GUIDE TO THE PROFESSIONAL SURVEYOR CAREER DEVELOPMENT PROGRAM

Texas Department of Transportation

Human Resources Division

Revision History

Rev. 1.0…….. .April 2016

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Section 1:
Introduction

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Introduction

This guide will help you on the path to becoming a Surveying and Geomatics professional at TxDOT.

Purpose and Eligibility

Purpose

One of the strengths of the Texas Department of Transportation (TxDOT) is that TxDOT offers training and professional development opportunities to our valued employees.

Becoming a Registered Professional Land Surveyor (RPLS) should be a career goal for those who do survey or geomatics work within the department. TxDOT is proud to offer a Career Development Program designed specifically to guide prospective and current Surveyors in Training (SIT) on the path to an RPLS license through training, job rotation, mentoring activities, and SIT/RPLS exam preparation.

This program supports both those who are interested in becoming an SIT as well as current SITs interested in becoming an RPLS.

Eligibility

Employees who participate in the Professional Surveyor Career Development Program may come from a variety of job descriptions, depending on the District or Division.

District Engineers (DE) and Division Directors (DD) may designate any employee as a participant in the Professional Surveyor Career Development Program if in the best interests of TxDOT.

Participation in the program must be upon DE/DD approval. Requests for entry into the program are submitted through the supervisor to the DE/DD. Eligibility for participation in this program requires the participant to:

- Be serving or cross-training to serve in a survey or geomatics capacity; OR
- Better serve TxDOT by having a surveying or geomatics certification/license; AND
- Be in good standing by at least achieving overall expectations on the latest employee evaluation (initial employment probationary employees do not need a completed employee evaluation); AND
- Received no written reprimand during the last six months; AND
- Not be on probation; AND
- Complete and sign Form 2616 “Professional Surveyor Career Development Program Agreement”, agreeing to the program requirements.

- Employees who participate in the Survey Career Development Program will sign a Program Agreement (Form 2157). This form outlines the participant's commitment and program conditions. Failure to comply with the terms on the Program Agreement may result in reclassification. If the participant is not compliant with the Agreement, the supervisor and DE/DD will review the employee's status and coordinate with Human Resources to reclassify the employee to another job title that is appropriate for their assigned duties. Exceptions may be authorized by the DE/DD.

Program Progress & Designations

Employees in the Professional Surveyor Career Development Program are expected to progress through the program at a pace that allows the participant to meet minimum qualifications for the SIT and RPLS statuses as defined by the Texas Board of Professional Land Surveyors (TBPLS).

Some participants will move quickly to RPLS and obtain a license within 2 years of starting with TxDOT, while others will require 4 to 10 years – or longer – to earn the RPLS license.

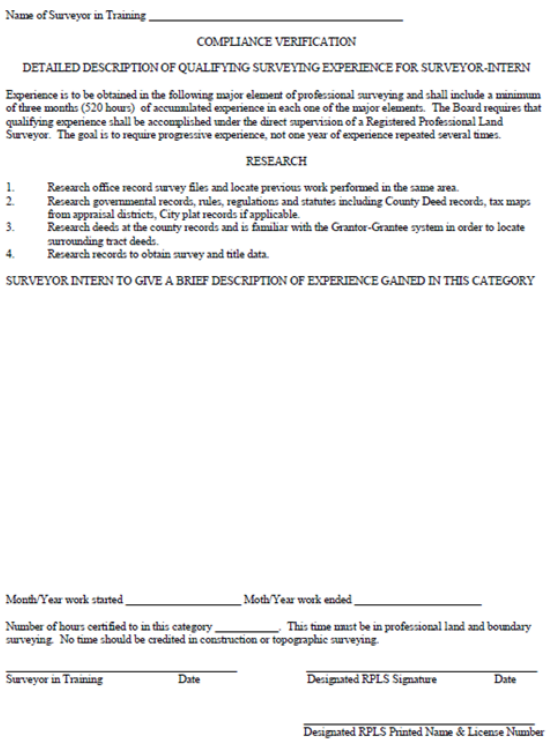
While TxDOT does use some designations unique to the department, the profession of surveying in Texas is governed by state law. As such, surveying and geomatics professionals at TxDOT are expected to be familiar with the laws, procedures, and practices of the profession. The authority for survey work is the Texas Board of Professional Land Surveying (TBPLA, www.txls.texas.gov).

- **Prospective Surveyor in Training (SIT)** – The SIT designation is reserved for those who have passed Texas' LSIT Examination. Those on the path to SIT, and eventually RPLS will find the following requirements to become eligible for the LSIT Exam:

  1. Hold a Bachelor of Science in Geomatics from Texas A&M University Corpus Christi OR a Bachelors of Science in Industrial Technology with emphasis in Surveying and Mapping, University of Texas at Tyler – this path has **no requirement for experience working under an RPLS** before being eligible to take the Licensed Surveyor in Training (LSIT) Exam.
  2. Hold a bachelor's degree with 32 hours in civil engineering, land surveying, math, photogrammetry, forestry, land law or the physical sciences and **one year of experience working under a RPLS**;
  3. Hold an Associate's degree in surveying and have **two years of experience working under a RPLS**;
  4. Have 32 accredited course hours and **two years of experience working under a RPLS**;
  5. Graduated from high school, **have four years of experience working under an RPLS, and can prove you are self-educated in land surveying**.

- **Surveyor in Training (SIT)** – Those who hold the SIT designation have passed Texas' LSIT examination and were eligible based on the above criteria. A Surveyor in Training is a person certified by the Texas Board of Professional Land Surveying to train under the direction of a designated Registered Professional Land Surveyor (RPLS) in the state of Texas. Once you have qualified, been approved to test,and passed the exam, the Board will then issue you a SIT Certificate. **This certificate is valid for eight years and allows you the opportunity to obtain the necessary education and/or experience to later apply for the RPLS license if you so choose.** Many individuals choose to keep their SIT certification at the end of the eight-year period, by paying the annual renewal fee and earning the minimum hours of continuing education each year.

- **Registered Professional Land Surveyor (RPLS):** An individual licensed by the Texas Board of Professional Land Surveying to practice land, boundary, or property surveying. **The prospective RPLS must have a four-year degree** that includes 32 hours of accredited hours and **two (2) years of experience as an SIT.** During this time the applicant is required to accrue 4,000 hours of experience in five fields or Research, Legal Principles/Boundary Reconciliations and Deed Sketches; Computations/Travers Accuracy Analysis; Documentation/Descriptions/Monumentation/Preparing Final Surveys; and Field Experience. Each field requires a **Compliance Verification Form** that is completed by the applicant, signed by the designated RPLS, and submitted to the Board.



Name of Surveyor in Training _____

COMPLIANCE VERIFICATION

DETAILED DESCRIPTION OF QUALIFYING SURVEYING EXPERIENCE FOR SURVEYOR-INTERN

Experience is to be obtained in the following major element of professional surveying and shall include a minimum of three months (520 hours) of accumulated experience in each one of the major elements. The Board requires that qualifying experience shall be accomplished under the direct supervision of a Registered Professional Land Surveyor. The goal is to require progressive experience, not one year of experience repeated several times.

RESEARCH

1. Research office record survey files and locate previous work performed in the same area.
2. Research governmental records, rules, regulations and statutes including County Deed records, tax maps from appraisal districts, City plat records if applicable.
3. Research deeds at the county records and is familiar with the Grantor-Grantee system in order to locate surrounding tract deeds.
4. Research records to obtain survey and title data.

SURVEYOR INTERN TO GIVE A BRIEF DESCRIPTION OF EXPERIENCE GAINED IN THIS CATEGORY

Month/Year work started _____ Moth/Year work ended _____

Number of hours certified to in this category _____. This time must be in professional land and boundary surveying. No time should be credited in construction or topographic surveying.

_____ _____
Surveyor in Training Date Designated RPLS Signature Date

_____
Designated RPLS Printed Name & License Number

Sample Compliance Verification Form for the Research field.

Service Time Commitment

The participant must agree to the following service time commitments:

- Participation in the program with the intent of becoming an SIT – one year
- Participation in the program with the intent of becoming an RPLS – two years

Service time begins upon completion of the most recent exam prep class taken. The service time commitment for certification as an SIT may run concurrently with the service time commitment for RPLS licensure. Similarly, the service time commitments for the Survey Program may run concurrently with other service time commitments an employee has with the department. (For example, if the SIT is obligated to 1 year for tuition assistance programs, and 1 year for the Survey Career Development Program, the employee is obligated to only 1 year with the department.)

Failure to meet the desired goals within the time allotment defined in Form 2616 may lead to removal from the program and reclassification to another job title. Exceptions may be granted by the DE/DD.

Reclassification

- Reclassification may occur when:
  - An employee chooses not to participate in the Professional Surveyor Career Development Program or requests to leave the program after the Program Agreement (Form 2616) has been initiated.
  - An employee is not compliant with the Program Agreement (Form 2616), including the program progress timeframes and the service time commitment, as determined by the supervisor, RPLS, or DE/DD
- The supervisor and the DE/DD will review the employee's status and coordinate with Human Resources to reclassify the employee to another job title that is appropriate for their assigned duties, if warranted.
- The Professional Surveyor Career Development Program Agreement (Form 2616) remains in effect until the commitment is fulfilled. This obligation is the same for full-time employees and those converted to part-time.
- If employees fail to fulfil their commitment, they may be asked to repay the department the entire cost of the training for exam preparation assistance provided from the date the current Program Agreement was signed.

Reinstatement

Reinstatement into the Professional Surveyor Career Development Program after failing to meet the program goals will be upon approval of the DE/DD after coordination with the Director, Human Resources Division.

Repayment

Failure to meet the service time commitment results in an employee's repayment obligation. The total repayment amount includes training costs and eligible expenses paid by the department for the test preparation program. Employees are also liable for reasonable expenses incurred in obtaining repayments, including reasonable attorney's fees. Employees may be reported to credit agencies for failure to repay the department. In all cases, the decision to seek repayment is at the discretion of the DE/DD.

Reduction or Cancellation of Debt

Requests for reduction or cancellation of debt or service requirements due to hardship must be submitted to the DE/DD and Director of HRD for consideration. Debt is automatically cancelled upon completion of service time commitment. The debt is not reduced proportionally to service time commitment fulfilled.

Employee Transfer

Lateral transfers – transfers to another work unit of TxDOT – do not affect the Program Agreement. If the participant has signed the agreement (Form 2616), the Agreement remains in place through the transfer.

- The losing D/D will:
  - Provide to the new DE/DD the original, signed agreement (Form 2616) and a copy of the current training plan or other work documents
  - Notify Workforce Development of the transfer

- The gaining D/D will:
  - Develop an updated training plan
  - Provide a copy of the updated plan to Workforce Development

Program Activities

Job Rotation Activity (JRA)

Strengthening job performance through job rotation activities is recommended of all employees who are participating in the Professional Surveyor Career Development Program. While many activities of the survey professional will fulfil work experience and "responsible charge time" requirements of the prospective SIT, the SIT who is working towards the RPLS will eventually require specific experience in five distinct fields to be eligible for eventual licensure.

- Job Rotation Activities will be assigned based on business needs of the employee's work unit and the professional needs and career development interests of the employee. Employee job performance and affirmative action objectives will be among factors considered in the selection of an employee for job rotation.
- Participation in a job rotation activity is a temporary assignment, designed to familiarize employees with a variety of activities. The plan may be adjusted depending on the scheduling needs of the participating employee and the needs of the department and to facilitate career advancement.
- Rotation from one D/D to another does not affect payroll. Participating employees remain on their hiring office's payroll.
- DE/DD or designee will initiate and monitor the Professional Surveyor Career Development Program participants assigned to his/her district/division in a manner similar to the management of Engineering Assistants.
- Both the immediate supervisor and the receiving supervisor are charged with tracking and documenting the employee's participation and progress in the program.
    - The employee's immediate supervisor will document participation in the program, identify each work assignment and its duration, and submit a copy of the plan to the employee.
    - A copy of a training plan and any modifications to the training plan will be submitted to the Workforce Development Section (WFD) within 30 days after signature by all parties.
- The employee's receiving supervisor will handle all other personnel matters for the employee.

Mentor

DE/DDs may assign a Mentor to each program participant to provide guidance and advice to facilitate the participant's development. The mentor and the participant will meet regularly to discuss program progress.

Field Projects

Participants will participate in a variety of field projects that will provide opportunities to visit actual projects “on the ground” and gain insight into the real survey work in support of transportation projects.

Engineering Assistant Group (EAG) – Open to Survey Professionals

Each District or Division with Engineering Assistants has an established Engineering Assistant Group that meets regularly to discuss activities, tour projects, receive presentations on new technologies, and participate in formal training activities. This group is also open to Professional Surveyor Career Development Program participants.

These EAGs provide opportunities for peer support and networking. The name of the chair of the EAG will be provided to WFD to enable efficient communications. Austin based divisions may collaborate to establish a joint EAG.

Engineering Assistants and survey program participants may be permitted to join Engineering Assistant Groups located in nearby districts and/or divisions should there be too few participants in the local Engineering Assistant Group.

You are strongly encouraged to become actively involved with the local EAG. EAGs generally meet on a monthly or quarterly basis to discuss or investigate topics and may include:

- Tours of a project
- Presentations on new technologies
- Discussions with upper level management about department activities or policies
- A tour to the state headquarters or other Districts
- Presentations by a representative of Texas Board of Professional Engineers
- Formal training exercises in preparation for the Professional Engineer Exam
- Career development opportunities presented by the Professional Development and Contracts Office

The Professional Surveyor Career Development Program Training Plan

Each participant will be counselled upon assignment to the Professional Surveyor Career Development Program with regard to the scope and responsibilities associated with the program. A training plan will be co-developed between the employee, the supervisor, and the RPLS that outlines the expectations for activities associated with career progression, training, and job rotation.

The training plan does not have an associated form or template, so this discussion and resulting plan or schedule should be documented in whatever form serves both the supervisor and the participant.

The Training Plan is a dynamic document that defines the coursework and training activities the participant is expected to attend over the term of the program. The training plan may also include documented job rotation activities. This plan is reviewed annually (at a minimum) and modified as circumstances and business needs change.

Training

Workforce Development (WFD), TxDOT's training provider, will offer formal training to assist in the successful completion of the program. Instructor-led classes and on-line classes are available as part of this program. Many formal training courses labelled as engineering, design, construction, or even information technology courses have value to surveyor training. Participants are encouraged to explore many training offerings and ask both supervisors and peers before assuming the course content doesn't apply to survey work.

Exam Prep Courses

When discussing the Professional Surveyor Career Development Program Agreement, Form 2616, the supervisor and employee will determine the best time to sit for the LSIT and/or RPLS exam. Once approved by the supervisor, the employee will be assigned the appropriate access codes to the online test preparation course hosted by WFD.

- LSIT – Exam Preparation for the Texas Land Surveyor in Training Exam
- RPLS – Exam Preparation for the Registered Professional Land Surveyor Exam

Participants must complete the entire training series while in the Professional Surveyor Career Development Program, including repeating the exam prep courses if the participant has failed the prior exam. Exceptions or waivers from prep courses may be authorized only by the DE/DD.

Work Experience and Licensing

The profession of Surveying in Texas is governed by state law. As such, surveying and geomatics professionals are expected to be familiar with the laws, procedures, and practices of the profession. The authority for survey work is the Texas Board of Professional Land Surveying (TBPLS, www.txls.texas.gov).

In Texas, the SIT designation and the RPLS license are conferred by the Texas Board of Professional Land Surveying (TBPLS). Failure to become licensed may severely limit your potential career growth within the department, regardless of the scope of your

experience. This program supports both your development as a Surveyor in Training (SIT) and preparation for licensure as a Registered Professional Land Surveyor (RPLS).

Work experience, education, and licensure as an RPLS are key elements in achieving your career goals at TxDOT. For the purpose of licensing, the key elements in determining the acceptability of your experience include:

- Experience working under an RPLS that demonstrates a clear use of your surveying knowledge, education, and judgment to perform the task.

- Demonstrated progressive and an increasing standard of quality and responsibility.

- **SIT Applicants – Delegated Responsible Charge of Work time or Responsible Charge Time:** Time in the field when decisions were made without relying upon advice or instructions from supervisors. In the office, the applicant must have had to undertake tasks demanding resourcefulness, originality, initiative, professional skill and independent judgment.

- **RPLS Applicants – Compliance Verification:** The demonstrated completion of a total of 4,000 hours among five areas that includes a minimum of 3 months (480 hours) in each of the five areas.

Program Contact Information

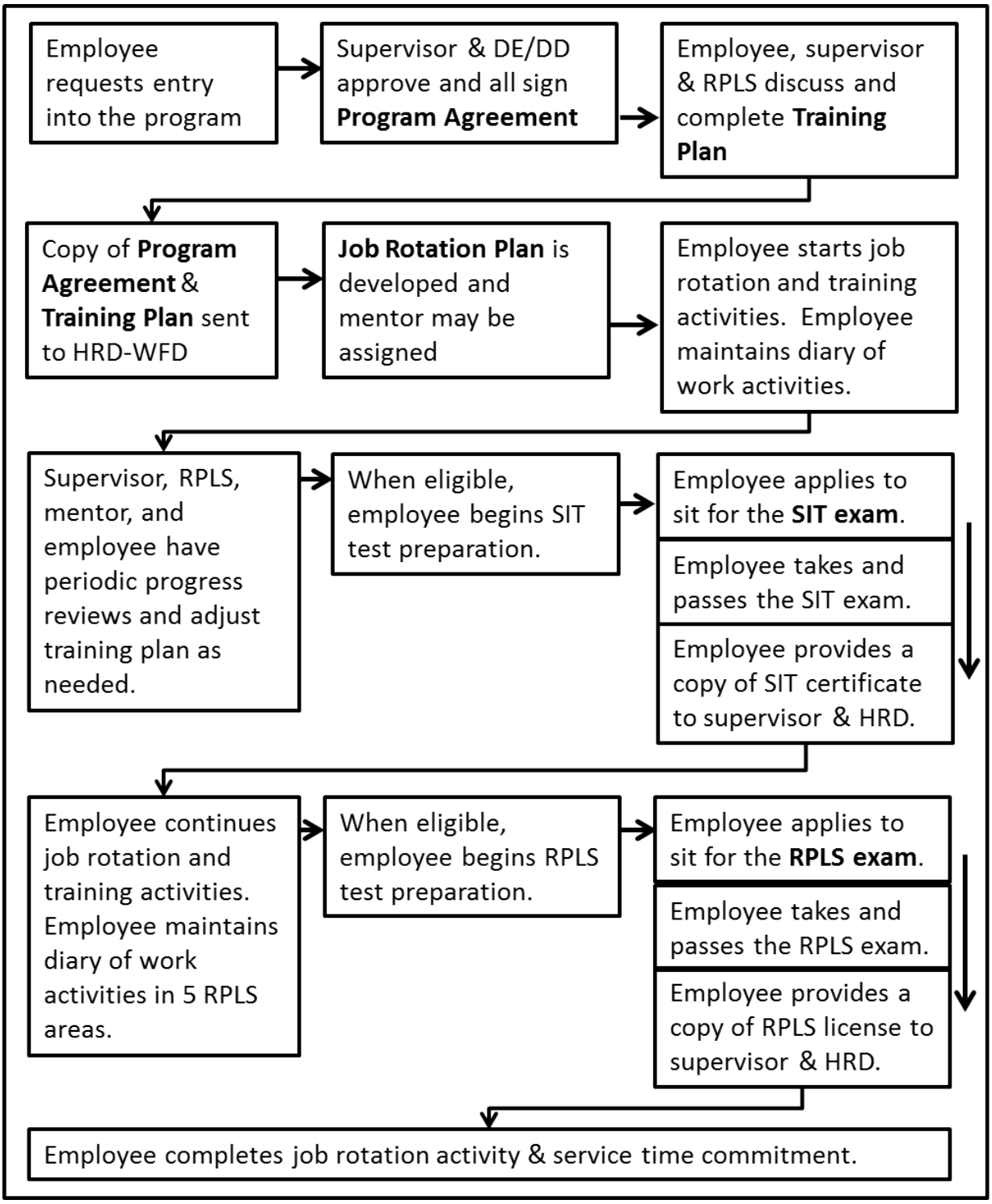
Human Resources Division – Workforce Development Section
200 E. Riverside Drive, 2nd Floor
Austin, TX 78704

Training Helpline (512) 416-2000
training@txdot.gov

Terms Used in this Guide & in related to the Professional Surveyor Career Development Program

Agreement	TxDOT Form 2616, Professional Surveyor Career Development Program Plan Agreement
BJD	Business Job Description or Job Description
Career Development Program Training Plan	An unstructured document of specific courses and activities in which the participant will participate throughout the career development program.
DE/DD	District Engineer or Division Director. This position has authority over most decisions made in the respective District or Division.
EA	**Engineering Assistant** (EA) is a designation used in the business job description for an employee performing engineering support duties for the department.
EACDP	**Engineering Assistant Career Development Program** – the parallel program to the Professional Surveyor Career Development Program.
EAG	**Engineering Assistant Group** - local group of EAs who meet on a regular basis for program updates, training, and networking. This group is open to survey professionals.
EIT	**Engineer in Training** (EIT) is a designation by the Texas Board of Professional Engineers given to individuals who meet the educational requirements of the Board and have successfully passed the examination on the Fundamentals of Engineering. This certification does not entitle an individual to practice as a Professional Engineer.
Job Rotation Activity *(JRA)*	Activities and assignments that are included in the career development program used to strengthen job performance.
LSLS	**Licensed State Land Surveyor** – someone licensed by the TBPLS to perform survey work on behalf of the General Land Office.
Mentor	Adviser or coach assigned to program participants to provide advice and counsel during the program.
NCEES	National Council of Examiners for Engineers and Surveying http://www.ncees.org/ is a national non-profit organization of engineering and surveying licensing boards representing all states and U.S. territories. NCEES develops, scores, and administers examinations used for engineering and surveying licensure throughout the United States. While NCEES is the testing body for engineering in Texas, the TBPLS administers its own tests for the
PE	**Professional Engineer**
SIT	**Surveyor in Training** – someone who has passed the LSIT Examination.
RPLS	**Registered Professional Land Surveyor** – someone who has passed the RPLS Examination and met the requirements of licensure.
TBPE	Texas Board of Professional Engineers - agency overseeing licensure of engineers in Texas engineers.texas.gov.
TXLS or TBPLS	Texas Board of Professional Land Surveyors – agency overseeing licensure of surveyors in Texas www.txls.texas.gov.

Professional Surveyor Career Development Program
Activity Flowchart



Section 2:

Responsibilities

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Employee

Employees who participate in the Professional Surveyor Career Development Program may come from a variety of job descriptions, depending on the organization of the section. District Engineers and Division Directors may designate any employee as a participant in the program if in the best interests of TxDOT. While in the program, participants may participate in Job Rotation Assignments (JRA), participation in field projects, Engineering Assistant Group when appropriate, annual TSPS conferences, SIT and RPLS exam preparation, training, mentoring, and professional development advice.

While all of these tools and opportunities are available, program participants are ultimately responsible for their own professional growth.

- Employees who participate in the Professional Surveyor Career Development Program will be required to:
  - Sign a Program Agreement (TxDOT Form 2616). The supervisor and DE/DD will also sign this Agreement.
  - Develop, with their supervisor, an individualized training plan that defines training and job rotation activities.
- The Program Agreement outlines and summarizes the following:
  - The SIT's commitment to attend all required training and job rotation activities.
  - The conditions for noncompliance with the terms of the Agreement.
  - Service time commitment, when appropriate
- The participant is required to attend all exam prep class sessions, mentoring appointments, and job rotation assignments defined in the training plan.
- Upon receipt of SIT/RPLS results, the SIT will provide a copy to the supervisor and HRD.
- The employee must maintain good standing with the department. Employees who fail to maintain eligibility may be suspended from the program. Reinstatement must be requested from and approved by the DE/DD.
- The participant must comply with the department's Ethics Policy, avoid the appearance of unprofessional behavior, and report any questions to the supervisor.
- The SIT must work with the supervisor to initiate a new Form 2616 for the RPLS exam within 30 days passing the SIT exam.

Supervisor

The direct supervisor of a program participant is critical to the development and timely progression of each prospective SIT and current SIT. Supervisors of program participants should be in close contact with the employee and actively participate in the Professional Surveyor Career Development Program. Following are some of the activities in which supervisors should take part:

- Meet briefly on a regular basis with the participant to touch base regarding any issues, concerns or challenges that are immediately facing them.
- Meet formally on a monthly or quarterly basis with program participants to review their progression in the program to include:
    - Escalating issues that need to be handled at a higher level.
    - Review the work diary or journal to ensure they are capturing the required documentation that will be needed for the preparation of the RPLS application when applying to take the RPLS examination.
- Ensure program participants are attending regular meetings with a mentor, when assigned.
- Ensure program participants are attending appropriate meetings and activities on a regular basis.
- Ensure program participants are enrolled in and attend the formal training that is required, including registration and use of the online exam prep courses scheduled prior to the LSIT or RPLS examinations. All modules must be completed, including those required when the participant fails a previous attempt.
- Perform a debrief with the program participant when returning from a training event to assess their comprehension level of the material and to determine if additional on-the-job training may be delivered to augment the formal training.
- Ensure program participants are attending appropriate meetings and activities on a regular basis.
- Provide opportunities to the program participants to practice skills learned in formal training events.
- Provide opportunities to the program participants to practice skills learned in formal training events
- Work with the SIT to initiate a new Form 2616 within 30 days of the successful completion of the LSIT exam.

Registered Professional Land Surveyor (RPLS)

The relationship between the survey professional and the RPLS who is directly supervising the work of a program participant is the most critical part of the development and timely progression of each program participant. In many cases, the supervisor will also be the RPLS. In situations where the roles are separate, the supervising RPLS should be in close contact with both the supervisor and the participant. Following are some of the activities in which the supervising RPLS will take part:

- Meet briefly on a regular basis with the participant to touch base with any issues, concerns or challenges that are immediately facing them.

- Meet formally on a monthly or quarterly basis with the participant to review their progression in the program to include:

    - Escalating issues that need to be handled at a higher level.

    - Review the work diary or journal to ensure they are capturing the required documentation that will be needed for the preparation of the RPLS application when applying to take the RPLS examination

Mentor

What is Mentoring?

Mentor: Dating back to Greek mythology and Homer's tale of Odysseus. Odysseus entrusted his friend, Mentor, to guide and protect his son, Telemachus while he was away at war. -- (Wikipedia)

Bozeman and Feeney (2007) define mentoring as a process for the informal transmission of knowledge, social capital, and the psychosocial support perceived by the recipient as relevant to work, career, or professional development. It requires informal communication, usually face-to-face and during a sustained period of time, between a person who is perceived to have greater relevant knowledge, wisdom, or experience (the mentor) and a person who is perceived to have less (the protégé)." In a nutshell, mentoring is about growing personally.

Mentoring is often understood as the relationship between a person in a leadership position within the organization that is willing to share his/her expertise and wisdom to guide the mentee's career and educational goals new to the organization. Mentoring has proved to have a positive effect on people who have been involved in a mentoring program. Gerald Roche (1979) conducted a study that found 63.5% of the 1,250 respondents who had a mentor at one time during their career were experiencing better salaries, obtained their positions at an accelerated rate and were happier in their choice of work and career than their non-mentored colleague.

A mentor is expected to be a coach, learner, listener, nurturer or guide. These changes will depend on the need of the mentee during that time.

Mentoring Versus Coaching

Although mentoring and coaching have similar characteristics and will overlap from time to time, the goal of each role is quite different. The *mentor* is regarded as a role model. A mentor's goal is to be supportive and the focus is directed toward the personal growth. The *coach* is job-focused with a spotlight on the performance. The coach is focused on changing negative behaviors into positive behaviors, while achieving more. It is usually task related. The coach has a goal: to improve another person's skills or abilities.

Mentoring is an informal practice where someone that is more experienced shares experiences with those who are less experienced. You will find that you have greater rapport with some persons more than others. Therefore, you will probably develop mentoring relationships with several people during your years with TxDOT. And, in turn, you will probably serve as a Mentor to less experienced employees.

Each participant in the Professional Surveyor Career Development Program should be assigned a Mentor to support them during the program. The Mentor will be an experienced RPLS or even a Professional Engineer who has experience guiding participants through the program and can provide insight into technical and professional situations that may arise over the course of a career in surveying. In most cases, your RPLS will fill multiple roles – supervisor, coach, and even mentor.

District Engineer/Division Director

The DE/DD is responsible for providing guidance and other support for the program participant and their progression through their Professional Surveyor Career Development Program – much as with Engineering Assistants. The DE/DD plays an active role in the program and must approve each participant’s participation. Additionally, the DE/DD will approve program exceptions and waivers.

Workforce Development

The Workforce Development Section (WFD) of the Human Resources Division is responsible for providing program oversight and instructional support. WFD provides a variety of courses and other training opportunities that support employee advancement and ultimate success in the Professional Surveyor Career Development Program.

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Section 3:

Career Opportunities

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Survey & Geomatics Job Descriptions

TxDOT has positions specifically related to surveying and many more that are related to surveying, geomatics, and the competencies that led you to choose TxDOT. There are also many related positions for which a background in survey and geomatics is well-suited.

TxDOT expects you to manage your own career and explore opportunities outside a traditional career ladder. This applies particularly to survey professionals who may otherwise be limited to fewer positions in a District when compared to engineering or maintenance personnel. You should have regular Career Development conversations with at least your supervisor, RPLS, and mentor to continually evaluate your options.

TxDOT Job Title	Job Code	State Title	Salary Group
Surveying/GPS/GIS Support Branch Supervisor	C221	Director II	B27
Survey Technician I	E012	Engineering Tech I	A11
Survey Technician II	E015	Engineering Tech II	A13
Survey Technician III	E020	Engineering Tech III	A15
GIS Analyst I	N131	Geographic Information Specialist I	B18
GIS Analyst II	N132	Geographic Information Specialist II	B20
GIS Analyst III	N133	Geographic Information Specialist III	B22
Cartographer I	N142	Engineering Specialist II	B18
Cartographer II	N143	Engineering Specialist III	B19
Cartographer III	N144	Engineering Specialist IV	B20
Mapping Branch Supervisor	N147	Manager III	B24
Mapping Branch Supervisor II	N148	Manager IV	B25
Photogrammetry Specialist I	C240	Systems Support Specialist I	B13
Photogrammetry Specialist II	C245	Systems Support Specialist II	B15
Photogrammetry Specialist III	C250	Systems Support Specialist III	B17
Photogrammetry Specialist IV	C255	Systems Support Specialist IV	B19
Photogrammetry Specialist V	C258	Systems Analyst III	B20
Photogrammetry Specialist VI	C259	Systems Analyst IV	B22
Photogrammetry Section Director	C262	Manager IV	B25
Survey Specialist I	E029	Engineering Specialist I	B17
Survey Specialist II	E030	Engineering Specialist II	B18
Survey Specialist III	E031	Engineering Specialist III	B19
Survey Specialist IV	E028	Engineering Specialist IV	B20
Land Surveyor I	E032	Land Surveyor I	B19
Land Surveyor II	E035	Land Surveyor II	B21
Land Surveyor III	E037	Land Surveyor III	B23
Land Surveyor Supervisor I	E038	Manager III	B24
Land Surveyor Supervisor II	E039	Manager IV	B25
Map, Survey & Utility Br. Mgr.	P640	Director II	B27

As of April 2016, the above positions had specific responsibilities related to surveying or geomatics-related competencies. Other positions, like those with right-of-way functions or real estate responsibilities are similarly related but not included in this list.

Minimum Requirements

Each job description has “minimum requirements” that must be met for you to be considered eligible for promotion or competitive hire. For most job descriptions, education and years of experience are the primary requirements.

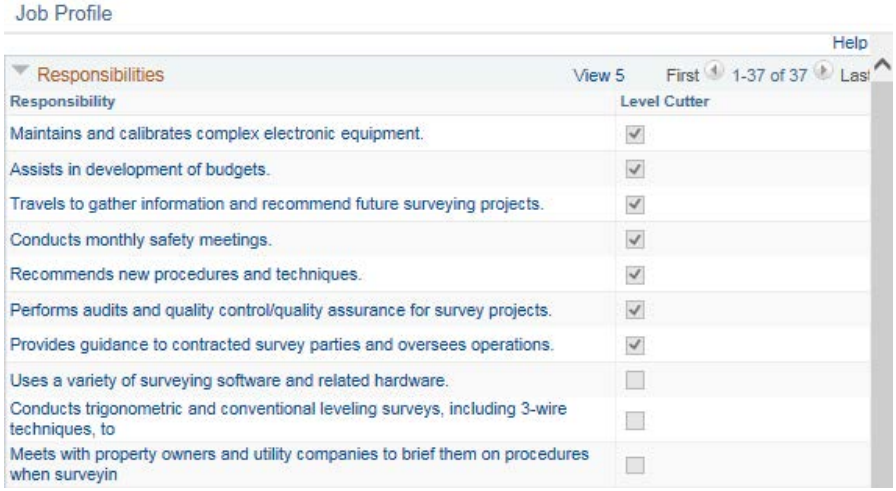
In some cases, experience may be substituted for education, but some jobs will always require one and/or the other. For example, Land Surveyors I – III all require an RPLS, meaning that those positions will always require a Bachelor’s degree and at least 2 years’ experience due to the requirements of the RPLS license.

You can find the minimum requirements for every position at TxDOT in PeopleSoft. The instructions for how to find the minimum requirements are the same as for finding the “level cutters” as listed on the next pages.

Level Cutters

It’s sometimes difficult to determine the differences between job levels, like the difference between a Survey Specialist II and a Survey Specialist III. Time in position is not a good measure of what makes one position higher, but there will be differences among the job responsibilities. These differences are sometimes referred to as “level cutters”.

The responsibilities you see for a level III position but don’t see in the level II position description are what make the job more sophisticated.


Job Profile

Help

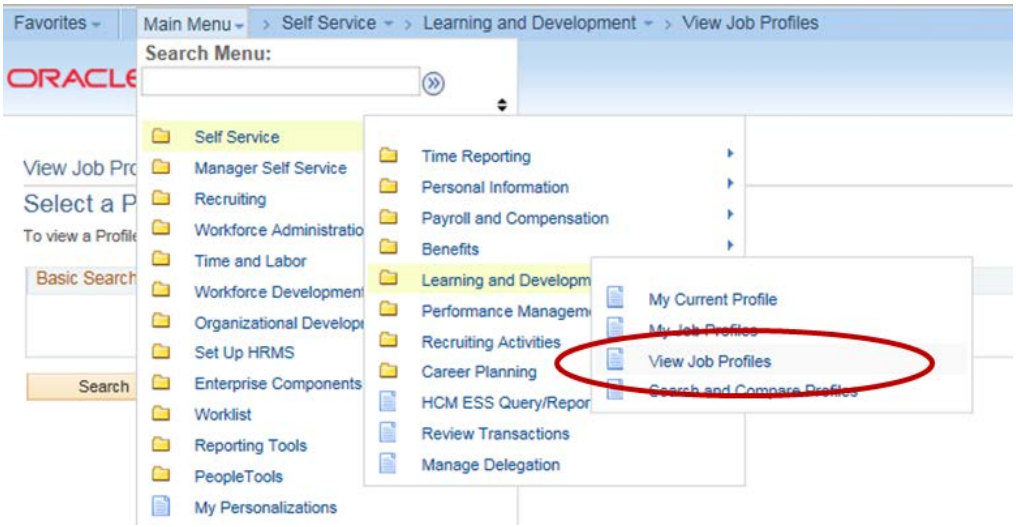
Responsibilities View 5 First 1-37 of 37 Last

Responsibility	Level Cutter
Maintains and calibrates complex electronic equipment.	☑
Assists in development of budgets.	☑
Travels to gather information and recommend future surveying projects.	☑
Conducts monthly safety meetings.	☑
Recommends new procedures and techniques.	☑
Performs audits and quality control/quality assurance for survey projects.	☑
Provides guidance to contracted survey parties and oversees operations.	☑
Uses a variety of surveying software and related hardware.	☐
Conducts trigonometric and conventional leveling surveys, including 3-wire techniques, to	☐
Meets with property owners and utility companies to brief them on procedures when surveyin	☐

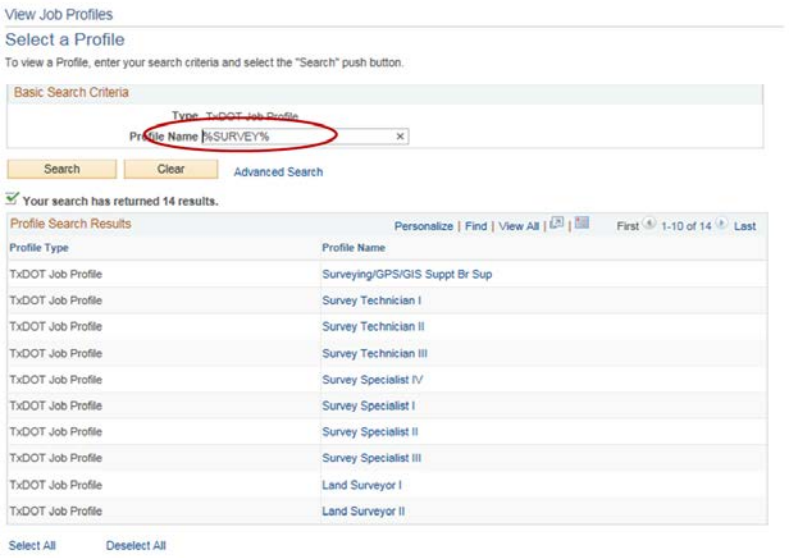
The Survey Specialist III has responsibilities for calibration, budgets, project management, safety meetings, new techniques, audits, and QC/QA that aren’t found in the Survey Specialist II responsibilities.

Anyone interested in advancing up the career ladder from a level I to a level II position – or any other advancement – should first identify the level cutters of the next highest position and ensure that he or she is seeking opportunities to demonstrate competency in those areas. Any consideration for advancement or competitive hire at TxDOT will look to answer the hiring manager's question: "Can this person do the work that is unique to this level?"

To find the level cutters for a position, follow this sequence (below): log into PeopleSoft Human Resources, click Self Service, click Learning and Development, click View Job Profiles. This will pull up a new "View Job Profiles" screen.



On the "View Job Profiles" screen (below), you'll be able to search for positions using key words. Simply click on the job profile to look at the job responsibilities – including the level cutters – as well as the minimum requirements.



Supervisors, Managers & Lead Workers

By statute, TxDOT strives to maintain a management-to-staff ratio of 11-to-1. Supervisors should have a "span of control" of 11 employees. As a result, the majority of employees at TxDOT are individual contributors who can remain in that role for an entire career.

For those positions that are coded in PeopleSoft as a "Manager/Supervisor", these positions include job responsibilities specific to the management of others. In many cases, managers will be supervising individuals from different career fields. As such, the key to successful leadership at TxDOT lies in honing management and leadership competencies that go beyond technical expertise in one field.

To improve your management and leadership skills, supervisors are required to complete a series of mandatory courses related to practical supervision, progressive discipline, recruiting & hiring, ePerformance management, workplace violence prevention, and substance abuse training for managers. In addition, most TxDOT leaders will complete at least 40 hours of professional development training per year to continually evolve and grow.

A second category of leader is the "lead worker". While this designation is no longer formally recognized as a "Manager/Supervisor" in PeopleSoft, those who have a lead worker designation are assigned manager-like responsibilities by District or Division leadership. Tasks like developing work schedules, providing coverage during absences, enforcing compliance for safety and training tasks, and managing group tasks may fall to the lead worker. Many sections have stopped using the lead worker designation, but some formally recognize it and most all TxDOT employees know that non-managers could be tasked with "lead worker responsibilities" at any time.

In all cases, TxDOT employees may attend training for supervisors and managers – even if you're not currently a supervisor. TxDOT is interested in developing you for future positions, not just the one you may have today.

Related, you may have the opportunity to take on "lead worker" responsibilities, like leading projects, programs, committees, tasks, initiatives, survey parties, or field crews as situations arise. For those interested in advancing to leadership positions, opportunities that don't involve direct authority over team members are the most common place to start building experience.

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Section 4:

Exam Preparation Program

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Overview

Training is a crucial element in your progress as a TxDOT employee. Training can best be defined as an activity that is designed to improve immediate TxDOT job performance by achieving specific learning objectives. In other words, training increases skills and competence and teaches the "how" of a job. It also prepares you for certification exams, like the Land Surveyor in Training (LSIT) examination.

Self-paced, computer-based training to prepare prospective SITs and SITs to take and pass the Land Surveyor in Training (LSIT) examination and the Registered Professional Land Surveyor (RPLS) examination are included in the program.

Prior to the exam:

- Participants will be afforded a minimum of 2 hours of study time per week for the 6 months prior to SIT or RPLS exam.
- Participants will be afforded a minimum of 40 hours of study time the week just prior to the exam.

A number of core courses that are appropriate for all employees in the Career Development Program have been identified. These courses range from ethics and homeland security to plans and specifications. Additional courses are intended to enhance performance for actual work as a survey professional; others are knowledge based courses that provide specific information related to a particular discipline.

It is recommended that participants take 100 hours of training a year for the first four to five years at TxDOT.

Training vs. Education

Training should be distinguished from education. Education concentrates on global learning in a particular topic such as survey fundamentals or engineering concepts. Training may cover the same topics, but it focuses on teaching you specific skills, such as calculating a ratio of precision or deploying a total station.

Program participants new to TxDOT can adapt to the work environment more quickly by taking TxDOT training. TxDOT training courses are offered in specific areas such as planning, project development and design, construction, maintenance operations, traffic operations, management, and staff development. The complete catalog of courses can be found in the PeopleSoft Training & Development section.

LSIT & RPLS Test Preparation

The preparatory training for the SIT and RPLS exam is needed to prepare those employees who may have not been in an academic setting for several years. This preparatory training includes breadth-and-depth topics contained in the examinations as well as test taking strategies and techniques. Login/password access to both courses is maintained by Workforce Development (WFD) and administered on behalf of TxDOT's Committee on Geomatics & Surveying (COGS).

- In preparation for the LSIT exam, participants will take:
  - Land Surveyor in Training Online Test Preparation
- In preparation for the RPLS exam, participants will take:
  - Registered Professional Land Surveyor Online Test Preparation

Login/password access to both courses is maintained by Workforce Development (WFD) and administered on behalf of TxDOT's Committee on Geomatics & Surveying (COGS).

Recommended Professional Development

Following is a list of TxDOT courses that may assist you in your continuing education while preparing for the LSIT or RPLS.

Enrollment in any training course requires the approval of your supervisor. Several factors, including course availability, course location, work load, etc. may affect your supervisor's determination in this matter. Develop a plan with your supervisor to schedule and arrange for taking the courses in your training plan

Your training record is available in PeopleSoft and historical training records (training completed prior to October 2014) are available through Workforce Development.

How to Enroll in Training Courses:

1. Log on to Training & Development at http://www.txdot.gov/apps-cq/portal/training-development/default.htm and sign in using your PeopleSoft login
2. Enter unique search terms like course codes in the "Search for Learning" field
3. When a course has classes scheduled, you will see them listed below the course description; click on "Enroll Now"
4. For Computer Based Training (CBT), you will see additional screens and options to "Launch" content.
5. For Instructor Led Training (ILT), you will receive a confirming email that you have requested enrolment; check to see that your supervisor has seen the automated message for approval and that it hasn't been sent to the "junk mail" folder
6. After your supervisor approves the course, you will receive a confirmation e-mail; check to see that the approval has not been sent to the "junk mail" folder

Course Listings

The below list includes additional courses that may be helpful for you during your preparation for the LSIT and RPLS exams – and for your career with TxDOT. You should work with your supervisor and RPLS to select those courses that best fit your career goals. Selected courses should be included in your individual training plan and are divided between Computer Based Training (CBT) and Instructor Led Training (ILT).

Mandatory courses you will need to use vehicles, equipment, and perform work in the right-of-way – like TRF520 Work Zone Traffic Control and SFH521 Surveying Safety in the Right of Way – have not been included in the below list.

Course Code	Course Title	CBT	ILT	Description
TCC100	Math Module	X		The Math Module consists of three self-assessments and lessons: Mathematics Review, Algebra, and Geometry. You should complete the self-assessments first to determine where you should concentrate your efforts and what material you should review
TCC101	Daily Diary Documentation Training	X		This training assists you with proper documentation on a construction or maintenance project. It is important that the information in the daily diary kept for projects are accurate, correct, and factual to ensure proper payment and to avoid lawsuits.
TCC102	Construction Inspection and Emerging Technology - GPS Technology in Construction	X		This course provides the participant with a general understanding of GPS and the accuracy that can be obtained with this new technology. The understanding of GPS is essential to technicians when performing inspection and maintenance job functions.
TCC106	Basic Construction Surveying	X		This training serves as a review of the basics of construction surveying. The important surveying tasks involved in this work and the surveying procedures to be followed are described in this course.
TCC112	Plan Reading - Right-of-Way Plans	X		The ability to read plans is essential for anyone involved in highway and/or bridge construction. This training reviews the information found in right-of-way plans for a highway project.

TCC114	Plan Reading - Bridge Plans	X		The ability to read plans is essential for anyone involved in highway and/or bridge construction. This training reviews the information found in a bridge plan.
TCC113	Plan Reading - County Plans	X		The ability to read plans is essential for anyone involved in highway and/or bridge construction. This training reviews the information found in a county plan.
TCC115	Plan Reading - Culvert Plans	X		The ability to read plans is essential for anyone involved in highway and/or bridge construction. This training reviews the information found in a culvert plan.
TCC111	Plan Reading - Erosion and Sediment Control Plans	X		The ability to read plans is essential for anyone involved in highway and/or bridge construction. This training reviews the information found in the Erosion and Sediment Control Plans section of a highway plan.
TCC109	Plan Reading - Grading Plans	X		The ability to read plans is essential for anyone involved in highway or bridge construction. This training reviews the information found in the Grading Plans section of a highway plan.
TCC108	Plan Reading - Highway Plan Reading Basics	X		This training describes the foundational information needed to begin reading and understanding highway plans. This includes an overview of the title page and its components, station numbers, townships, and quantity estimates.
TCC110	Plan Reading - Traffic Control Plans	X		The ability to read plans is essential for anyone involved in highway or bridge construction. This training reviews the information found in the Traffic Control Plans section of a highway plan.
CON116	Critical Path Scheduling-Const		X	This course teaches construction personnel and designers how to enter and track the progress of a project and the contract time of a construction project using the critical path method (CPM) of scheduling.

CON118	Construction Contract Admin		X	This course introduces and re-inforces the policies and guidelines used on construction projects and the recordkeeping process as outlines in the Construction Contract Administration Manual. This course replaces CON200 Construction and Maintenance Pro
DES720	GPS Basic Data Collect-GIS Map		X	Provides instruction in basic GPS concepts, field data collection (1-5 m& eter accuracy), post-processing techniques & exporting collected data to a GIS. The curriculum in this course is aimed specifically at GIS applications & covers PFO v. 5.4.
IOD100	Advanced GPS for GIS Mapping		X	Advanced instruction for users of Trimble mapping grade equipment; expands on material covered in DES720. Covers GPS mapping techniques using Trimble handheld GPS equipment by utilizing laser measuring devices, bar code readers, and digital cameras.
DES109	Plans, Specifications and Estimates Package		X	Describes processes used to assemble and review project plans, specifications and estimates. Participants should be familiar with the basic operations of TxDOT's Design Construction Information System (DCIS).
DES110	Right-of-Way Considerations		X	Provides the steps involved in ROW acquisition and the impact of project design. Encourages increased coordination between designers and ROW personnel to identify potential project restraints.
DES116	Introduction to Highway Project Development		X	Focuses on major activities listed in the "TxDOT Project Development Process Manual". Participants must bring current "TX Standard Specifications for Construction & Maintenance of Highways, Streets & Bridges" book, scientific calculator & straight edge.
DES119	Preliminary Design Process		X	Outlines the preliminary design process of a transportation improvement project. Includes the vaious tasks and sequences required to obtain schematic approval.

ENV433	Storm Water ENV Req During CON	X		This course provides awareness on Storm Water Environmental Requirements during Construction & is in compliance with the requirements of the EPA Consent Agreement and Final Order (CAFO)
ENV414	Environmental Mgt System	X		Course provides an overview of TxDOT's Environmental Management System (EMS) program for those involved in the road construction activities of planning, design and construction of earth disturbing activities.
TRF203	Risk Management & Tort Liability		X	Provides an overview of the basic principles of project risk management that are applied to TxDOT projects to avoid traffic incidents and liability. Legal principles, the Texas Tort Claims Act and the lifecycle of a lawsuit are also covered.
DES730	GEOPAK I		X	This course provides instruction in utilizing GEOPAK for roadway design and construction plan set creation.Course covers Microstation v. V8i/SS2 (Current training materials introduced May 2013).
DES731	GEOPAK II		X	Advanced instruction in utilizing GEOPAK roadway design software. Participants must bring GEOPAK I manual to class & be able to perform all aspects of GEOPAK covered in GEOPAK I training. Course covers Microstation v. V8i/SS2.
DES705	GEOPAK Survey		X	Users will learn how to work with Open Roads survey data. Topics include: general settings, data file parsing, importing and editing ASCII and RAW survey data, creating terrain models from field books, editing linear features, and adjusting survey data
DES729	GEOPAK Survey		X	GEOPAK ensures consistency & accuracy of survey data from initial field collection to construction staking. Course reviews data collected in the field, edits survey data & creates design files in MicroStation v. V8i/SS2.

DES704	GEOPAK Advanced		X	Users will learn how to create: templates for complex projects, pavement slabs, stripes, curbs, and end conditions for templates. Also, users will learn how to work with templates while working in a 3D model and using civil cells
DES728	GEOPAK Corridor Modeling - 3D		X	Covers 3D design tools within the department's engineering applications, GEOPAK Corridor Modeling roadway design software & Microstation v. V8i/SS2. Design process supersedes the Proposed Cross Sections with Criteria portion in GEOPAK II training.
DES738	GEOPAK Drainage		X	This course will teach TxDOT designers how to design and analyze drainage systems using GEOPAK Drainage.Course covers Microstation v. V8i/SS2 (Current training materials introduced May 2013).
DES733	Survey Data Management Sys		X	This is a hands-on course designed to instruct students on collecting, editing and processing survey data collected in the field using a total station, digital level or automatic level with AASHTO SDMS and create a file for exporting to a CAD software.
CTR104	Best Value Contract at TxDOT		X	This course provides intensive training in all aspects of contracting with a best value procurement standards, including contracts for scientific, right of way acquisition, landscape architect, accounting, medical, private consulting, outside counsel, an
CTR105	TX Transportation Contracting		X	This class provides a general overview of contracting at TxDOT. It surveys the wide range of contracting types in common use at TxDOT and addresses the inherent risks with each type of contract. It also addresses contract planning, procurement, scopes
CTR106	Negotiating TxDOT Contracts		X	How to prepare for contract negotiations, negotiating techniques to use during contract negotiations, and ways to approach negotiation of particular contracting issues, including scopes of work, fee schedules, work schedules, competitive negotiations, di

CTR615	Consultant Management/Administ		X	Presentation of Project Management and Contract Administration roles and responsibilities from the selection and award process through contract close-out for engineering, surveying, and architectural contracts. The material would be developed in a modul
CTR616	Consultant Error & Omission		X	Presentation of the Consultant Errors & Omission Correction and Collection Procedures with an emphasis on the steps involved to identify the error or omission, who is responsible for the additional costs to TxDOT, how to process change orders correctly,
DEV415	Introduction to Project Management		X	Serves as an introduction and overview of project management. Based on the Project Management Institute (PMI) and the book, The Fast Forward MBA in Project Management.
DEV417	Project Management - Risk Assessment		X	Presents the processes, tools and techniques needed to effectively manage risks on TxDOT projects. Based on the Project Management Institute (PMI) standards, as defined by the Guide to the Project Management Book of Knowledge (PMBOK).
DEV418	Project Management - Resource Management		X	Provides project management concepts related to the management of project resources. Based on the Project Management Institute (PMI) standard, as presented in the Guide to the Project Management Body of Knowledge (PMBOK) and TxDOT-specific applications.
DEV419	Project Management - Scheduling		X	Presents processes required to create and manage a project schedule. Based on the Project Management Institute (PMI) standards, as presented in the Guide to the Project Management Body of Knowledge (PMBOK) and TxDOT-specific information.
PMD201	PMP Preparation: Project Integration Management	X		This course assists participants pursuing project management skills development and potentially Project Management Professional (PMP) certification

PMD202	PMP Preparation: Project Cost Management	X		This course assists participants pursuing project management skills development and potentially Project Management Professional (PMP) certification.
PMD203	PMP Preparation: Project Communication Management	X		This course assists participants pursuing project management skills development and potentially Project Management Professional (PMP) certification
PMD204	PMP Preparation: Project Procurement Management	X		This course assists participants pursuing project management skills development and potentially Project Management Professional (PMP) certification
PMD205	PMP Preparation: Project Quality Management	X		This course assists participants pursuing project management skills development and potentially Project Management Professional (PMP) certification
PMD206	PMP Preparation: Project Scope Management	X		This course assists participants pursuing project management skills development and potentially Project Management Professional (PMP) certification
PMD171	Monitoring and Communicating Project Progress		X	This course will explore life cycle project monitoring and communicating project progress and status reporting with project team and stakeholders. Students will discover useful project management tools.

Section 5:

Job Rotation Activity (JRA)

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Purpose

Job Rotation Activities (JRA) are in addition to education, training, and mentoring activities and are intended to prepare the program participant to be a well-rounded TxDOT professional.

The JRA is also intended to ensure SIT and RPLS candidates are acquiring the needed hours to qualify for the SIT and RPLS exams.

The Job Rotation Activity (JRA) is a documented part of the Professional Surveyor Career Development Program and is expected of all participants in the program, when possible. As with the Engineering Assistant Career Development Program, the Job Rotation Activities for those in the survey program is the responsibility of the DE/DD.

The JRA should provide exposure to a variety of realistic job activities that survey and geomatics professionals are likely to encounter throughout their career. Supervisors and program participants work together to define those job rotation activities that best fit with individual career goals and the business needs of the department. Most JRAs for survey professionals could be divided into “field” and “office” work.

Survey professionals may be hired in Districts or Divisions and both experience and work activities vary significantly among the Districts and Divisions. The following are presented separately as typical District assignments as well as those at the Divisions. Individual supervisors may modify the JRA to combine parts of the District and Division model in order to maximize the program’s benefits when those opportunities are available. In a larger office, this experience may be accomplished through diversified assignments without a formal JRA outside of the office.

The JRA is not a contract of employment and is dependent on both availability and business needs. It is a program for TxDOT leadership to use in developing professionals through varied job assignments that provide various surveying assignments.

Program Description

The DE/DD is ultimately responsible for recommending and implementing a JRA. A senior staff member may be assigned to monitor and implement the JRA for the DE/DD, but the hiring authority will remain responsible for implementation and effectiveness of the JRA.

- Program participants that become licensed as an SIT or RPLS while they are employed at TxDOT are expected to continue the JRA as business needs demand.

Participation in the JRA requires that the participant work toward maximizing the benefits of the program while the DE/DD and supervisor/RPLS work together with the participant toward supporting the benefits. The DE/DD, the participant, the supervisor, the RPLS, and the mentor work to accomplish business needs during the entire JRA time period.

Assignment descriptions and durations in the JRA presented in this guide should be considered as recommendations. The JRA will be implemented at the time of assignment to the position and regularly monitored by the DE/DD to ensure that business needs are met and the JRA participant's experience is accomplished as effectively as possible. The JRA should maximize the effectiveness of participant's experience and professional development. It should also be used to accomplish business needs considering activity levels and assignments that are available at the participant's district/division during the participant's assignment to the JRA.

The JRA assumes that participants may be tasked to continue in the JRA after licensure. Mentors and DE/DD's are encouraged to consider assignments after licensure that maximizes career development opportunities. Assignments after licensure have the potential to provide a significantly different experience by the JRA participant than those assignments made before being licensed.

JRAs for Experience

Surveyor in Training (SIT) Candidates

To qualify for the LSIT exam, most candidates will require between one to four years of **"Delegated Responsible Charge Time"**, defined here and below as "the direct control of professional land surveying work performed under the supervision of a Registered Professional Land Surveyor" and divided between field or office work. Section 6, SIT & RPLS Applications, has additional details on time accounting and responsible charge time.

- "In the field, the applicant must have had the direction of work, the successful accomplishment of which rested upon the applicant, where decision questions involve the method of execution without relying upon advice or instructions from supervisors."

- "In the office, the applicant must have had to undertake tasks demanding resourcefulness, originality, initiative, professional skill and independent judgment, such as:
    - Conducting record research
    - Analyzing survey data and preparing metes and bounds descriptions
    - Computations and drafting using only rough sketches, general information, and field measurements for reference and guidance."

Time spent performing survey related activities may seem like survey work to many technicians and other TxDOT employees, but the TBPLS recognize most of that time as “Sub-Professional Experience.”

- **“Sub-Professional Work** includes, but is not limited to, the time spent as chain man, rod man, instrument man, statistician, recorder, draftsman, or similar work; and also the time spent on work where the personal responsibility and technical knowledge required are minimal, for example, minor positions in which the task is set and supervised by a superior.”

Office Responsible Charge Time

Examples of this work at TxDOT could include:

- In any office in TxDOT, an employee might conduct Records Research to discover and/or analyze any of the following:
  - Appraisal District Records
  - Deeds: Property, Adjoiners, ROW
  - Subdivision maps/plats
  - ROW Maps
  - TxDOT Field Book
  - Other TxDOT Maps
  - Probate Records
  - County Surveyor Records
  - County Commissioner Records
  - County/District Court Records
  - As-Built Plans
  - Other local records
  - Consultation with other surveyors regarding research activities and findings
- In any office in TxDOT, an employee may prepare Working Sketches/Deed Sketches for:
  - Individual properties
  - Series of properties
  - ROW deeds
  - Subdivisions
- Centerline/Baseline Alignments
- Calculations/proofing of Field Work
- Boundary Analysis
  - Follow the Footsteps
  - Honor the Dignity of Calls (Priority of Calls)
  - Junior/Senior Rights
  - Proration
  - Case Law
  - Alignment Geometry
- Creation of Documents
  - Writing Metes and Bounds

    - Creating Parcel Plats
    - Creating ROW Maps
    - Survey Reports
- Document Review
    - Legal Descriptions
    - ROW Mapping
    - Closure Reports
- Contracts or Work Authorizations for ROW projects
    - Writing contract language
    - Writing scopes of work
- Even self-study, when approved by an RPLS, counts towards responsible charge time.
    - Study of the ROW Manual
    - Study of the Survey Manual

Field Responsible Charge Time

Responsible Charge Time for field activities could be conducted whether assigned to the Right of Way Division, in another Division, or as a District employee. Examples of these experiences at TxDOT include:

- Communication with landowners
    - Seeking Right-of-Entry (ROE)
    - Gathering Parol (Parole) Evidence
- Searching for Boundary Evidence
    - Property corners
    - ROW markers
    - Centerline/Baseline alignment evidence
        - monuments
        - construction improvements
        - drainage structures
        - pavement
    - Water Boundaries
- Searching for Possession Evidence
    - Fences
    - Walls
    - Tree lines
    - Track roads
- Field book sketches
- Field Tie Boundary/Possession Evidence
- Locating improvements compared to the boundaries
- Setting new Boundary Corners
    - Property corners
    - ROW monuments
    - Centerline/Baseline monumentation

RPLS Candidates

To qualify for the RPLS exam, a candidate must be an SIT for two years and accumulate 4,000 hours of experience in each of five fields – this time can be done simultaneously, depending on how you record hours and how your RPLS endorses your time.

- Each of the five areas requires at least 3 months of experience, which is generally equivalent to 480 hours.
- Only one of the five areas has a maximum. Only 1 year – or about 2,080 hours – of Field Experience will be accepted.
- A standard work year at TxDOT is 2,080 hours, but sub-professional work, sick time, vacations, and other duties likely reduce that number. It is not accurate to simply conclude that two years as an SIT "on the job" has resulted in the 4,000 hours needed for the RPLS application.
- In all cases, the RPLS who is signing the Compliance Verification Form is indemnifying himself/herself as much as you are, so be prepared to defend your submission.

Many activities conducted by a prospective SIT are identical to those of an SIT on the path to RPLS. Some activities might also be considered for different fields. It will be the supervising RPLS' judgment as to whether the sophistication of the activity is appropriate for the RPLS application and for which field the activity should be counted.

Research

Examples of these experiences at TxDOT include:

- Appraisal District Records
- Deeds: Property, Adjoiners, ROW
- Subdivision maps/plats
- ROW Maps
- TxDOT Field Book
- Other TxDOT Maps
- Probate Records
- County Surveyor Records
- County Commissioner Records
- County/District Court Records
- As-Built Plans
- Other local records
- Consult with other surveyors
- Survey Manual research
- ROW Manual research
- Consultation with other surveyors regarding research activities and findings

Legal Principles/Boundary Reconciliations and Deed Sketches

Examples of these experiences at TxDOT include:

- Working Sketches/Deed Sketches
    - Individual properties
    - Series of properties
    - ROW deeds
    - Subdivisions
    - Corridors/Alignments
- Calculation and Analysis
    - Centerline/Baseline Alignments
    - Horizontal Curves
    - Calculations/proofing of Field Work
    - Calculation and Application of Surface Adjustment Factors
    - GNSS Data Reduction/Analysis
    - Level Line Analysis/Adjustment
- Boundary Analysis
    - Follow the Footsteps
    - Honor the Dignity of Calls (Priority of Calls)
    - Junior/Senior Rights
    - Proration
    - Case Law
    - Alignment Geometry
    - Horizontal Curves

Computations/Traverse Accuracy Analysis

Examples of these experiences at TxDOT include:

- Proration
- Alignment Geometry
- Area
- Traverse Analysis/Closures (Closed and Open End)
- Horizontal Curves
- Control Network for Boundary Surveys
- Calculation and Application of Surface Adjustment Factors
- GNSS Data Reduction/Analysis
- Level Line Analysis/Adjustment

Documentation/Descriptions/Monumentation/Preparing Final Surveys

Examples of these experiences at TxDOT include:

- Creation or Review of Documents
    - Metes and Bounds

    - Parcel Plats
    - ROW Maps
    - Survey Reports
    - Control Sheets for ROW Mapping
- Contracts or Work Authorizations for ROW projects
    - Writing contract language
    - Writing scopes of work

Field Experience

Examples of these experiences at TxDOT include:

- Communication with Landowners
    - Seeking Right-of-Entry (ROE)
    - Gathering Parol (Parole) Evidence
- Searching for Boundary Evidence
    - Property Corners
    - ROW Markers
    - Centerline/Baseline Alignment Evidence
        - Monuments
        - Construction Improvements
        - Drainage Structures
        - Pavement
    - Water Boundaries
- Searching for Possession Evidence
    - Fences
    - Walls
    - Tree lines
    - Track roads
- Field Book Sketches
- Field Tie Boundary/Possession Evidence
- Locating improvements compared to the boundaries
- Setting new boundary corners
    - Property corners
    - ROW monuments
    - Centerline/Baseline Monumentation
    - Horizontal Curve Stakeout
    - Vertical Contour Stakeout

Other Experience

Although survey work is mostly self-evident, other types of work experience will be acceptable to the TXLS when it can be related directly to surveying. Your RPLS will be the best source of guidance – and approval – for other experiences, but you should be constantly asking yourself if the task at hand has "Delegated Responsible Charge Time" hidden within. Does this construction project have a boundary issue? Does this construction project need staking?

Participants should work with supervisors to explore JRAs that may not be traditionally considered for survey work. Questions like "Would working in contract letting meet the requirements of responsible office charge time?" or "Would testing new traffic control devices used for TxDOT personnel – including survey personnel – count as responsible field charge time?" While the answer may be yes or no, the basic challenge should be for participants to collaborate with supervisors and the RPLS to consider how non-traditional assignments could be related to the profession of surveying.

Supervisory Work

Supervisory work is great experience and should help you advance in the department, but it is most times considered "Sub-Professional Work" by TXLS standards. In general, **only the practice of surveying and geomatics activities** are considered survey work to become a SIT and/or RPLS.

That said, some supervisor roles are routinely considered acceptable to the Board. "Survey Party Chiefs," who are supervising the actions of the a survey crew are normally accruing Responsible Charge Time when the RPLS agrees that the party chief is also doing some of the survey work himself/herself. Even circumstances where the Survey Party Chief is conducting work alone – a "survey party of one" – the board would likely still consider it both supervisory work and responsible charge time.

JRA Sequencing

The sequence of job rotation activities is not required to follow any specific order, as business needs and resources will likely dictate when a JRA can occur. The order of assignments should ultimately consider business needs, DE/DD activity levels, project schedules, and prior experience of the JRA participant. The minimum duration of an individual assignment should be the time it takes to accomplish the recommended experience activities.

Summary of District Job Rotation Activities

Following is a summary of recommended job rotation activities while assigned to a District and while enrolled in the Professional Surveyor Career Development Program. These recommendations are suggestions based on years of experience at TxDOT and serve as an avenue for accumulation of hours/years needed to qualify for the LSIT and RPLS exams as explained earlier, as well as time needed for successful preparation for the exams.

SIT & RPLS Time

	Core	Elective	Recommended DURATION
Design (Project Development)		X	12 - 48 Months
Construction & Lab		X	12 - 24 Months
Maintenance Operations		X	2 Weeks - 2 Months
Administration & Support		X	2 Weeks - 2 Months
Traffic Operations		X	2 Weeks - 2 Months
Total			**12 – 48 Months Total**

Design (Project Development)

	Recommended	Elective	Comments
ROW/Utility	X		May include researching property owner records, determining type of property interest, assist in valuation process Assist in some aspects of eminent domain activities. This
Advanced Planning	X		The participant may help develop schematics, preliminary estimates, be involved in the TIP process, participate in public involvement and write a Feasibility Study if possible
Consultant Management	X		
Surveying	X		

12 – 48 Months in duration.

Design, or Project Development experience, is broken into several activities with recommended areas of assignment and experience. The sequence of assignments in the Project Development area should be made to maximize the experience and exposure of the participant to the variety of transportation activities while also accomplishing business needs. While some areas, like Environmental, may not directly relate to surveying, below areas are specifically highlighted for responsible charge time.

Right of Way (R/W) – The participant should be involved in the following elements during their R/W experience: Assist with researching property owner records; determine what type of property interest exists; assist in the valuation or review appraisal process; and prepare R/W documents such as metes and bounds, parcel plats, and R/W maps. The participant may also assist in some aspects of eminent domain activities. This experience may include exposure to the development and/or monitoring of projected and actual R/W budget expenditures.

Utility Adjustment Process - The participant should receive experience in determining the need for a utility adjustment; developing options to avoid or minimize conflicts; determining the need and appropriate level for a Subsurface Utility Engineering surveys; preparation and review of maps for a proposed utility; determining reimbursable adjustments; and developing reimbursement ratios; reviewing plans, specifications, and estimates to ensure compliance with TxDOT policy; preparing documentation for approval of work before adjustment can begin; monitoring the adjustment process for compliance to the Utility Accommodation Policy.

Boundary Surveying – The participant should be assigned to assist in analyzing information and determine deed lines and ROW lines; stake ROW; and prepare ROW maps (plats and property descriptions).

Construction Surveying – The participant may be assigned to obtain design plans, locate control points, calculate control layout, shoot grades, reduce grades, mark layout stakes, check layout stakes to verify against proposed plans and take cross-sections of channels or roadways.

Advance Planning – The participant should be assigned to develop a schematic (geometric layout), prepare preliminary estimates, be involved in the TIP process, participate in public involvement and write a Feasibility Study.

Engineering Consultant Contracts – The participant should be involved in the price negotiation or the consultant selection processes.

Bridge – The participant may be involved in one or more of the following elements: bridge layout, retaining wall layout, structural analysis, shop drawing review, consultant plan review, bridge detail review, geotechnical report, core logging, and BRINSAP inspections.

Roadway Design – The participant may be involved in pavement designs on various types of facilities. This training should include obtaining and analyzing FWD data as well as road cores, investigating road conditions including site visits and using applicable design methods. The participant may also be involved in preparing several

PS&E submittal packages, developing vertical and horizontal alignments, preparing suggested sequence of work, and project scheduling using CPM. The participant should attend several plan reviews and may even be responsible for leading a plan review meeting and answering questions specific to the surveying profession.

Recommended Training Topics:
Right of Way
PS&E Package
GEOPAK I and II
Microstation SoftTutor (computer based training),

Construction and Laboratory

	Recommended	Elective	Comments
Inspection		**x**	
Record Keeping		**x**	Should include exposure to Site Manager
Daily Diary		**x**	
Lab		**x**	May be at District or Area Office Lab

12 – 24 Months in duration

Participants may be assigned to construction projects in an Area Office for 12 to 24 months, which may include assignment to the Laboratory. Personnel assigned to the District Headquarters should be reassigned to an Area Office for their construction experience. During the assignment, the participation will obtain experience in both construction inspection and construction records keeping. Record keeping activities should include experience using SITEMANAGER in (a) Daily Work Reports (DWR), (b) the estimate process, (c) change order process, and (d) tracking material sources. The participant will keep a diary on a project and possibly serve as a Chief Inspector. Training available to construction employees and the Inspector Development Program parallel that of the engineering assistants and the professional survey program participants.

Recommended Training Topics:
Inspections *(Concrete, Hot Mix, Bridge, etc.)*
Construction/Maintenance Project Management
Administration
Materials Engineering and Soil Technologies
SITEMANAGER

Maintenance Operations

	Recommended	Elective	Comments
Office Operations		x	Maintenance Office
Stock Management		x	Maintenance Section
Develop Daily Work Assignments		x	
12 Month Maintenance Plan		x	
Budgeting		x	
Maintenance Contracts		x	
TCP Selection		x	
Tailgate Safety Meetings		x	

2 Weeks – 2 Months in duration.

Program participants should gain experience in the maintenance area, primarily to understand and gain experience operating in the right-of-way. This experience should come after their first year with TxDOT.

The participant will usually be assigned to a particular maintenance section or the Office of the Director of Maintenance. Assigned responsibilities should provide opportunities where the participant will work with the maintenance supervisor and be actively engaged in every facet of the maintenance operations. They should be involved in engineering/surveying aspects of the maintenance operation as well as office operations, such as stock management, development of daily work assignments, developing and/or monitoring of the 12 month maintenance plan, budgeting, selection of TCPs for daily operations, conducting Tailgate safety meetings, and other aspects of maintenance supervision.

The participant will most likely develop contracts or maintenance design for contracts that may include responsible charge time. Participants will work closely with District Maintenance Operations to gain an understanding of the overall District maintenance function.

Participants could be assigned to projects with responsibilities for any of the following:

Facilities Management Section

Safety Rest Area (SRA) and Capital Improvement building programs:

- Structural - design, analysis, PS&E production, and construction administration activities
- Mechanical - design, analysis, PS&E production, and construction administration
- Electrical - design, analysis, PS&E production, and construction administration
- Plumbing - design, analysis, PS&E production, and construction administration
- Water and Waste Water Systems - design, analysis, PS&E production, and construction administration
- Building Civil - design, analysis, PS&E production, and construction administration

Maintenance Section

- Maintenance Contracts -plans and specifications
- Texas Maintenance Assessment Program (TxMAP) - quality control evaluation of state roadway system
- Review Construction Plans for Rest Areas
- Pavement management activities

Vegetation Management Section

- Herbicide research trials
- Research of pesticides used on state's right-of-way
- Specifications for soils, seeding, sodding, vegetative watering and erosion control

Recommended Training Topics:

Maintenance Section Supervisor course

Administration and Support Areas

	Recommended	Elective	Recommended DURATION
Budgeting/ Business Services		**X**	2 Weeks – 2 Months
Human Resources		**X**	2 Weeks – 2 Months
Purchasing/ Procurement/ PEPS/ Business Services		**X**	2 Weeks – 2 Months
Warehousing		**X**	2 Weeks – 2 Months
Public Information Office		**X**	2 Weeks – 2 Months

2 Weeks – 2 Months in duration.

Administration experience may be most beneficial either close to the time the SIT or RPLS candidate takes the SIT exam or shortly after RPLS licensure. This assignment may take place during or concurrent with another rotation assignment because it is short in duration.

Participants should gain experience in the administration and support area. Survey professionals are exposed to budgets, contracts, vouchers, human resource activities, purchasing, warehousing, information systems, public information, open records, and the equipment shop as part of everyday life at TxDOT.

Recommended Training Topics:
Budget related
Policy
Human Resources
Management
Contract Management
Project Management

Traffic Operations

	Recommended	Elective	Recommended DURATION
Development of TCPs		**X**	2 Weeks – 2 Months
Illumination Design		**X**	2 Weeks – 2 Months
Signs & Pavement Markings Design		**X**	2 Weeks – 2 Months
Speed Studies		**X**	2 Weeks – 2 Months
Signal Warrants		**X**	2 Weeks – 2 Months
Rail Road Crossing Design		**X**	2 Weeks – 2 Months
Pedestrian Facilities Design		**X**	2 Weeks – 2 Months
Transportation Management Systems (ITS)		**X**	2 Weeks – 2 Months

2 Weeks – 2 Months in duration.

As with Maintenance assignments, participants should complete Traffic JRAs for general TxDOT experience Traffic related experience may be obtained at the Area Office or District Traffic Section or District Transportation Operations.

Traffic related experience should consist of the following areas: Traffic Control development, illumination layout and design, sign and pavement marking design and layout, and SIGNCAD. Participants may also should acquire experience in traffic studies for signal warrants, speed, and pedestrian traffic. Additional experience might include Traffic Signal design, Traffic Impact Analysis, Traffic Management Systems, railroad issues, and successful interaction with public complaints.

Field Rotations

When possible, JRAs should be combined with field rotations, which are simply job assignments in specific District Sections or Area Offices other than a Headquarters facility. At any point, a program participant should expect to work in any of the following offices or sections.

Area Office
- Project inspection

District Construction Office
- Construction Recordkeeping
- Project Acceptance

District Design

District Right of Way

Traffic Engineering
- Traffic control plans
- Signs and Markings installation and inspection

Summary of Division Job Rotation Activities

Prospective SITs and SITs may be assigned to Divisions in a number of capacities – be it a GIS analyst, a Survey Technician, or a position that is allowing for cross-training into the survey profession.

As such, each Division manages its own JRA assignments. As with Districts, the business needs of the Division take precedent when determining job rotations. Divisions may also collaborate with other DE/DDs to accomplish a combined rotation program with assignments in two or more Districts or Divisions.

The job rotation activity durations listed below are prepared with the intent that each Division is managing its own rotation program with sufficient flexibility to accomplish business needs and support professional development of the program participant.

Field rotation assignments to other Districts or Divisions may be used as needed or as opportunities present themselves.

Right of Way Division

The Right of Way Division (ROW) is the functional "home" for TxDOT's survey and geomatics professionals. Job rotations in ROW consist of recommended and elective activities in any of the Austin-based sections and among the approximately 90 ROW Project Delivery personnel and with the Legal Field staff assigned around the state.

ROW Division participants could expect to spend all of their program time as a ROW Division employee or as a District ROW employee.

Just as with other Divisions, the sequence of activity assignments and their duration will support business needs and be as effective as possible while supporting the participant's professional development needs.

Transportation Planning and Programming Division

Job rotations in the TP&P Division consist of recommended and elective activities among the Division's eight sections, with emphasis on Data Management and Statewide Planning & Program Management for geomatics and GIS professionals

Durations will vary and will typically be longer for participants who will remain with TPP Division than for those who will be applying for positions in other TxDOT organizations.

Just as with other Divisions, the sequence of activity assignments and their duration will support business needs and be as effective as possible to support the participant's professional development needs.

Design Division

Job rotations in the Design Division consist of recommended and elective activities among the Design Division sections, with emphasis on Photogrammetry and Plan Development.

Durations will vary and will typically be longer for participants who will remain with DES Division than for those who will be applying for positions in other TxDOT organizations.

Just as with other Divisions, the sequence of activity assignments and their duration will support business needs and be as effective as possible to support the participant's professional development needs.

Photogrammetric Mapping Section
Consultant Contract Section
Field Coordination Section
Landscape Design Section
Letting Management Section
Plan Development Section
Roadway Design Section

Construction Division

Job rotations in the Construction Division consist of recommended and elective activities among the main sections of Construction, Contract Letting, and Materials & Pavements.

Durations will vary and will typically be longer for participants who will remain with CST Division than for those who will be applying for positions in other TxDOT organizations.

Just as with other Divisions, the sequence of activity assignments and their duration will support business needs and be as effective as possible to support the participant's professional development needs.

Construction Section

- Letting process
- Change order process
- Field engineering assignments

Claims and Disputes

- Claims and disputes process

Construction and Materials Information Systems

- CIS
- Site Manager

Materials and Pavements Section

Laboratory Branches

- **Asphalt**
- **Chemical**
- **Flexible Pavement**
- **Geotechnical, Soils, and Aggregates**
- **Pavements and Materials Systems Branch**
- **Rigid Pavements**
- **Structural Inspection Branch**
- **Traffic Materials**

Bridge Division

Job rotations in the Bridge Division consist of recommended and elective activities to accomplish Job Rotation activities in BRG. Durations will vary and will typically be longer for participants who will remain with BRG Division than for those who will be applying for positions in other TxDOT organizations. The sequence of activity assignments and their duration will support business needs and be as effective as possible to support the EA's professional development needs.

Maintenance Division

Job rotations in the Maintenance Division consist of recommended and elective activities to accomplish Job Rotation activities in MNT. Durations will vary and will typically be longer for participants who will remain with MNT Division than for those who will be applying for positions in other TxDOT organizations.

Traffic Operations Division

Job rotations in the Traffic Operations Division consist of recommended and elective activities to accomplish Job Rotation activities in TRF. Durations will vary and will typically be longer for participants who will remain with TRF Division than for those who will be applying for positions in other TxDOT organizations. Traffic related experience may consist of the following areas:

- Traffic Control development
- Illumination layout and design
- Sign and pavement marking design and layout
- SIGNCAD
- Traffic Signal design
- Traffic Impact Analysis
- Traffic Management Systems
- Railroad issues
- Successful interaction with public complainants

Field Rotations

When possible, JRAs should be combined with field rotations, which are simply job assignments in specific District Sections or Area Offices other than a Headquarters facility. At any point, a program participant should expect to work in any of the following offices or sections.

Area Office
- Project inspection

District Construction Office
- Construction Recordkeeping
- Project Acceptance

District Design

District Right of Way

Traffic Engineering
- Traffic control plans
- Signs and Markings installation and inspection

Management Summary

The participant's supervisor will conduct an annual performance review of as part of TxDOT's annual performance evaluation exercise. During these reviews, the supervisor and the participant will include job performance from the JRA as part of the performance review.

The Management Summary should indicate the following:

1. A summary of completed experience
2. The supervisor's recommended plan for the next 12 months, with RPLS comments if the supervisor is not the RPLS.
3. The participant's career goals for the next year

The Management Summary will be delivered to the DE/DD or the designated person managing the JRA for review and implementation as required.

Section 6:

SIT & RPLS Applications

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The SIT Application

One of the most critical parts of your application for professional licensure is the SIT Application itself. The Board will use it not only to evaluate your experience, but also to determine your general understanding of TBPLS (TXLS) processes and procedures. Failure to adequately prepare your SIT application can derail your application. By asking yourself if you can describe your activity in terms such as ***"I calculated…, I researched..., I documented..."*** your experience is likely acceptable to TXLS.

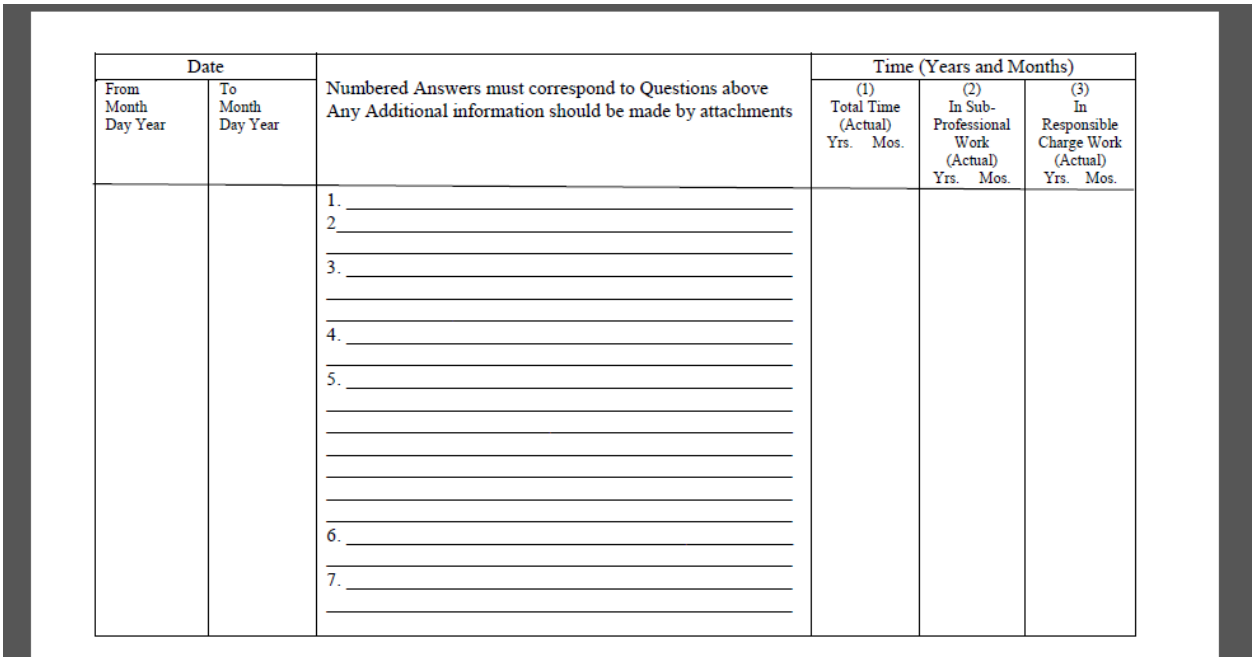
Planning and Preparing your SIT Application

I. **The first thing that you should be prepared to do is to thoroughly communicate the surveying work that you have performed to date.**

The best method of doing this is to keep a journal that will allow you to complete the Work Experience section of the application. The journal should contain:

- A sample journal page is included in **Appendix B**.
- **The importance of keeping this record cannot be overstated.** Without this information, as time passes, it becomes more difficult to remember the details of your time. Submitting quarterly reports to your supervisor is recommended as another way to ensure that your job experience is being kept up to date, but depending on old e-mails and messages is less reliable than simply keeping a paper journal.

II. **Second**, you need to begin the process of writing your experience in the SIT application format, pictured below.



Date		Numbered Answers must correspond to Questions above Any Additional information should be made by attachments	Time (Years and Months)		
From Month Day Year	To Month Day Year		(1) Total Time (Actual) Yrs. Mos.	(2) In Sub- Professional Work (Actual) Yrs. Mos.	(3) In Responsible Charge Work (Actual) Yrs. Mos.
		1. _____ 2. _____ _____ 3. _____ _____ _____ 4. _____ _____ 5. _____ _____ _____ _____ _____ _____ 6. _____ _____ 7. _____ _____			

- The SIT application allows for multiple pages, but you should be formatting your work experience to be short and to the point. This is not a "cut-and-paste" of your professional resume.

- The SIT application is looking for Responsible Charge Time with the full understanding that some of your time at work is sub-professional work.

- There is no page limit – minimum or maximum – for the SIT application. You must simply write enough and in enough detail so that the RPLS under whom you worked would be willing to defend your application to the Board.

III. **Third,** you follow the current instructions at the TBPLS/TXLS website regarding submission of the application and associated fees. Expect to print out, hand enter, copy and mail the finished application to TBPLS/TXLS in Austin.

IV. **Fourth**, you should strive for overall clarity in the Work Experience section of the SIT application. The engagement number should match the applicable section of the application. Introduce the experience with when, where, and what. Follow with type or description of work. State in detail what you personally performed.

For example, suppose you have worked for TxDOT your entire career and you have been assigned to two separate projects in different offices. You may choose to list them as separate work experiences, or as subsections of a main TxDOT Work Experience section.

V. **The fifth task** in the completion of the Work Experience section is to address the relationship between your selected references and the text.

- You must have an RPLS reference for each section of your work experience, and that reference must be personally familiar with the technical aspects of your work.

- **Appendix B** includes examples of journals and a completed Work Experience section.

The RPLS Application

If you became a Surveyor in Training (SIT) in Texas, then the RPLS application should follow almost the same process as your original SIT application. Again, the Board will use your RPLS application to evaluate your experience and your general understanding of TBPLS processes and procedures. Failure to adequately prepare the RPLS application can derail your application, particularly as the Board knows you have been a Surveyor in Training for at least the last two years.

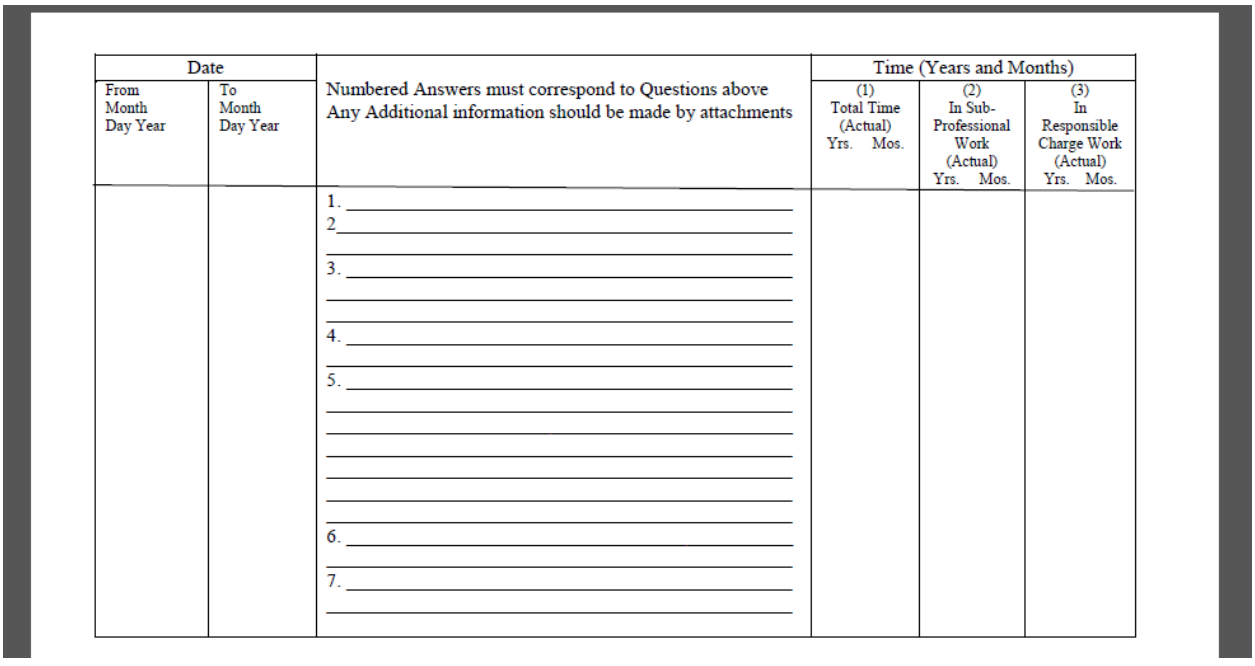
Planning and Preparing your RPLS Application

I. **The first thing that you should be prepared to do is to thoroughly communicate the surveying work that you have performed to date.**

The best method of doing this is to keep a journal that will allow you to complete the Work Experience section of the application. The journal should contain:

- A sample journal page is included in **Appendix B**.
- **The importance of keeping this record cannot be overstated.** Without this information, as time passes, it becomes more difficult to remember the details of your time. Submitting quarterly reports to your supervisor is recommended as another way to ensure that your job experience is being kept up to date, but depending on old e-mails and messages is less reliable than simply keeping a paper journal.

II. **Second**, you need to begin the process of writing your experience in the RPLS application format, pictured below. This is the same format as the SIT application, so use that as your start point.



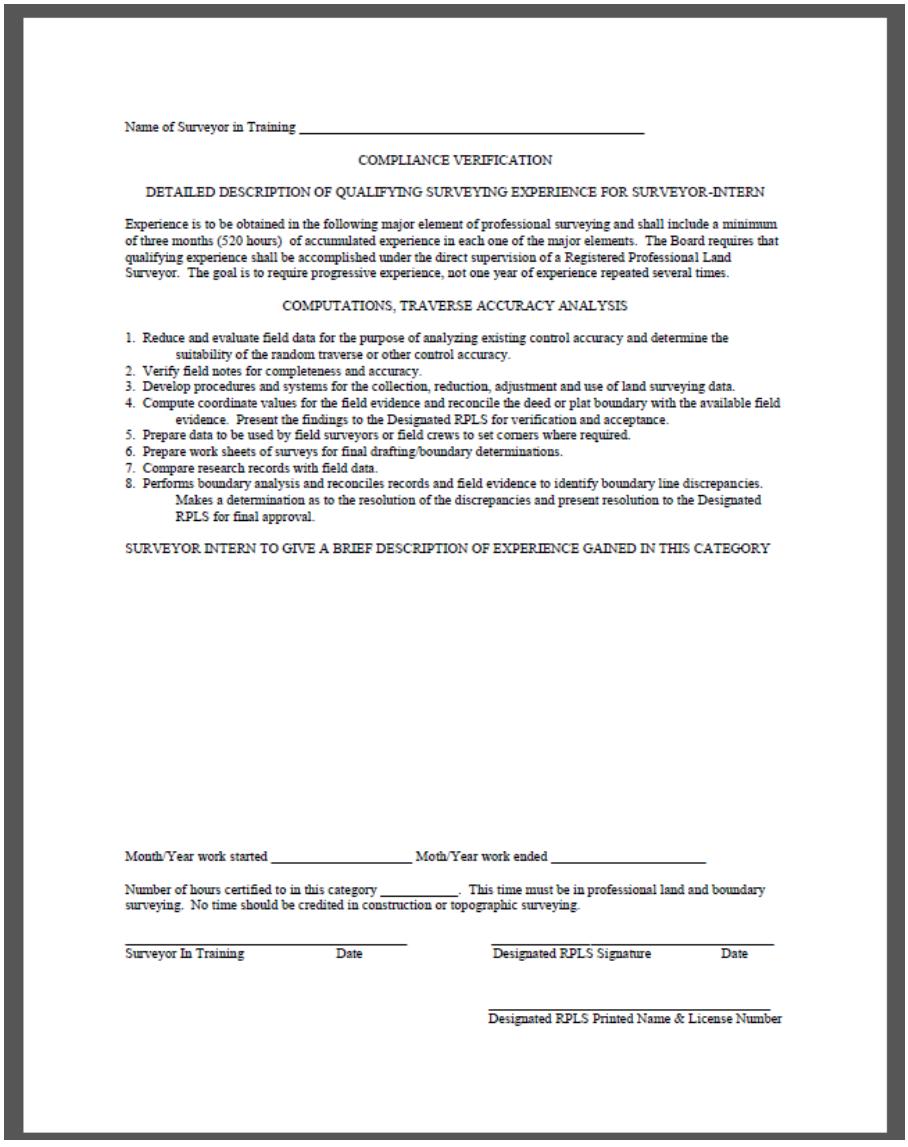
Date		Numbered Answers must correspond to Questions above Any Additional information should be made by attachments	Time (Years and Months)		
From Month Day Year	To Month Day Year		(1) Total Time (Actual) Yrs. Mos.	(2) In Sub- Professional Work (Actual) Yrs. Mos.	(3) In Responsible Charge Work (Actual) Yrs. Mos.
		1. 2. 3. 4. 5. 6. 7.			

- The RPLS application allows for multiple pages, but you should be formatting your work experience to be short and to the point. This is not a cut-and-paste of your professional resume.

- The RPLS application is looking for Responsible Charge Time with the full understanding that some of your time at work is sub-professional work.

- There is no page limit – minimum or maximum – for the RPLS application. You must simply write enough and in enough detail so that the RPLS under whom you worked would be willing to defend your application to the Board.

III. **Third,** the major difference between the SIT application and the RPLS application is the requirement to submit **Compliance Verification Forms**, like the one pictured here.



Name of Surveyor in Training _____

COMPLIANCE VERIFICATION

DETAILED DESCRIPTION OF QUALIFYING SURVEYING EXPERIENCE FOR SURVEYOR-INTERN

Experience is to be obtained in the following major element of professional surveying and shall include a minimum of three months (520 hours) of accumulated experience in each one of the major elements. The Board requires that qualifying experience shall be accomplished under the direct supervision of a Registered Professional Land Surveyor. The goal is to require progressive experience, not one year of experience repeated several times.

COMPUTATIONS, TRAVERSE ACCURACY ANALYSIS

1. Reduce and evaluate field data for the purpose of analyzing existing control accuracy and determine the suitability of the random traverse or other control accuracy.
2. Verify field notes for completeness and accuracy.
3. Develop procedures and systems for the collection, reduction, adjustment and use of land surveying data.
4. Compute coordinate values for the field evidence and reconcile the deed or plat boundary with the available field evidence. Present the findings to the Designated RPLS for verification and acceptance.
5. Prepare data to be used by field surveyors or field crews to set corners where required.
6. Prepare work sheets of surveys for final drafting/boundary determinations.
7. Compare research records with field data.
8. Performs boundary analysis and reconciles records and field evidence to identify boundary line discrepancies. Makes a determination as to the resolution of the discrepancies and present resolution to the Designated RPLS for final approval.

SURVEYOR INTERN TO GIVE A BRIEF DESCRIPTION OF EXPERIENCE GAINED IN THIS CATEGORY

Month/Year work started _____ Moth/Year work ended _____

Number of hours certified to in this category _____. This time must be in professional land and boundary surveying. No time should be credited in construction or topographic surveying.

_____ _____
Surveyor In Training Date Designated RPLS Signature Date

_____
Designated RPLS Printed Name & License Number

- **Five separate Compliance Verification Forms must be submitted** – each form is specific to each of the five areas specific to an RPLS and is available on the TXLS website.

- The RPLS application requires **4,000 hours** in each of five competency areas. This is the one place in the SIT and RPLS application that references hours instead of months/years, so it may be confusing to some applicants. **It is up to you and your RPLS to determine the amount of time dedicated to these five areas.**

    - Each of the five areas requires at least 3 months of experience, which is generally equivalent to 480 hours.
    - Only one of the five areas has a maximum. Only 1 year – or about 2,080 hours – of Field Experience will be accepted.
    - A standard work year at TxDOT is 2,080 hours, but sub-professional work, sick time, vacations, and other duties likely reduce that number. It is not accurate to simply conclude that two years as an SIT "on the job" has resulted in the 4,000 hours needed for the RPLS application.
    - In all cases, the RPLS who is signing the Compliance Verification Form is indemnifying himself/herself as much as you are, so be prepared to defend your submission.

IV. **Fourth,** you follow the current instructions at the TBPLS/TXLS website regarding submission of the application and associated fees. Expect to print out, hand enter, copy and mail the finished application to TBPLS/TXLS in Austin.

V. **Fifth**, you should strive for overall clarity in the Work Experience section and the Compliance Verification Forms. State in detail what you personally performed and what made it specific to survey work and then specific to the field.

    - **Appendix B** includes examples of journals and a completed Work Experience section.

Application Reviews

The real professional burden for both the SIT application and the RPLS exam application lies with the Registered Professional Land Surveyors who are listed on your application.

While you are a newer professional who is not expected to know the nuances and intricacies of your chosen profession, the RPLS' you've worked under are experts in the field. As such, they have as much of an obligation as you do to ensure your application is ready for the Board.

Allow yourself time for all of the RPLS' you've listed to see what you've written. Consider their suggested revisions to the application prior to submitting the form to TXLS and look to your current RPLS for the final approval as to when you should submit your application.

In summary, your career hinges upon the experience gained by participating in the various project assignments at TxDOT. Consider each new assignment an opportunity to build your experience base in a manner that will benefit your progression at TxDOT and apply toward becoming a professional.

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Section 7:

Continuing Education and Professional Organizations

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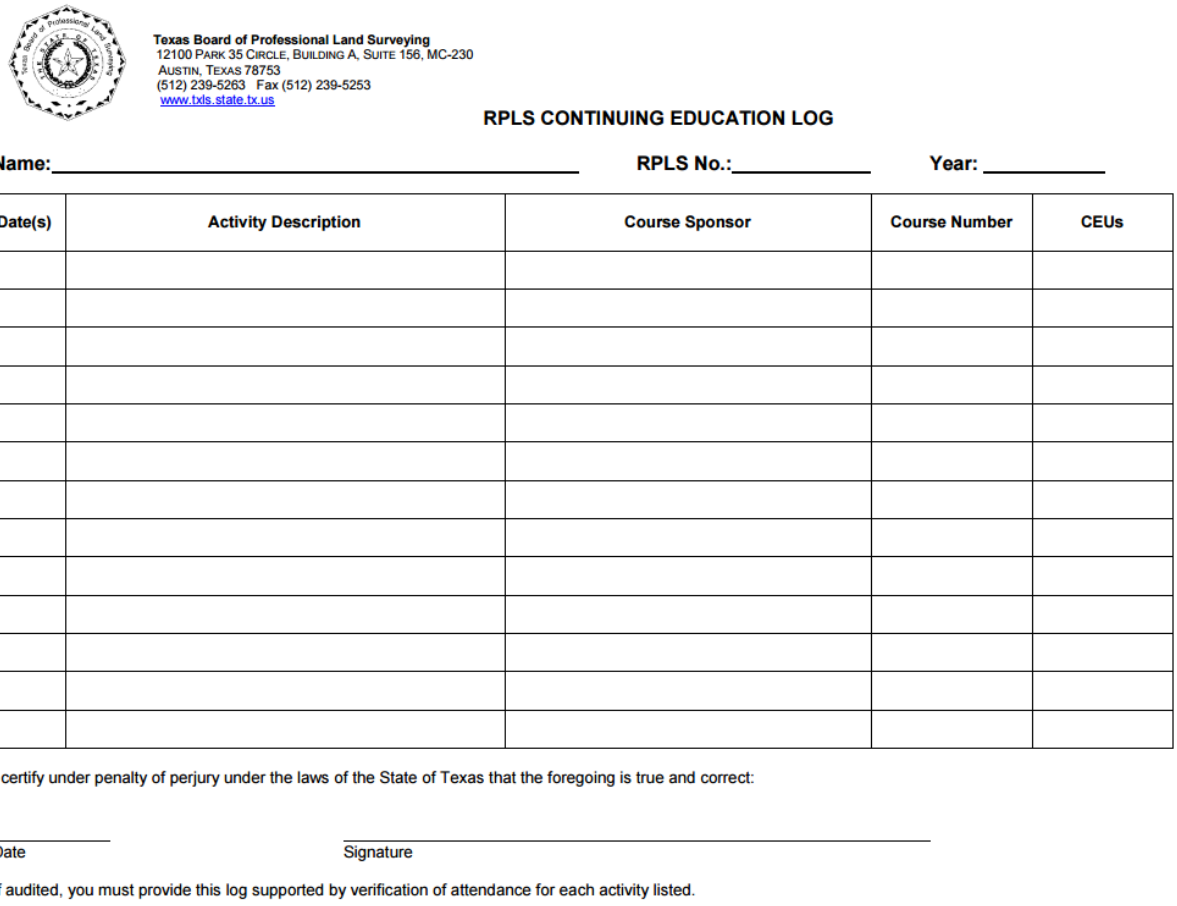
Continuing Education Requirements

Every surveyor licensed by the Board must complete a total of twelve (12) hours of Continuing Education Units (CEUs) in order to renew their licenses annually – three (3) of the units being in ethics or the Board's Act and Rule. The CEU requirement must be met every year and cannot be carried over from any previous year. TxDOT surveyors have many opportunities to obtain their continuing education requirements through conferences, seminars, training courses, and other technical presentations.

- One contact (or clock) hour of training is generally equivalent to one CEU.
- Three (3) of the units must be approved courses over the Rules or in ethics.
- The Board allows four (4) hours of self-directed study in a topic related to the practice of surveying. If you have utilized self-directed study to meet part of your required 12 hours necessary for registration renewal, please document the amount of self-directed study in writing including:
  - The date(s) of study, the number of hours claimed, your topic goals, the resources used, and a short summary of the outcome of your study.
  - You may complete the Self-directed Study form or create your own form to provide to the Board in the event of a Continuing Education audit.
  - Examples of acceptable sources for self-directed study include: Surveying or technical text books used in university or college surveying curriculum, Boundary law court cases (such as the court cases outlined in the Candidate Guide or found on the TBPLS website under boundary law legal principles), Ethics courses, Project management or business management materials, Professional Surveying Practices Act and TBPLS Rules, Peer-reviewed published professional/technical papers such as the ACSM Journal, Surveying and Land Information Science, Cartography, and Geographic Information Science
  - Examples of unacceptable sources for self-directed study would include: Magazines such as P.O.B., Professional Surveyor, GPS World, or The Texas Surveyor.
  - Published articles can count as CEUs when peer-reviewed.

TxDOT Supervisors are authorized to approve training expenses in support of your CEUs. If approved, submit a completed Form 1750, Approval for Out-of-Agency Training or Conferences, when submitting an expense report (See Appendix C for more details).

- "Government Code Sec. 656.047. PAYMENT OF PROGRAM EXPENSES. (a) Except as provided by this section or other law, a state agency may spend public funds as appropriate to pay the salary, tuition and other fees, travel and living expenses, training stipend, expense of training materials, and other necessary expenses of an instructor, student, or other participant in a training or education program."



Texas Board of Professional Land Surveying
12100 Park 35 Circle, Building A, Suite 156, MC-230
Austin, Texas 78753
(512) 239-5263 Fax (512) 239-5253
www.txls.state.tx.us

RPLS CONTINUING EDUCATION LOG

Name:_____ **RPLS No.:**_____ **Year:** _____

Date(s)	Activity Description	Course Sponsor	Course Number	CEUs

I certify under penalty of perjury under the laws of the State of Texas that the foregoing is true and correct:

Date Signature

If audited, you must provide this log supported by verification of attendance for each activity listed.

An example RPLS Continuing Education Log downloaded from txls.texas.gov

Professional Organizations

Your participation in professional organizations provides opportunities for professional development. These groups often have technical presentations acceptable for continuing education in their regular meetings. Examples of typical organizations include:

- Texas Society of Professional Surveyors (TSPS)
- American Society of Civil Engineers - Utility Engineering and Surveying (ASCE/UES)
- International Right of Way Association (IR/WA)

Be aware that while TxDOT may pay for training-related expenses like CEU courses, per above, professional memberships are uniquely covered by a different statute of Texas' Government Code (See Appendix C for more details).

Should you decide to request your supervisor approve a payment or reimbursement for a membership, your District Engineer or Division Director will need to request approval from the Chief Financial Officer or the Executive Director.

- "GC Sec. 2113.104. MEMBERSHIPS IN AND DUES FOR PROFESSIONAL ORGANIZATIONS. (a) Except as provided by Subsection (b), a state agency may not use appropriated money to pay for membership in or dues for a professional organization unless the administrative head of the agency, or that person's designee, first reviews and approves the expenditure."

Section 8:

Putting It All Together

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Summary of Expectations

Now that you've had an opportunity to look at the various aspects of professional development on the path to RPLS, let's see how mentoring, experience, training, education, and licensure will serve as building blocks for a career as a surveyor at TxDOT.

The table below is a summary of recommendations for the first four years:

Building Block	Year 1	Year 2	Year 3	Year 4 through licensure
Mentoring and Experience	Mentor assigned, plan for annual TSPS meetings, Perform distinct job assignments under guidance of supervisor and RPLS			
Training & Education	Exam Prep Course When Applicable, complete required 32 hours of course work, AA/AAS/BA or BS degrees & Recommended training courses.	Exam Prep Course When Applicable, complete required 32 hours of course work, AA/AAS/BA or BS degrees & Recommended training courses	Exam Prep Course When Applicable, complete required 32 hours of course work, AA/AAS/BA or BS degrees & Recommended training courses.	Exam Prep Course When Applicable & Recommended training courses
Certification and Licensure	Keep a journal of work experience. Complete SIT prep course & take SIT exam when eligible.	Keep a journal of work experience. Complete SIT prep course & take SIT exam when eligible.	Keep a journal of work experience. Complete SIT prep course & take SIT exam when eligible, Complete RPLS prep course and take RPLS exam when eligible.	Keep a journal of work experience. Complete SIT prep course & take SIT exam when eligible, Complete RPLS prep course and take RPLS exam when eligible.

Your career with TxDOT is flexible; however, you should make every attempt to meet or exceed the minimum requirements and guidelines shown above so that you will be prepared to take on the professional challenges that await you.

Establishing Career Goals

This document can only serve as an outline for you to follow as you plan your future at TxDOT. You must decide for yourself during these first few years where you would like to see yourself in the years to come and begin establishing career goals.

- **The first step** is to determine the best sources of information to guide you in the process. As soon as you begin working at TxDOT, seek assistance from your supervisor, RPLS, and mentor. Discuss with them your options for career development and solicit their assistance in achieving your personal and professional goals.
- **The second step** is to take advantage of as many varied opportunities as you can so that you gain experience in a wide variety of job assignments. These experiences will provide you with a solid understanding of TxDOT activities.
- **The third step** is to embrace the challenges of each new assignment. Training through formal education and a variety of job assignments are essential to your preparation as surveyor.
- **The fourth step** is to continually evaluate your progress. Assess your experience, your training, and the coaching you have received. Determine if you are headed in the right direction – take corrective action early and seek guidance to help you make decisions.

The building blocks of TxDOT's Professional Surveyor Career Development Program fit together to help provide you with the information, experience, training, and education necessary to make solid career decisions.

Find ways to balance your career with other essential elements in your life: family life, social needs, personal changes, etc. This is a continuous process. A successful TxDOT career is based on continual self-appraisal and a clear vision.

Remember:

- Take full advantage of the resources available.
- Challenge yourself and your department to take it to the next highest level.
- Take someone along on the journey – become a Mentor to another SIT.
- Take joy in your success.

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Appendices

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Appendix A
Selections from the Professional Land Surveying Practices Act

OCCUPATIONS CODE

TITLE 6. REGULATION OF ENGINEERING, ARCHITECTURE, LAND SURVEYING, AND RELATED PRACTICES

SUBTITLE C. REGULATION OF LAND SURVEYING AND RELATED PRACTICES

CHAPTER 1071. LAND SURVEYORS

SUBCHAPTER A. GENERAL PROVISIONS

Sec. 1071.001. SHORT TITLE. This chapter may be cited as the Professional Land Surveying Practices Act.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.002. DEFINITIONS. In this chapter:

(1) "Board" means the Texas Board of Professional Land Surveying.

(2) "Commissioner" means the commissioner of the General Land Office.

(3) "Delegated responsible charge" means the direct control of professional surveying work performed under the supervision of a registered professional land surveyor.

(4) "Land surveyor" means a registered professional land surveyor or licensed state land surveyor.

(5) "Licensed state land surveyor" means a surveyor licensed by the board to survey land in which the state or the permanent school fund has an interest or perform other original surveys for the purpose of filing field notes in the General Land Office.

(6) "Professional surveying" means the practice of land, boundary, or property surveying or other similar professional practices. The term includes:

(A) performing any service or work the adequate performance of which involves applying special knowledge of the principles of geodesy, mathematics, related applied and physical sciences, and relevant laws to the measurement or location of sites, points, lines, angles, elevations, natural features, and existing man-made works in the air, on the earth's surface, within underground workings, and on the beds of bodies of water to determine areas and volumes for:

(i) locating real property boundaries;

(ii) platting and laying out land and subdivisions of land; or

(iii) preparing and perpetuating maps, record plats, field note records, easements, and real property descriptions that represent those surveys; and

(B) consulting, investigating, evaluating, analyzing, planning, providing an expert surveying opinion or testimony, acquiring survey data, preparing technical reports, and mapping to the extent those acts are performed in connection with acts described by this subdivision.

(7) "Registered professional land surveyor" means a person registered by the board as a registered professional land surveyor.

(8) "State land surveying" means the science or practice of land measurement according to established and recognized methods engaged in as a profession or service for the public for compensation and consisting of the following activities conducted when the resulting field notes or maps are to be filed with the General Land Office:

(A) determining by survey the location or relocation of original land grant boundaries and corners;

(B) calculating area and preparing field note descriptions of surveyed and unsurveyed land or land in which the state or the permanent school fund has an interest; and

(C) preparing maps showing the survey results.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.
Amended by:
Acts 2005, 79th Leg., Ch. 611 (H.B. 2179), Sec. 1, eff. June 17, 2005.

SUBCHAPTER F. REGISTRATION, LICENSING, AND CERTIFICATION REQUIREMENTS

Sec. 1071.251. REGISTRATION, LICENSE, OR CERTIFICATE REQUIRED. (a) In this section, "offer to practice" means to represent by verbal claim, sign, letterhead, card, or other method that a person is registered or licensed to perform professional surveying in this state.

(b) A person may not engage in the practice of professional surveying unless the person is registered, licensed, or certified as provided by this chapter.

(c) A person may not offer to practice professional surveying in this state unless the person is registered or licensed as provided by this chapter.

(d) A person may not use in connection with the person's name or use or advertise a title or description that tends to convey the impression that the person is a professional land surveyor unless the person is registered or licensed under this chapter.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.252. APPLICATION REQUIREMENTS. (a) An applicant for certification as a surveyor-in-training, registration as a registered professional land surveyor, or licensing as a licensed state land surveyor must file a written application with the board accompanied by an application fee in an amount determined by the board.

(b) An application must be made on a form prescribed and furnished by the board and contain statements that show the applicant's education and experience. The application must contain a detailed summary of the applicant's education and experience and references from at least three registered professional land surveyors having personal knowledge of the applicant's surveying experience. The board shall accept an application that meets board requirements regardless of whether the application is notarized.

(c) After the board determines that the applicant is qualified to take the appropriate section of the examination under Section 1071.256, the board shall set the examination section the applicant is approved to take and notify the applicant of the examination section and of the time and place of the examination. The applicant may take the examination section on payment of an examination fee in an amount determined by the board.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003. Amended by Acts 2003, 78th Leg., ch. 16, Sec. 15, eff. Sept. 1, 2003.

Sec. 1071.253. SURVEYOR-IN-TRAINING CERTIFICATE. (a) An applicant for a surveyor-in-training certificate must:

(1) have earned a bachelor of science degree in surveying from an accredited institution of higher education;

(2) have:

(A) earned a bachelor's degree from an accredited institution of higher education that included at least 32 semester hours in a combination of courses acceptable to the board in:

(i) civil engineering;

(ii) land surveying;

(iii) mathematics;

(iv) photogrammetry;

(v) forestry;

(vi) land law; or

(vii) the physical sciences; and

(B) completed at least one year of experience acceptable to the board in delegated responsible charge as a subordinate to a registered professional land surveyor actively engaged in professional surveying;

(3) have:

(A) earned an associate degree in surveying from an accredited institution of higher education; and

(B) completed at least two years of experience acceptable to the board in delegated responsible charge as a subordinate to a registered professional land surveyor actively engaged in professional surveying;

(4) have:

(A) successfully completed a course of instruction consisting of 32 semester hours in land surveying or the equivalent number of semester hours in board-approved courses related to surveying; and

(B) completed at least two years of experience acceptable to the board in delegated responsible charge as a subordinate to a registered professional land surveyor actively engaged in professional surveying; or

(5) have:

(A) graduated from an accredited high school;

(B) completed at least four years of experience acceptable to the board in delegated responsible charge as a subordinate to a registered professional land surveyor actively engaged in professional surveying; and

(C) provided evidence satisfactory to the board that the applicant is self-educated in professional surveying.

(b) On proof that an applicant has the qualifications required by Subsection (a), the board shall allow the applicant to take an examination consisting of parts of the examination under Section 1071.256, the contents of which are as determined or approved by the board.

(c) The board shall issue a surveyor-in-training certificate to an applicant who passes the applicable parts of the examination taken under Subsection (b). The certificate is valid for eight years.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Amended by:

Acts 2007, 80th Leg., R.S., Ch. 53 (S.B. 1340), Sec. 1, eff. May 10, 2007.

Sec. 1071.254. QUALIFICATIONS FOR REGISTRATION AS REGISTERED PROFESSIONAL LAND SURVEYOR. (a) An applicant for registration as a registered professional land surveyor must:

(1) hold a certificate as a surveyor-in-training;

(2) have at least two years of experience satisfactory to the board as a surveyor-in-training in performing surveying in delegated responsible charge as a subordinate to a surveyor registered or licensed to engage in the practice of surveying in this state or in another state having registration or licensing requirements equivalent to the requirements of this state; and

(3) if the application is filed after January 1, 2003, have earned a bachelor's degree from an accredited institution of higher education that included at least 32 semester hours in a combination of courses acceptable to the board in:

(A) civil engineering;

(B) land surveying;

(C) mathematics;

(D) photogrammetry;

(E) forestry;

(F) land law; or

(G) the physical sciences.

(b) An applicant is entitled to registration as a registered professional land surveyor if the applicant meets the qualifications prescribed by Subsection (a) and is approved to take and passes the required sections of the examination prescribed under Section 1071.256.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.255. QUALIFICATIONS FOR LICENSING AS LICENSED STATE LAND SURVEYOR; OATH. (a) A registered professional land surveyor is entitled to be licensed as a licensed state land surveyor if the person is approved to take and passes the appropriate sections of the examination prescribed under Section 1071.256.

(b) The board may not issue a license to a licensed state land surveyor until the applicant takes the official oath stating that the person will faithfully, impartially, and honestly perform all the duties of a licensed state land surveyor to the best of the person's skill and ability in all matters in which the person may be employed.

(c) The board may not issue a license as a licensed state land surveyor to a person residing outside of this state.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.256. EXAMINATION. (a) The board shall prescribe the scope of the written examination and examination procedures with special reference to the applicant's ability in order to protect the public safety, welfare, and property rights.

(b) The examination for an applicant for registration as a registered professional land surveyor must be developed and given as provided by this chapter under board rules designed to determine the knowledge and ability of the applicant.

(c) The examination for an applicant for licensing as a licensed state land surveyor must be developed under board rules and include examination on:

(1) the theory of surveying;

(2) the law of land boundaries;

(3) the history and functions of the General Land Office; and

(4) other matters pertaining to surveying as determined by the board.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.257. EXAMINATION RESULTS. (a) Not later than the 30th day after the date a person takes a licensing examination, the board shall notify the person of the results of the examination.

(b) If the examination is graded or reviewed by a testing service:

(1) the board shall notify the person of the results of the examination not later than the 14th day after the date the board receives the results from the testing service; and

(2) if notice of the examination results will be delayed for longer than 90 days after the examination date, the board shall notify the person of the reason for the delay before the 90th day.

(c) If requested in writing by a person who fails an examination administered under this chapter, the board shall furnish the person with an analysis of the person's performance on the examination. The analysis shall be provided in a summary form that does not compromise the integrity of the examination.

(d) The board may require a testing service to notify a person of the results of the person's examination.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003. Amended by Acts 2003, 78th Leg., ch. 16, Sec. 16, eff. Sept. 1, 2003.

Sec. 1071.258. REEXAMINATION; FEE. An applicant who fails an examination may apply to take a subsequent examination by filing an updated application and paying an additional examination fee set by the board.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003. Amended by Acts 2003, 78th Leg., ch. 16, Sec. 17, eff. Sept. 1, 2003.

Sec. 1071.259. REGISTRATION OF OUT-OF-STATE SURVEYORS. (a) The board may waive any registration requirement for an applicant who holds a license from another state having registration or licensing requirements substantially equivalent to the registration requirements of this state.

(b) The board may issue a certificate of registration as a registered professional land surveyor to an applicant under this section who meets all waived and unwaived registration requirements and who:

(1) applies to the board for a certificate of registration;

(2) pays a fee set by the board; and

(3) passes an examination on Texas surveying.

(c) The board shall determine the contents of the examination under Subsection (b)(3). The examination may not exceed four hours in duration.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003. Amended by Acts 2003, 78th Leg., ch. 16, Sec. 18, eff. Sept. 1, 2003.

Sec. 1071.260. REGISTRATION NUMBER; FORM OF CERTIFICATE OR LICENSE. (a) The board shall issue to each registered professional land surveyor a registration number that may not be assigned to or used by any other surveyor. The number must be on the certificate of registration and recorded in the board's permanent records and is the surveyor's registration number for use on all official documents.

(b) Each certificate of registration and license issued by the board must show the full name of the registration holder or license holder and shall be signed by the presiding officer and the executive director of the board.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.261. DISPLAY OF CERTIFICATE AND LICENSE. (a) An original or renewal certificate of registration or license is evidence that the person whose name and registration number appear on the document is qualified to practice as a registered professional land surveyor or licensed state land surveyor.

(b) A person holding a certificate of registration or license shall display the certificate or license at the person's place of business or practice. The person shall be prepared to substantiate that the certificate or license has been renewed for the current year.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.262. REPLACEMENT OF REVOKED, LOST, OR DESTROYED CERTIFICATE OR LICENSE. The board may issue, on payment of a fee set by the board and subject to board rules, a new certificate of registration or license to replace a certificate or license that has been revoked, lost, destroyed, or mutilated.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003. Amended by Acts 2003, 78th Leg., ch. 16, Sec. 19, eff. Sept. 1, 2003.

Sec. 1071.263. INACTIVE STATUS. (a) A registered professional land surveyor may request inactive status at any time before the expiration date of the person's certificate of registration. A registration holder on inactive status may not practice surveying.

(b) A registration holder on inactive status must pay an annual fee set by the board.

(c) A registration holder on inactive status is not required to:

(1) comply with the professional development requirements adopted by the board; or

(2) take an examination for reinstatement to active status.

(d) To return to active status, a registration holder on inactive status must file with the board a written notice requesting reinstatement to active status.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003. Amended by Acts 2003, 78th Leg., ch. 16, Sec. 20, eff. Sept. 1, 2003.

SUBCHAPTER H. PRACTICE OF LAND SURVEYING

Sec. 1071.351. PERFORMANCE OF LAND SURVEYING; OFFICIAL SEAL. (a) In this section, "employee" means a person who receives compensation for work performed under the direct supervision of a land surveyor.

(b) On receipt of a certificate of registration, a registered professional land surveyor shall obtain an authorized seal bearing the person's name and registration number and the title "Registered Professional Land Surveyor."

(c) Each licensed state land surveyor shall obtain a seal of office. The seal must contain the license holder's official title, "Licensed State Land Surveyor," around the margin and the word "Texas" between the points of the star in the seal. A licensed state land surveyor shall attest with the seal all official acts authorized under law. An act, paper, or map of a licensed state land surveyor may not be filed in the county records of the General Land Office unless it is certified to under the surveyor's seal.

(d) A registration holder or license holder may not affix the person's name, seal, or certification to any plat, design, specification, or other professional surveying work that is prepared by a person who is not registered

or licensed under this chapter unless the work is performed by an employee under the direct supervision of the registration holder or license holder.

(e) A registration holder or license holder may not allow a person who is not registered or licensed under this chapter to exert control over the end product of professional surveying work.

(f) If professional surveying is performed as a joint venture of an association of two or more firms, each firm shall use the seal of the surveyor having primary responsibility for the venture.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.352. SURVEYING BY BUSINESS ENTITY. (a) An association, partnership, or corporation may not offer professional surveying services unless the entity is registered with the board and a registered professional land surveyor is employed full-time where the services are offered.

(a-1) The board shall adopt rules prescribing the requirements for the registration of an entity described by Subsection (a).

(a-2) The board may refuse to issue or renew and may suspend or revoke the registration of a business entity and may impose an administrative penalty against the owner of a business entity for a violation of this chapter by an employee, agent, or other representative of the entity, including a registered professional land surveyor employed by the entity.

(b) A registered professional land surveyor or licensed state land surveyor may organize or engage in any form of individual or group practice of surveying allowed by state statute. The individual or group practice must properly identify the registered professional land surveyor or licensed state land surveyor who is responsible for the practice.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.
Amended by:

Acts 2007, 80th Leg., R.S., Ch. 1077 (H.B. 2820), Sec. 1, eff. June 15, 2007.

Sec. 1071.353. PRACTICE UNDER ASSUMED NAME. A person engaging in the practice of surveying in this state under any business title other than the real

name of one or more persons authorized to engage in public or state land surveying, whether individually or as an association, partnership, or corporation, shall file with the board, in the manner prescribed by the board, a certificate stating the full name and place of residence of each person engaging in the practice and the place, including the street address, city, and zip code, where the practice or business is principally conducted.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.354. JURISDICTION OF LICENSED STATE LAND SURVEYORS. A licensed state land surveyor may perform surveys under Section 21.011, Natural Resources Code, and is subject to the commissioner's direction in matters of land surveying in cases that come under the supervision of the commissioner. The jurisdiction of the license holder is coextensive with the limits of the state.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.355. LICENSED STATE LAND SURVEYOR AS AGENT OF STATE. A licensed state land surveyor is an agent of this state when acting in that official capacity.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.356. RESIGNATION OF LICENSED STATE LAND SURVEYOR. (a) A licensed state land surveyor may resign at any time by filing a written resignation with the board. On receipt of the resignation, the board shall inform the General Land Office.

(b) A licensed state land surveyor who resigns under this section is not entitled to reinstatement of the person's license. To obtain a new license, the person must meet the requirements for an original license.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.357. COUNTY SURVEYORS. (a) A licensed state land surveyor may hold office as a county surveyor. If elected, the person must qualify as provided by law for county surveyors.

(b) The election of a licensed state land surveyor as county surveyor does not limit the jurisdiction of the license holder to that county, and the election of a county surveyor for any particular county does not prevent any licensed state land surveyor from performing the duties of a surveyor in that county.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.358. COURT ORDER FOR LICENSED STATE LAND SURVEYOR TO CROSS LAND. (a) A licensed state land surveyor engaged in surveying in the person's official capacity who is denied permission to cross land owned by a private party is entitled to a court order to enforce the license holder's authority to cross the land.

(b) The attorney general shall promptly apply for an order under this section from the district court. Venue for the action is in the county in which the land is located.

(c) The court shall grant the order on proof that the person is licensed under this chapter and acting in the person's official capacity.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.
Amended by:

Acts 2007, 80th Leg., R.S., Ch. 158 (S.B. 1634), Sec. 1, eff. May 21, 2007.

Sec. 1071.3585. COURT ORDER FOR REGISTERED PROFESSIONAL LAND SURVEYOR TO CROSS LAND. (a) A registered professional land surveyor engaged in surveying who is denied permission to cross land owned by a person or entity may seek a court order authorizing the surveyor to cross the land.

(b) A registered professional land surveyor may apply for an order under this section from the district court. Venue for the action is in the county in which the land is located.

(c) If the registered professional land surveyor holds office as a county surveyor and is engaged in surveying in the person's official capacity, the county attorney may apply for an order under this section.

(d) The court shall grant the order on proof that:

(1) the person is a registered professional land surveyor acting in the person's official capacity as a county surveyor; or

(2) the person is a registered professional land surveyor and the issuance of a court order authorizing the person to cross the land is in the public's best interest.

Added by Acts 2007, 80th Leg., R.S., Ch. 158 (S.B. 1634), Sec. 2, eff. May 21, 2007.

Sec. 1071.359. LICENSED STATE LAND SURVEYOR FIELD NOTES. (a) Official field notes made by a licensed state land surveyor must be signed by the surveyor, followed by the designation "Licensed State Land Surveyor."

(b) Field notes and plats prepared by a licensed state land surveyor must conform to Sections 21.041 and 21.042, Natural Resources Code.

(c) Field notes made by a licensed state land surveyor in any county in this state are admissible in evidence.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.360. DISCOVERY OF UNDISCLOSED LAND. A licensed state land surveyor who discovers an undisclosed tract of public land shall:

(1) make that fact known to any person who has the tract enclosed; and

(2) forward a report of the existence of the tract and the tract's acreage to the commissioner.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

Sec. 1071.361. ACCESS TO COUNTY SURVEYOR RECORDS. (a) A licensed state land surveyor is entitled to access to a county surveyor's records for information and examination.

(b) An examination fee may not be charged if the investigation of the records is for the purpose of:

(1) making a survey of public land under the law regulating the sale or lease of public land; or

(2) identifying and establishing the boundaries of public land.

(c) A licensed state land surveyor who examines records under this section shall comply with any regulations prescribed by the county surveyor or the commissioners court for protecting and preserving the records.

Added by Acts 2001, 77th Leg., ch. 1421, Sec. 1, eff. June 1, 2003.

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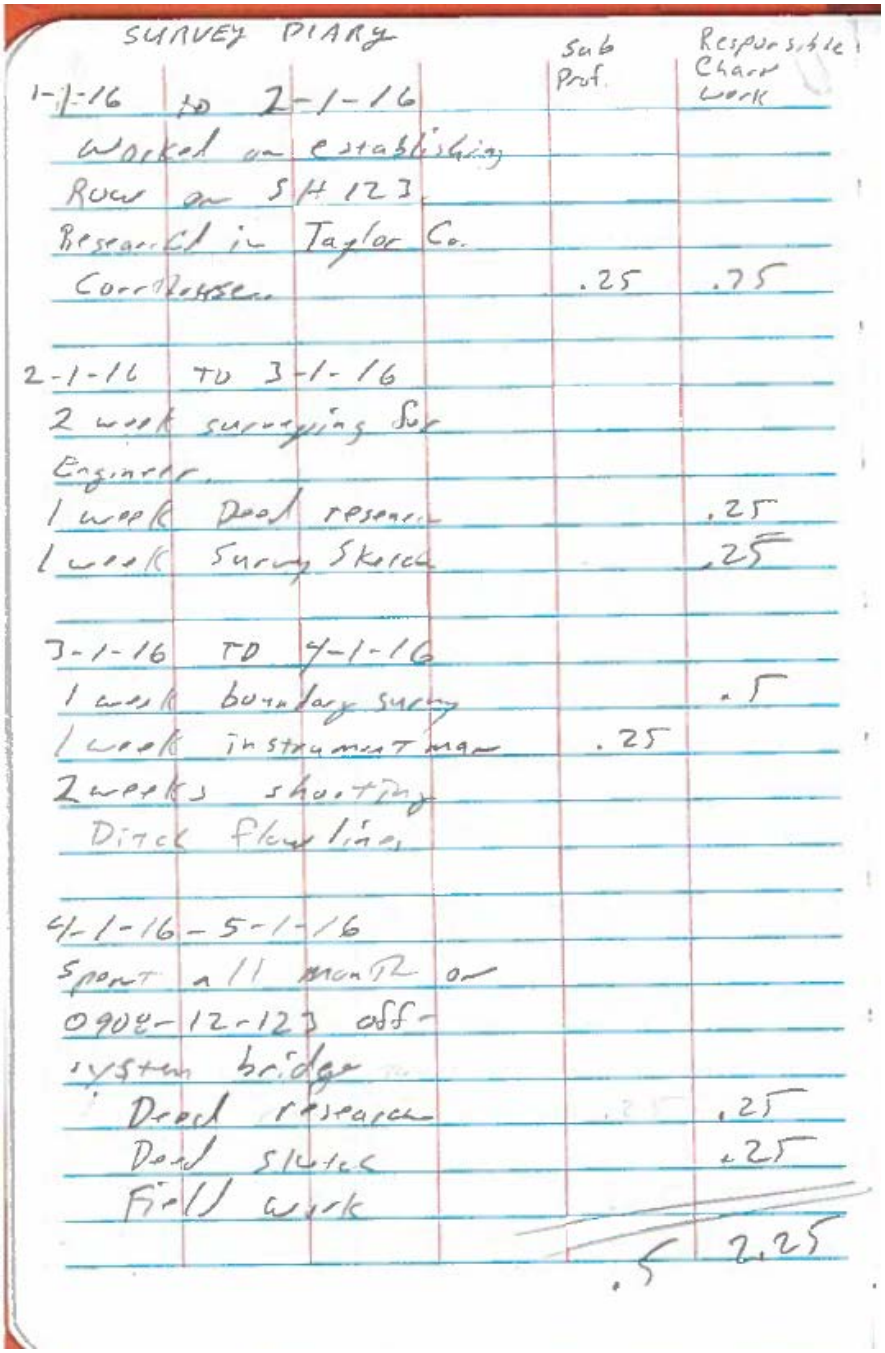
Appendix B

Examples of Journal Entries & Work Experience

The following example is from an RPLS applicant's work journal later used to write an RPLS application for submission to the Texas Board of Professional Land Surveyors (TBPLS):



SURVEY DIARY

	Sub Prof.	Responsible Charge Work
1-1-16 TO 2-1-16		
Worked on establishing		
Row on SH 123.		
Research in Taylor Co.		
Corrections.	.25	.75
2-1-16 TO 3-1-16		
2 week surveying for		
Engineer.		
1 week Deed research		.25
1 week Survey Sketch		.25
3-1-16 TO 4-1-16		
1 week boundary survey		.5
1 week instrument man	.25	
2 weeks shooting		
Ditch flow lines		
4-1-16 - 5-1-16		
Spent all month on		
0902-12-123 off-		
system bridge		
Deed research		.25
Deed Sketch		.25
Field work		
	.5	2.25

This journal documents the dates, the location, the specific survey tasks, the sub-professional time, and the responsible charge time.

You can see "deed research," "survey sketch," and "shooting ditch flowlines" among other survey activities listed in this one journal page.

This journal was then used to make the draft RPLS application on the next page.

Date From Month Day Year	Date To Month Day Year	Numbered Answers must correspond to Questions above Any Additional information should be made by attachments	Time (Years and Months) (1) Total Time (Actual) Yrs. Mos.	(2) In Sub-Professional Work (Actual) Yrs. Mos.	(3) In Responsible Charge Work (Actual) Yrs. Mos.
1-1-16	4-1-16	1. TxDOT 2. Any Town 3. 1-1-16 Survey Tech 4. My Boss, RPLS 5. I worked on a TxDOT Survey Crew where I preformed field work, deed research and sketched boundaries under an RPLS 6. .5 mos / 4 months = 12.5% 7. 2.25 mos / 4 mos = 56.25%	0 yrs 4 mos	0 yrs .5 mos	0 yrs 2.25 mos
Date From	Date To	Numbered Answers must correspond to Questions above	Time (Years and Months) (1)	(2)	(3)

The candidate's journal becomes section 5 of the Work Experience section of the application which reads: "I worked on a TxDOT Survey Crew where I performed field work, deed research and sketched boundaries under an RPLS."

You can also see from both the journal and the application that while the candidate was in this position for four months, he told TXLS that two weeks only 10 weeks of the four months met the criteria of Responsible Charge Work.

Appendix C

Cost & Time Charge Policy

Purpose

Cost and time charges are directed by policy where assistance is provided by the department in support of training for employees seeking to become Surveyors in Training and/or Registered Professional Land Surveyors.

Following is a summary of costs paid by the department:

- TxDOT pays tuition/fees and related expenses for training classes and exam refresher courses.
- TxDOT pays travel costs to training classes, exam refresher courses, and exam locations.
- TxDOT may pay for certification and license examinations, subject to supervisor approval and availability of funds.

Training, Refresher, and/or Exam Preparation Courses

TxDOT pays for the online LSIT and RPLS examination preparation courses as long as the program participant remains in the career program. Any additional exam preparation courses beyond the program may be authorized by the supervisor and is subject to availability of funds based on Texas Government Code Section 646.047 and TxDOT HR Policy Manual Chapter 2.

- The DE/DD may authorize paying tuition for other training or exam refresher courses including workshops offered by state universities or private companies that offer group classes from their overhead accounts.
    - The department will not pay for individual one-on-one classes like personal tutoring.
    - The DE/DD may allow an employee to attend these sessions during official work hours just as with any other TxDOT training.
    - Any tuition, travel, per diem, or compensatory time required may be authorized for reimbursement by the DE/DD as with any out-of-agency training.
    - Non-TxDOT training events shall be approved using eForm 1750, Approval for Out-of-Agency Training or Conferences.

Sec. 656.047. PAYMENT OF PROGRAM EXPENSES. (a) Except as provided by this section or other law, a state agency may spend public funds as appropriate to pay the salary, tuition and other fees, travel and living expenses, training stipend, expense of training materials, and other necessary expenses of an instructor, student, or other participant in a training or education program.

(b) For an administrator or employee of a state agency who seeks reimbursement for a training or education program offered by an institution of higher education or private or independent institution of higher education as defined by Section 61.003, Education Code, the agency may only pay the tuition expenses for a program course successfully completed by the administrator or employee at an accredited institution of higher education.

Added by Acts 1993, 73rd Leg., ch. 268, Sec. 1, eff. Sept. 1, 1993.
Amended by: Acts 2015, 84th Leg., R.S., Ch. 366 (H.B. 3337), Sec. 2, eff. September 1, 2015.

Human Resources Policy Manual – Effective Date 12/21/2015

Chapter 2: Training and Development

Section 1: Overview

The overall training program provides educational and professional development opportunities for employees to enhance their current work and prepare them for future roles with the Department. The program supports both internal and external models; the internal program is designed and implemented by internal staff, while the external program provides financial assistance to employees for educational opportunities outside the Department. Decisions regarding training opportunities will be made without regard to the employee's race, color, religion, sex, national origin, genetic information, citizenship or immigration status, disability, military status, or age.

Training Programs

District Engineers/Division Directors (DE/DD), their designees, supervisors, and managers will:

- Ensure all employees meet mandatory training requirements within prescribed time lines
- Use the performance management system for analyzing employee aptitudes and training requirements, as needed
- Focus on program activities that add value to the Department business and enable it to meet its strategic objectives, and
- Ensure all employees receive appropriate work-related training, education, licensing, and certification to meet job demands.

After verifying with HR that training courses cannot be supported by TxDOT internal resources, DE/DD's may recommend to HR that the Department contract with other agencies and private organizations to provide training. In all cases, TxDOT's resource for training needs is the Workforce Development section of the Human Resources Division.

Cost and Time Charges

Participants will use the following cost codes for Career Development Program expenses related to training:

Tuition fees, group study time, and exam preparation course attendance time:

PS Bus Unit:	Project #:	Activity	Source Unit:
60171	533402	IND	025

Course Travel Time:

PS Bus Unit:	Project #:	Activity	Source Unit:
60171	533402	IND	027

Travel

When travel distance from work location to class is more than 50 miles, the department pays hotel and meal expenses in accordance with the **TxDOT Travel Manual** for the examination preparation training classes while the participant is in the program.

The department does not pay for mileage for personal vehicle unless authorized by the supervisor. Employees may use a state vehicle when travel is needed and approved by the DE/DD.

In all cases, the participant should consult with the local travel coordinator before committing to travel.

Expenses for Exams

Participants are responsible for all costs associated with taking the certification or licensing exam, including exam fees and travel, unless approved by the supervisor and subject to availability of funds.

If approved by the supervisor and/or DE/DD, these items may be paid from the D/D overhead account:

- Exam expenses to include registration costs
- Exam travel time
- Exam time
- Travel expenses when taking exams

Memberships in Professional Organizations

Participants may find that a professional membership will support the goals of the program. Member discounts on training materials, discounts to training events, unique access to study groups, and other membership benefits may yield a cost savings for TxDOT, as supervisors are currently authorized to pay for these resources at full price.

That said, memberships in professional organizations are regulated by a unique provision of the Texas Government Code. If approved by the supervisor based on a cost savings business case, the DE/DD should seek e-mail approval from the CFO or Executive Director for permission to pay for the membership and the D/D should process it as it would any other expense.

Sec. 2113.104. MEMBERSHIPS IN AND DUES FOR PROFESSIONAL ORGANIZATIONS.
(a) Except as provided by Subsection (b), a state agency may not use appropriated money to pay for membership in or dues for a professional organization unless the administrative head of the agency, or that person's designee, first reviews and approves the expenditure.

(b) This section does not apply to a state library.

Added by Acts 1999, 76th Leg., ch. 1498, Sec. 4, eff. Sept. 1, 1999.

Work Schedule and Comp Time

While studying for and preparing for a professional certification is a considerable burden on an employee's time, it is TxDOT's expectation that program participants prioritize tasks in such a way that participation in the program does not lead to excessive overtime, compensatory time, or other "non-standard" time accumulation.

- Participants will adhere to department policies for reporting absences, tardiness, using leave, and recording time worked and paid leave taken on their time sheets.
- Participants may earn compensatory time for course attendance and travel time over 8 hours per day.

Supervisors may adjust work schedules to minimize compensatory time. Contact WFD for further assistance and guidance.

Reimbursement

Employees must reimburse the department for tuition, hotel, meal, and other expenses, excluding time charges, when they fail to adhere to the program training requirements as outlined in Form 2157, Survey Career Development Program Agreement. Employees are eligible for reconsideration to participate in program again, or the Engineering Assistant Career Development Program, after reimbursing the department.

Employees who leave the career development program and do not remain with the department for the required service time commitment outlined in Section 1 may be required to reimburse the department for costs associated with the exam prep courses taken while in the program. Should the employee remain with the department and fulfil their service time commitment, no reimbursement is required.

Support Resources and Reference Materials

D/D's may allocate support resources or purchase reference materials for participants. These may include, but are not limited to:

- The formation of study groups and making available time, equipment, and facilities for groups to meet and study together. The amount of individual or group study time allowed during normal work hours is at the discretion of the DE/DD.
- Appointment of a seasoned RPLS or other employee to mentor and coach study groups or individuals.
- Purchase of reference materials and equipment for study and preparation of examinations like flash cards, study apps, and even calculators.
- Designating a central depository for past and current exam preparation materials.
- Computer-based or online training courses to prepare students for the examinations.
- Use of TxDOT equipment.

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Appendix D

Professional Surveyor Career Development Program Forms

The below forms are uniquely associated with the Survey Assistant Career Development Program and used to document activities and progress.

Other TxDOT forms will be used when appropriate.

Form #	Form Title		Required	Optional	File location
2616	Professional Surveyor Career Development Program Agreement for SIT	Professional Surveyor Career Development Program Agreement for RPLS	X		E-Forms - template HR File - original WFD Employee D/D Supervisor
2617	Professional Surveyor Career Development Program Supervisor Review Checklist			X or as required by supervisor or D/D	E-Forms - template HR File - original WFD Employee D/D Supervisor

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Appendix E

Test Taking Strategies

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Source: Student Counseling & Resource Service-- University of Chicago Virtual Pamphlet Collection

Test Taking Strategies

Test Masters Information

From Dr. Haku Israni,

1. **Please arrive early on the date of the exam**
2. **Bring these items with you to the exam:**
   a. Documentation from TXLS
   b. Your ID
   c. Approved calculators
   d. One or two page summary sheets of formulas, conversion factors etc. for each subject – if allowed
3. **Read all questions carefully**
   a. Prioritize and do them according to your comfort level.
   b. Rate them 1 (easy), 2 (medium), 3 (hard and have no idea how to do).
   c. First do all easy questions. Then medium and only in the end hard questions.
   d. Every question is worth only one point.
   e. Initially, never waste time on hard questions.
4. **Keep track of time**
   a. By the end of the first two hours of each session you must answer at least twenty questions.
   b. Never… never… never get bogged down on any one question.
   c. Remember, every question in each session is worth only one point.
5. **Be very careful about the calculations and units**
   a. If you don't make any calculation or unit mistakes, you should pass the exam.
6. **Do not waste time**
   a. Unless you must, never redraw the figures.
   b. Do the minimum amount of writing required – you don't need to show your work in most cases, just get the right answer.
7. **Use the last ten minutes**
   a. To check that you have answered all the questions.
8. **When proctor calls "time", you must stop**
   a. If you don't, your test paper may be voided.
9. **Leave your mobile phone or other electronic devices in your car**
   a. You are not allowed to bring them in the exam room.
   b. You will be asked to leave if you have a cell phone or pager in the exam.

Test Taking Strategies – Santa Clara University

- **Plan your arrival so that you have plenty of time**.
- **Be sure to check your test taking material prior to leaving for the exam**. (Showing up for an exam late or without a pencil is a sure way to focus unfavorable attention to yourself.)
- **Read all directions**. Underline key words in the directions that give indication as to how your answers are to be recorded and how they should be worded.
- **Budget your time**. Survey the test to determine the type and number of questions to be answered. Determine where you will start on the test. Check yourself at 15 or 20 minute intervals to determine if you are progressing at an acceptable rate.
- **Be aware that you may have problems remembering from time to time**. If you find yourself blocking, move on to the next question.
- **Ask for help** in interpreting test questions which you do not understand.
- **Be aware of any negative statements you are telling yourself about the test**. Such statements as "I'm failing, I didn't study for this, and the test is too hard for me" are sure ways of increasing anxiety.
- **Do not be concerned with what the other students are doing**. (Another sure way of increasing anxiety is to tell yourself you are the only one having trouble or are the only one taking the exam.)
- **As a general rule answer the easy questions first**.

Answering Different Exam Questions

Multiple Choice

- Pay attention to qualifying words (e.g., always, never)
- Do not look for patterns.
- Read through the questions with the answer.
- Estimate the alternatives.
- Look for clues (e.g., grammar, tenses)
- Guess if you don't know the answer.
- Work backwards - read the answers, then the question.
- Choose the best alternative (more than one answer may be correct).

Matching

- Matching is an exercise in recalling memorized information. The tests are divided into two columns. Items on the left side are usually matched with responses on the right side.
- Ask if you can use alternatives more than once.
- Do not match if you are not sure.
- Take each entry in turn in the left column and try to think of the answer before reading the choices.
- Choose the best answer and mark the answer sheet according to the directions
- Narrow down the field, by completing those answers you know are correct.
- Avoid changing answers.

Fill-in-the-Blank

- This test item also requires recalling specific types of information. Unlike multiple choice or matching questions, you must supply the appropriate word or number to complete the entry.
- Look for clues (e.g., grammar, tenses)
- Use common sense.
- Choose the best word.
- Pay attention to the length of line given or to the number of lines.
- Read through after you answer to make sure it sounds right.

Essay

- Essay questions are analytical in nature. Your instructor is interested in determining how well you relate course material and class discussion to the particular question under consideration.
- Read directions carefully (i.e., Do you have to answer every question or just three out of five?).
- Re-read questions. Pay attention and know the meaning of key words (e.g., explain, contrast, compare).
- Outline your answer.
- Include an introduction, middle, and conclusion to your essay.
- Include details.
- Be general when you aren't sure of the exact detail (e.g., It is better to write "late fourteen hundreds" rather than 1493 if the true date is 1492).

Short Answer

- Pay attention to grammar.
- Answer within the context of the course.
- Use terms the instructor used.
- If you are having a problem, answer by giving an example.
- Beef up your answers if you have time.

True/False

- Pay attention to qualifying words (e.g., always, never).
- The answer is false if any part is false.
- Do not look for patterns.
- Guess if you don't know.
- Stick with your first answer unless you are sure you are wrong.
- Problem-Solving.
- Read the question.
- Re-read getting important information.
- If there is a multiple option, estimate your answer.
- Work backwards (e.g., 2 + 3 = 5, 5 - 2 = 3).
- Watch for careless errors.

Important Words in Essay Questions

The following terms appear frequently in the phrasing of essay questions. You should know their meaning and answer accordingly. (*This list and the sense of definitions are adapted from C. Bird and C. M. Bird, Learning More by Effective Study, Appletom Century Crofts, New York, 1945, pp. 195-198*.)

- **COMPARE** -- Look for qualities or characteristics that resemble each other. Emphasize similarities among them but in some cases also mention differences.
- **CONTRAST** -- Stress the dissimilarities, differences, or unlikeness of things, qualities, events, or problems.
- **CRITICIZE** -- Express your judgment about the merit or truth of the factors or views mentioned. Give the results or your analysis of these factors, discussing their limitations and good points.
- **DEFINE** -- Give concise, clear and authoritative meanings. Don't give details, but make sure to give the limits of the definition. Show how the things you are defining differ from the things in other classes.
- **DESCRIBE** -- Recount, characterize, sketch, or relate in sequence or story form.
- **DIAGRAM** -- Give a drawing, chart, plan, or graphic answer. Usually you should label a diagram. In some cases, add a brief explanation or description.
- **DISCUSS** -- Examine, analyze carefully, and give reasons pro and con. Be complete, and give details.
- **ENUMERATE** -- Write in list or outline form, giving points concisely one by one.
- **EVALUATE** -- carefully appraise the problem, citing both advantages and limitations. Emphasize the appraisal of authorities and to a lesser degree your own evaluation.
- **EXPLAIN** -- Clarify, interpret, and spell out the material you present. Give reasons for differences of opinion or of results, and try to analyze causes.
- **ILLUSTRATE** -- Use a figure, picture, diagram, or concrete example to explain or clarify a problem.
- **INTERPRET** -- Translate, give examples of, solve, or comment on a subject, usually giving your judgment about it.
- **LIST** -- As in "enumerate," write an itemized series of concise statements.
- **OUTLINE** -- Organize a description under main points and subordinate points, omitting minor details and stressing the arrangement or classification of things.

Other Test-Taking Resources

Answering Essay Exam Questions - Tulane University
Answering Essay Questions - University of Victoria
Answering Multiple-Choice Exam Questions - Tulane University
Big Test Tomorrow - George Washington University
Common Words Used in Essay Questions - George Washington University
Conquering Your Finals - Texas A&M University
Decide What You Need to Do to Prepare - George Washington University
General Remarks About Exams - Michigan State University
General Strategies for Objective Tests - George Washington University
General Strategies for Taking Essay Tests - George Washington University
General Suggestions for Taking Tests - Texas A&M University
How to Keep Calm During Tests - Texas A&M University
How to Take Tests - Brooklyn College
"I Know the Material, but When I Take the Test I Go Blank!" - Kansas State University
Learn Strategies for Multiple Choice Questions - George Washington University
Learn Strategies for True-False Questions - George Washington University
Managing Your Test Anxiety - University of Western Ontario
The Multiple Choice Exam - University of Victoria
Multiple Choice Exams - University of Guelph
Multiple-Choice Exams - University of Western Ontario
Preparing for Essay Style Exams - York University
Preparing for Exams – University of Waterloo
Preparing for Multiple Choice Exams - York University
Reducing Exam Anxiety and Improving Concentration - York University
Some General Rules About Exams - Tulane University
Strategies for Matching Columns - George Washington University
Strategies to Use with Difficult Questions - Virginia Polytechnic Institute
Suggestions for Test-Taking - Michigan State University
Test Anxiety - Hampden-Sydney College
Test Anxiety - Mary Washington College
Test Anxiety - SUNY at Buffalo
Test Anxiety - Texas Woman's University
Test Anxiety - University of Florida Test Anxiety- University of Illinois
Test Anxiety - University of Oregon
Test Anxiety - University of Texas at Dallas
Test Anxiety Tips - University of California, Irvine
Test-Taking Strategies - Edinboro University
Test Taking Strategies - University of North Carolina
Top Ten Tips for Increasing Test Strategies - George Washington University
Top Ten Tips for Reducing Test Anxiety - George Washington University
Use Test Time Wisely - George Washington University
Writing Exams - University of Waterloo
The Writing of a History Essay Examination - University of Victoria

Texas Department of Transportation
Guide to the Professional Surveyor Career Development Program
April 2016