database.
 - Establish/maintain learning management system.
- Create accountability standards/internal controls.
- Implement program elements.

For specific program elements, for instance:

OJT

- Determine current level of effectiveness/current skills.
- Develop supervisors'/lead workers' training skills.
- Develop supervisors'/lead workers' coaching skills.
- Develop job aids.
- Establish mentoring system.

Course Development

- joint development of courses that cross organizational boundaries
 - o needs assessment
 - secure funding
 - o secure designer
- Develop short instructional modules.
- Develop e-learning choices and blended learning choices.

Course Delivery

- Select and order NHI courses that meet shared needs.
 - Decide on funding option Who contracts for the course? How do you handle reimbursement?
 - Arrange course delivery details recruitment, location, etc.

Development of Job Aids

- Conduct needs assessment/market survey to locate needs.
- Determine what exists in other jurisdictions and industries, and secure or purchase right to use.
- Develop aids that don't exist or modify existing resources.
- Test on representative group; revise, publish, and distribute.

Learning Management System

- Determine needs, including operating systems.
- Review commercial products.
- Select appropriate system.
- Adapt to meet local needs.

Marketing

- Establish primary and secondary target groups.
- Create marketing strategy.
- Develop materials in form and mode to reach the targets.
- Track activities and results.
- Evaluate the results Measure performance both in terms of process how the group functions and results what the group achieves.

Mechanisms for Expansion – We recommend starting this option as a pilot, to test the system and its reception. After a successful pilot, the program may be expanded to other parts of the State, such as more remote areas where choices are even more limited; to other content or program areas, such as maintenance or design; or to other customers in the selected topics, such as local governments and other parts of the construction industry. The success of the pilot will help build momentum, increasing the interest and commitment to the program, and increasing the resources available for maintenance and expansion.

Evaluation Process – The evaluation measures should be keyed to the elements of the implementation plan. The overall measures would look at viability, satisfaction of customers and suppliers, profit or fiscal health, and even an improved transportation system.

Resources – Additional resources will be required that are dedicated solely to the administration and growth of this option. These resources include an executive director, an office with all electronic and operational supports, supplies, funds for course

development and delivery, marketing, trainer training, coach development, trainers, development, and production of learning aids.

Funding Plan – Support for this alternative may be available from the following resources, used singly or in combination.

- Organizational Contributions or Assessments Stakeholders may contribute the same amount, or amount may be proportioned based on staff sized, projected participation, or some other formula. Contributions need to be reviewed regularly to reconcile differences between planned and actual use.
- New Legislative Appropriation The MDT alone, or together with industry groups, may request legislation that supports either continuing education or improvement of the highway system as a rationale for establishing a "Transportation University" or "Highway Institute", or some other organization with the purpose of providing the services described in this plan. In some cases, the legislation supports start-up funding, for perhaps the first three years of operation, at which time the program has to be self-supporting.
- Corporate Support There may be corporations within Montana, or those who have an interest in Montana, who have workforce development or transportation as part of their philanthropy or their mission. Corporate support might supplement the funding contributed by stakeholders by supplying equipment, laboratories, materials, or other program requirements.
- Foundation Support Foundations that have workforce development or a quality highway system as part of their mission might provide funding for project-specific activities.
- Benefactor There may be someone who resides in Montana, or who has a fondness for Montana, who might provide start up or matching funds for a well-designed collaboration.

Conclusion – The success of any of these options depends on the energy and commitment of those who care about the outcome. This is hard work.

APPENDIX A

Dear Colleagues:

We have been asked by the Montana Department of Transportation, in collaboration with a coalition of contractors and consultants in Montana, to find out what similar organizations are doing in the area of public/private partnerships for training and employee development. This survey is one aspect of a larger project for Montana. If you are interested in the finding out about the complete project, please contact Sue Sillick at 406-444-7693, ssillick@state.mt.us or Barbara Martin at 406-444-6048, bmartin@state.mt.us.

Most of the questions are short answers or fill-in-the-blank. A few questions ask for more detail; if you would like to talk to one of us, rather than record a complicated answer, please call Pat Lees at 775.329.4955.

Our estimate for completing the survey is about 15 minutes. We appreciate your willingness to help. We think this information will be helpful for any state considering developing or expanding a local program. If you are interested in the results, please send us an e-mail message, and we'll send the summary report to you electronically as soon as it is available.

Please return the survey by July 15, 2002.

Thank you for considering participating in this important survey.

Survey of State Practice

Please know that, in accordance with the standards of the Council of American Survey **Research Organizations:**

- no individual answers will be revealed
- only aggregate summary data are ever looked at
- no sales calls will ever happen based on your participation
- you will not be on anyone's e-mail list
- all responses are kept strictly confidential

Areas of concern:

- 1. Is there a public/private partnership in your State for the design and delivery of training and employee development? ____ yes ____ no (If no, thanks for letting us know.)
 - Is there a formal agreement? _____yes ____ no

 - What type of commitment do the parties make (financial, personnel, etc.)?
 - How many people are affected by the partnership?
 - o agency
 - contractors _____
 - o consultants _____
 - o other
 - Does the agreement cover all or part of your training program?
 - o administration ____ yes ____ no
 - o **planning** ____ yes ____ no

 - design
 design
 yes
 no
 construction
 yes
 no
 yes
 no
 yes
 no
 - o other _____

2. How is the content for the training selected and provided?

	 Is it developed for your particular audience?yesno Is it a national curriculum (NHI, ACI, NCCER)?yesno Is the content selected by committee?yesno Are the courses taught by partners in the agreement?yesno Are the courses taught by consultants/vendors?yesno
3.	How is the training system administered?
	 Is there a learning management system?yesno If not, how are the records kept?
	 Is there a single manager/system administrator/training director? yesno
4.	How is the partnership funded?
	 Do you use pooled funds? yes no How do you decide on the proportion each member contributes?
	 Do you have a system for tuition reimbursement/tuition support? yes no If yes, how much per year? Does the trainee pay for the training? yes no Do you have any grant or foundation support? yes no Do you use funds from other State or Federal agencies (e.g. Labor, Social Services, etc)? yes no If yes, what types of funds?
	 Do you have a union agreement that supports training? yes no
5.	How do you accommodate the time needed for training?
	 Do you give employees time off? yes no If so, how much time per year/per employee? Do you give comp time for time spent in training? yes no Is training time considered part of the job, as billable hours? yes no

- 6. What delivery options do you include?
 - classroom ____yes ____no
 - ____ yes ____ no one-on-one
 - ____ yes ____ no web-based
 - ____yes ____no on-line
 - CD-ROM ____yes ____no
 - ____yes ____no • video apprenticeship ____yes ____no

 - coaching/mentoring ____ yes ____ no
 - workbooks ____ yes ____ no
 - OJT yes no
- 7. Have you focused on certain groups of employees?
 - new employees _____yes ____no
 skill refreshers/OJT _____yes ____no
 job shift/new responsibilities _____yes ____no new employees ____yes ____no preparation for promotion _____yes ____no
- 8. Please describe your type of organization:
 - public ______
 - contractor ______
 - consultant ______
 - association ______
 - local government ______
 - training provider ______
 - number of employees ______
 - number of people to whom you deliver services

APPENDIX B

CASE STUDIES

Case Study

Background

The Learning Solution

The Approach

The Results

Alliances for Industry-Built (Online)Degree Programs

Employers in the telecommunications and utilities industries are concerned about their ability to meet their future skill and labor needs. Large numbers of their skilled workers will be retiring in the next 7-10 years and it is unclear how those positions will be filled. At the same time, these employers are concerned about their ability to retain workers in their frontline positions. Individual employers have been addressing these issues on their own but recognize the need to utilize additional strategies to prepare for the future.

CAEL has been helping address the common needs of industry employers through the work of alliances of various stakeholders, including employers (large and small), labor unions, trade associations, and others. These industry alliances help spread the cost and responsibility for meeting industry-specific labor demands, while ensuring that the current workforce is given accurate information, direction, and educational resources to meet future labor and skill needs.

In these projects, CAEL works with various industry stakeholders to:

- Identify the common need the industry's largest skill gap that it will face in 5-7 years for skilled entry-level jobs.
- Identify an education provider to customize an education and training program to help the industry's lower skilled workers qualify for the in-demand higher skilled positions. In this way, the industry can retrain and retain its workforce.
- Create a coalition of key industry stakeholders to drive the project. Various constituencies are represented in the coalition, including large and small employer, trade associations, and labor unions.

CAEL's role in this alliance is to:

- Help the industry identify and monitor its needs statement
- Serve as a neutral third party manager and facilitator
- Staff the coalition
- Identify funding sources for the administrative costs of the program
- Manage the work of the educational providers to encourage their responsiveness to industry needs

With CAEL's assistance, the industry coalition members work with the educational provider to develop a customized curriculum for industry educational programs. The members contribute their content expertise to ensure that the courses in the program are comprehensive, current and relevant in today's work environment and that they prepare students for real-life work responsibilities. Moreover, the program is applicable across the industry and not specific to a particular company. In short, the program is developed by the industry, for the industry.

Specific Examples CAEL has facilitated industry alliances for the telecommunications, utilities and healthcare industries. The learning solution in each of these three industries has involved on-line degree programs. CAEL's role in these alliances has been funded by the Alfred P. Sloan Foundation, while the tuition for program courses comes from the employer training budgets or from the employees' tuition benefits. For more information, please see the telecommunications and utilities industries' web sites, <u>www.nactel.org</u> and <u>www.epceonline.org</u> .

Case Study	Levi Strauss & Company
Background	Levi Strauss & Company (LS&Co.), the world's #1 maker of brand- name clothing, sells jeans and sportswear under the Levi's, Dockers, and Slates names in more than 60 countries. To re-tap the youth market, LS&Co. is exploring a host of nontraditional advertising methods and abandoning its one-style-fits-all design approach. The Haas family (relatives of founder LS&Co.) owns LS&Co. With 30,000 employees, 1998 sales jumped 13% to \$6,000 (mil).
The Issues	Faced with domestic and international competition, a significant number of American plants needed to be closed. In most locations, LS&Co. was the main employer in town, and many employees had devoted most of their working life to LS&Co.
The Learning Solutions	As part of a comprehensive separation program, LS&Co. established career transition centers in each plant. CAEL coordinated the start-up of 21 centers and manages the on-site transition services, including: capability assessment, career and education advising, education and training resources, job developer services, workshops, computer and internet access, and distribution of transition funds.
	In addition to our work with the individual employees, CAEL public policy staff mobilized federal, state and community agencies to make funding and training opportunities available to the employees.
The Results	This resulted in highly successful outplacement education services. While the LS&Co. employees were obviously not happy to lose their jobs, many took the opportunities provided by the company to start their own businesses, complete a high school or college degree, and become more proficient in basic and advanced skills.
	 "Combining educational and career development resources in one spot is a powerful strategy for increasing workers' employability." John Ermatinger, President Levi Strauss and Company, the Americas

Case Study	FMC Compass Program
Background	FMC is a diversified maker of chemicals and machinery. It has three operating groups: machinery and equipment (food machinery and energy and transportation equipment), performance chemicals (including food ingredients, lithium, and pesticides), and industrial chemicals (including alkalies, hydrogen peroxide, and phosphorus chemicals). The company operates more than 100 plants in 26 countries and employees own about 19% of FMC.
The Issues	 The non-exempt staff in the Philadelphia office – many were lifetime employees of FMC – faced issues related to changing job expectations in light of new technological innovations: Perceived competency gaps Morale decline Managers and support staff wanted a more personal connection to work
	Although the existing tuition assistance program was available only to exempt staff, the management recognized the need to increase competencies and boost morale.
The Learning Solutions	 CAEL worked with a Learning Leadership Team to design and implement: Assessment Interview key management staff to distill issues and company direction Conduct focus groups with employees Analyze information. Write detailed report that <i>tells the story</i> and prepares decision-makers to develop a plan Learning Program Monthly seminar series for support staff Manager briefings and workshops Voluntary, confidential skills assessment Individual planning and advising with CAEL consultant Activities designed by support staff Improved computer and technical skills offerings
The Results	 Improved employee survey results Increased utilization of tuition aid, increased training budget Improved skills: communication, presentation, writing, etc. (based on pre- and post-tests) Improved perceived value to teams Improved understanding of broader business context Systems in place for career assessment and guidance Measurement/evaluation systems using surveys, focus groups, pre- and post-tests

Case Study	FMC Corporation
Background	FMC is a diversified maker of chemicals and machinery. It has three operating groups: machinery and equipment (food machinery and energy and transportation equipment), performance chemicals (including food ingredients, lithium, and pesticides), and industrial chemicals (including alkalies, hydrogen peroxide, and phosphorus chemicals). The company ranks at or near the top in several of its markets, including production of the natural soda ash used in glassmaking. The company operates more than 100 plants in 26 countries. Employees own about 19% of FMC.
	percent from 9.6 percent in 1997.
The Issues	 Significant capital investment in new equipment and technology Introduction of SAP Skill-based pay required cross-training New model for supervision incorporated coaching expectations Cultural changes with emphasis on employee ownership and teambuilding
The Learning Solutions	CAEL worked with FMC to create a "Culture Shift" program. We facilitated cross-functional Learning Leadership Teams. The teams concentrated on tactics and activities that addressed immediate needs, while building for the future. The teams also acted as advocates for the program, building enthusiasm and ownership among their peers.
	 CAEL supported the company's strategies through: Creating and implementing a communications plan Recommending job-profiling for supervisor and production positions Implementing individual assessment and advising Defining the needs for a supervisor development seminar series Organizing plant site visits to review: Communication Redefining production work Responsible care Company and customer overview Team-building Facilitating a procedures documentation process
The Results	Successful pilot programs increased participation in the training and learning program. Managers utilized new coaching techniques with positive feedback. Employee morale and satisfaction showed a significant increase.

Case Study	Fel-Pro Inc. (now Federal-Mogul)
Background	Fel-Pro Inc., now part of Federal Mogul Corporation, is a manufacturing company in Skokie, Illinois, that produces a wide variety of gaskets for automotive, heavy-duty, high performance, marine and industrial applications worldwide. Known for its family-friendly policies, Fel-Pro, Inc., was voted one of "the Top 100 Places to Work" by <i>Fortune Magazine</i> in 1998.
The Issues	 Management wanted to make existing Tuition Reimbursement program more accessible to frontline employees because: Few hourly employees were taking the initiative to learn new skills and use tuition assistance funds. The company was undergoing a culture shift, transitioning responsibility for career planning from upper management to the employees themselves. A number of low-skill jobs were expected to be eliminated, and rather than outplacing employees, management preferred to train them to advance in the company.
The Learning Solutions	 CAEL helped Fel-Pro revise and implement the existing educational policy by: Crafting a more accessible Tuition Assistance program, including: 100 percent prepaid tuition Educational advising Returning to Learning[®] workshops Managing the new Tuition Assistance program Providing quarterly usage analysis and activity reports to track trends Promoting the new Tuition Assistance program through outreach and education advising Coordinating educational advising for workers on all three shifts Providing job search resources and educational options at a Job Fair for employees whose department was closing Coordinating School Fairs, where local providers provided information on admission requirements and program offerings
The Results	Employees' rate of participation in the Tuition Assistance program rose from 4% to 8%, annually. Since the Tuition Assistance program was revised, approximately 50 employees have received degrees; Federal- Mogul regularly recognizes new degree-holders and provides monetary rewards to encourage employee participation in the program. Using the Tuition Assistance program and CAEL's educational advising, some workers have moved to increasingly skilled jobs within the company When Federal-Mogul acquired Fel-Pro, the learning program was continued because of its success.





"LiLAs are a powerful recruitment and retention tool and can boost our bottom line with more productive employees. We are excited to be able to help our employees improve their skills." -Ivan Matsunaga, Connie's Pizza

"It all comes down to a fact we learned long ago: a motivated worker is a better worker. LiLAs are an easy, cost-effective way to invest in the future, both for our employees and our business" -Tom Tunney, Ann Sather Restaurant



a project by The Illinois Restaurant Association and CAEL

with support from:

The Ford Foundation The Chicago Community Trust

CAEL 55 E. Monroe St. #1930 Chicago, IL 60603



What are LiLAs?

Lifelong Learning Accounts (LiLAs) are a new way for restaurants and other businesses to finance and encourage skill development. With LiLAs, restaurants can help their employees upgrade their skills using matching funds from the restaurant and a foundation. With the sponsorship of the Illinois Restaurant Association (IRA), local restaurants are being invited to participate in a two-year LiLAs pilot project.

How do LiLAs work?

Employees, regardless of job type, who have been with your restaurant for at least six months and work at least thirty hours per week, are eligible. Employees must contribute at least \$120 per year. Employers agree to match these contributions, up to a maximum of \$500. A foundation will match the combined contributions, up to \$1,000.

LiLAs funds may then be used to pay for a broad range of educational services consistent with the employee's approved learning plan, including tuition and fees, books, supplies and other related items. Employees can only access the matched funds while employed at a participating program restaurant.

Participation in the LiLA demonstration project is being offered to IRA members on a first-come, first-served basis, since foundation-matching funds are limited.

How do LiLAs benefit my restaurant?

<u>Maximize Training Dollars</u>: For every matched dollar that the employer contributes, the employee will have four dollars towards education and training.

<u>Boost Retention and Recruitment:</u> The restaurant industry is burdened by an over 95% employee turnover rate. It can cost \$4,000 or more to replace each employee. Training is directly tied to retention. A study shows that restaurants providing less than 10 hours of training per year have a 134% turnover rate. Compare this number with the 27% turnover at restaurants that provide 60-80 hours of training!

<u>Increase Productivity:</u> Studies show that for every \$1 invested in employee education, companies realize a \$10 return in productivity. A better-educated employee has more skills and is able to take on new job responsibilities.

Who manages these LiLAs?

Employers process employee deductions and employer contributions with their regular payroll. The LiLA accounts themselves are held by a bank and managed by CAEL, a national non-profit organization focused on lifelong learning. CAEL distributes LiLA funds for approved expenses and takes care of the paper work.

What will I have to do to offer LiLAs in my business?

With help from CAEL, you will provide information and promote LiLAs to your employees. To measure the success of the project, CAEL may request information about the learning goals for your restaurant. You will be asked to supply information and feedback for evaluation purposes.

Sounds great! How do I get started with LiLAs? To get your company started with LiLAs, contact Diane Stoneman at CAEL: telephone: (312) 499-2669 (email: dstoneman@cael.org)

APPENDIX C

Current Training Efforts

Initiative/Organization	MCA	MDT	DOL	AFSME	Oper. Eng.	Teamsters	Consulting	Engineers	Higher Ed.	LTAP	Equipment Vendors	Other Vendors
Cooperative Training Program	х	х					х					
Apprenticeship Proposal	Х		Х					х				
Career Ladder for Main. Wks												
Maintenance Academy		Х		Х								
Training on MDT Specs	Х	Х					Х					
Shared Heavy Equip. Training	Х											
Contractors Buying Training	Х	х		Х	х	х			х	?	x	х
Joint Heavy Equip Comm.				Х	х	х	?					
Dislocated Workers Program		?	х		х							
Consulting Eng. Buying Training		х							х	?		Х

APPENDIX D

Montana Cooperative Training Program Business Plan Comparison

	A: Cooperation	B: Coordination	C: Collaboration		
Feasibility	Easy to do; relationships have been established	Requires commitment to maintain the relationship and to problem-solve when things aren't going right	Requires significant commitment – financial, policy, practice,		
Organization structure	Status quo	 independent organizations with designated liaisons information- sharing systems in place (web site, listserv, phone tree, fax,) 	 Foundation 501(c)(3) Community college Third party/free- standing organization 		
Program elements	 share schedules offer seats maintain database notify others if considering new course develop- ment share collateral material and permit use/adapta- tion support for e-learning choices 	 joint selection of NHI courses to be ordered joint delivery of selected courses joint development of selected courses joint develop- ment of support materials (job aids, checklists, etc.) support for e- learning choices learning management system database of available training 	 focus on improving OJT skills/tech transfer develop coaching skills establish mentoring program develop e- learning choices develop curriculum of short instructional modules for information that can be applied immediately internships/appre nticeships develop leadership training for all levels in each organization all the features of other plans 		

Implementation plan	Contact all stakeholders	Involve all stakeholders	 involve other stakeholders determine what is currently being spent for training redirect portion of funds to partnership develop a budget for a pilot project test/evaluate/corr ect
Mechanisms for expansion	See Plan B	See Plan C	Go beyond pilot – geographically, content, customers,
Evaluation process	Customer' and administrators' satisfaction	Meet targets for number of courses and satisfaction, cost, results measures, if appropriate for course content and design	Viability, satisfaction, results, profit, improved transportation system,
Resources	Current staff and overhead	Current staff and additional overhead for administrative, marketing expenses, course development, maintenance of database	Location, executive director, supplies, funding for course development, trainer training, coach development, trainers, development/production of job aids
Funding plan	Agreement to maintain appropriate level of service	Agreement to contribute resources to development	Organizational contributions, new legislative appropriation, corporate foundations, benefactor, in-kind, assess member organizations

9/6/02 plees