

SURVEYING IN TEXAS FOR NON-TEXANS

Brian D. Autio, RPLS
Houston, Texas

To understand Texas Surveying let's compare surveying in the

United States Public Land Survey System (US PLSS)

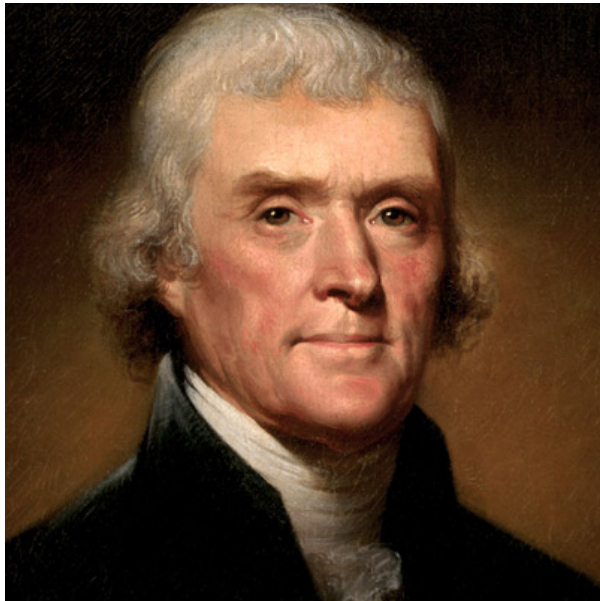
VS.

Texas

Start with two historical giants

Thomas Jefferson

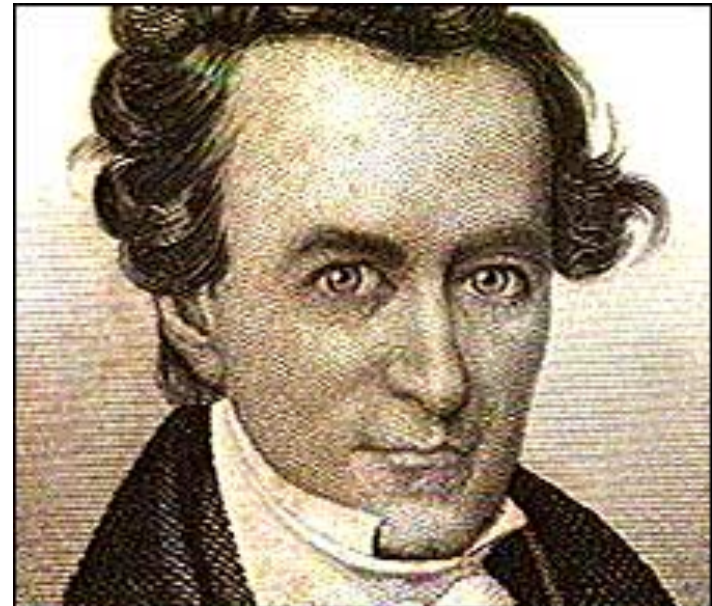
3rd President of the U.S.



Stephen F. Austin

“Father of Texas”

1793 To 1836



US Public Land Survey System originally
proposed by Thomas Jefferson
became
Land Ordinance of 1785
Then
The US Public Land Survey System



Statue of Jefferson at University of Virginia

**Instructions to Surveyors
Based upon Empresario Austin
And the
Colonial Commissioner
later
Texas General Land Office
Commissioner**

XX

PAINTING TEXAS HISTORY TO 1900

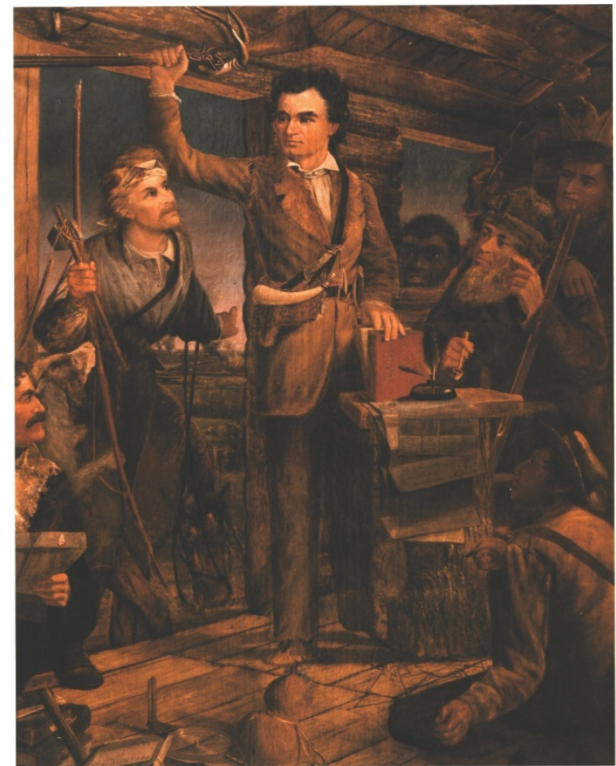
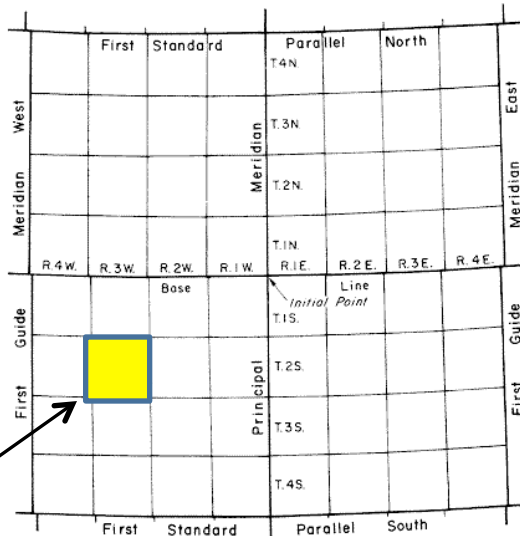


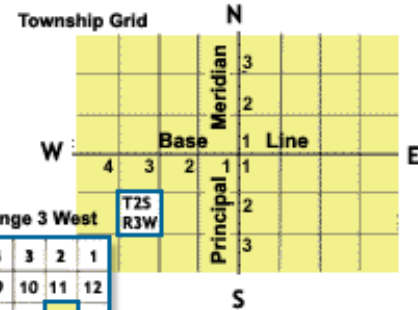
PLATE 6. Henry Arthur McArdle, *The Settlement of Austin's Colony or The Log Cabin*, 1875. Oil. Archives Division-Texas State Library. Acc. no. 1989/237-1.

Painting of Austin by Henry
Arthur McArdle, 1873

US PUBLIC LAND SURVEY SYSTEM - PLSS



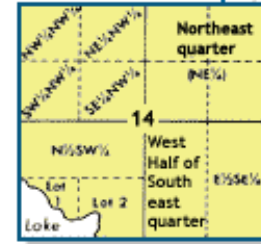
Public Land Survey System (PLSS)



Township 2 South Range 3 West

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
0	21	22	23	24	
9	28	27	26	25	
2	33	34	35	36	

Section 14



Section 14 shows both normal division of the section into aliquot parts and the fractional division into government lots.

Township

- 36 miles square

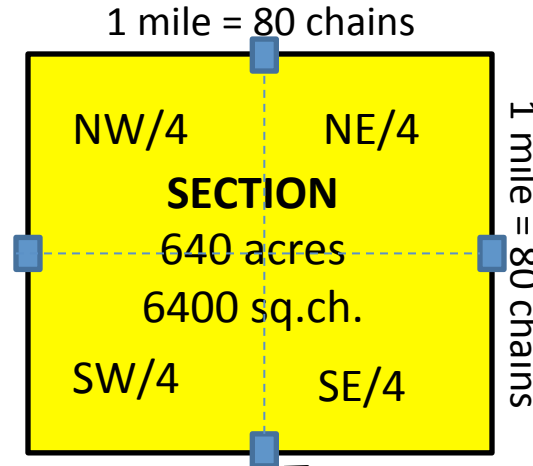
Section

- 1 mile square
- 640 acres
- 80 chains x 80 chains

Gunter Chain

- 66 feet
- 100 links

Aliquot Parts – standard subdivisions of a section



1/4 corners set

Austin experience in Missouri with his Father Moses Austin

- SFA born in Virginia – raised in Missouri
- litigation and land boundary conflicts

Austin was a surveyor and acted most like a survey coordinator in Texas

- Texas first hydrographic surveyor (page 457 Austin Papers)

I have also heard that the Vessells and Familys which were to go from New Orleans to Join S. F. A. had started and that their was others in preparation—and also that Stephen was engaged in Survey- and takeing Soundings of the Bay of St. Bernard for the purpose of assert[ain]ing the best Chanells etc.—

Great Resource!

Austin Papers edited by Eugene Barker (Public Domain)

- Online = HATHI TRUST Digital Library

Citation:

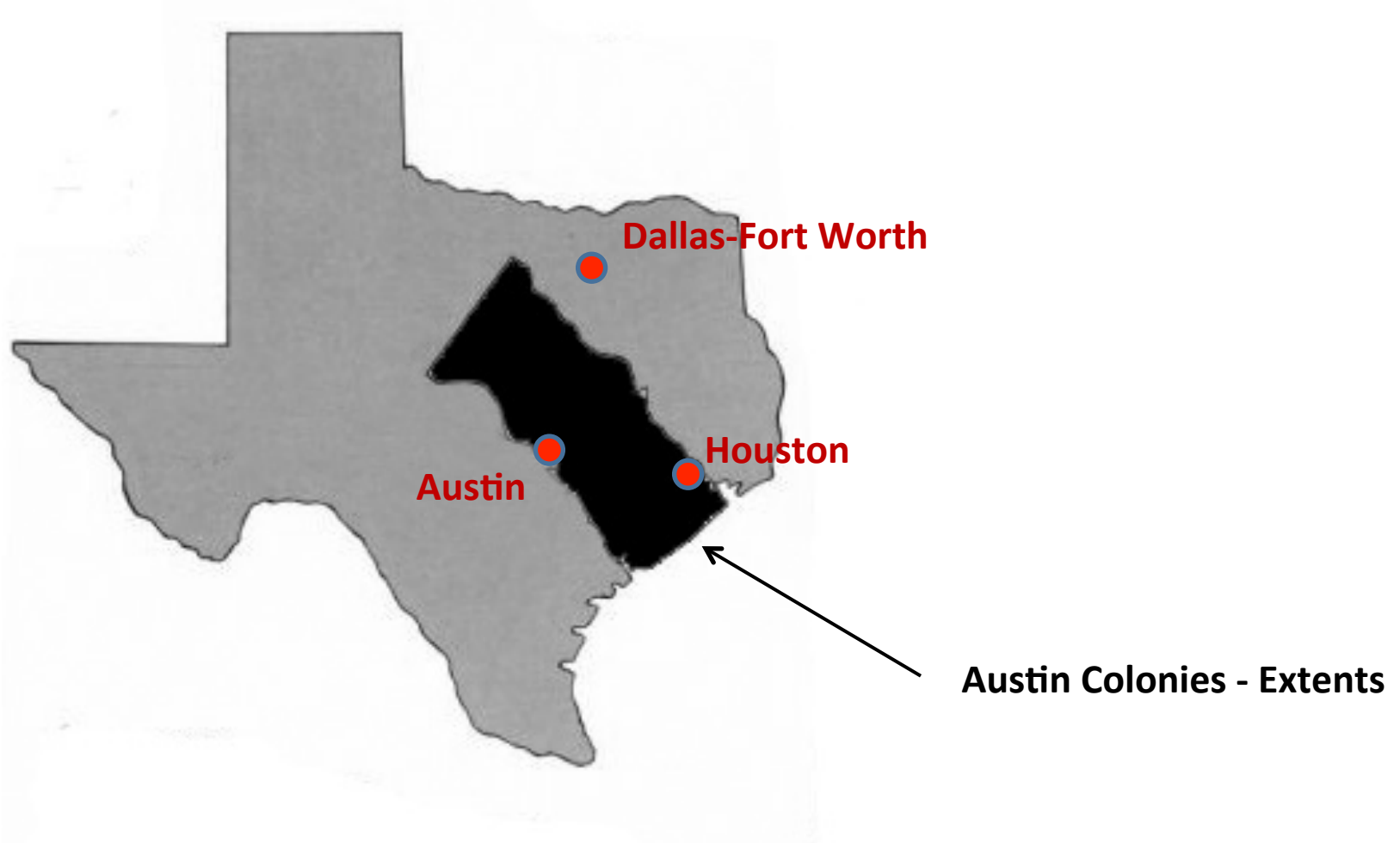
APA Citation Austin, M. (192428). *The Austin papers*. Washington: Govt. print. off..

MLA Citation Austin, Moses, 1761-1821. The Austin Papers. Washington: Govt. print. off., 192428

Link to Austin Papers:

<http://catalog.hathitrust.org/Record/004570145>

AUSTIN COLONIES – Extent of contracted Areas



Austin Colony for 300 families approved and surveying addressed

such a length of time—Owing to sundry delays in Monterrey which I could not very well avoid and which were caused by my Anxiety to perfect the work I had so far progressed with I did not arrive in San Antonio de Bexar until July in Company with the new Governor Luciano Garcia who was appointed to succeed Trespalcacios—You will perceive by the decree of the Emperor that the lands were to be laid off for the Settlers and Titles given therefor by myself in Conjunction with the Governor of this Province or a Commissioner whom he should name—The Governor appointed the Baron de Bastrop this Com^r and we arrived in Company on the Colorado in August—On my arrival the Settlers were publicly notified and informed of the manner in which they were to procure their lands both by the Com^r and myself, And I was very particular to inform them all and in the most public manner that the terms originally established by me relative to the cost of their lands must be adhered to—The first Object After my return was to get the Land Surveyed, an object of equally as much importance as the Titles themselves and one which was embraced in my original Contract with the Settlers, for I was bound not only to procure titles for their Lands but also to survey them and pay all other Expences whatever attending the completion of their Titles An Obligation which was binding on me for ever, unless released therefrom by a noncompliance on the part of the Settlers with their part of the said Contract—Before I arrived in the Colony after my return from Mexico I studied the whole subject with all the attention which my feeble capacity would allow me to devote to one of such importance to the settlers as well as to the Government whose interests it was also our duty to promote.

Two plans presented themselves for Completing the settlement—One was to let each Settler run his lines as he pleased, and mark them or not, or define his Tract by natural or imaginary boundaries and make out the Deeds accordingly—And only requiring them to pay the Expences which were due to the Government but by adopting this plan I should as I considered have forfeited my part of the Original Contract with the Settlers which was to survey and clear out their lands as well as to procure Titles for them, A Contract which I thought I had no right to change, besides I had seen and we have all seen or heard of the difficulties and confusion which arose and still exists in Kentucky, Tennessee And many other States in consequence of locations being made without actual Surveys, tracts or parts of tracts, when run out were found to interfere with each other and hence arose a source of litigation which has involved hundreds and I may say thousands in the perplexing mazes and hopeless uncertainties of law Suits which after harrassing a family

for years and like a Moth devouring its substance finally involved them in ruin and beggary—

To Comply therefore with my part of the Contract with the Settlers in full And at the same time to save them from even the possibility of difficulty hereafter relative to their lines I determined to survey the Lands regularly and accurately and to continue upon myself the responsibility which my original Contract with the Settlers imposed on me of being personally responsible for the expence of Surveying, for the Expences due to the Governm^t and for all other Expences whatever; expecting that the settlers would comply with their part of the Contract by paying the sum originally stipulated—There were also other considerations which urged the Adoption or rather the continuance of this plan—The fees due to the Governm^t would have to be paid in Cash—The Expenses of Surveying if any was done would Also have been burthensome in many instances to the Settlers to advance, besides the first Settlers who had borne all the difficulties of establishing the Country would have then been placed on an Equality with those who came later after all the difficulties were over, provisions were plenty, and the Indians forced into subjection—Whereas the plan which I adopted relative to the payments would have removed all these difficulties and enabled the first Settlers to reap the full fruits of their Arduous labors to the extent they merited, and that without the delay which a different plan would likely have produced. I informed the Settlers on my arrival that I would receive any kind of property from them, And give them their own time to pay it in, at the same time requesting those who were able to do so to aid me all they could, for that I had so far faithfully Complied with my part of the Contract with them And thought that in justice they ought to do the same towards me—I never said that any one ought to pay one Cent before he received his Title—The new Settlers who came in and who had no privations to undergo in Comparison to the first Settlers I did say ought to make more prompt payment And in this Arrangement I consulted the Interests of the old settlers, for the sums I should have thus received would have enabled me to have paid a part of the surveying fees, And Governm^t on the Lands of the Old Settlers without harrassing them to raise the Money— from those who did not pay money or some other property that could be used I intended to have taken notes payable in Cotton in yearly installments, of One two or Six years according to the situatⁿ of the person—This would not have been oppressive for every one could have paid two or three hundred pounds of Cotton annually without ever feeling it—these notes would have insured a certainty of receiving a specific quantity of Cotton annually And this cer-

TEXAS SURVEYING UNITS

1 vara = 33 1/3 inches

0.36 varas = 1 foot

1 LEAGUE

25 Labors

4428.402 acres

25,000,000 sq. varas

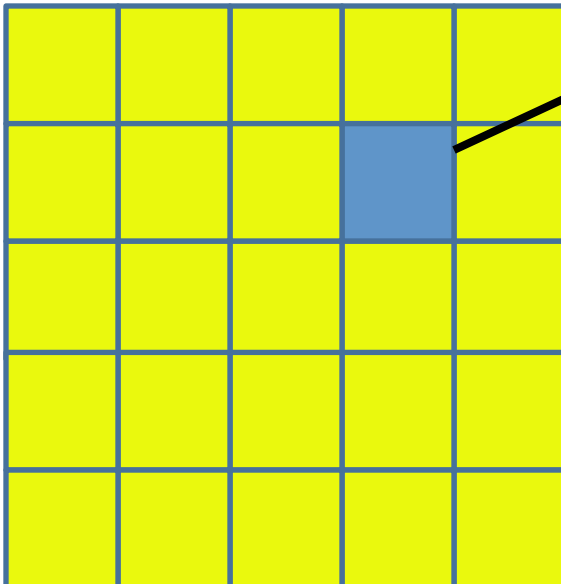
1 LABOR

177.136 acres

1000 varas x 1000 varas



5000 varas



5000 varas

1900.8 varas



1900.8 varas

1 SECTION

640 acres

1000 sq. varas

NOTE: Leagues almost never are subdivided into labors in practice

Formation of the General Land Office (GLO) – Headed by Land Commissioner

- GLO Organized vacant land into Districts (then Counties) and headed by District Surveyor
 - Surveying performed by Deputy Surveyors
- Survey required for claiming land – along with fees
- Claim to land by various means (a few examples)
 - Headright: Land based on classes and time of entry to Texas
 - Head of family = 1 league + 1 labor (4605.538 acres)
 - Single male = 1/3 of league (1476.134 acres)
 - Bounty: Military service (pay)
 - Donation: Military service per battle

AGREEMENT BETWEEN AUSTIN AND HORATIO CHRISMAN

This agreement entered into at the Town of San Felipe de Austin in the province of Texas between Stephen F Austin Empresario for the settlement of three hundred families in this province and Horatio Chriesman surveyor, is To Witness—That said Chriesman agrees to survey such Tracts of Land in this Colony as he may be directed to Survey by sd Austin and the Commissioner of the Government in the form and manner which they may direct using the Mexican Vara as the standard for regulating their chains and running by the true meridian after Calculating the Variation of the compass—and the said Chriesman agrees to execute his work accurately and in a good and workman like manner and to complete it as speedily as possible establishing Corners with bearing true at each principal corner of a survey with the initials of the Owners names marked on the bearing Trees where the Owner is known or erecting sufficient mounds of Earth in Prairie at least Three feet high and marking every line not bounded by a River or Creek which runs through Timber so that it can be easily Traced and followed and finally To make out correct returns and plots of Each survey To sd Austin on completion of the work in the manner above stated the sd Chriesman shall be entitled to demand and receive from each settler pay for surveying their lands at the rate of five dollars p^r Spanish mile payable in property or three dollars p^r mile payable in Cash to be paid by the settler and for which payment the said Austin is not to be in any manner accountable or responsible more than to refuse to deliver the titles to any settler until he brings a certificate from the surveyor or stating that the surveying fees of his land were paid or settled For the faithful compliance of all which the s^d Chriesman Obligates himself under the penalty of being liable for any damages which may arise from a non or incorrect Compliance with this Contract



Horatio Chriesman
Austin Colony Surveyor



Texas General Land Office

Map type: Sketch

Title: Surveys in Austin's Colony
along east bank of Mill Creek

Sketch Number: 216

Brazoria County

Surveyor: Horatio Chriesman

Date: 1827

Near present day Bellville, Texas

Horatio Chriesman later would later call for the Texian Consultation and Convention at San Felipe de Austin in 1832 – which resulted in the eventual War with Mexico and the formation of the Nation of Texas

**MAIN DIFFERENCE BETWEEN SYSTEMS
AT THE POINT OF TRANSFER OF RIGHTS
FROM
GOVERNMENT TO PRIVATE OWNERSHIP:**

US PLSS = SIMULTANEOUS CONVEYANCE OF TOWNSHIP

- All 36 sections created instantly at approval
 - Sections or parts of sections granted to individuals
 - Requires considerable government money and resources to survey US public lands
 - Remote chance of vacancies or unclaimed land – if done by the rules
 - No Junior/Senior rights between sections
 - Property description by aliquot parts
-

TEXAS = SEQUENTIAL CONVEYANCE PER INDIVIDUAL SURVEY

- Survey cost paid for by individual claimant
- Creates Junior/Senior rights between tracts
- Possibility of vacancies (land still owned by State of Texas) between tracts
- Property require metes and bounds for description

Texas under six flags – France, Spain, Mexico, Texas Nation, United States of America, Confederate States of America

Texas came into the US as a 28th state in 1845 by treaty (the only state to do so) - land rich, cash poor. US Gov't assumed Texas debt – but it gave up claims outside of today's borders. Texas retained ownership of its land.

Stafford v. King - 30 Tex 257 – April 1867 – Cherokee County, Texas

"Course and distance are the most unreliable calls; distance is less reliable than course, because of the mistakes of the officers, over which the locator has no control; but of natural and artificial objects the locator can take note on the ground; hence the general rule, that course and distance yield to natural objects; while, under certain circumstances, course and distance may control, yet generally they are but guides to the other calls. The actual identification of the survey, the footsteps of the surveyor upon the ground, should always be followed, by whatever rule they may be traced."

Hogue v. Baker (1898) Texas Supreme Court declared no more vacant land – all remaining “un-appropriated” land was set aside for the benefit of public schools – the permanent school fund”

Discovery of Oil – Spindletop 1901

– Vacancies hunters and litigation