



# ITRC Training Program Strategy

August 31, 2006

## EXECUTIVE SUMMARY

This ITRC Training Program Strategy outlines the future of the Training Program for 2007-2009 and sets the direction for 2010 and beyond. The ITRC Training Program assists ITRC's advancement of innovative environmental decision-making by helping ITRC create and deliver high-quality training courses. The Training Program provides an organized, structured, and consistent approach to training curricula development and delivery in conjunction with technical teams. The ITRC Training Program is led by the Training Liaison of the ITRC Board of Advisors and includes functions performed by ITRC technical teams, training instructors, and contract support.

The ITRC Training Program links directly to the ITRC Strategic Plan by reinforcing ITRC's values and by serving as an ITRC implementation function to support the overall ITRC Purpose to..... "advance innovative environmental decision-making" and to be the market recognized "go to" environmental solution provider.

ITRC will offer courses primarily based on ITRC Technical and Regulatory Guidance Documents (Guidance Documents), and on a case by case basis non-guidance documents. The following formats will be offered: Internet-based, classroom (lasting 2 hours to 2½ days), as well as to explore new formats and comprehensive training curricula. The Training Program will provide an organized, structured, and consistent approach to training curricula development and delivery allowing customers to apply principles, practices, and recommendations contained in ITRC documents. ITRC recognizes that new opportunities for training outside of the presently recognized formats may arise and is open to considering other training formats within the constraints of available resources after review by the Training Liaison and Board of Advisors Co-chairs, and the full Board of Advisors when appropriate.

ITRC's market niche is defined by the focus on innovative technologies and approaches, instructors who are environmental professionals from diverse environmental sectors, and an audience that includes both environmental decision-makers (*i.e.*, state and federal regulators and site owners) and implementers (*i.e.*, consultants). The curricula for ITRC training courses are based on ITRC documents developed by a consensus-based ITRC technical team made up of various sectors of the environmental community.

In order to be successful over the next three years (2007-2009), several strategic priorities exist for the ITRC Training Program. Strategic priorities outline how ITRC intends to meet its Training Program mission. More detailed action plans describe how the Training Program will implement these strategic priorities. Strategic priorities include the following groupings for 2007-2009:

- **General:** pilot partnerships with U.S. EPA regions and states; create and implement a training course marketing strategy; formalize Training Program policies and procedures; stay current in delivery practices; provide continuing education documentation for classroom training courses.
- **Internet-based Training:** first priority of ITRC training resources is to continue offering Internet-based training for all ITRC guidance documents and continue the partnership with U.S. EPA's CLU-IN site. Non-guidance document-based trainings will be considered by the Board of Advisors based upon available resources after all guidance document training needs have been met.
- **Classroom:** develop a new portfolio of classroom training curricula; establish "short-course" classroom program; design Decision Systems classroom training.
- **Funding:** Pursue federal, state, and foundation funding through ITRC Board of Advisors for core Training Program expenses and project-specific classroom training development and delivery. Registration fees from classroom training courses are collected by ITRC. Although the ITRC Training Program will generate revenue, it is not a self-sustaining program and requires additional organizational funding to operate.

## **A. INTRODUCTION**

This ITRC Training Program Strategy outlines the future of the Training Program for 2007-2009 and sets the direction for 2010 and beyond. This document communicates to ITRC Leadership (Board of Advisors, Team Leaders and Members, State Points of Contact (POCs), and others) the framework and guiding principles for ITRC's training development and delivery. The document also identifies Training Program priorities – where ITRC will commit resources for the next three years. This strategy was developed under the leadership of the Board of Advisor's Training Program Liaison with input gathered through surveys from over 1000 customers and 60 ITRC members.

The content of this document is as follows:

- Unique Nature of ITRC Training
- ITRC's Training Customers
- Purpose, Mission, and Values
- Envisioned Future of ITRC Training Program
- ITRC Training Program Guiding Principles
- Training Program Priorities
- Resource Considerations
- Training Program Action Plan and Schedule to Implement Strategic Priorities

## **B. UNIQUE NATURE OF ITRC TRAINING**

ITRC focuses on the customer group of state regulators who are generally considered the final decision-makers in the environmental industry. Since the environmental regulated community prepares materials for final state approval, they are also a logical audience for ITRC training courses. The balance of ITRC customers realize value by understanding the priorities of state regulators that are highlighted through ITRC training curricula and its associated guidance document(s).

The curricula for these training courses are primarily based on guidance document(s) developed by consensus-based ITRC technical teams made up of various sectors of the environmental community. Training on non-guidance documents may be approved by the ITRC Training Liaison and the Board Co-chairs on a case by case basis. These technical teams contain members such as state and federal regulators, consulting firms, technology vendors, federal and private site owners, academicians, and community stakeholders. ITRC technical teams represent multiple perspectives important to the industry, each of which contribute to the development of the ITRC documents and associated training curricula.

ITRC designs curricula around the decision points or salient questions necessary to understand the uniqueness, advantages, and limitations of the subject. This design allows customers to apply new information within their existing experience and knowledge base. Training instructors are a mix of various perspectives of the original technical team – state and federal regulators, practitioners, academia, community stakeholders, and owners/operators.

ITRC appears to have few direct competitors that provide the same types and range of training on innovative investigation and remediation technologies to a similar audience of state regulators, and remediation and waste management consultants and engineering firms. It is this focus on innovative technologies and approaches, and the inclusion of environmental professionals from diverse environmental sectors and the presentation to audiences that include

both decision-makers and implementers that gives ITRC its own market niche. While this niche also may somewhat limit ITRC's ability to market its training courses more broadly, there is an opportunity to capitalize on the overwhelming preference for in-state training by focusing ITRC's efforts on offering existing or new courses in individual states and/or regional locations.

### C. ITRC'S TRAINING CUSTOMERS

Based on data from ITRC's Internet-based training classes (from July 1999 to June 2006 with 30,185 participants) and information gathered in a customer survey (in May 2006 with over 1,000 responses), ITRC's customers' demographics, location, needs, and interests are summarized in the following statements:

- **Demographics:** The ITRC provides training to the national environmental community with the majority of customers coming from the consulting firms (43%) and the state government sectors (34%). The audience also includes federal regulators, federal and commercial site owners (decision-makers), technology vendors, community stakeholders, academia, and other groups.
- **Location:** Participation in ITRC training courses is distributed throughout the country with the top state participants being CA, NY, PA, TX, OH, VA, SC, GA, and CO. Grouping states by EPA Region, the highest participation levels include Region 4 (AL, FL, GA, MS, NC, SC, TN) Region 5 (IL, IN, MI, MN, OH, WI).
- **Needs:** Results from the May 2006 customer survey indicate that respondents need both Internet-based and classroom-style training classes. Most respondents indicated that they allocate up to one week of their schedule toward environmental training each year. Survey respondents also provided information about class features they value and how they find out about training courses.
- **Interests (topic-based upon past and present ITRC efforts):** ITRC's training customers are interested most in site topics of brownfields and vapor intrusion; contaminant topics of DNAPLs, metals, and petroleum; and technology topics of *in situ* bioremediation, natural attenuation, and *in situ* chemical oxidation.

More information about customers' demographics, location, needs, and interests is available in Appendix A.

During the period covered by this strategy, the ITRC Training Program will primarily serve both decision-makers (state and federal regulators and site owners) and implementers (consultants). In addition to continuing to serve the existing customer demographics, the program will expand marketing efforts to increase participation within ITRC's existing market niche - U.S. EPA regional project managers; state agency managers; and local government professionals working in environmental, natural resource and waste management programs operated by counties and cities. In addition, to serving all locations with Internet-based training classes, the Training Program will consider state agency and EPA Regional office locations for classroom training course delivery. For classroom short courses, large scale federal meetings and conferences may be considered as locations as well. Considering the influx of new personnel in the field in all the categories of customers, the needs and priorities may not change. As ITRC's approved project topics evolve, the training topics will change (e.g., beyond remediation) accordingly but the needs and priorities within that topic stays constant (i.e., training curriculum features).

## D. PURPOSE, MISSION, AND VALUES

The purpose of the ITRC Training Program is to support ITRC's overall purpose

*To advance innovative environmental decision-making* – ITRC Strategic Plan, 2005.

The ITRC Training Program assists ITRC's advancement of innovative environmental decision-making by helping ITRC create high-quality training courses. The Training Program provides an organized, structured, and consistent approach to training curricula development and delivery. In addition, the Training Program prepares and issues integrated reports on training results, customer participation demographics, and participant evaluations.

As a key element of ITRC implementation efforts, its mission is to proactively provide an opportunity for ITRC's customers to learn about the application of principles, practices, and consensus recommendations contained in ITRC guidance documents.

Several values guide the ITRC Training Program. The program works in *collaboration* with ITRC technical teams to ensure that *quality* training curricula are developed *consistently* and reflect the *technically sound* information contained in ITRC consensus-based guidance documents. In addition, the ITRC Training Program strives to provide *excellent customer service* in the planning, development, and delivery of all ITRC training courses to meet ITRC member and training participant needs.

## E. ENVISIONED FUTURE OF ITRC TRAINING PROGRAM

Supported by ITRC's high-quality training efforts, the environmental community makes effective decisions to solve environmental challenges. ITRC will deliver training curricula that responds to current problems, primarily based on ITRC guidance documents and delivered through existing and innovative mechanisms.

ITRC will primarily offer courses based on ITRC guidance documents in the following formats: Internet-based training courses (typically 2 hours in length), short course classroom training courses (typically less than one day, often 2 to 4 hours), and classroom courses (typically 1.5 to 2.5 days). In addition, ITRC will provide Decision Systems courses, referencing several ITRC guidance documents that will guide training customers through the process of selecting appropriate environmental technologies and approaches within given situations. Training courses on non-guidance documents will be approved by the ITRC Training Liaison and the Board Co-chairs on a case by case basis.

### ***ITRC's Training Market Niche***

*ITRC has few direct competitors that provide the same types of training on innovative investigation and remediation technologies to a similar audience of state regulators and remediation and waste management firms. ITRC's market niche is defined by the focus on innovative technologies, instructors who are environmental professionals from diverse environmental sectors, and an audience that includes both regulators and the regulated.*

## F. ITRC TRAINING PROGRAM GUIDING PRINCIPLES

The guiding principles listed below are those rules by which the program will operate and be managed. Exceptions may exist but require approval by the Board of Advisors prior to beginning training development.

- ITRC training development and delivery is an ITRC implementation activity connected to ITRC projects (not a stand-alone function). Accordingly, guidance documents typically serve as the basis for ITRC training curricula. Internet-based training is developed for all guidance documents and for non-guidance documents and emerging issues on a case by case basis upon Board of Advisors approval.
- Classroom training development and delivery requires a guidance document to serve as a basis (or Board of Advisors approval for non-guidance document/emerging issues training requests), demonstrated market need for more in-depth curriculum, and an associated proposal jointly developed by the ITRC Training Program and the related technical team. These proposals will require a multi-year commitment of planning and funding if approved by the ITRC Proposal Process.
- ITRC training curricula predominantly go beyond information sharing to focus on providing the audience with tools to evaluate the proper applications of solutions and decision-making assistance for environmental challenges.
- ITRC training courses are developed for decision-makers (*i.e.*, state and federal regulators and site owners) and implementers (*i.e.*, consultants) customers although other environmental sectors (*e.g.*, citizen stakeholders) also participate in ITRC training courses. Primary audience for training is based upon the contents of ITRC document that serves as the basis for the training. Targeting customers beyond the above may be necessary on a case-by-case basis accordingly.
- Developing and delivering a quality training curriculum includes the following activities: identifying key content from the ITRC guidance document(s), developing engaging materials and training approach (*e.g.*, inclusion of case studies and lessons learned), testing and practicing the training approach, and using effective communicators as instructors. At least one instructor must be a state member of the technical team who developed the training.
- Co-sponsorship of a host state is required for multi-day classroom training delivery at a particular location.
- ITRC guidance documents and training curricula developed by ITRC technical teams are the property of ITRC and copyrighted accordingly.
- It is understood that although the ITRC Training Program generates revenue, it is not a self-sustaining program and requires additional organizational funding to operate.
- State regulators receive ITRC training at no cost.

## **G. TRAINING PROGRAM PRIORITIES**

In order to be successful over the next three years (2007-2009), several strategic priorities exist for the ITRC Training Program. Strategic priorities outline how ITRC intends to meet its training program mission. More detail on action plans to implement these strategic priorities are contained in Section I of this document.

### **General Training Program Priorities for 2007-2009**

GP-1 Formalize already developed (those prioritized for development in 2006) Training Program Policies and Procedures (By February 2007).

- GP-2 Develop remaining identified Training Program Policies and Procedures (By December 2007).
- GP-3 Maintain current marketing efforts for reaching primary customer base of decision-makers and implementers (On-going during 2007-09).
- GP-4 Expand training marketing by creating and implementing a strategy focused on U.S. EPA Region participants, state agency managers (e.g., work through ASTSWMO), and county and city customer groups (By June 2007 develop; by January 2008 begin to implement)
- GP-5 Ensure ITRC training stays current with industry delivery practices (On-going during 2007-09).
- GP-6 Pilot partnership with one to two U.S. EPA Regions for the delivery of classroom training courses in addition to marketing Internet-based training courses to federal regulators (During 2007-08 and maintain through 2009).

#### **Internet-based Training Program Priorities for 2007-2009**

- IBT-1 Internet-based training receives first priority of resources to ensure quality Internet-based training continues to be offered for all ITRC guidance documents (On-going during 2007-09).
- IBT-2 Continue to partner with U.S. EPA's Office of Superfund Remediation and Technology Innovation's CLU-IN site to deliver Internet-based training on all ITRC guidance documents (On-going during 2007-09).

#### **Classroom Training Program Priorities for 2007-2009**

- CT-1 Select and develop a new portfolio of classroom training curricula (typically 1.5 to 2.5 days in length). Classroom Training is only for limited topics based on market information, need, funding and resource availability, and ability for Training Program to commit to a long-term effort for development and multiple deliveries (e.g., 10 offerings, over 3 years in each of the 10 EPA Regions) (On-going during 2007-09). Classroom training courses require a proposal for development and delivery, and ITRC Board of Advisors approval.
- CT-2 Establish "short course" classroom program – e.g., using ITRC Internet-based curriculum as a basis but expanding the curriculum to include additional case studies or related information for a conference style audience, or may develop specific curriculum if training could be applicable to multiple locations. (Develop during 2007 and maintain in 2008-09).
- CT-3 Develop draft basis, approach, and proposal for Decision Systems Classroom Training design (Develop and determine next steps in 2007).
- CT-4 For "short course" classroom program, identify federal and other conferences to target delivery of courses (Develop list of targeted course matches with conferences in 2007 and begin implementation in 2007).
- CT-5 Establish continuing education certificate process for classroom training (By January 2008).
- CT-6 Ensure host state is committed and co-sponsors are identified (as multi-day classroom training is scheduled in 2008-09).

## Training Program Funding Priorities for 2007-2009

- TPF-1 Pursue federal funding to cover core Training Program expenses by Board of Advisors with existing or new partners (*i.e.*, Department of Energy, Department of Defense, U.S. Environmental Protection Agency – including Regions) (see resource considerations below) (On-going during 2007-09).
- TPF-2 Pursue federal funding for project-specific classroom training development and delivery by Board of Advisors from existing or new partners (*e.g.*, Department of Agriculture, Department of Interior) (*i.e.*, this is beyond annual baseline contribution) (On-going during 2007-09).
- TPF-3 Pursue state programs to fund ITRC training activities; if not hard-dollar funding, states may still provide in-kind funding for training facilities, advertising, etc. (2007-09).
- TPF-4 Generate foundation proposals for project-specific classroom training development and delivery and core Training Program expenses. (See Appendix B for more information) (2007-09)

## H. RESOURCE CONSIDERATIONS

Implementation of the above Strategic Priorities will require a combination of funding to cover core Training Program functions, project-specific classroom training development and delivery functions as well as contributions from other organizational activities. This strategy also assumes the on-going relationship with the EPA CLU-IN.org Internet-based delivery system.

The breakdown of resources needed to support these functions are as follows:

### Core Program Functions

As an implementation function for ITRC, the Training Program will provide the following core functions:

- (1) Leadership, policy development, and implementation
- (2) Program management
- (3) Internet-based Training Development and Implementation
  - Planning and scheduling
  - Coordination, integration, and partnering
  - Advising and coaching for curriculum development and delivery
  - Quality and curriculum testing coordination (*e.g.*, dry runs)
  - Marketing and advertising
  - Registration coordination with EPA CLU-IN
  - Customer service
  - Delivery facilitation and moderation
  - Evaluation and record-keeping
- (4) Program marketing and advertising
- (5) Proposal development assistance
- (6) Market and needs assessments for topic areas
- (7) Fundraising assistance
- (8) Evaluation of new delivery mechanisms and curriculum systems
- (9) Other planning and implementation costs
  - Marketing materials
  - Travel costs for Program Support to attend organizational meetings and promote program

- Conference calls for Internet-based delivery and general program coordination and implementation. Technical teams provide conference calls during the curriculum development phase.

### **Classroom Training Development and Delivery Functions**

Activities that go beyond the core functions listed above are specific to classroom training development and delivery and include the following:

- (1) Planning and scheduling
- (2) Coordination, integration, and partnering
- (3) Advising and coaching for curriculum development and delivery
- (4) Quality and curriculum testing coordination (e.g., dry runs)
- (5) Marketing and advertising
- (6) Registration coordination, implementation, and fee collection
- (7) Customer service
- (8) Instructor speaker/facilitation training and evaluation
- (9) Delivery facilitation and moderation
- (10) Evaluation and record-keeping
- (11) Logistical planning and implementation costs
  - Marketing materials
  - Course materials production and delivery
  - Venue research and contracting
  - Venue and catering costs
  - Conference calls for general program coordination and implementation. Technical teams provide conference call during the curriculum development phase.
  - Travel costs
    1. Instructor, state proctor, and contract support travel to classroom training preparation and delivery events
    2. State regulator and stakeholder participant travel to classroom training courses

### **Interdependencies for a Successful ITRC Training Program**

Other parts of the ITRC organization play key roles in the ITRC Training Program, and coordination across these organizational functions is essential for a successful Training Program. In order for the ITRC Training Program to function efficiently and to serve as an implementation function for ITRC the Training Program relies on the following:

- (1) *ITRC Technical Teams* create guidance documents that serve as the basis for training development. Technical teams provide instructors and technical Program Advisor support for development of curriculum content (including testing). Coordination is necessary across teams to ensure documents and associated trainings are complimentary vs. competitive with each other. This will also be necessary during development of Decision Systems Trainings.
- (2) *ITRC State Engagement Program* (i.e., State POCs) serves as quality function during curriculum development (i.e., dry runs) to ensure state needs are met, assists with advertising training courses to member states, and helps coordinate classroom training in member states and related regions.
- (3) *ITRC Outreach Program* works in concert with the Training Program to market ITRC training courses including website functionality and support. In addition, the Outreach Program documents ITRC success related to ITRC training impacts.

- (4) *ITRC Board of Advisors* play a key role in working with the Training Program to determine training priorities (i.e., topics), and allocates funding for training development, delivery, and program management.
- (5) *ITRC/ECOS Management Support* provides classroom training venue coordination and contract implementation.
- (6) *EPA CLU-IN.org Partnership and Support* provides resources to ensure on-going delivery of ITRC Internet-based training courses through the EPA CLU-IN.org website system.
- (7) *Training Program Contractor* provides support for planning and implementation of all training program activities under the leadership of Training Liaison from the ITRC Board of Advisors.

## I. TRAINING PROGRAM ACTION PLAN AND SCHEDULE TO IMPLEMENT STRATEGIC PRIORITIES

The ITRC Training Program Strategy links directly to the ITRC Strategic Plan by reinforcing ITRC's values and by serving as an ITRC implementation function to support the overall ITRC Purpose to..... "advance innovative environmental decision-making" and to be the market recognized "go to" environmental solution provider.

The following table summarizes the strategic actions that will facilitate the execution of the ITRC Training Program strategic priorities outlined above. Due to the multi-year (2007-2009) nature of this strategy and the current limited availability of funding, a prioritization of strategic priorities will be required by the Board of Advisors

Strategic Priority Number	Brief Description	Required Action	Working With.....	Timeline
GP-1	Formalize Training Program Policies & Procedures	<ol style="list-style-type: none"> <li>1. Develop training materials on developed policies &amp; procedures to ensure understanding of Technical teams and others</li> <li>2. Implement policies &amp; procedures within Training Program activities</li> <li>3. Document lessons learned and re-evaluate as necessary to ensure program efficiency and success</li> </ol>	<ul style="list-style-type: none"> <li>• Technical teams</li> <li>• Other organizational functions</li> </ul>	By Feb. 2007
GP-2	Develop remaining Training Program Policies & Procedures	<ol style="list-style-type: none"> <li>1. Based on 2006 prioritization of policies &amp; procedures development, complete development of remaining priorities</li> <li>2. Development any newly identified policy and procedure needs based on 2007 program implementation</li> <li>3. Implement policies &amp; procedures</li> </ol>	<ul style="list-style-type: none"> <li>• Technical teams</li> <li>• Other organizational functions</li> </ul>	By Dec. 2007
GP-3	Maintain current market efforts to current customers	<ol style="list-style-type: none"> <li>1. Monthly advertising</li> <li>2. Yearly course schedules and promotion</li> </ol>	<ul style="list-style-type: none"> <li>• Outreach Program</li> </ul>	On-going 2007-09
GP-4	<p>Expand training program marketing strategy (targets EPA Regions, state agency managers, county &amp; city customers groups)</p> <p><i>Training Program will coordinate with Outreach Program</i></p>	<ol style="list-style-type: none"> <li>1. Research &amp; develop marketing strategy (e.g., assess audience target - needs link to course content)</li> <li>2. Establish key contacts for advertising</li> <li>3. Develop content for marketing materials, for e-mail, hardcopy, websites, etc. (e.g., Generate a training marketing brochure stressing ITRC unique value)</li> <li>4. Identify Training Program successes for development by Outreach Program then for use for Training Program marketing and general organization use.</li> <li>5. Implement plan</li> <li>6. Evaluate success and tailor as needed to reach intended audiences</li> </ol>	<ul style="list-style-type: none"> <li>• Outreach Program</li> <li>• POCs/SE</li> <li>• Technical teams,</li> </ul>	<p>Develop by June 2007; Begin implementation June 2007- 09</p> <p>Priority of identified targets (EPA Regions, state agency managers, county &amp; city customers groups)</p>

Strategic Priority Number	Brief Description	Required Action	Working With.....	Timeline
GP-5	Ensure Training Program stays current with delivery practices	<ol style="list-style-type: none"> <li>1. Evaluate and document alternative mechanisms for training delivery</li> <li>2. Determine applicability of any new delivery mechanism</li> <li>3. If applicable, pilot one new mechanism for use by program (others based upon available resources)</li> </ol>	<ul style="list-style-type: none"> <li>• Technical teams (if pilot testing needed)</li> </ul>	Assess 2008 Implement, if appropriate 2008-09
GP-6	Pilot partnership with EPA Regions for classroom training delivery  <i>Training Program will work with Board to develop partnership</i>	<ol style="list-style-type: none"> <li>1. Develop ideal partnership concept with EPA and develop approach</li> <li>2. Outline roles/responsibilities</li> <li>3. Engage appropriate level of EPA Regional personnel (may include engagement of EPA RAs via ECOS connections, may link back to need for EPA Regional POCs)</li> <li>4. Plan/implement training deliveries</li> </ol>	<ul style="list-style-type: none"> <li>• Board</li> <li>• Outreach Program</li> <li>• POCs/SE</li> <li>• Technical teams</li> <li>• ECOS connections</li> </ul>	Begin 2007; Implement 2008-09
IBT-1	Coordinate, support, and implement Internet-based training (IBT) development for ITRC Guidance Documents (and other approved non-guidance documents)  <i>Training Program will work with Technical teams</i>	<ol style="list-style-type: none"> <li>1. For each IBT:               <ul style="list-style-type: none"> <li>• Planning and scheduling</li> <li>• Coordination, integration and partnering</li> <li>• Advising and coaching for curriculum development and delivery</li> <li>• Quality and curriculum testing coordination (e.g., dry runs)</li> <li>• Marketing and advertising</li> <li>• Registration coordination with EPA CLU-IN</li> <li>• Customer service</li> <li>• Delivery facilitation and moderation</li> <li>• Evaluation and record-keeping</li> </ul> </li> <li>2. Assess yearly resource needs for IBT for planning purposes</li> </ol>	<ul style="list-style-type: none"> <li>• Technical teams (curriculum development, instructors)</li> <li>• POCs/SE (testing &amp; advertising)</li> <li>• Outreach Program (marketing including web)</li> <li>• In-kind EPA CLU-IN delivery system</li> </ul>	Highest priority for 2007-09 TBD based upon Board of Advisor approvals
IBT-2	Maintain partnership for IBT delivery via EPA CLU-IN.org <i>Training Program will Board</i>	<ol style="list-style-type: none"> <li>1. On-going coordination and partnership with EPA leadership and contract support for interface with CLU-IN.org on-line delivery system</li> </ol>	<ul style="list-style-type: none"> <li>• In-kind EPA CLU-IN delivery system</li> </ul>	Highest priority for 2007-09
CT-1	Select and develop new portfolio of classroom training curricula and deliver  <i>Training Program will coordinate with Board proposal process and fundraising</i>	<ol style="list-style-type: none"> <li>1. Assess market need and target topics for potential development in conjunction with technical teams</li> <li>2. Finalize development of boiler plate training proposal, policy &amp; procedures, baseline costs</li> <li>3. Each classroom training course requires a separate proposal and Board approval as a separate project</li> <li>4. Once formally funded and approved for each classroom training development/delivery:</li> </ol>	<ul style="list-style-type: none"> <li>• Technical teams (curriculum development, instructors)</li> <li>• POCs/SE (testing &amp; advertising)</li> <li>• Outreach Program (marketing including web)</li> <li>• ITRC/ECOS support (venue coordination/contracts)</li> </ul>	Lay groundwork 2007; Develop one course 2007 (pending funding availability). Implement training deliveries 2008-09.

Strategic Priority Number	Brief Description	Required Action	Working With.....	Timeline
		<ul style="list-style-type: none"> <li>• Planning and scheduling</li> <li>• Coordination, integration and partnering</li> <li>• Advising and coaching for curriculum development and delivery</li> <li>• Quality and curriculum testing coordination (e.g., dry runs)</li> <li>• Marketing and advertising</li> <li>• Registration coordination, implementation, and fee collection</li> <li>• Customer service</li> <li>• Instructor speaker training and evaluation</li> <li>• Delivery facilitation and moderation</li> <li>• Evaluation and record-keeping</li> <li>• Logistical planning and implementation</li> </ul> 5. Test existing policies & procedures and update to ensure successful program 6. Assist technical teams with training proposal development		
CT-2	Establish “short course” classroom program (courses typically done in conjunction with existing events, e.g., conferences)  <i>Training Program will coordinate with Board proposal process and fundraising</i>	1. Develop program and associated processes 2. Research need and opportunities 3. Establish partnerships for implementation (including roles/responsibilities) 4. Based on existing IBT curricula modify for classroom in conjunction with technical team(s) (instructors) to meet audience needs 5. Implement courses 6. Evaluate & re-design as needed	<ul style="list-style-type: none"> <li>• Technical teams (curriculum development, instructors)</li> <li>• POCs/SE (testing &amp; advertising)</li> <li>• Outreach Program (marketing including web)</li> <li>• Board</li> </ul>	Develop program 2007; Pilot 2007 at AEHS; Implement 2008-09
CT-3	Develop draft basis, approach and proposal for Decision Systems training design  <i>Training Program will coordinate with Board proposal process and fundraising</i>	1. Develop outline of approach 2. Convene group of experts to work on concept 3. Draft approach and proposal for classroom training design 4. Determine next steps for funding and development	<ul style="list-style-type: none"> <li>• Technical team experts</li> <li>• POCs/SE</li> <li>• Board</li> </ul>	Develop 2007 Next steps TBD
CT-4	For “short course” classroom program, identify federal and other conferences to target	1. Develop list of federal and other major conferences that would provide opportunities for ITRC short course delivery	<ul style="list-style-type: none"> <li>• Technical Teams</li> <li>• POCs/SE</li> <li>• Board</li> </ul>	Develop on multi-year basis with yearly updates pending funding

Strategic Priority Number	Brief Description	Required Action	Working With.....	Timeline
	delivery of courses (Develop list of targeted course matches with conferences in 2007 and implement in 2008).	<ol style="list-style-type: none"> <li>2. Approval and funding by Board for short course capacity within each year</li> <li>3. Match short course options with potential conferences</li> <li>4. Coordinate placement of ITRC short courses with conference organizers</li> <li>5. Ensure training program procedures are followed to enable successful delivery of short courses</li> </ol>		availability and approval by Board
CT-5	Establish continuing education certificate process for classroom training	<ol style="list-style-type: none"> <li>1. Research/develop process for classroom training events</li> <li>2. Set-up process, policies &amp; procedures for implementation at multiple events</li> <li>3. Establish partnerships as required to implement</li> <li>4. Implement process</li> <li>5. Evaluate/re-design as needed</li> </ol>	<ul style="list-style-type: none"> <li>• POCs/SE</li> <li>• TBD organizations based on targeted training locations</li> </ul>	Develop process 2007; Implement 2008-09
CT-6	<p>Ensure host state is committed and co-sponsors are identified when classroom training deliveries are held</p> <p><i>Training Program will work with POC/SE coordination</i></p>	<ol style="list-style-type: none"> <li>1. Confirm host state for each classroom training &amp; develop roles &amp; responsibilities</li> <li>2. Develop sponsorship requirements (roles &amp; responsibilities) for state agencies and other appropriate sponsors in coordination with POCS</li> <li>2. Coordinate with targeted sponsors (POC interface is key) in scheduling and implementing classroom training deliveries</li> </ol>	<ul style="list-style-type: none"> <li>• Board</li> <li>• Outreach</li> <li>• POCs/SE</li> <li>• Technical teams</li> <li>• ECOS connections</li> </ul>	Begin 2007; Implement 2008-09
TPF-1	<p>Pursue federal funding to cover core program expenses</p> <p><i>Training Program will assist Board</i></p>	<ol style="list-style-type: none"> <li>1. Develop funding plan and core program needs</li> <li>2. Board seeks funding from existing and potential new partners</li> <li>3. Secure funding for program use</li> </ol>	<ul style="list-style-type: none"> <li>• Board</li> <li>• Outreach Program (communications materials)</li> <li>• ITRC/ECOS Management Support (funds transfer &amp; manag.)</li> </ul>	2007 Develop plan and determine next steps for 2008-09
TPF-2	<p>Pursue federal funding for project-specific classroom training development &amp; delivery</p> <p><i>Training Program will assist Board</i></p>	<ol style="list-style-type: none"> <li>1. Develop funding plan and core program needs</li> <li>2. Board seeks funding from existing and potential new partners</li> <li>3. Secure funding for program use</li> </ol>	<ul style="list-style-type: none"> <li>• Board</li> <li>• Outreach Program (comm.. materials)</li> <li>• ITRC/ECOS Manag. Support (funds transfer &amp; manag.)</li> <li>• Technical teams (for specific topic areas)</li> </ul>	2007 Develop plan and determine next steps for 2008-09
TPF-3	Pursue state program funding for training activities	<ol style="list-style-type: none"> <li>1. Research funding opportunities within states</li> <li>2. Target specific states based on their priorities</li> <li>3. Develop strategy to address funding requirements for</li> </ol>	<ul style="list-style-type: none"> <li>• Board</li> <li>• Outreach Program (communications materials)</li> </ul>	2007 research to determine next steps for 2008-09

Strategic Priority Number	Brief Description	Required Action	Working With.....	Timeline
	<i>Training Program will assist Board</i>	use 4. Secure funding for program use	<ul style="list-style-type: none"> <li>• ITRC/ECOS Management Support (funds transfer &amp; management)</li> <li>• Technical teams (for specific topic areas)</li> </ul>	
TPF-4	<p>Generate foundation proposals for project-specific classroom training development and delivery or for core Training Program expenses</p> <p><i>Training Program will assist Board</i></p>	<p>1. Further research potential foundations to target (using Appendix A and attached table as a starting point).</p> <p>2. Develop foundation fundraising plan</p> <p>3. Submit a letter of inquiry about their organization or proposed project</p> <p>3. If accepted, make carefully targeted proposals to potential funders that position ITRC training courses in way that addresses foundation funding priorities (for example, by talking about capacity-building rather than training delivery).</p>	<ul style="list-style-type: none"> <li>• Board</li> <li>• Outreach Program (communications materials)</li> <li>• ITRC/ECOS Management Support (funds transfer &amp; management)</li> <li>• Technical teams (for specific topic areas)</li> </ul>	2007 research, plan, submit letters of inquiry to X foundations – results of inquiry will dictate next steps

## APPENDIX A – ITRC's TRAINING CUSTOMERS

This section describes the ITRC Training Program customer:

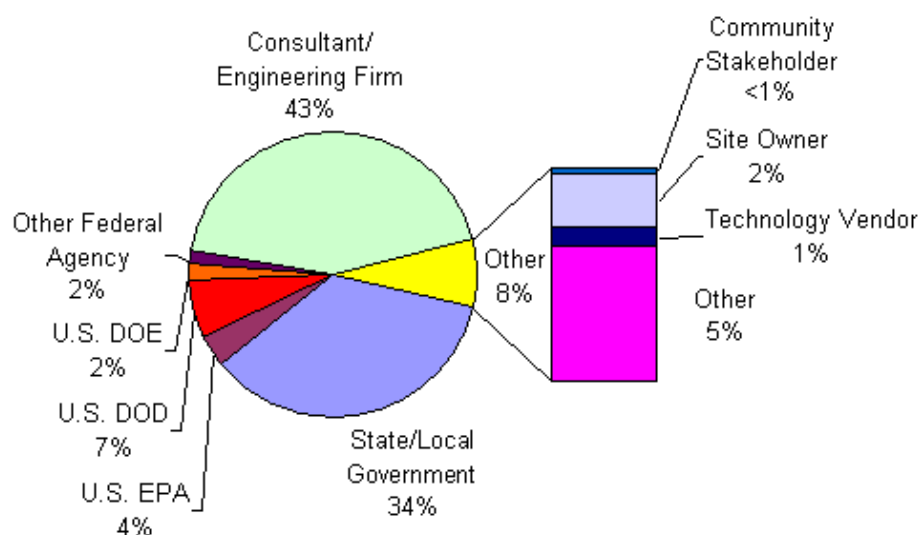
- demographics
- location
- needs
- interests (topic-based upon past and present ITRC efforts)

The information provided in this section comes from Internet-based training participant data (30,185 participants) collected from the inception of Internet-based Training Program in July 1999 through June 2006. In addition, information related to customer needs and interests was gathered through a customer survey conducted in May 2006 with input from over 1,000 ITRC customers. Although ITRC has trained well over 5,000 participants in classroom-style training venues across the country, the availability of quality data to accurately categorize their participation does not exist. Therefore only Internet-based training participant data is used, but it is assumed that whether the training takes place in an in-person setting or via the Internet, the ITRC customer generally remains the same.

### Demographics

The ITRC Training Program currently provides training to the national environmental community with the majority of customers coming from the consulting firms (43%) and the state government sectors (34%) (Figure A-1). The audience also includes federal regulators, federal and commercial site owners, technology vendors, community stakeholders, academia, and other groups, but on a much smaller scale. Participants include engineers, scientists, project managers, hazardous and solid waste management professionals, and resource conservation specialist as well as other disciplines. Besides the primary federal agency participants of the Department of Energy (DOE), the Department of Defense (DoD), the Environmental Protection Agency (EPA), additional federal agency participants are from the Department of Interior and the Department of Agriculture and others.

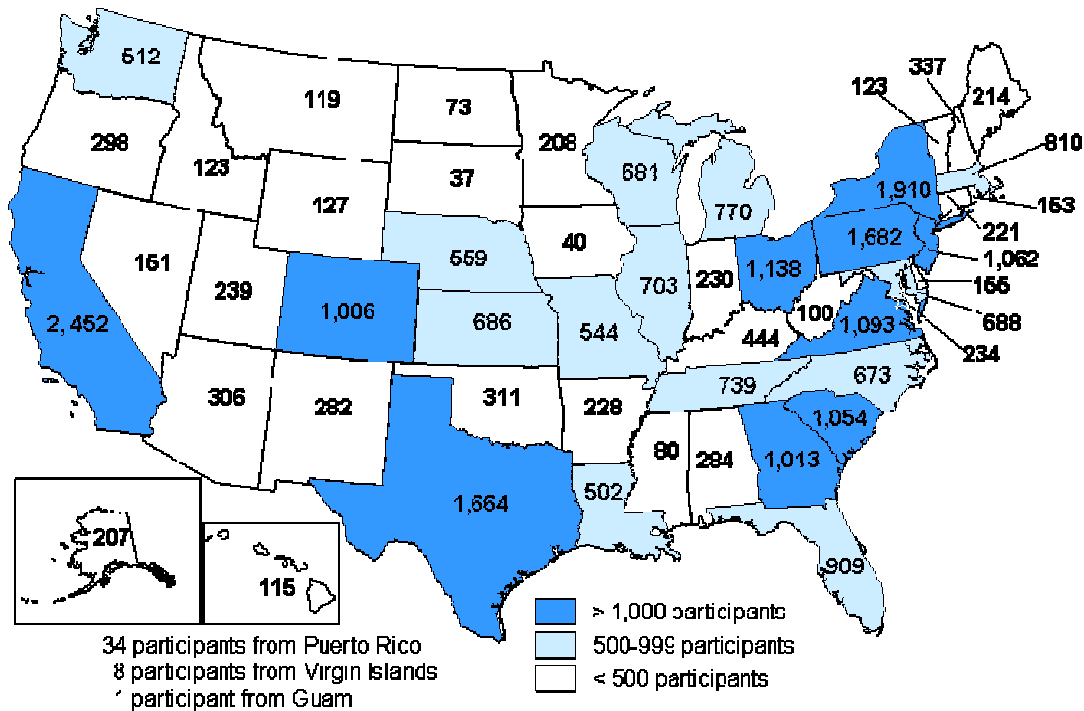
**Figure A-1: ITRC Internet-based Training Participation by Environmental Sector (30,185 participants)**



## Location

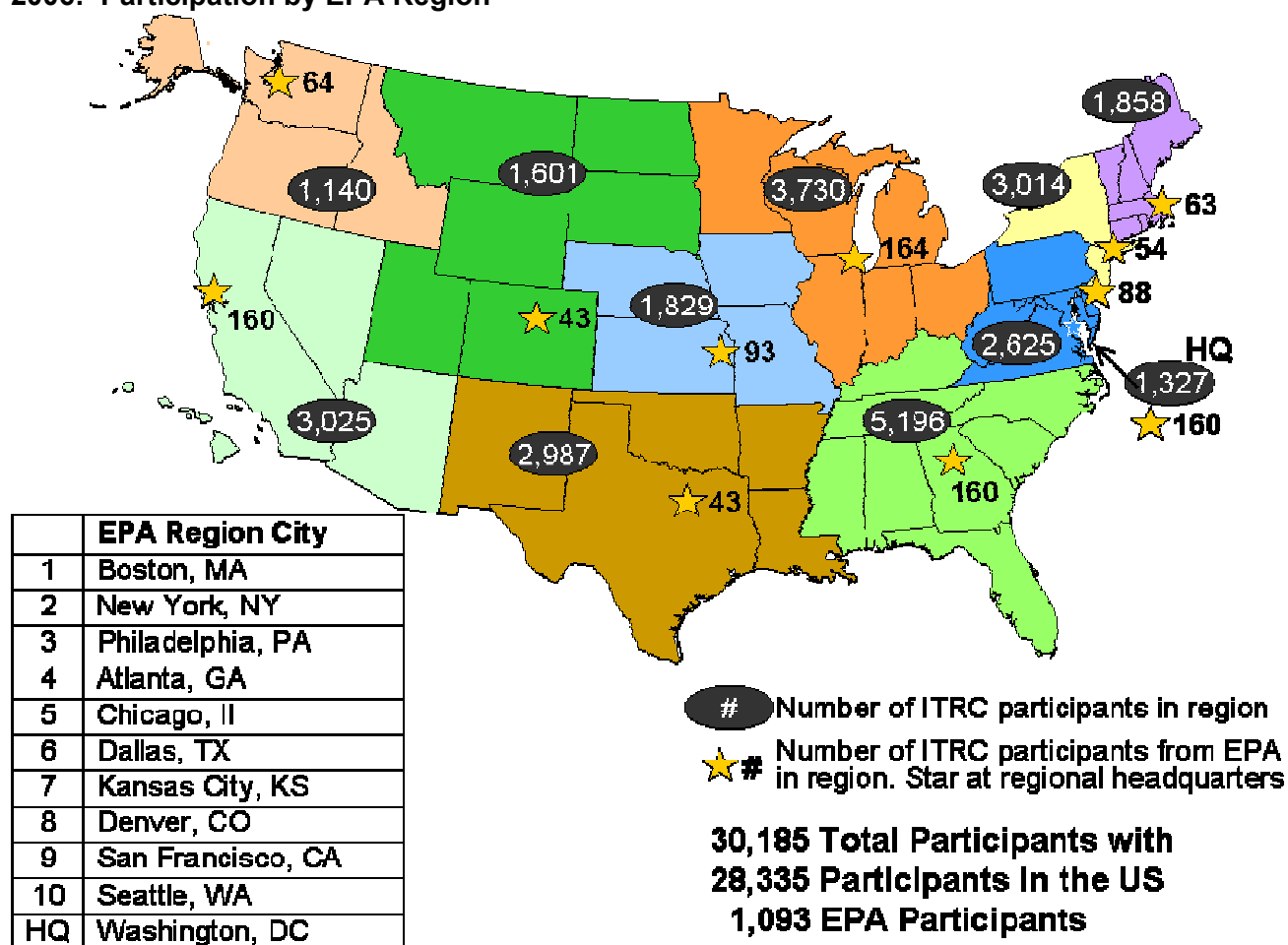
The environmental community across the country takes advantage of ITRC training courses (Figure A-2). As ITRC targets state environmental professionals, there undoubtedly is a higher distribution of training customers in state capitals as well as other population centers within the state. Participation in ITRC training courses is distributed throughout the country with the top state participants being CA, NY, PA, TX, OH, VA, SC, GA, and CO. State agency central offices are typically located in state capitals, often one of the population centers of the states. EPA Regional offices are located within state capitals or regional population centers as well and provide potential regional location for classroom training course delivery (Figure A-3). EPA Regions with the highest participation levels include Region 4 (AL, FL, GA, MS, NC, SC, TN) with the Regional office in Atlanta and Region 5 (IL, IN, MI, MN, OH, WI) with the Regional office in Chicago.

**Figure A-2: ITRC Internet-based Training Total Participant Data July 1999 through June 2006**



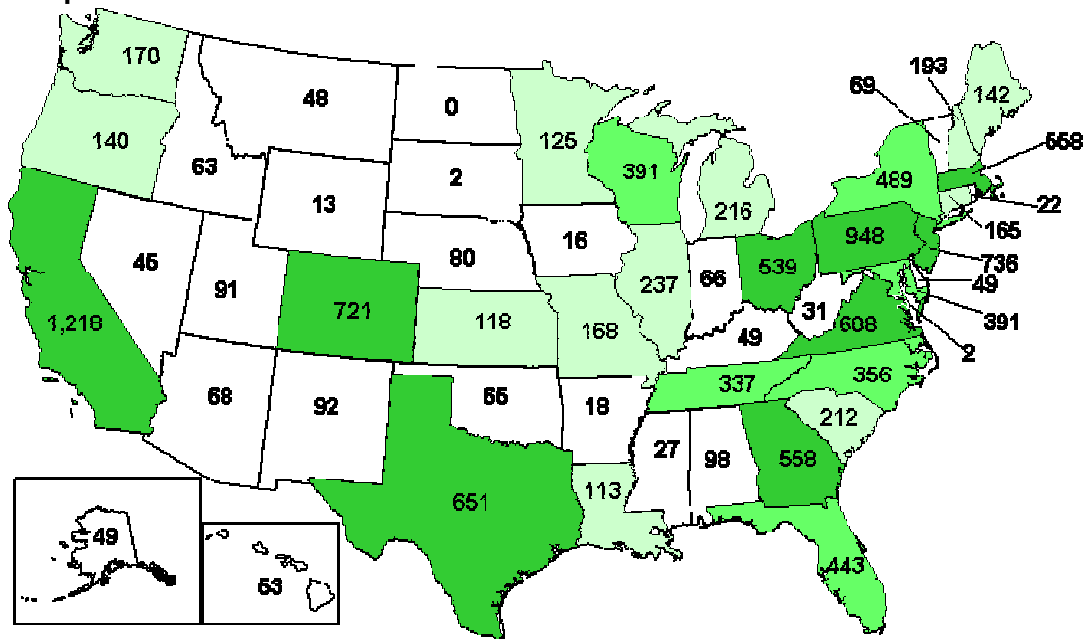
**30,185 Total Participants with  
28,335 Participants In the US**

**Figure A-3: ITRC Internet-based Training Total Participant Data July 1999 through June 2006: Participation by EPA Region**

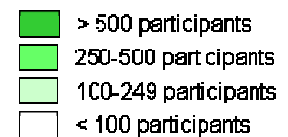


Consultants, even though they work state-wide or regionally, normally have direct access with the state and EPA centers of the state and, therefore, attend the classroom training at those locations (Figure A-4).

**Figure A-4: ITRC Internet-based Training Data July 1999 through June 2006: Consulting Firm Participation**

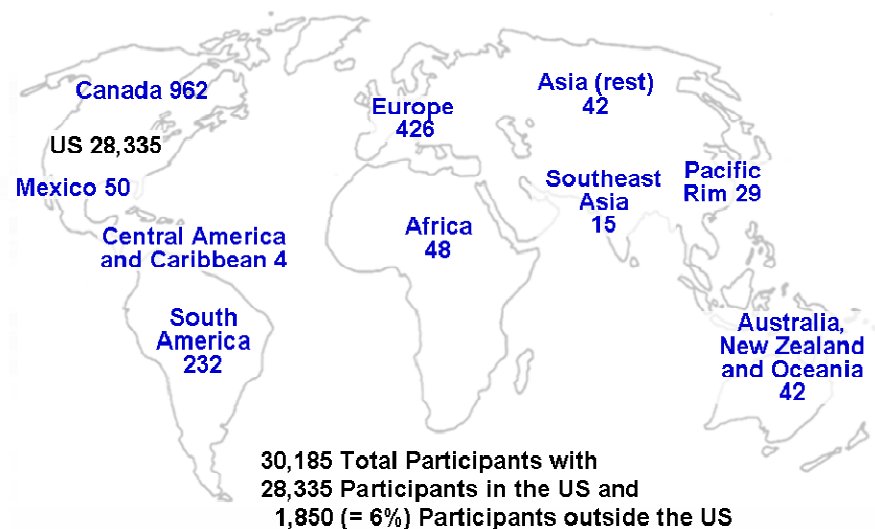


**13,142 Total Consultant/Engineering Firm Participants with  
12,059 Consultant/Engineering Firm Participants in the US**



International participation is approximately six percent of total training participation with the majority being from the consulting firms and the state/local government sectors. Figure A-8 provides a geographical summary of international participation.

**Figure A-8: ITRC Internet-based Training Data July 1999 through June 2006: Total Participation by World Region**



## Needs

Based on May 2006 customer survey results, the majority of respondents (58.6%) indicated that in the last two years they have taken both Internet-based and classroom-style training classes, followed by Internet-based training only (29.7%) and classroom-style training (11.7%). Of all training classes that have been taken, most respondents (79.1%) indicated that they have taken classes on remediation technology applications, followed by innovative management approaches (28.6%) and information on new environmental policies or laws (29.3%).

Most respondents (60%) indicated that they allocate up to one week of their schedule toward environmental training each year. What limits them most from taking training are travel budget restrictions (76%) and lack of time (58%). While only 37 percent of respondents indicated that their training is restricted geographically, only 15 percent of all survey respondents indicated that they attended training events outside of their state.

Most respondents find out about environmental classroom-style training through e-mail announcements (76%) and their own organization's training department (51%). However, it appears that hardcopy mailings (34%), web sites (35%), and word of mouth (39%) also are popular ways of communicating about training.

The features rated as most important for environmental training for classroom-style training included the following features:

- Instructors who are technical experts
- Emerging environmental solutions
- Low cost

The features rated as least important for environmental training for classroom-style events included the following features:

- Led by State regulators
- Located in an appealing location
- Continuing education documentation
- Site Visits (related to class content)

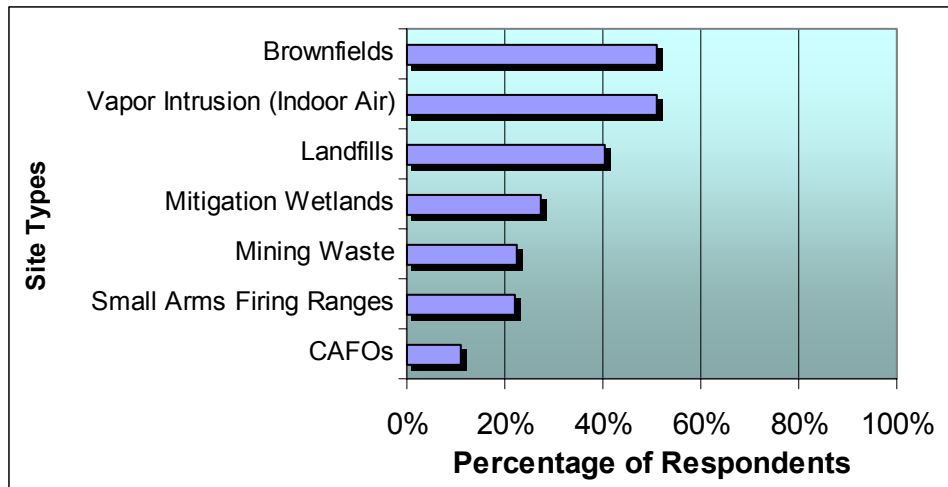
Training curriculum features important to ITRC customers include (in order from highest to lowest) were the following features:

- Advantages and limitations of technology or approach
- Applicability of technology or approach
- Basic science behind the technology
- Practical application considerations
- Case studies and lessons learned
- Design and operational considerations
- Regulatory barriers, flexibilities, and solutions
- Cost estimating
- Performance monitoring and evaluation
- Question-and-answer sessions
- Community stakeholder considerations
- Hands-on practices

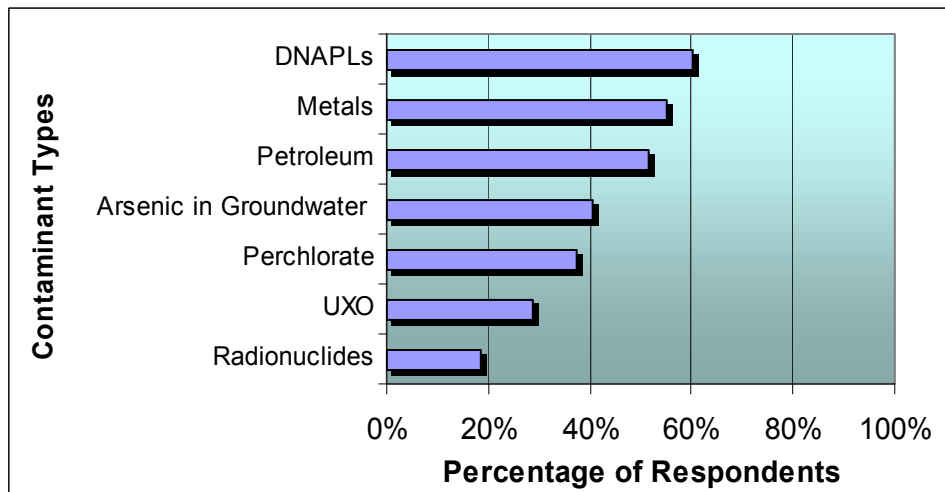
### Interests (Topic-based upon past and present ITRC efforts)

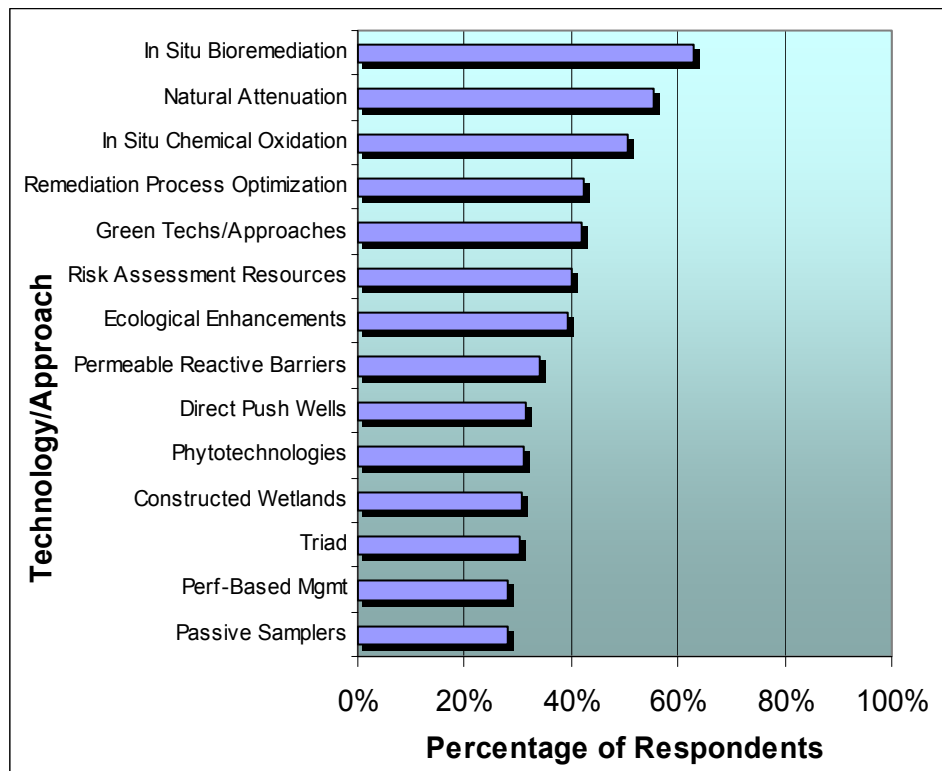
Of those respondents who answered questions about future classroom-style training topics, 88 percent indicated that they do plan to take classroom-style training in the next two years. Of those who do plan to take classroom-style training, the majority of respondents want the training focus on brownfields sites and sites where vapor intrusion is a problem. The most important contaminant topics for training are DNAPLS, metals, and petroleum; and for technologies/ approaches the most important were *in situ* bioremediation, natural attenuation, and in situ chemical oxidation technologies. There did not appear to be any variation in preferences by Region for any of these categories. Figures A-5 to A-7 provide customer input on topic importance for future classroom training curricula.

**Figure A-5: Future Training Interests – Sites**



**Figure A-6: Future Training Interests – Contaminant Types**



**Figure A-7: Future Training Interests – Technologies/Approaches**

## **APPENDIX B – FOUNDATION FUNDING OPPORTUNITIES**

Foundation Funding provides a great opportunity to increase the financial resources for the ITRC Training Program. It may be well-worth exploring foundation funding for development and delivery of ITRC classroom-style courses and for updating existing training courses. Through research, it was found that many national and regional foundations support organizations that focus on environmental issues, and more specifically, environmental administration and regulation, environmental technical aid, waste management, and capacity-building. Regional foundations primarily fund local and regional organizations, or projects that will take place locally or regionally.

Eleven foundations were identified that can be considered a first group of potential foundation-funding sources for ITRC training efforts, if funding requests are carefully “positioned” and described in a way that targets each foundation’s particular interests, which usually are quite specific. They are: the Beldon Fund, James Graham Brown Foundation, Bullitt Foundation, Energy Foundation, Ford Foundation, Richard and Rhoda Goldman Fund, William and Flora Hewlett Foundation, Charles Stewart Mott Foundation, New York Community Trust, David and Lucile Packard Foundation, and the Surdna Foundation.

Exploring potential foundation funding will involve making carefully targeted proposals to potential funders that position ITRC training courses in way that addresses foundation funding priorities (for example, by talking about capacity-building rather than training delivery). The potential for attracting foundation funding is enhanced if ITRC is willing to seek foundation support for individual course deliveries in a foundation’s area of interest. Table 1 provides a summary table of foundations that may provide an opportunity for ITRC to explore and secure funding for the Training Program.

For foundation fundraising to have an opportunity for success the ITRC as an organization will need to have quality communication materials available to accompany Training Program efforts provided by the Outreach Program. It will take a concerted effort by the ITRC Board of Advisors and ECOS/ITRC Leadership with assistance from the Training Program to make the fundraising efforts successful.

TABLE 1: Potential Funding Entities for ITRC Training Program: Foundations and Philanthropies

Foundation/Contact Information	Primary Funding Interests	Submitting Proposals	Possible Funding Source for ITRC Because:	Web Site
<b>Beldon Fund</b> Holeri Faruolo, Grants Manager 99 Madison Ave., 8th Fl. New York, NY 10016 Telephone: 800-591-9595 E-mail: <a href="mailto:info@beldon.org">info@beldon.org</a>	Human health and the environment, key states	Three-page letter of inquiry must be submitted first. The next deadline for letters of inquiry is June 14; the next will be March 2007.	The foundation has a long history of interest in environmental issues, and has awarded grants to the State Environmental Leadership Program and the Environmental Support Center. It is included in the Foundation Directory Online search results of foundations that support management development/capacity-building on environmental issues, and environmental management/technical aid.	<a href="http://www.beldon.org">www.beldon.org</a>
<b>James Graham Brown Foundation</b> 4350 Brownsboro Road Suite 200 Louisville, Kentucky 40207 Telephone: 502-896-2440 Toll-free: 866-896-JGBF (5423)	Education (primarily higher education), civic/economic development, culture and humanities, human services and health	A pre-grant application must be submitted first. Grant proposals must be submitted before October 1, 2006.	Although the foundation's Web site states that it does not fund organizations outside of Kentucky, even for local projects, it awarded a grant to the Waste Reduction and Technology Transfer Foundation in Alabama for management and technical aid in waste management. It is included in the Foundation Directory Online search results of foundations that support environmental management/technical aid.	<a href="http://www.jgbf.org">www.jgbf.org</a>
<b>Bullitt Foundation</b> 1212 Minor Avenue Seattle, WA 98101-2825 Telephone: 206-343-0807 E-mail: <a href="mailto:info@bullitt.org">info@bullitt.org</a>	Energy and climate change; education and outreach; and training, communication and unique opportunities	Prospective applicants are asked to contact a program officer regarding their grant requests prior to submitting a grant proposal. Deadlines are May 1 and November 1.	The foundation has a strong history of interest in environmental issues, and has awarded grants to the Environmental Support Center for training and technical assistance. It is included in the Foundation Directory Online search results of foundations that support management development/capacity-building on environmental issues, and environmental management/technical aid.	<a href="http://www.bullitt.org">www.bullitt.org</a>
<b>Energy Foundation</b> 1012 Torrey Avenue #1 San Francisco, CA 94129 Phone: (415) 561-6700 <a href="mailto:energyfund@ef.org">energyfund@ef.org</a>	Advancing new energy technologies that enable economic growth with dramatically less pollution, power generation, transportation, and buildings.	Letters of inquiry are recommended before submitting a proposal. Projects must fit into one of the foundation's program areas. Letters and proposals are accepted continuously through the year.	The foundation has a strong commitment to energy/environmental technologies and awarded grants to the Tellus Institute for Resource and Environmental Strategies for a training workshop. It is included in the Foundation Directory Online search results of foundations that support management development/capacity-building on energy issues, and environmental management/technical aid.	<a href="http://www.ef.org">www.ef.org</a>
<b>Ford Foundation</b> 320 East 43rd Street New York, NY 10017 Telephone: 212-573-5000 E-mail: <a href="mailto:office-secretary@fordfound.org">office-secretary@fordfound.org</a>	Economic development, community and resource development, human rights, governance and civil society, and knowledge, creativity, and freedom.	Letters of inquiry must be submitted first; grant proposals are then submitted only by request. There are no deadlines for letters of inquiry.	The foundation has awarded grants to the Institute for Governance and Sustainable Development to conduct training on governance issues, to the Environmental Support Center for capacity-building activities in the Southeast, and the International City/County Management Association to facilitate conversations among stakeholders and provide research and technical assistance to demonstration communities. It is included in the Foundation Directory Online search results of foundations that support management development/capacity-building on environmental issues, and environmental management/technical aid.	<a href="http://www.fordfound.org">www.fordfound.org</a>

Foundation/Contact Information	Primary Funding Interests	Submitting Proposals	Possible Funding Source for ITRC Because:	Web Site
<b>Richard and Rhoda Goldman Fund</b> The Presidio211 Lincoln BoulevardP.O. Box 29924San Francisco, California 94129Telephone: 415-345-6300	Reducing pollution, toxics, and waste from production processes; encouraging laws, policies, and corporate behaviors that support sustainable, sensible and sound industry practice; and stimulating large-scale market shifts toward recycled materials.	A two-page letter of inquiry must be submitted first. Proposals are by invitation only. Letters are accepted throughout the year.	The foundation has a strong history of interest in environmental issues, and has awarded grants to the Environmental Support Center. It is included in the Foundation Directory Online search results of foundations that support management development/capacity-building on energy issues, and environmental management/technical aid.	<a href="http://www.goldmanfund.org">www.goldmanfund.org</a>
<b>William and Flora Hewlett Foundation</b> 2121 Sand Hill Road Menlo Park, CA 94025 Telephone: 650-234-4500	Education, environment, global development, performing arts, and population	A letter of inquiry must be submitted first. Instructions are on the foundation's Web site. There are no deadlines	The foundation has a strong history of support for the environment, and has awarded grants to the Center for Energy Efficiency and Renewable Technologies. It is also a primary funder of the Energy Foundation	<a href="http://www.hewlett.org">www.hewlett.org</a>
<b>Charles Stewart Mott Foundation</b> Mott Foundation Building 503 S. Saginaw Street, Suite 1200 Flint, Michigan 48502-1851 Telephone: 810-238-5651 E-mail: <a href="mailto:info@mott.org">info@mott.org</a>	Environment, civil society, Flint area, and Pathways Out of Poverty. In addition to these four programs, the foundation also funds Exploratory and Special Projects [XSP] which support unusual or unique opportunities to address significant national and international problems.	A letter of inquiry must be submitted first. Proposals are by invitation only. Letters are accepted throughout the year. Guidelines state that grants are not awarded for projects that duplicate, or significantly overlap, the work of federal, state or local governmental agencies.	The foundation has awarded grants to the Environmental Support Center and the State Environmental Leadership Program. It is included in the Foundation Directory Online search results of foundations that support management development/capacity-building on environmental issues, and environmental management/technical aid.	<a href="http://www.mott.org">www.mott.org</a>
<b>New York Community Trust</b> 909 Third Avenue New York, NY 10022 Telephone: 212-686-0010	Children, Youth, and Families; Community Development and the Environment; Education, Arts, and the Humanities; and Health and People with Special Needs.	The foundation asks applications to review grant guidelines first and then send an application form. These documents are available online. There are no deadlines for applications.	The foundation has a strong history of interest in regional and national environmental issues, and has awarded grants to the Association for Resource Conservation for management development and capacity-building, and to the Environmental Support Center. It is included in the Foundation Directory Online search results of foundations that support management development/capacity-building on environmental issues, and environmental management/technical aid.	<a href="http://www.nycommunitytrust.org">www.nycommunitytrust.org</a>

Foundation/Contact Information	Primary Funding Interests	Submitting Proposals	Possible Funding Source for ITRC Because:	Web Site
<b>David and Lucile Packard Foundation</b> 300 Second Street Los Altos, California 94022 Telephone: 650-948-7658 E-mail: <a href="mailto:inquiries@packard.org">inquiries@packard.org</a>	Conservation and science, population, and organizational effectiveness, in which the foundation supports projects of grantees to improve management, governance, and leadership by developing strategies, systems, structures, and skills.	A two-to-three-page letter of inquiry must be submitted first. Letters of inquiry are accepted throughout the year.	The foundation has a strong history of interest in environmental issues and has awarded grants to the Environmental Support Center. It is included in the Foundation Directory Online search results of foundations that support management development/capacity-building on environmental issues, and environmental management/technical aid.	<a href="http://www.packard.org">www.packard.org</a>
<b>Surdna Foundation</b> 330 Madison Avenue, 30th Floor New York, NY 10017 Telephone: 212-557-0010 <a href="mailto:questions@surdna.org">questions@surdna.org</a>	Environment, community revitalization, effective citizenry, non-profit sector support, and organizational capacity-building grants	A letter of inquiry must be submitted first. Letters of proposal are accepted throughout the year. Grant proposals are submitted by invitation only	The foundation has a long history of support for the environment, and has awarded grants to the State Environmental Leadership Program and the Environmental Support Center. It is included in the Foundation Directory Online search results of foundations that support management development/capacity-building on environmental and energy issues, and environmental management/technical aid.	<a href="http://www.surdna.org">www.surdna.org</a>