This proposal recommends an integrated Professional Development Program which enables TTI to maintain its premier leadership role in transportation research by attracting and retaining exceptional employees who excel in their current and future roles in the organization.
Introduction

A Professional Development Workgroup was formed to propose a Professional Development Program to support the strategic Imperative – **Attract and retain exceptional staff.** The Strategic Plan identified **Goal 2.2** – Establish a professional development program for TTI employees to enhance skills and develop career paths.

The proposed TTI Professional Development Program presented here responds to the strategic focus suggested in the TTI Strategic Plan. The program’s objective can be stated as follows:

*To develop an integrated Professional Development Program which enables TTI to maintain its premier leadership role in transportation research by attracting and retaining exceptional employees who excel in their current and future roles in the organization.*

To accomplish this objective, the Professional Development Program addresses the following areas:

- Provide TTI employees with opportunities to enhance their skills and capabilities through ongoing training and development opportunities;
- Offer a Professional Development Program which is well thought out, professionally delivered, and is seen as **Value Added** by our employees;
- Address the training and development needs of all TTI job groups;
- Address Succession Planning training and development needs of TTI through the Professional Development Plan; and
- Be sensitive to the unique work environment of TTI in structuring the program.

Policy Statement

It is the policy of Texas Transportation Institute to provide training and development opportunities for all its employees on an ongoing basis. Training and development opportunities will be provided on a voluntary basis to enhance employee productivity, promote quality of work, encourage retention and job skill development. The program will be reviewed annually to ensure its relevancy and efficacy.

Methodology

Development of a Professional Development Program for an organization such as TTI can be daunting. Consideration must be given to a number of factors to address the varying needs of individual employees as well as job groupings within the Institute. The unique operating environment of the organization demands the program be viewed as a true **Value Added** component of every employee’s immense workload and responsibility. We have resisted the temptation of adopting other agencies’ programs; rather, the Workgroup assigned the task has focused on a deliberate methodology to craft a program which responds to TTI particular needs.

The Workgroup deployed the following methodology:

- Identified a clear objective for the program consistent with the TTI Strategic Plan. Focusing the program has permitted us to develop a proposal which is designed to attract and retain the best and brightest employees and to develop a training and development program which meets the needs of TTI.
- Developed core competencies for all TTI employees regardless of which job group family a position title is assigned.
Identified TTI job groups to permit the development of job competencies and logical career paths for various TTI jobs.

Developed competencies for each job group.

Based on core and job group competencies, training and development needs were identified to accomplish two key objectives – a) to promote enhancement of job skills and competencies for every TTI employee; and b) to promote career paths for TTI employees.

Developed guidelines to implement and administer the Professional Development Program throughout TTI.

The Workgroup developed a set of recommendations for consideration by the Leadership Team to enhance implementation of the Program.

**Job Groups, Core Competencies, Job Group Competencies**

TTI is a diverse organization with a variety of jobs to support its mission. The Professional Development Workgroup identified the following TTI Job Groups:

- Administrative
- Executive Managerial
- Financial/Business
- IT
- Research
- Communications

**Core Competencies**

The Professional Development Workgroup suggests as a cornerstone to the Professional Development Program, the establishment of core competencies for all TTI employees. These core competencies are skills, attributes, and capabilities every TTI employee will be expected to exhibit. While many of the core competencies are innate to the TTI workforce, they establish a basic benchmark for future and current employees of the Agency. Core Competencies are presented in Appendix I of this report.

**Job Group Competencies**

Identification of competencies for each Job Group helps define both career paths and skill enhancement. Job related competencies are provided in the Appendix II of this report.

**Recommendations**

The Professional Development Workgroup makes the following recommendations in connection with the Professional Development Program:

1) Designate TTI Human Resources Office as program manager for Professional Development Program
2) Commit the required resources to successfully implement the program. The success of the Professional Development Program will require a commitment of both people and financial resources.

3) Establish a formal On-boarding Program be established for TTI employees.

4) It is recommended that a voluntary, informal mentoring program be established for TTI employees.

5) Disseminate program offerings through TTI intranet and printed catalogue. Employees need to know when, where and what is being offered on an on-going basis.

6) Deploy a combination of the Mentoring Program and HR support to counsel employees in program offerings. This is particularly important to employees who desire to develop specific career paths within TTI.
Professional Development Plan

This section sets forth the proposed Professional Development Plan for TTI. The Plan as presented here has two objectives:

1) To promote enhancement of job skills in support of the Agency’s core competencies and specific job group competencies identified within this Plan.

2) To suggest logical career paths for TTI employees to increase job knowledge, skills and responsibilities within TTI.

Professional Development Program Guidelines

Administration of the Professional Development Program will require constant vigilance and support to ensure both the quality and consistency of the program. The overall program must be seen as Value Added by all TTI employees to ensure its success and usefulness to the Agency. Of necessity, every program offering must meet the highest standard of quality and be delivered in a timely manner to meet the needs of TTI and its workforce. Potential and current employees must see the program as a valuable tool to enhance their careers, prepare for future opportunities within the Agency and support the Agency’s Strategic Plan.

It is acknowledged that TTI is a unique organization. TTI has a unique entrepreneurial culture which drives its excellence in research. Programs and services delivered as a part of the Professional Development Plan must account for the unique culture of the Institute by providing a variety of venues and activities which allow TTI employees to enhance their skills without sacrificing quality time dedicated to research. This challenge can be overwhelming in many ways but must be met to achieve the Value Added goal of the program.

Programs and training opportunities will be identified or developed to meet the specific needs of TTI workforce. While there are a vast number of offerings provided throughout Texas A&M University System, programs, services, and offerings from other entities and System agencies will be selected based on appropriateness and applicability to TTI needs and requirements. As appropriate, TTI will develop in-house programs to meet its needs. Experienced third-party providers will be selected to deliver programs, services and offerings as needed.

Employee Training and Development Plan

The Professional Development program is designed as a collaborative effort between the employee and supervisor. It is intended to support employee efforts to enhance job skills while improving the overall capabilities of the workgroup. The proposed Plan Guidelines are designed to assist both the supervisor and employee to develop a meaningful training and development plan on a voluntary basis annually.

1) The initial step in the professional development program will be the establishment of a voluntary training and development plan for every employee during the annual performance review. During the performance review, the employee and supervisor will review the identified core competencies and job group competencies as they relate to the employee. Specific training and development goals will be identified with the employee for the next year. Employees will be encouraged to utilize the Professional Development Program to address training and development goals for the year.

The TTI Human Resources Office is available to support both the supervisor and individual employee to customize the training and development plan.
2) All TTI – Texas A&M System employees are required to participate in required training. TAMU System requirements:
   • Creating a Discrimination-Free Workplace
   • Ethics
   • Information Security Awareness
   • Orientation to A&M System

TTI requirements:
   • Office and General Work Areas – Safety Procedures
   • Motor Vehicle Operations Program
   • Research Laboratory, Shop and Chemical Safety Procedures
   • Travel Safety Tips
   • Work Performed in the Public Right – of – Way Safety Procedures

3) Based on the voluntary training and development plan, each employee will be expected to participate in at least one core competency Professional Development Program offering on an annual basis.

4) Employee’s participating in the voluntary Professional Development Program will be expected to participate in at least one Job Group offering on an annual basis.

5) At the time an employee’s training and development plan is established with the supervisor, employees may substitute a published Job Group training offering for one of the following:

   • Participation in a professional conference such as Transportation Research Board
   • Presentation of a paper or major research report to a professional organization
   • Specialized job specific training offered outside the offerings of the Professional Development Catalogue which would enhance the skills and knowledge of the employee and the work unit
   • Active participation in an Institute Work Group in support of the Strategic Plan
   • Employees selected to participate in Delta – T Leadership program may meet both their Core Competency and Job Competency requirements for the year they participate in the program.

6) Upon completion of a course or participation in an approved course in lieu, the completion will be added to the employee’s Training and Development record maintained by the TTI Human Resources Office.

7) Program offerings which qualify for continuing education credits for engineering licensing will be submitted to the State of Texas to satisfy annual continuing education requirements.

Course Offering Catalogue
The initial courses to be offered to TTI employees are presented in the Appendix III. The initial courses are a beginning point. The program and offerings will be reviewed on a continuous basis and revised as necessary to ensure they meet the needs of TTI.

Presentation of Offerings
TTI's entrepreneurial environment presents a challenge in implementing a Professional Development Program. Available time to participate in training and development activities often come at the expense of other critical
activities in pursuit of research projects. While it would be inappropriate to cast the challenge in an either/or paradigm, the reality is that research reports must be written, project research must be conducted, and proposals for new work must be addressed. While at the same time, growth and development of our workforce is vital to the future of TTI.

Program Managers currently utilize several functional venues to offer training and plan for the future. The Professional Development Program will utilize, where appropriate, similar venues to offer training and development courses.

- Brown Bag Research Development Seminars
- Session(s) at TTI Day
- Program – Division Retreats

**Funding Course Offerings**
TTI administration will establish an account to fund registration for employees to participate in one training or workshop per year in an area associated with a TTI core competency. Employees may take additional courses if alternate funding is available within the program or division.

**Charging Time for Training and Development**
Time necessary to participate in professional development programs will be handled through the usual project time allocation procedures. Programs and divisions should charge time for professional development in a manner consistent with other professional development activities and conferences.

**Professional Development Webpage**
The Human Resources Office will develop and maintain a Professional Development webpage on TTINet to provide information on course offerings, general program guidelines and other pertinent information on TTI’s Professional Development Program.

**Certificate Programs**
The Professional Development Program will offer several certificate programs designed to develop and expose employees to various key personnel development areas. Employees will be recognized on completion of the following certificate programs.

**Leadership – Management Development Seminar**
The Leadership – Management Development Seminar will be offered to all TTI program managers, center and division directors to enhance leadership skills and managerial capabilities. The mandatory program is designed to increase the overall leadership capacity of the Institute.

**Delta – T - Developing Leaders for Today and Tomorrow**
This program is designed to provide employee’s opportunities to learn, develop and sharpen leadership skills; enhance leadership knowledge, experiences and skills applicable in personal, professional and volunteer environments; create a network of peers and resources for personal and professional growth; and strengthen their ability to manage and lead the organization.

**Management and Supervisory Academy**
This certificate program focuses on how the behavior of managers and supervisors is impacted by laws,
policies, regulations, rules and procedures. It also provides instruction in leadership, team building, continuous improvement and communication.

**Personal Development Program**
This program is designed to help employees develop better self-leadership skills and improve their overall professional effectiveness.

**Career Paths**
The growth and development of TTI employees to assume broader responsibilities and roles in the Institute is a key organization value. The proposed Professional Development Program identifies within each Job Group increasing levels of competence which must be possessed by employees to achieve increasing levels of responsibilities within their existing job group within the Institute. In addition, three Certificate Programs are offered to allow individuals to prepare themselves for consideration outside their current job group to prepare them for future consideration.

Employees who desire to develop career paths within TTI are encouraged to examine the various job group competencies and discuss career paths with a supervisor and or manager. The Human Resources office is also available to assist employees with specific plans and make recommendations for inclusion in an employee’s professional development plan.

**Support Programs**
There are several support programs which enhance the value of the Professional Development Program. The identified programs, while independent, provide employees with a comprehensive network of activities sponsored by the Institute to enrich their professional development.

**On-Boarding Program (New Employee Orientation)**
Introducing new employees to TTI is a critical foundational function to assist employees to successfully integrate into the organization and develop an affinity with the organization. New employee orientation provides the opportunity for newly hired employees to become acquainted with the values, culture and goals of the Institute. It also provides an opportunity to develop a deeper sense of mission and ownership in the valuable work of TTI.

**Mentoring Program**
An important aspect of professional development and growth involves utilizing the expertise and active involvement of TTI employees to mentor other employees. A mentoring partnership involves a mentor sharing his/her experience and expertise to assist a mentee with his/her personal and professional growth. Counseling employees in terms of career paths, managing job demands and participation in various opportunities offered by the Agency to its workforce are all vital to the long term success of TTI.

The long-term goal for the TTI mentoring program is to make the Institute a better place to work, fostering professional development of its employees, increasing employee productivity, connecting people, improving new employee retention, and building trust and communication.

**Evaluation of Professional Development Program**
Evaluation of the Professional Development Program will be accomplished on three levels.
Course Level Evaluation. At the conclusion of every course, program, or activity, participants will be asked to evaluate the offering in terms of quality, applicability and relevance. Based on the evaluation, specific actions will be taken to address concerns through communicating with providers, modifying venues, time of day and length. Offerings which provide little or no value will be considered for deletion from future program offerings.

Six months Evaluation. Six months after the launch of the program, an initial evaluation will be conducted as a means to calibrate the program. The six-month review will use the basic same techniques and parameters as the annual evaluation.

Program Evaluation. At least annually, the overall program will be evaluated. The annual survey will utilize web-based questionnaires, interviews and/or informal feedback obtained from participants in the program over the past year. The objective will be to determine the level of satisfaction with the program and whether it is achieving Value Added goal of the program.
Appendix I

Core Competencies
These core competencies are skills, attributes, and capabilities every TTI employees will be expected to exhibit. While many of the core competencies are innate to the TTI workforce, they establish a basic benchmark for future and current employees of the Agency.

- **Achievement Orientation**
  - Remains open to new ideas and modifies behavior in response to changing circumstances
  - Performs work with individual motivation, self-confidence and minimal instruction
  - Sets and achieves challenging goals
  - Measures self against standard of excellence
  - Remains focused on long-term objectives as priorities change and overcomes obstacles to reach goals

- **Building Relationships**
  - Meets customers’ and stakeholders’ needs in a timely and courteous manner
  - Identifies and shares information with all relevant individuals and groups
  - Develops networks and builds relationships with customers and co-workers
  - Understands others’ perspectives, and works to relate to them and develop effective working relationships

- **Communication**
  - Verbally communicates ideas and information clearly
  - Expresses disagreement in a constructive, non-confrontational manner
  - Exhibits good listening and comprehension
  - Keeps others adequately informed
  - Selects and uses appropriate communication methods
  - Possesses strong writing skills; communicates ideas concisely and accurately

- **Information Technology**
  - Efficient in the use of e-mail, word processing, spreadsheets and presentation software
  - Proficient in the use of the TTI intranet, TTI-IS, My Stuff and other applications as required to perform job duties

- **Job Knowledge and Continuous Learning**
  - Seeks feedback and development opportunities to improve performance
  - Displays competency in required job skills and knowledge
  - Keeps abreast of current developments and strives to continuously build knowledge and skills
  - Displays an understanding of how the job relates to others
  - Uses resources and technology to increase productivity

- **Dependability and Organizational Support**
  - Follows instructions and responds promptly to management direction
  - Commits to doing the best job possible
  - Meets attendance and punctuality guidelines – keeps commitments
  - Follows policies and procedures
  - Supports organizational goals and values
  - Responds positively and promptly to requests for service and assistance
• **Judgment and Decisions (Ethics)**
  - Displays willingness to make good and accurate judgments
  - Exhibits sound and accurate judgment
  - Includes appropriate people in decision-making processes
  - Makes timely decisions
  - Ability to discern relevance
  - Works ethically and with integrity
  - Demonstrates fiscal responsibility
  - Participates in required safety programs and demonstrates safe workplace practices
  - Considers the well-being of others as well as themselves

• **Leadership and Initiative**
  - Demonstrates high standards of conduct and personal accountability
  - Exhibits confidence in self and others
  - Motivates others to perform well
  - Anticipates needs and takes action without waiting to be told
  - Takes independent action and calculated risks

• **Teamwork, Cooperation, and Diversity Commitment**
  - Contributes to building a positive team spirit
  - Establishes and maintains effective relationships
  - Offers assistance and support to co-workers
  - Works actively to resolve conflicts
  - Shows respect and sensitivity for cultural differences and promotes a harassment-free environment

• **Supervisor Competencies: Managing and Supervising People**
  - Provides timely direction and gains employee commitment
  - Takes responsibility for subordinates’ activities
  - Maintains open communications and solicits feedback from subordinates as appropriate
  - Provides ongoing performance feedback, coaches for improved performance and makes effective use of performance appraisals to motivate employees
  - Provides opportunities for subordinates’ skill development and encourages professional development and growth
  - Motivates for increased results and assists subordinates in achieving goals
  - Recognizes and rewards contributions
  - Delegates work assignments as appropriate
  - Commitment to building a diverse, high-quality workforce
  - Ensures safe workplace practices and ensures that subordinates participate in required safety training and other required training
  - Treats all employees in a fair and equitable manner
Appendix II

Job Competencies
Job competencies are skills, attributes, and capabilities exhibited by employees assigned to various Job Groups within the Institute. The various competencies are presented below.

Research Competencies
Level 1 – Titles including but not limited to:
Traffic Surveyor II, Electronics Technician II, TTI Test Vehicle Technician I, TTI Construction Technician III, Engineering Technician and Groundskeeper III

- Follows prescribed procedures for collecting and reporting data
- Knowledgeable in laboratory techniques, procedures and terminology
- Skilled in the operation and maintenance of laboratory and research equipment
- Demonstrates the ability to work under minimal supervision with clearly defined instruction
- Possesses basic knowledge of standard design, methods and principles
- Exercises good judgment related to safety in the ever-changing field environment

Level 2 – Titles including but not limited to:
Research Technician, Research Assistant, Research Associate, Sr. Research Associate, Laboratory Supervisor, Research Specialist, Asst. Research Specialist, Assoc. Research Specialist and Sr. Research Specialist

- Demonstrates an understanding and knowledge of standard research design, methods, principles, techniques and philosophies
- Exhibits skill in research design, implementation and problem solving methods and techniques
- Displays the ability to organize, coordinate and direct research projects
- Develops procedures, evaluates research data and interprets test results
- Demonstrates the ability to train, plan and assign work and/or supervise others
- Skilled in the use of software applications to conduct research
- Displays initiative and independent judgment

Level 3 – Titles including but not limited to:
Post Doctoral Research Associate, Asst. Transportation Researcher, Associate Transportation Researcher, Program Manager, Research Scientist, Assoc. Research Scientist, Sr. Research Scientist, Asst. Research Engineer, Sr. Research Engineer, Research Engineer, Sr. Research Fellow, Assoc. Research Engineer and Asst. Research Scientist

- Exhibits skill in research and implementation and problem solving methods and techniques
- Displays the ability to organize, coordinate and direct research projects
- Develops procedures and evaluates research data and/or interprets test results
- Demonstrates the ability to train, plan, and assign work and/or supervise others
- Skilled in the selection of software applications used to conduct desired research
- Exhibits the ability to direct the development of measuring instruments with respect to reliability, relevance and validity
- Demonstrates the ability to identify research areas and recommend priorities on the basis of need and available resources
- Demonstrates the ability to interpret and publish comprehensive research findings
• Displays initiative and independent judgment
• Ability to establish strong programs of research and extramural funding
• Demonstrates strong understanding of research contracting, scope of work development, work breakdown structure development, budget development, and schedule development
• Demonstrates the ability to analyze monthly budgeting and accounting reports to maintain expenditure controls and prepare regular and special budget reports as needed

**Administrative Competencies**

**Level 1 – Titles including but not limited to:**
Office Assistant, Sr. Office Assistant, Lead Office Assistant, Office Associate, Sr. Office Associate and Lead Office Associate

• Maintains broad understanding of departmental structure
• Skilled in the use of standard office equipment and software
• Able to develop effective visual presentations and error-free documents and reports
• Displays professionalism in work product, communications and conducting administrative practices and procedures
• Knowledgeable in business, program and system terminology
• Maintains orderly and systematic records and files
• Manages workload in a timely, accurate and thorough manner

**Level 2 – Titles including but not limited to:**
Administrative Assistant, Administrative Coordinator, Conference Coordinator, Safety Coordinator and Facilities Coordinator

• Maintains broad understanding of organizational structure
• Effectively trains others on standard equipment and procedures
• Prepares and maintains detailed records, files and reports
• Implements new systems and procedures and evaluates their effectiveness
• Interprets organizational programs and plans, and prioritizes workload accordingly
• Monitors, reviews, and forecasts unit resources, requirements, trends, and discrepancies
• Applies or adapts established guidelines to correct problems
• Makes operational changes or improvements within policy and/or structural limitations

**Level 3 – Titles including but not limited to:**
Sr. Admin Coordinator, Federal Research & Policy Coordinator, Program Coordinator, Executive Assistant to Agency Director, Sr. Human Resources Manager, Manager Events Management & Planning and Coordinator of Special Projects and Senior Facilities Coordinator

• Monitors program status, funding use, and staffing requirements based on purposes, objectives and requirements of organizational programs and projects
• Compiles data from high-level sources and creates statistical reports, charts and other records for internal and external communications
• Verifies accuracy of standard work measurement data and corrects errors
• Reviews proposed directives to ensure proper content, consistency, and distribution
• Independently carries out recurring program analysis, non-standard technical assignments, and executive reporting initiatives without specific instructions
• Selects, adapts and applies the most suitable practices, procedures, methods, and precedents to collect, and analyze various types of information, formulate conclusions, define needs and make recommendations for resolving problems to higher-level employees

Financial/Business Competencies
Level 1 – Titles including but not limited to:
Accounting Assistant II, Business Assistant II, Business Associate III and Financial Specialist II
• Accurately records, sorts, verifies, enters, and retrieves financial and other data
• Maintains orderly and systematic records and files
• Accurately prepares purchase vouchers, travel vouchers and/or other fiscal documents for processing
• Able to expeditiously access computerized financial information to answer general questions
• Skilled at identifying and reporting and/or reconciling errors
• Accurately compiles statistical, financial, accounting or auditing reports and tables pertaining to such matters as cash receipts, expenditures, accounts payable and receivable
• Projects a professional demeanor when conducting routine office duties such as answering the telephone and producing routine correspondence

Level 2 – Titles including but not limited to:

• Accurately prepares, examines and analyzes accounting records, financial statements and other financial reports to assess accuracy, completeness and conformance to reporting and procedural standards
• Demonstrates ability to develop, implement, modify and document record-keeping and accounting systems, making use of current computer technology
• Skilled at developing, maintaining and analyzing budgets, and preparing accurate and timely reports that compare budgeted costs to actual costs
• Effectively works to resolve policy and procedural compliance issues
• Provides internal auditing services and effectively directs the work activities of accounting/bookkeeping personnel to ensure compliance
• Demonstrates the ability to identify financial discrepancies and budget shortfalls and informs management
• Demonstrates excellent oral and written communication skills in detailing complex financial information

Level 3 – Titles including but not limited to:
Director of Projects Administration and Operational Analysis and Controller
• Skilled at developing and implementing operational strategies and ensuring that internal processing procedures comply with applicable agency, state and federal regulations.
• Works closely with functional units ensuring achievement of the organization’s goals.
• Effectively analyzes business operations, trends, costs, revenues, financial commitments and obligations to project future revenues and expenses or to provide advice.
• Effectively maintains budgetary controls and works effectively with departments in developing budgets.
• Demonstrates excellent skills in analyzing legislative bills and other regulatory activity to determine impact.
• Displays excellent understanding of the agency’s mission and services and designs and initiates training that most benefits the organization.
• Works well with outside auditors in preparation of financial statements and compliance reports.

**IT Competencies**

**System Analyst, Network Analyst, Microcomputer Specialist, Microcomputer/LAN Administrator – Titles including but not limited to:**
Sr. Systems Analyst, Information Technology Security Manager, Information Technology Manager, Senior Lead Network Analyst, Microcomputer/LAN Administrator and System Analyst I

• Efficiently installs, upgrades, configures computer workstation and/or server software
• Investigates, recommends and assists customers with workstation and/or network server software and hardware purchases to obtain the highest capabilities within fiscal constraints
• Maintains tight computer and network security, and promotes awareness of security issues
• Performs efficient on-and-off-site troubleshooting, repair, and upgrade of microcomputer system equipment
• Assists with planning of office space for network connections, resolving network problems and establishing network rights and privileges
• Develops succinct, user friendly documentation, instructions and training materials for hardware and software; performs training for hardware and software

**Database Administrator, Programmer, Software Applications Developer, Web Developer – Titles including but not limited to:**

• Analyzes and defines data/program/application requirements and specifications.
• Accurately maintains, monitors, normalizes and revises databases and provides precise backup and recovery services.
• Works effectively with customers to identify needs, then develops, maintains and revises computer programs/databases/software applications/web page designs.
• Writes and or modifies program code/database components, and writes documentation of procedures and guidelines for users in a concise and highly efficient manner.
• Willingly assists other employees in solving other technical problems.
• Displays a high degree of knowledge and principles of programming, database design, flowcharting and/or project control.
• Displays sound logic and reasoning in development of databases/programs/applications/web designs.
Communications Competencies
Library & Information Services

Level 1 - Titles including but not limited to:
Library Specialist

- Skilled in the use of standard office equipment
- Ability to accurately process publications received by Library
- Knowledge of principles and process for providing customer service
- Knowledge of circulation, reservation, renewal and the discharge of publications and other materials
- Maintain orderly and systematic records and files of publication and patron records in Library Database

Level 2 – Titles including but not limited to:
Research Librarian

- Ability to review and evaluate resource materials in order to select and order audiovisual, printed and electronic resources
- Analyze patrons’ requests to determine needed information and assist in furnishing or locating that information.
- Ability to code, classify and catalog publications and other materials based on library classification systems
- Ability to explain library facilities, resources equipment and services and provide information about library policies
- Train and supervise Library Staff

Processing, Printing and Distribution/ Editing& Desktop Publishing/Content Development & Coordination

Level 1 - Titles including but not limited to:
Publications Specialist, Associate Research Editor, Editorial Assistants, and Graphic Designer

- Check preliminary and final proofs for errors and make necessary corrections.
- Operate desktop publishing software and equipment to design, layout, and produce materials.
- View monitors for visual representation of work in progress and for instructions and feedback throughout process, making modifications as necessary.
- Enter text into computer keyboard and select the size and style of type, column width and appropriate spacing for printed materials.
- Store copies of publications on paper, magnetic tape, film or diskette.

Level 2 - Titles including but not limited to:
PUBLISHING & DISTRIBUTION SUPERVISOR, RESEARCH EDITOR, PUBLICATIONS MANAGER, SENIOR RESEARCH EDITOR, AND SENIOR GRAPHIC DESIGNER

- Position text and art elements from a variety of databases in a visually appealing way to design print or web pages, using knowledge of type styles and size and layout patterns.
- Enter digitized data into electronic prepress system computer memory, using scanner, camera, keyboard, or mouse.
- Edit graphics and photos using pixel or bitmap editing, airbrushing, masking, or image retouching.
- Import text and art elements such as electronic clip-art or electronic files from photographs that have been scanned or produced with a digital camera, using computer software.
Executive Managerial

Titles including but not limited to:
Director, Center Director, Division Head, Executive Assoc. Agency Director, Asst Agency Director, Chief Information Officer & Director of Information Systems, Director of Fiscal Affairs, Director of Communications, Director of Agency Relations and Marketing, Director of Research Development, and Manager of Facilities and Support Services, Director of Administration and Director of Human Resources

- Develops strategies to achieve organizational goals
- Understands organization’s strengths and weaknesses
- Directs improvement in processes and services
- Identifies external threats and opportunities
- Adapts strategy to changing conditions
- Develops project plans, timelines, and resources; then assigns projects as needed to meet organizational goals
- Reacts well under pressure and inspires respect and trust
- Leverages TTI resources and capabilities with other Texas A&M system agencies and academic departments
Appendix III

Course Training and Development Catalogue

On a preliminary basis, an assortment of courses and training opportunities are presented in this section. As stated within the report, training and development opportunities will be presented based on the needs of TTI personnel, appropriateness of the offering to meet the needs of our employees, and achieve the quality standard demanded by Institute personnel. Many of the identified opportunities exist within the University or System component agencies.

Achievement Orientation

Courses:
- Goal Setting – TEEX
- Goal Setting – TAMU
- Assertiveness Training – TAMU

Action Orientation
- Personal Effectiveness
- Managing Projects, Priorities and Deadlines
- Motivation

Building Relationships

Courses:
- Respect & Responsibility – TEEX
- Through the Customer’s Eyes – Customer Service Certification - TEEX
- Dealing with Difficult People - TEEX
- Customer Service/Courteous Service – TAMU
- Personal Conflict Management in the Workplace - TAMU

Sexual Harassment
- Managing Anger
- Communicating Non-Defensively
- Conflict Resolution

Communication

Courses:
- Communicating with Tact and Skill – TEEX
- Advanced Business Writing – TEEX
- Business Grammar for Busy Professionals – TEEX
- Persuasive Communication – TEEX
- Dealing with Difficult People – TEEX
- Customer Service/Courteous Service – TAMU
- Presentation Skills – TAMU
- Interpersonal Communication Skills – TAMU
- Email Etiquette – TAMU
- Better Business Writing – TAMU

The Art of Listening
- Managing Anger
- Communicating Non-Defensively
The Power of Words
Managing Communication in a Multicultural World
Conflict Resolution
Basic Communication Skills
Advanced Communications
Writing and Grammar Skills

Information Technology
Courses:
- Computer Basis – TAMU
- Microsoft Windows – TAMU
- Microsoft Outlook 2007 – Essentials - TAMU
- Microsoft Word 2007 – Essentials - TAMU
- Microsoft Excel 2007 – Essentials - TAMU
- Microsoft PowerPoint 2007 – Essentials – TAMU
- Access: Foundations – MicroAge
- Excel: Foundations – MicroAge
- PowerPoint: Foundations – MicroAge
- Word: Foundations – MicroAge
- Adobe Acrobat 8.0 – MicroAge

TTI Intranet
TTI – IS (Oracle)
TTI My Stuff

Job Knowledge and Continuous Learning
Courses:
Dependant on job group, title and duties of the job.

Dependability and Organizational Support
Courses:
- Change Management – TEEX
- Time Management and Organizational Skill – TEEX
- Project Management – TEEX
- Stress Management and Time Management – TAMU
- Efficiency and Procrastination - TAMU
- Ben Bissell on Change - TAMU
- Personal Change Management Strategies - TAMU

Managing Change
Action Orientation
Organizational Effectiveness
Personal Effectiveness

Judgment and Decisions
Courses:
Designs for Effective Decision Making - TAMU
Leadership and Initiative
Courses:
- Designs for Effective Decision Making - TAMU
- Introduction to Leadership – TAMU
- Introduction to Innovation – TAMU
- Leadership Applications – TAMU
- Understanding Work and Leadership Styles - TAMU
- Managing Change and Transition
- Encouraging the Heart
- Developing Leadership Skills
- Employee Motivation
- Leadership 101
- Roles and Responsibilities of a Leader

Teamwork, Cooperation, and Diversity Commitment
Courses:
- Developing Cultural Competence in the Workplace - TAMU
- Freedom from Workplace Discrimination - TAMU
- Working in Teams – TAMU
- Generations at Work – TAMU
- Working in Teams – TAMU
- Customer Service/Courteous Service - TAMU
- Now, Discover Your Strengths – TAMU
- Managing Anger
- Communicating Non-Defensively
- Fish
- Decision Making
- Managing Communication in a Multi-Cultural World
- Diversity Training
- Becoming a Successful Team Leader
- Team Building
- Building a Winning Team
- Meyer’s Briggs Type Indicator

Supervisor Competencies
Managing and Supervising People
Courses:
- ADA: Americans with Disabilities Act – TAMU
- Alcohol & Drugs in the Workplace– TAMU
- Fair Labor Standards Act (FLSA): Timekeeping– TAMU
- Family Medical Leave Act (FMLA) – TAMU
- Leave Policies and Procedures– TAMU
- Legal Issues in the Workplace– TAMU
- Performance Development Process– TAMU
- Position Descriptions & Hiring Procedures– TAMU
- Positive Performance Management (PPM) – TAMU
- Preventing Sexual Harassment (Supervisory Overview) – TAMU
- Prevention of Violence in the Workplace – TAMU
- Progressive Discipline – TAMU
Records Management – TAMU
Worker's Compensation Procedures – TAMU
Ben Bissell on Change – TAMU
QPR (Question, Persuade, Refer) for Suicide Prevention – TAMU
Managing Personal Anger in the Workplace – TAMU
Now, Discover Your Strengths – TAMU
Personal Change Management Strategies – TAMU
Personal Conflict Management in the Workplace – TAMU
Winning Strategies for Successful Interviewing – TAMU
Leadership-Management-Supervisory – TAMU
Communicating with Employees in Crisis – TAMU
Communication Skills for Supervisors – TAMU
Communication Skills for Leaders – TAMU
Conflict Management Skills for Supervisors – TAMU
Effective Delegation – TAMU
Followership – TAMU
Inclusive Leadership – TAMU
Introduction to Supervision – TAMU
Introduction to Leadership – TAMU
Leadership & Innovation – TAMU
Leadership Applications – TAMU
Managing Difficult Behavior as a Supervisor – TAMU
Making Meetings Work – TAMU
Motivation: Principles & Practices – TAMU
Supervisory Primer for Managing Anger at Work – TAMU
Supervisory Skills – TAMU
Understanding Work & Leadership Styles – TAMU
Change & the Retention of Top Performers – TAMU
Collaborative Leadership – TAMU
Generations at Work – TAMU
Guiding Your Employees through Change – TAMU
Learning Organization – TAMU
Making Meetings Work – TAMU
Program Evaluation – TAMU
Purpose, Values, and Team Building – TAMU
Working in Teams – TAMU
Decision Making/Future Planning – TAMU
Coaching – TAMU
Designs for Decision Making – TAMU
Stress Management & Time Management – TAMU

Dealing with Unsatisfactory Behavior
Conducting a Performance Appraisal
Basic Supervisory Skills
Risk Management
The Art of Listening
Effective Staffing and Recruiting
Managing Anger
Communicating Non-Defensively
Becoming a Successful Team Leader
When the Coach is You
Managing Projects, Priorities and Deadlines
Encouraging the Heart
Motivating Employees
Recruitment and Retention Strategies
Dealing with Difficult People
Team Building
Developing Others
Building a Winning Team
Rewards and Recognition
Discipline without Punishment
Conflict Resolution & Conflict Management Skills for Supervisors
How to Prepare for a Performance Appraisal
Observing Behaviors Accurately
Performance Development Process
Communicating with Employees in Crisis
Research Competencies & Related Training

Level 1 – Titles including but not limited to:
Traffic Surveyor II, Electronics Technician II, TTI Test Vehicle Technician I, TTI Construction Technician III, Engineering Technician, and Groundskeeper III

Courses:

Introduction to Transportation Research

Level 2 – Titles including but not limited to:
Research Technician, Research Assistant, Research Associate, Sr. Research Associate, Laboratory Supervisor, Research Specialist, Asst. Research Specialist, Assoc. Research Specialist, Sr. Research Specialist

Courses:

Introduction to Transportation Research
Research Development
Project Scope
Project Schedule
Project Budget
FAMIS for Principal Investigators
Indirect Rates, Direct Expenses
IT for Research Projects
Working with Academic Units
Sponsor Relationships

Promoting Your Research
Writing Techniques for Effective Deliverables
TdDOT - RMC Deliverables
Microsoft Word Tips for Document Preparation
Making the TTI Web Site Work for You
Transportation Literature Searches and TTI
Library Searches
Creating Effective Presentations
Illustrating Your Research

Level 3 – Titles including but not limited to:
Post Doctoral Research Associate, Asst. Transportation Researcher, Associate Transportation Researcher, Program Manager, Research Scientist, Assoc. Research Scientist, Sr. Research Scientist, Asst. Research Engineer, Sr. Research Engineer, Research Engineer, Sr. Research Fellow, Assoc. Research Engineer, and Asst. Research Scientist

Courses:

Introduction to Transportation Research
Research Development
Project Scope
Project Schedule
Project Budget
Contracting
FAMIS for Principal Investigators
Indirect Rates, Direct Expenses
IT for Research Projects
Working with Academic Units
TdDOT - RMC Deliverables
Microsoft Word Tips for Document Preparation
Making the TTI Web Site Work for You
Transportation Literature Searches and TTI Library Searches
Sponsor Relationships
Writing Techniques for Effective Deliverables

TTI SPP&E & TOG
Pavements, Materials & Structures
Transportation Finance
Promoting Your Research
Risk Management
Creating Effective Presentations
System Engineering
Illustrating Your Research
Intellectual Property
Legislative Issues
International Research
Administrative Competencies & Related Training

**Level 1** – Titles including but not limited to:
Office Assistant, Sr. Office Assistant, Lead Office Assistant, Office Associate, Sr. Office Associate, Lead Office Associate

Courses:
- *Computer Basics*
- *Microsoft Windows*
- *Microsoft Outlook 2007 - Essentials*
- *Microsoft Word 2007 - Essentials*
- *Microsoft Word 2007 - Mail Merge*
- *Microsoft Excel 2007 - Essentials*
- *Travel/Purchasing Basic Workshop*
- *Advanced Travel Workshop*

**Level 2** – Titles including but not limited to:
Administrative Assistant, Administrative Coordinator and Conference Coordinator, Safety Coordinator and Facilities Coordinator

Courses:
- *Microsoft Word 2007 - Tables*
- *Microsoft Word 2007 - Graphics*
- *Microsoft Office 2007 Demonstration*
- *Microsoft Excel 2007 Upgrade*
- *Microsoft PowerPoint 2007 - Essentials*
- *Advanced Business Writing*
- *Project Management*

**Level 3** – Titles including but not limited to:
Sr. Admin Coordinator, Federal Research & Policy Coordinator, and Program Coordinator, Exec Asst to Agency Director, Sr. Human Resources Manager, Manager Events Management & Planning, Coordinator of Special Projects, and Senior Facilities Coordinator

Courses:
- *Microsoft Word 2007 - Advanced Formatting*
- *Microsoft Word 2007 - Long Documents*
- *Microsoft Excel 2007 - Worksheet and Workbook Features*
- *Microsoft Project 2007*
- *Advanced Business Writing*
- *Project Management*
Financial/Business Competencies & Related Training

**Level 1**—Titles including but not limited to:
Accounting Assistant II, Business Assistant II, Business Associate III, Financial Specialist II

**Courses:**
- Computer Basics
- Microsoft Windows
- Microsoft Outlook 2007 - Essentials
- Microsoft Word 2007 - Essentials
- Microsoft Word 2007 - Mail Merge
- Microsoft Excel 2007 - Essentials
- Travel/Purchasing Basic
- Advanced Travel Workshop

**Level 2**—Titles including but not limited to:

**Courses:**
- Microsoft Word 2007 - Tables
- Microsoft Word 2007 - Graphics
- Microsoft Office 2007 Demonstration
- Microsoft Excel 2007 - Worksheet and Workbook Features
- Microsoft Excel 2007 Upgrade

**Level 3**—Titles including but not limited to:
Director of Projects Administration and Operational Analysis and Controller

**Courses:**
- Microsoft Word 2007 - Advanced Formatting
- Microsoft Project 2007
- Microsoft PowerPoint 2007 - Essentials
- Microsoft Excel 2007 for Power Users Upgrade
- Microsoft Excel 2007 - Tables
- Microsoft Excel 2007 - Advanced Formatting
- Microsoft Excel 2007 - Advanced Formulas and Functions
- Microsoft Excel 2007 - Graphics
- Microsoft Excel 2007 - Charts and PivotTables
- Microsoft Excel 2007 - Macros
- Microsoft Access 2007 Upgrade
Executive Managerial Competencies & Related Training

Titles - including but not limited to:
Director, Center Director, Division Head, Executive Assoc. Agency Director, Asst Agency Director, Chief Information Officer & Director of Information Systems, Director of Fiscal Affairs, Director of Communications, Director of Agency Relations and Marketing, Director of Research Development, Manager of Facilities and Support Services, Director of Administration and Director of Human Resources

Courses:
- Leadership Challenge - TAMU
- Identifying and Applying Organizational Purpose and Core Values - TAMU
- Transformational Leadership – TAMU
- Strategic Planning - TAMU
- Understanding Organizational Culture – TAMU

Leadership Essentials
Vision Development
Executive Decision Making
Organizational Communication
Salesmanship
The Governor’s Executive Development Program
Leadership Texas

Specialized Courses
Two specialized courses will be offered through the professional development program to support the ongoing needs of TTI staff.

- Academic Research Environment. This course is designed to provide a critical overview of key components required to perform research in an academic environment. The course should be useful to new researchers and research staff desiring to improve their overall research skills.

- Engineering Ethics. This course is designed for all registered professional engineers who must meet the annual continuing education requirements by the state of Texas.
IT Competencies & Related Training

Computer Operators – Titles including but not limited to:
(none identified)

System Analyst, Network Analyst, Microcomputer Specialist, Microcomputer/LAN Administrator – Titles including but not limited to:
Sr. Systems Analyst, Information Technology Security Manager, Information Technology Manager, Senior Lead Network Analyst, Microcomputer/LAN Administrator, and System Analyst I

Courses:
To be determined.

Database Administrator, Programmer, Software Applications Developer, Web Developer – Titles including but not limited to:

Courses:
To be determined.
Communications Competencies & Related Training

Library & Information Services

Level 1 – Titles including but not limited to:
Library Specialist

Courses:
   To be determined.

Level 2 – Titles including but not limited to:
Research Librarian

Courses:
   To be determined.

Processing, Printing and Distribution/Editing & Desktop Publishing/content Development & Coordination

Level 1 – Titles including but not limited to:
Publications Specialist, Associate Research Editor, Editorial Assistants

Courses:
   To be determined.

Level 2 – Titles including but not limited to:
Publishing & Distribution Supervisor, Research Editor, Publications Manager

Courses:
   To be determined.