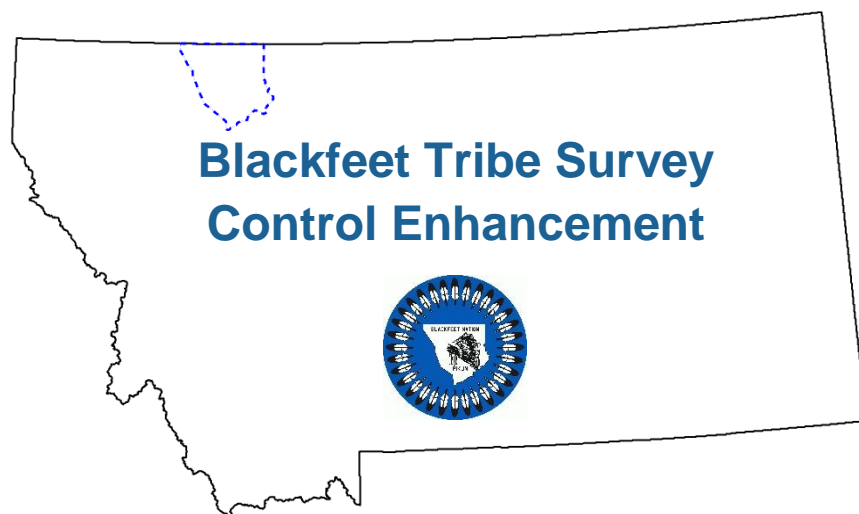


MONTANA LAND INFORMATION GRANT APPLICATION

STATE FISCAL YEAR 2020

JULY 1, 2019 – JUNE 30, 2020



APPLICATION FOR MLIA GRANT FUNDING

SECTION 1 – APPLICANT, PARTNER, AND PROPOSAL INFORMATION

Primary Applicant Contact Information <i>(Please fill this section out in its entirety)</i>	
Name of Agency/Entity:	Blackfeet Tribe
Department:	Transportation Planning
Division/Section:	Transportation
Street:	660 All Chiefs Road
City:	Browning
County:	Glacier
State:	Montana
Zip Code:	59417
<i>Project Manager Contact Information:</i>	
Name:	Don White
Title:	Transportation Director
Email Address:	donywhite@yahoo.com
Phone Number:	406.338.7445
Fax Number:	406.338.7117
<i>Secondary Project Manager Contact Information:</i>	
Name:	Toni Grant
Title:	Assistant Transportation Director
Email Address:	granttoni@yahoo.com
Phone Number:	406.338.7445
MLIA Grant Funding Request & Match:	
Total Requested MLIA Funds:	\$20,100
Total Matched Funds:	\$18,670

Proposal Information	
Date Submitted:	February 15, 2019
Identified Grant Priority:	Improve Land Records - Survey Control
Annual or Multi-Year Proposal:	Annual
Proposal Prepared By:	Blackfeet Tribal Transportation
Short Title of Proposal:	Blackfeet Tribe Survey Control Enhancement
<p>Executive Summary (<i>required – 250 maximum word count</i>):</p> <p>The Blackfeet Nations propose to survey the monument corners of all townships on the Blackfeet Reservation. This proposal is made under Montana Land Information Plan Priority III. Improve Land Records, subtheme a.i. Collecting new survey control data. The collection and legal submission of official Public Land Survey System (PLSS) coordinates at regular intervals throughout the reservation will enhance survey control and contribute to the improvement of land records in accordance with the Montana Land Information Act.</p> <p>This project will collect the 132 township corners of townships intersecting the Blackfeet Reservation and additional control points to correct for the three parallels present across the reservation. There are currently only 71 mapping control points, scattered in sparse clusters, represented in the Multi-state Control Point Database (MCPD) maintained by the Montana State Library (MSL). It is anticipated that more than doubling the number of control points on the reservation in a well distributed pattern will contribute to significant improvement in the survey control of the administrative boundaries and cadastral across our 1.5-million-acre Reservation and this region of the State of Montana.¹</p> <p>We are submitting two grant applications this year, the proposal you are reading, and the Blackfeet Nation Utility Infrastructure GPS & GIS Project. In anticipation that only one may be funded, we would state that the utility project is our priority.</p>	
List All Past Awarded MLIA Grants:	

¹ In order to avoid duplication of efforts, many portions of this application are based upon the narrative found in the FY2020 MLIA Grant Application for the Fort Peck Assiniboine and Sioux Tribes. This duplication is due to the similarities of the two proposed projects and the ongoing collaborative efforts amongst Tribes participating in the Rocky Mountain Tribal Mapping Project.

Fiscal Year 2020 Montana Land Information Act Grant Application Package

Funding Partners: <i>(required for each partner, copy box as needed)</i>	
Name of Contact:	
Name of Agency:	
Street:	
City:	
County:	
State:	
Zip Code:	
Contact Email Address:	
Contact Phone Number:	

SECTION 2 – RELEVANCE

300-WORD COUNT LIMIT FOR NARRATIVE

**In this section, applicants must describe how the proposal meets the purpose of the Montana Land Information Act: to develop a standardized, sustainable method to collect, maintain, and disseminate information; references the defined grant category priority of the Land Information Plan; and clearly demonstrates how the grant project will further the Plan's objectives for the defined category. (15% of the total score)*

**DO NOT COMPLETE SECTION: If the Grant Application is for the sole purpose of collecting new survey control data for improving the digital representation of the PLSS (FY2020 Grant Category 3.a.i.). (0% of the total score)*

SECTION 3 – PUBLIC BENEFIT

300-WORD COUNT LIMIT FOR NARRATIVE

**In this section, applicants must describe why and demonstrate how the grant project will benefit a specific MSDI theme; enhance the land information needs of multiple agencies or jurisdictions; and benefit the citizens of Montana. (25% of the total score)*

**DO NOT COMPLETE SECTION: If the Grant Application is for the sole purpose of collecting new survey control data for improving the digital representation of the PLSS (FY2020 Grant Category 3.a.i.). (0% of the total score)*

SECTION 4 – PROJECT MANAGEMENT AND ORGANIZATIONAL CAPABILITY

2-PAGE LIMIT FOR NARRATIVE

**In this section, the applicant must demonstrate their past record of performance with similar projects; the ability to implement the methodology described in the scope of work; organization's capability to maintain the project; and adequate skills, qualifications and experience of the defined Project Manager, key personnel, and funding partners.*

The applicant must demonstrate how the defined Project Manager (not hired consultant) will manage the entire project, including meeting the mandatory reporting requirements, communication with the State Library, fulfilling data requirements, and the management of all hired consultants.

If the applicant has an existing contract with a consultant or plans to hire a consultant the procurement process for acquiring professional services, this must be described in detail.

(10% of the score)

**DO NOT COMPLETE SECTION: If the Grant Application is for the sole purpose of collecting new survey control data for improving the digital representation of the PLSS (FY2020 Grant Category 3.a.i.). (0% of the total score)*

SECTION 5 – SCOPE OF WORK

Our Tribe began a long-term GIS/Geodetic strategy in 2009 (Figure 1). Collecting Public Land Survey System (PLSS) Township Corners is Phase 6.e.1. Collection of township corners is a tribal priority because of the need to improve the horizontal positional accuracy of the Cadastral National Spatial Data Infrastructure (Cad NSDI). When phase 6.e.1 is complete, the search areas of Phase 6.e.2: Collection of PLSS section corners and quarter corners will be reduced, increasing production.

Rocky Mountain Mapping Project	
Phase 1: Create Reservation Coordinate System	
<i>2009</i>	Information on the MARLS website www.MARLS.com ==> Resources ==> RMTCRS Information <i>ACEC 2013 Engineering Excellence Award</i>
Phase 2: Control Points Established in Tribal Coordinates	
<i>2012</i>	Tribal Control Points for QC to be done via NGS OPUS solutions after establish of NGS CORS
Phase 3: Tribal Coordinate Handbook & User Guide	
<i>2014</i>	Handbook on the MARLS website www.MARLS.com ==> Resources ==> RMTCRS Information <i>ACEC 2015 Engineering Excellence Award</i>
Phase 4: Tribal Continuously Operating Reference Stations (CORS)	
<i>2015-18</i>	See https://www.ngs.noaa.gov/CORS_Map/ for new CORS in project area <i>ACEC 2017 Engineering Excellence Award</i>
Phase 5: Real Time Network	
<i>Current</i>	Pilot project operational see www.mtsrn.org
Phase 6: Implementation of "Geo Reference - Survey Grade Data Collection"	
a	Tribal Transportation Program Implementation
b	Survey Procedure Handbook
c	Tribal Control Points (Quality Control)
d	NGS Benchmark (Prep 2022 NAV-D datum)
e1	PLSS Collection Township Corners to improve the horizontal accuracy of the Cad NSDI
e2	PLSS Collection Section Corners and 1/4 Corners
f	Water Asbuilts (Valves, Manholes, line size & locations)
g	Sewer Asbuilts (Manholes, Lift Stations, line size & locations)
h	Existing: ROW, Easements, Plats, Certificate of Surveys (MLIAC option available?)
i	New: ROW, Easements, Plats, Certificate of Surveys (MLIAC option available?)
Phase 7: GIS Foundation	
	Tribal GIS to store, share, and communicate data
Phase 8: LiDAR, 1 Foot Contours, 6" Pixel, Orthorectified Photogrammetry	
Phase 9: Legislative Adoption	
Phase 10: Measure Success	
	Success is defined by how many tribal members have been inspired to become surveyors, engineer technicians, engineers, GIS technicians, GIS coordinators and GIS professionals?

Figure 1: Rocky Mountain Mapping Project

We completed Phase 4, in partnership with the Montana Department of Transportation (MDT) in 2018. Phase 4 added four National Geodetic Survey (NGS) Continuously Operating Reference Stations (CORS) in Browning, Cut Bank, East Glacier, and Pendroy. By completing the CORS prior to starting phase 6.e.1, densifying the available network, we are now able to collect survey grade georeferenced coordinates on the proposed PLSS corners in minutes instead of hours allowing us to collect better data in less time.

The survey team will also be collecting 4-hour sessions on Tribal Control Points and NGS Benchmarks during the PLSS collection process, Phase 6.c and 6.d. This data will be submitted to the NGS via Online Positioning User Service (OPUS). It is imperative surveyors are working on the same datum. The tribal control and NGS benchmarks submitted via OPUS will provide future surveyors with quality control check points.

This process will leverage existing partnerships between the Tribe, the Consultant, and the Montana State Library.

Phase 6.e.1 work will focus on township corners on the Blackfeet Reservation.

Goals and Objectives

Goal: Enhance survey control by improving the accuracy of Multi-state Control Point Database (MCPD) coordinates marking the 132 PLSS township corners representing all townships intersected by the Blackfeet Reservation.

Objective 1: Develop a work plan with the Montana State Library and our Consultant.

- **Task 1.1:** Submit Proposal – Submit survey control collection proposal map to the Montana State Library (see Appendix A - Map 1).
- **Task 1.2:** Prioritize Target Control – Working with the Montana State Library, the Consultant, and our Tribe, we will prioritize the collection of PLSS township corners that would be the most efficient to make corrections - addressing any non-PLSS reference points that can further improve PLSS accuracy and any data gaps that the Montana State Library has identified. This planning effort is designed to efficiently select control points that will provide the best correction. Based on this effort, areas of interest will be devised.
- **Task 1.3:** Create Project Maps – Working with the Consultant and the Montana State Library, project maps will be developed for each area of interest. These maps will be comprised of existing PLSS/CadNSDI points to assist the Consultant in providing cost estimates as well as for mission planning to effectively collect the most control points possible.

Objective 2: Perform Survey – Collect all the township corners or PLSS corner within a 1/2 mile to 1-mile radius of the township corner and as many corners near the center of the townships, as prioritized upon completion of Objective 1, and as the budget allows.

- **Task 2.1:** Obtain Property Owners Consent – After survey controls points are finalized and agreed to by all parties, we will send Certified Letters to non-Blackfeet Tribe land owners notifying them about the survey and to obtain permission to cross their land to access control points.
- **Task 2.2:** Evidence Research – Land records will be gathered from federal/state/local government, and private entities, in order to efficiently locate, measure, and perpetuate the location of cadastral corners or boundary locations in the field. The land records will

primarily be obtained from both county's Clerk & Recorder Offices, the BIA, the BLM, and MDT.

- **Task 2.3:** Conduct Township Retracement Survey – Fieldwork will be completed through the non-construction/winter months and will consist of locating and collecting data on the PLSS monuments designated from Objective 1. Found cadastral monuments will be observed using Real Time Kinematic (RTK) or Rapid Static (RS) observation methods, in conformance with the *Field Survey Standards Manual* (Rocky Mountain Tribal Transportation Association). Field notes and photos will be taken of each monument. The work will be performed primarily by our Tribal surveyors under the supervision of the consulting Professional Land Surveyor.

Objective 3: Prepare and submit deliverables to the Montana State Library.

- **Task 3.1.A:** Process Raw Survey Data – The survey data collected by our Tribal surveyors will be corrected and/or post-processed using the MTSRN CORS (www.mtsrn.org) and compiled into a Survey Database.
- **Task 3.1.B:** Quarterly QC of Data – The data will be processed as it is collected on a monthly basis, the processed data will be reviewed by the consulting Professional Land Surveyor on a quarterly basis. For any discrepancies between found and recorded data, field verification of the data will be performed to ensure the quality of the corrected positions, the attributes entered, and attachments connected to the points in question.
- **Task 3.2.A:** Draft Certified Corner Recordation Forms – Certified Corner Recordation Forms will be drafted for each township corner that did not have an existing corner prior to the beginning of the project. Each form will be filed at its respective county's Clerk and Recorder's Office.
- **Task 3.2.B:** Digitize Recorded Forms – Once recorded, the submitted Certified Corner Recordation Forms will be gathered from Glacier and Pondera County's Clerk and Recorder Offices, digitized, and included as attachments for submittal. Document numbers will be attributed to the corresponding corner in the Montana Control Point Database Submission Spreadsheet.
- **Task 3.3A:** Finalize Data for Submittal – Process, edit, and properly attribute data from the raw survey format (20 attributes) to the State Survey and Mapping Control (SUMAC) database format (32 attributes).
- **Task 3.3A:** Final QC/QA of Deliverables – SUMAC Spreadsheet, attributes, and attachments will be reviewed by both the GIS coordinator and the Project Manager for correctness and completeness. Submit deliverables package to the State Library for incorporation into the PLSS/CadNSDI database.

We are aware of the complexities associated with working in Tribal areas as well as accessing land for field collection. These complexities include the adherence to all Tribal laws and employment regulations.

Project Schedule

		2019																											
OBJECTIVES	TASKS 1.1 - 3.1.A	MONTH	July				August				September				October				November				December						
		WEEK	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
		1.1: Submit Proposal																											
	1.2: Prioritize Target Corners																												
	1.3: Create Project Maps																												
	2.1: Research																												
	2.2: Obtain Permission of Property Owners																												
	2.3: Conduct Township Corner Retracement																												
	3.1.A: Process Raw Survey Data																												
		2020																											
OBJECTIVES	TASKS 2.3 - 3.3.B	MONTH	January				February				March				April				May				June						
		WEEK	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
		2.3: Conduct Township Corner Retracement																											
	3.1.A: Process Raw Survey Data																												
	3.1.B: QC of Data																												
	3.2.A: Draft and Submit Corner Recordation																												
	3.2.B: QC of Corner Forms. Record.																												
	3.2.C: Retrieve, Digitize, & Attribute Recorded																												
	3.3.A: Final QC of Data																												
	3.3.B: QA of Prepared Deliverables. Submit																												

SECTION 6 – BUDGET JUSTIFICATION AND BUDGET TABLE

We have developed a budget to cover the expenses related to the successful completion of the Blackfeet Tribe Survey Control Enhancement project. A detailed budget was created based on objective and task, reflective of variations in accessibility and terrain, as shown in Appendix A - Table 1.

Personnel - Through our Tribal Transportation Program, we will be contributing in-kind in the form of wages for Tribal Transportation Staff for working on the survey crew along with the hired consultants' Montana Professional Land Surveyor as well as a Certified Federal Land Surveyor. This in-kind contribution will provide additional experience to our Tribal Transportation Program Staff, bringing our staff closer to meeting professional licensing requirements which will enable them to conduct future surveys autonomously. We believe that this opportunity will lead to reduced costs for future surveying projects and ultimately allow our Tribe to make greater contributions to land record improvement in Montana.

Travel – Our Tribal Transportation Program will be contributing in-kind the travel costs associated with traversing the Reservation to collect the survey.

Equipment – We have survey grade GPS equipment necessary to successfully complete this project and are not requesting additional funding.

Supplies – Our Tribal Transportation Program will contribute in-kind the supplies and materials required for successful completion of the project. These costs include office supplies, postage, and fees involved in research.

Contractual – The contractual budget requested from the Montana Land Information Advisory Council is to retain a consulting firm with Montana Professional Land Surveyor's and Certified Federal Land Surveyor's on staff to perform the tasks outlined in this proposal alongside tribal staff to meet the legal and quality targets necessary to fulfill the goals of this project and the Montana Land Information Plan.

The Blackfeet Tribal Transportation Program accepts responsibility for maintaining this project and continuing its development. Tribal Transportation staff have been tasked with searching for PLSS monuments during the off-season for transportation construction projects. This task has been in place for the past 5 years and we intend to continue with this work plan. Locating township corners and updating the MCPD coordinates will narrow search areas for future PLSS corners required for transportation projects.

MLIA GRANT BUDGET SUMMARY TABLE

MLIA GRANT BUDGET SUMMARY								
	MLIA Summary	Applicant Summary			Funding Partner Summary*			Total: MLIA Share, Applicant Subtotal, Partner Subtotal
Category	MLIA Share	Applicant Cash	Applicant In-kind	Applicant Subtotal	Funding Partner 1	Funding Partner 2	Partner Subtotal	
a. Personnel			\$15,870	\$15,870				\$15,870
a. 1. Fringe Benefits								
b. Travel			\$1,800	\$1,800				\$1,800
c. Equipment								
d. Supplies & Materials			\$1,000	\$1,000				\$1,000
e. Contractual	\$20,100							\$20,100
f. Other								
Total	\$20,100		\$18,670	\$18,670				\$37,770

****Modify, add, or remove the funding partners column(s) as needed to define a clear budget***

SECTION 7 – RENEWABLE GRANT ACCOUNTABILITY

**In this section, applicants must outline past MLIA projects and project management accountability. Previous MLIA grant projects will be taken into consideration in final prioritization.*

If the applicant received a grant in the past five years, then the following items are needed.

- 1. Applicants awarded a FY2019 MLIA Grant must submit a report on the progress made toward meeting the requirements of that grant. The report must include the status of the project timeline, tasks, and deliverables. **1-page limit***
- 2. Applicant must write a narrative, outlining the successes and the failures, of each grant received in the past five years, excluding the FY2019 grant. Applicant must explain how tasks, timelines, and deliverables of the project were or were not met. The applicant must demonstrate how past projects failures will ensure future projects successes.*
 - a. Each narrative has a **250-word** count limit*

SECTION 8 – CHECKLIST

Applicant's Project Manager, defined Section 1, must initial in ink or mark 'n/a' if a section is not applicable.

Initial or mark n/a	Completed Required Task
<i>D.W</i>	Proposal Prepared by an outside party – I have read this document in its entirety. (if applicable)
<i>D.W</i>	Section 1 – Applicant, Partner, and Proposal Information
<i>D.W.</i>	Primary Applicant Information
<i>N/A</i>	Funding Partner (if applicable)
<i>D.W</i>	Proposal Information
<i>N/A</i>	List All Past Awarded MLIA Grants
<i>N/A</i>	Section 2 – Relevance (300 max word limit)
<i>N/A</i>	Section 3 – Public Benefit (if applicable)
<i>N/A</i>	Section 4 – Project Management (if applicable)
<i>D.W</i>	Section 5 – Scope of Work Narrative (4-page limit)
<i>D.W</i>	Section 6 – Budget Justification Narrative and Table (3-page limit)
<i>DW</i>	Budget Justification Narrative
<i>D.W</i>	Complete Budget Table
<i>N/A</i>	Section 7 – Funding Partner Statements of Support (if applicable)
<i>N/A</i>	Section 8 – Renewable Grant Accountability Narrative (if applicable)
<i>N/A</i>	FY2019 Grantee Report (if applicable)
<i>N/A</i>	Past MLIA Grant Project Narratives (FY2018 - FY2015) (if applicable)
	Section 9 – A Signed Authorizing Statement

SECTION 9 – AUTHORIZING STATEMENT

Authorizing Statement

I hereby certify that I have read the application and the information and all statements in this application are true, complete and accurate to the best of my knowledge and that the project or activity complies with all applicable state, local and federal laws and regulations.

I further certify that this project will comply with applicable statutory and regulatory standards.

I further certify that I am (by my signature) authorized to enter into a binding agreement with the Montana State Library to obtain a grant if this application receives approval.

DON WHITE

Name (print or type)

TRANSPORTATION PLANNER

Title (print or type)

Don White, TRANSPORTATION PLANNER






Signature and Title of Authorized Representative(s) of Public Entity Applicant

2/15/2019

Date

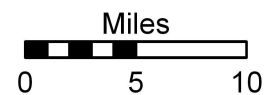
Appendix A

**Map 1.
Blackfeet Nation Survey
Control Enhancement -
Proposed Project
Extent**

-  Proposed Collection Corners
-  Existing Mapping Control (MSDI)
-  PLSS Townships (MSDI)
-  PLSS Sections (MSDI)
-  Tribal Boundary

Existing Mapping Control : 71
 Proposed Collection
 Corners: 132*
 Intersecting Townships: 81
 Intersecting Sections: 2,619

*Additional collection may
 be necessary due to
 parallels and meanders



**Table 1.
Blackfeet Tribe Survey Enhancement Project Budget Justification**

OBJECTIVE 1 DEVELOP WORKPLAN	TASKS 1.1 - 1.3		TASK DESCRIPTION			BILLABLE TYPE	HOURS BY TRIBE	IN-KIND RATE	COST BY TRIBE	HOURS BY CNSLT	BILLABLE RATE	COST BY CNSLT	COST BY TASK
	1.1: SUBMIT PROPOSAL	SUBMIT SURVEY PLSS CONTROL COLLECTION MAP FOR APPROVAL			PM	16.0	\$40.00	\$640.00	0.0	\$112.00	\$0.00	\$640.00	
	1.2: PRIORITIZE TARGET CONTROL	DETERMINE WHICH CORNERS ARE NECESSARY, PLAN SURVEY EFFICIENTLY, DEVELOP AREAS OF INTEREST			PLS & SURVEYOR	8.0	\$30.00	\$240.00	4.0	\$107.00	\$428.00	\$668.00	
	1.3: CREATE PROJECT MAPS	UPDATE PLSS CONTROL COLLECTION MAP WITH UPDATED PRIORITIES			PLS & SURVEYOR	20.0	\$30.00	\$600.00	4.0	\$83.00	\$332.00	\$932.00	
PRELIMINARY OFFICE WORK TOTALS							44.0	HOURS TO COST	\$1,480.00	8.0	HOURS TO COST	\$760.00	\$2,240.00
OBJECTIVE 2 PERFORM SURVEY	TASKS 2.1 - 2.3		TASK DESCRIPTION			BILLABLE TYPE	HOURS BY TRIBE	IN-KIND RATE	COST BY TRIBE	HOURS BY CNSLT	BILLABLE RATE	COST BY CNSLT	COST BY TASK
	2.1: OBTAIN OWNERS CONSENT	DETERMINE OWNERS, DRAFT AND SEND REQUEST LETTERS, ADJUST FINAL CORNERS			SURVEYOR	40.0	\$30.00	\$1,200.00	8.0	\$83.00	\$664.00	\$1,864.00	
	2.2: EVIDENCE RESEARCH	RETRIEVE EXISTING CORNER FORMS, FIELD NOTES, MAPS, OFFICE CALCS FROM EVIDENCE / GCDB			SURVEYOR	30.0	\$30.00	\$900.00	8.0	\$83.00	\$664.00	\$1,564.00	
	2.3: CONDUCT TOWNSHIP RETRACEMENT (BROKEDOWN BY LOCATION OF CORNERS)	NUMBER OF CORNERS	PERCENT OF TOTAL	FIELDWORK (HOURS PER MONUMENT)	BILLABLE TYPE	HOURS PER CORNER TYPE	IN-KIND RATE	TOTAL COST BY CORNER LOCATION	HOURS PER CORNER TYPE	BILLABLE RATE	TOTAL COST BY CORNER LOCATION	TOTAL COST BY CORNER LOCATION	
	TOWNSHIP CORNERS IN OR NEAR ROADS	22	17%	1.5	SURVEY (2 MAN CREW)	23.0	\$60.00	\$1,380.00	10.0	\$167.00	\$1,670.00	\$3,050.00	
	TOWNSHIP CORNERS IN OR NEAR TILLED FIELDS	28	21%	1.0	SURVEY (1 MAN CREW)	18.0	\$30.00	\$540.00	10.0	\$122.00	\$1,220.00	\$1,760.00	
	TOWNSHIP CORNERS IN UNDISTURBED AREAS	40	30%	0.75	SURVEY (1 MAN CREW)	20.0	\$30.00	\$600.00	10.0	\$122.00	\$1,220.00	\$1,820.00	
	TOWNSHIP CORNERS THAT FALL IN RIVERS AND ARE WITNESSED BY MEANDER CORNERS	23	18%	3.0	SURVEY (1 MAN CREW)	49.0	\$30.00	\$1,470.00	20.0	\$122.00	\$2,440.00	\$3,910.00	
	TOWNSHIP / RESERVATION INTERSECTIONS THAT LAND IN MOUNTAINOUS TERRAN	19	14%	4.0	SURVEY (2 MAN CREW)	52.0	\$60.00	\$3,120.00	24.0	\$167.00	\$4,008.00	\$7,128.00	
	TRAVEL TIME	TRAVEL TO / FROM OFFICE FOR DURATION OF FIELD WORK			SURVEYOR	60.0	\$30.00	\$1,800.00	40.0	\$83.00	\$3,320.00	\$5,120.00	
FIELD WORK TOTALS		132	100%	2.0 AVG		240.0	HOURS TO COST	\$7,890.00	106.0	HOURS TO COST	\$11,198.00	\$19,088.00	
OBJECTIVE 3 DELIVERABLES	TASKS 3.1 - 3.3		TASK DESCRIPTION			BILLABLE TYPE	HOURS BY TRIBE	IN-KIND RATE	COST BY TRIBE	HOURS BY CNSLT	BILLABLE RATE	COST BY CNSLT	COST BY TASK
	3.1.A: PROCESS RAW SURVEY DATA	PROCESS RAW RTK & STATIC DATA AS IT COMES IN, BUILD DATABASE W/REQUIRED ATTRIBUTES			SURVEYOR	24.0	\$30.00	\$720.00	16.0	\$83.00	\$1,328.00	\$2,048.00	
	3.1.B: QUARTERLY QC OF DATA	PLS REVIEW OF PROCESSED DATA, CORRECTIONS, POSSIBLE FIELD VERIFICATION			PLS & SURVEYOR	0.0	\$130.00	\$0.00	16.0	\$107.00	\$1,712.00	\$1,712.00	
	3.2.A: DRAFT AND RECORD CORNER RECORDATION FORMS	USE PHOTOS AND FIELD NOTES TO DRAFT REQUIRED CORNER FORMS			SURVEYOR	200.0	\$30.00	\$6,000.00	0.0	\$83.00	\$0.00	\$6,000.00	
	3.2.B: QC OF CORNER FORMS. RECORD.	PLS CERTIFICATION OF CORNER FORMS, FILE AT RESPECTIVE COUNTY'S C&R OFFICE			PLS & SURVEYOR	0.0	\$30.00	\$0.00	24.0	\$107.00	\$2,568.00	\$2,568.00	
	3.2.C: RETRIEVE, DIGITIZE, & ATTRIBUTE RECORDED FORMS	RETRIEVE THE NEWLY RECORDED DOCUMENTS AND DIGITIZE, ATTRIBUTE FILE NUMBERS TO DATA			SURVEYOR	30.0	\$30.00	\$900.00	12.0	\$83.00	\$996.00	\$1,896.00	
	3.3.A: FINALIZE DATA FOR SUBMITTAL TO STATE LIBRARY	GIS COORDINATOR REVIEW OF PROCESSED DATA, CORRECTIONS			GIS COORDINATOR	12.0	\$30.00	\$360.00	6.0	\$107.00	\$642.00	\$1,002.00	
	3.3.B: FINAL QC/QA OF DELIVERABLES. SUBMIT DELIVERABLES.	PM REVIEW OF FINAL DELIVERABLES, CORRECTIONS			PM	8.0	\$40.00	\$320.00	8.0	\$112.00	\$896.00	\$1,216.00	
POST SURVEY PROCESSING TOTALS							274.0	HOURS TO COST	\$8,300.00	82.0	HOURS TO COST	\$8,142.00	\$16,442.00
TOTAL COST TO COMPLETE OBJECTIVES 1 THROUGH 3							558.0	HOURS TO COST	\$17,670.00	196.0	HOURS TO COST	\$20,100.00	\$37,770.00