



## TNRIS Central Texas LiDAR

Figure 1: The above map indicates the three survey areas being the Austin seventy-seven (77) LiDAR points & fifteen (15) check shots locations (100-200's 4203's), the La Grange sixty-seven (67) LiDAR points and five (5) check shots (100-200's 4204's) and San Antonio thirty-six (36) LiDAR points (300's).

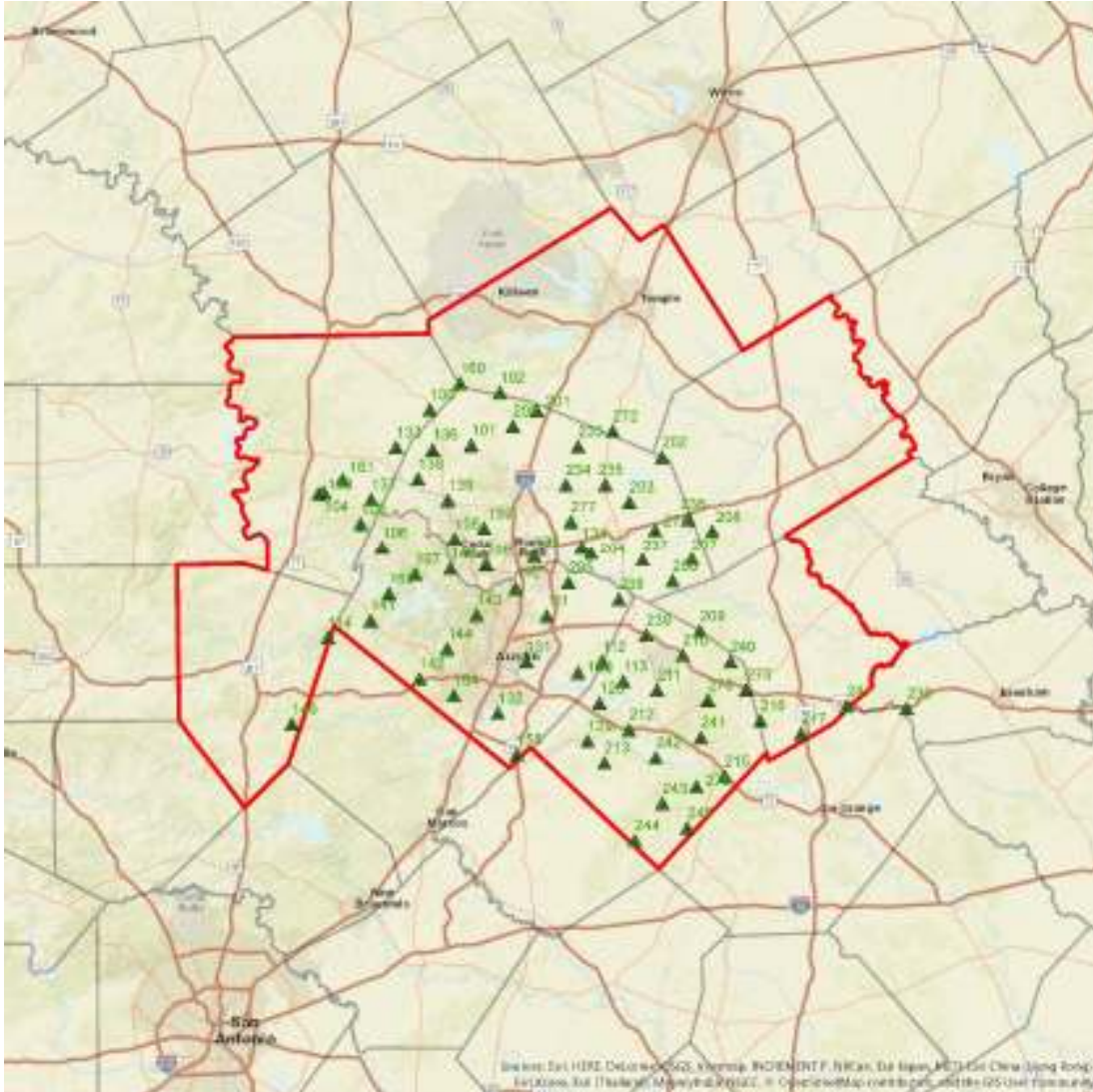


Figure 2: The above map indicates the Austin seventy-seven (77) LiDAR points & fifteen (15) check shots locations (100-200's 4203's)



# TNRIS Central Texas LiDAR

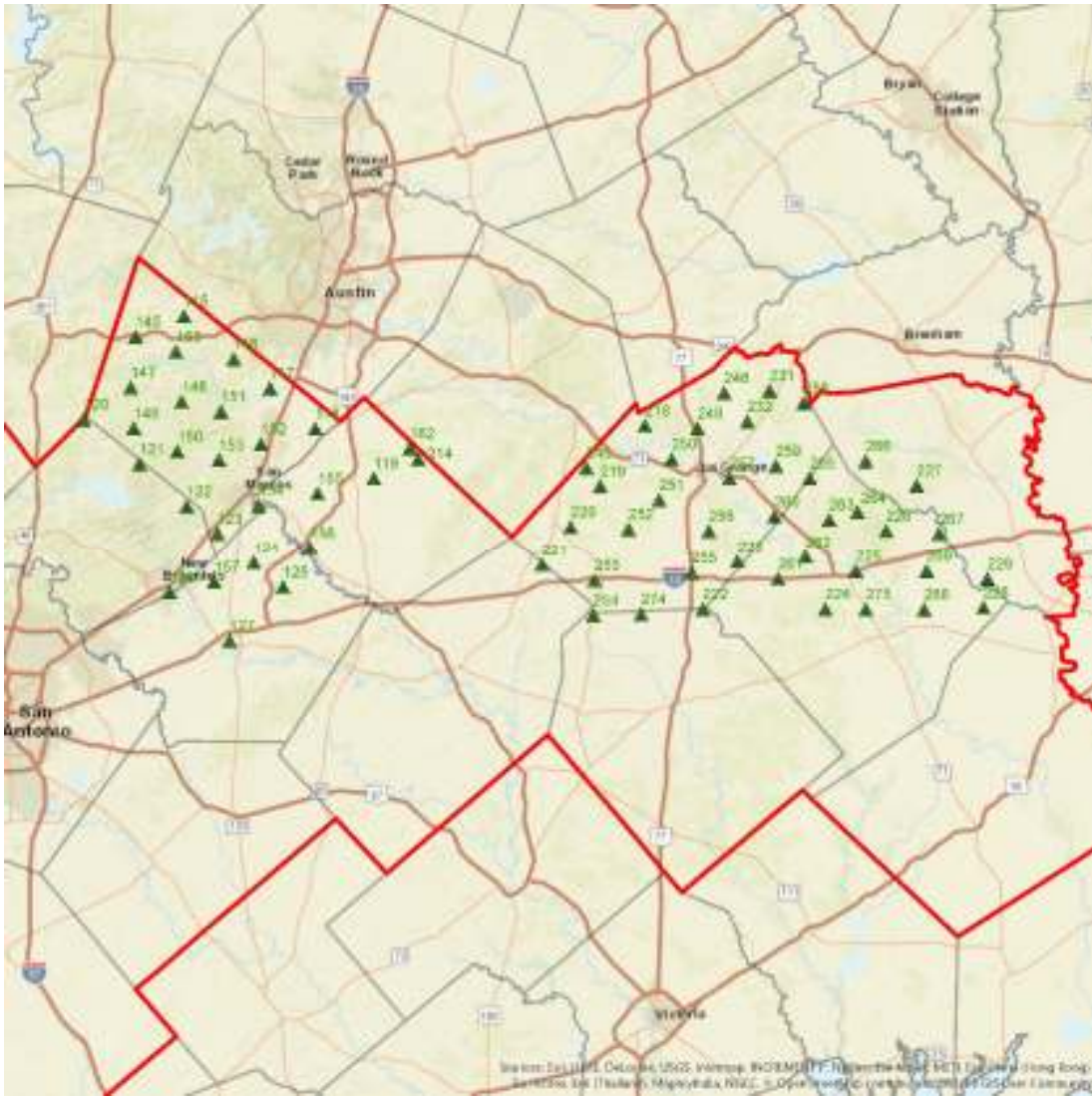


Figure 3: the above map indicates the La Grange sixty-seven (67) LiDAR points and five (5) check shots (100-200's 4204's)



## TNRIS Central Texas LiDAR

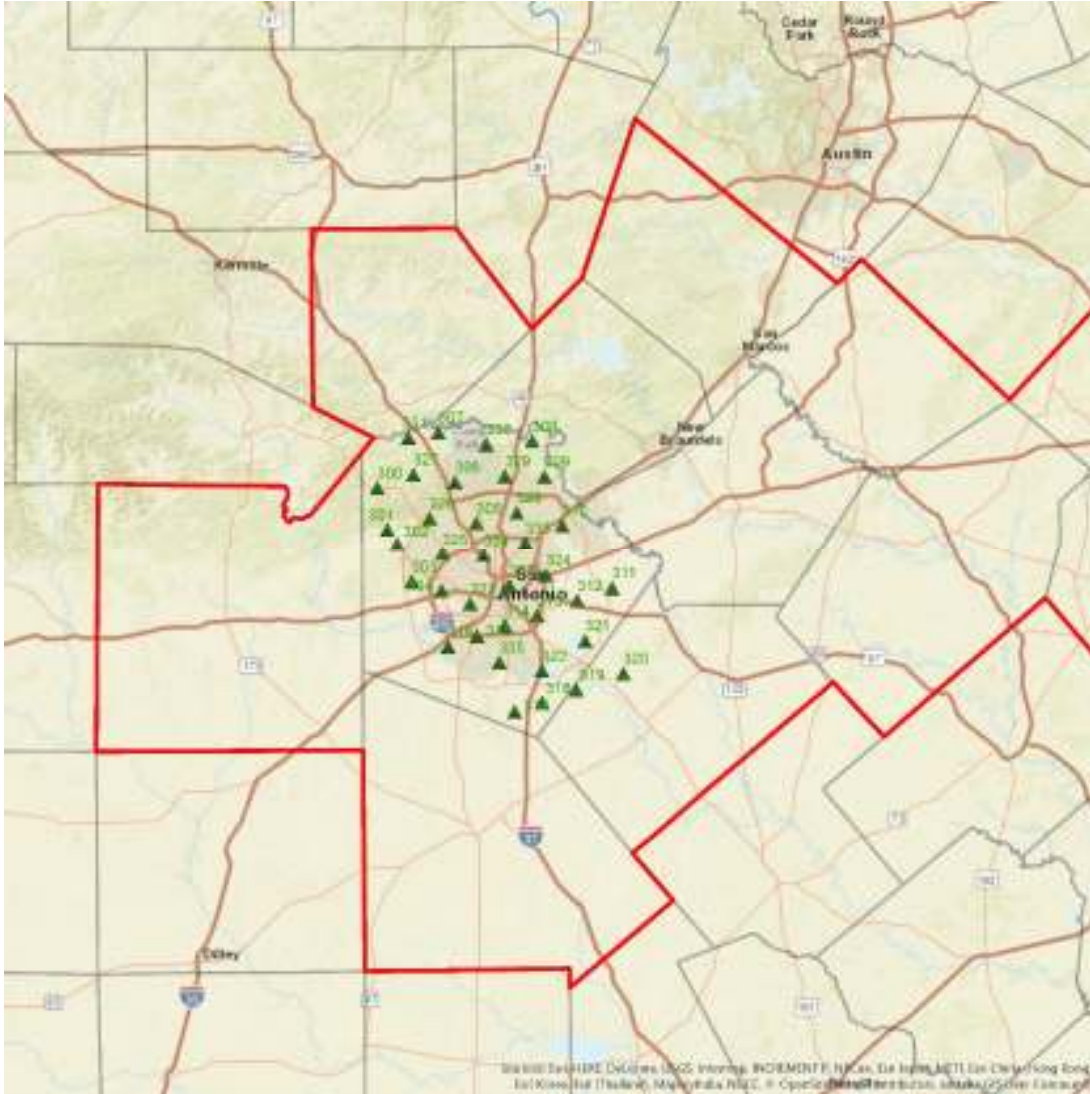


Figure 4: The above map indicates the San Antonio thirty-six (36) LiDAR points (300's).

### CONTROL

The Western Data System VRS Network was used to provide control for the survey. The Virtual Reference Station (VRS) base stations used for the Austin seventy-seven (77) LiDAR points & fifteen (15) check shots locations (100-200's 4203's) are listed in the table below:

SITE	VRS NETWORK NAME	CORS IS	PID	LATITUDE	LONGITUDE	ELLIPSOIDAL HEIGHT
BREHAM	HLSR_g1012	HLSR_g1012	HLSR	30d09'57.75639"	96d25'01.16821"	284.58
COLUMBUS	HRTK_g1012	HRTK_g1012	HRTK	29d43'19.71821"	96d33'33.89564"	146.056
TEMPLE	SCOT_g1215	SCOT_g1215	SCOT	31d05'50.10517"	97d20'28.98938"	694.387
MOPAC	SMNM_g1012	SMNM_g1012	SMNM	30d19'55.82386"	97d45'34.59761"	639.243



## TNRIS Central Texas LiDAR

LAMPASAS	SMPS_g10	SMPS_g10	SMPS	31d03'54.31085"	- 98d10'41.53940"	967.897
OAK HILL	SSAT_g1012	SSAT_g1012	SSAT	30d14'20.44820"	- 97d50'11.32374"	698.189
GIDINGS	SWBS_g1012	SWBS_g1012	SWBS	30d10'56.35806"	- 96d55'42.31305"	438.146
MARBLE FALLS	SWSH_g1012	SWSH_g1012	SWSH	30d34'21.75990"	- 98d16'38.36820"	735.597

The Western Data System VRS Network was used to provide control for the survey. The Virtual Reference Station (VRS) base stations used for the La Grange sixty-seven (67) LiDAR points and five (5) check shots (100-200's 4204's) and the San Antonio thirty-six (36) LiDAR points (300's) are listed in the table below:

SITE	VRS NETWORK NAME	CORS IS	PID	LATITUDE	LONGITUDE	ELLIPSOIDAL HEIGHT
COLUMBUS	HRTK_g1012	HRTK_g1012	HRTK	29d43'19.71821"	- 96d33'33.89564"	146.056
BLANCO	SBKR_g1012	SBKR_g1012	SBKR	30d06'50.04016"	- 98d24'53.00375"	1386.443
WETMORE CANYON LAKE	SFDE_g0913	SFDE_g0913	SFDE	29d32'22.58448"	- 98d24'56.24782"	752.807
SEGUIN	SGEO_g0913	SGEO_g0913	SGEO	29d58'38.23042"	- 98d15'38.97353"	1106.669
MOPAC	SGVD_g1113	SGVD_g1113	SGVD	29d32'36.04349"	- 98d04'28.33139"	554.362
OAK HILL	SMNM_g1012	SMNM_g1012	SMNM	30d19'55.82386"	- 97d45'34.59761"	639.243
PECAN VALLEY	SSAT_g1012	SSAT_g1012	SSAT	30d14'20.44820"	- 97d50'11.32374"	698.189
GIDDINGS	SSIA_g1012	SSIA_g1012	SSIA	29d22'22.96862"	- 98d24'14.54670"	541.58
BOERNE	SWBS_g1012	SWBS_g1012	SWBS	30d10'56.35806"	- 96d55'42.31305"	438.146
	SWEI_g0814	SWEI_g0814	SWEI	29d48'35.19623"	- 98d44'33.50792"	1433.102

The horizontal Datum was the North American Datum of 1983 NAD 83 (2011). The vertical datum was the North American Datum of 1988 (NAVD 1988). The geoid model GEOID12B was used to obtain the NAVD 1988 orthometric heights from the GRS 1980 ellipsoidal heights.



## TNRIS Central Texas LiDAR

### AUSTIN STATIONS

The seventy-seven (77) newly surveyed LiDAR points & fifteen (15) check shots locations were a combination of gravel, dirt, asphalt and concrete all in open terrain. The below table summarizes the new stations:

Station Name	GPSID	USGS Quad	Description
100	1100	MAHOMET	Asphalt, centerline County road 211 E. of US 183
101	1101	FLORENCE	Asphalt, centerline County Road 241 at gravel drive for Ranch
102	1102	YOUNGSPORT	Asphalt, centerline Quarry Dr. west edge County Road 231
103	1103	MORMON HILL	Asphalt, centerline of County Rd. 340 and County Rd. 335.
104	1104	MORMON HILL	Asphalt, centerline of driveway 5131 County Rd. 335.
105	1105	TRAVIS PEAK	Asphalt, centerline od driveway at 12875.
106	1106	TRAVIS PEAK	Asphalt, centerline of Cow Creek Rd.
107	1107	MANSFIELD DAM	Asphalt, centerline driveway at 19624 FM 1431. Rv Park.
108	1108	LEANDER	Gravel, edge of drive at 1307 Glass drive Dr. at W. side
109	1109	JOLLYVILLE	Concrete, center of drive at Avery Ranch neighborhood pool.
110	1110	PFLUGERVILLE WEST	Asphalt, center of turn lane on Wells Branch Parkway at Thomas Sinclair Blvd.
111	1111	PFLUGERVILLE EAST	Cast Iron, top of manhole near center of Titanium dr.
112	1112	ELGIN WEST	Asphalt, center of Cul De Sac at Deldra Dr.
113	1113	UTLEY	Asphalt, centerline of Cul De Sac at Forest Ridge Drive.
114	1114	HAMMETTS CROSSING	Asphalt, centerline of Live Oak Canyon Rd. and Whitetail Dr.
128	1128	UTLEY	Asphalt, centerline of Crested Butte and Moccasin Canyon.
129	1129	LYTTON SPRINGS	Concrete, the west entrance of Cedar Creek Intermediate school.
130	1130	WEBBERVILLE	Asphalt, centerline of driveway at Martin Marietta sand and Gravel, west of FM 969.
131	1131	AUSTIN EAST	Asphalt, centerline of Nafer Dr. and Loop Rd. gate 5.
132	1132	MONTOPOLIS	Asphalt, center of Cul De Sac on Sabrina Cove.
133	1133	JOPPA	Gravel, centerline gravel dr. at 3830 FM 243 at N. side FM 243.
134	1134	HUTTO	Asphalt, centerline county Road 132.
135	1135	ROUND ROCK	Asphalt, centerline driveway to cornfield on E. side Kenney fort Blvd. 220'+/- N. of Brushy Creek Trail
136	1136	MAHOMET	Asphalt, centerline drive 4601 County Road 207 at E. side.
137	1137	BERTRAM	Asphalt, centerline of Ranch Rd. 1869 and FM 1174.
138	1138	LIBERTY HILL	Asphalt, centerline gravel dr. at 1100 County Road 201 E. side County Road 201.
139	1139	LEANDER NE	Asphalt, E. edge of asphalt dr. to Mini Storage 10640 SH 29 at N. side
140	1140	JOLLYVILLE	Asphalt, centerline of Basie Bend and Checker dr.
141	1141	SHINGLE HILLS	Asphalt, center of driveway at Pooties Hill Top Roadhouse on the N. side of Hwy 290. Center of west driveway.
142	1142	SIGNAL HILL	Asphalt, centerline dr. on W. side Circle dr. N.E. of Oliver Cemetery Rd
143	1143	JOLLYVILLE	Asphalt, center of Cat Tail Cove at intersection with Lakewood Dr.



## TNRIS Central Texas LiDAR

144	1144	AUSTIN WEST	Asphalt, center of Cul De Sac on Phillip Ct. N.E. of Patterson Rd.
146	1146	YEAGER CREEK	Asphalt, centerline of FM 165 and Divide Pass Rd.
158	1158	CREEDMOOR	Asphalt, 400' East of SH 130 Frontage Rd. on Laws Rd.
159	1159	LEANDER	Asphalt, centerline Cul De Sac Guadalupe River Ct.
160	1160	DING DONG	Gravel, centerline Mustang Dr. at entrance to 1050 Mustang Dr.
161	1161	MORMON HILL	Asphalt, centerline of Dawin Dr. and County Rd. 344
164	1164	OAK HILL	Asphalt, center of Cul De Sac on Ovilla Dr.
165	1165	PACE BEND	Asphalt, centerline of Patton Cove.
200	1200	COBBS CAVERN	Asphalt, centerline drive at 5675 FM 487 S. side edge of asphalt FM 487
201	1201	COBBS CAVERN	Gravel, centerline of E.W running private rd. and private rd. to the South.
202	1202	GRANGER LAKE	Gravel, centerline of gravel driveway at 2636 County Rd. 423 at N. side of road.
203	1203	GRANGER	Asphalt, centerline County Road 414 E. of FM 619
204	1204	TAYLOR	Asphalt, centerline drive at 200 County Road 404 at S. Side of County Road.
205	1205	PFLUGERVILLE EAST	Asphalt, centerline Nicole Lane at S. edge Cameron rd.
206	1206	STRUCTURE	Asphalt, centerline driveway at 18054 FM 619 and the W. edge of FM 619
207	1207	BEAUKISS	Gravel, centerline driveway to Scruggs Ranch at W. side of FM 112
208	1208	THORNDALE	Asphalt, centerline P.C. at 1978 County Road 450.
209	1209	MC DADE	Gravel, center of private rd. near 3051 intersection of Johnny River rd.
210	1210	MC DADE	Asphalt, center of Marlin St. edge Hwy 290.
211	1211	LAKE BASTROP	Asphalt, center of Pershing Blvd on edge of Hwy 95.
212	1212	BASTROP SW	Asphalt, centerline of turn around lane on Hwy 71
213	1213	BASTROP SW	Gravel, centerline of gravel driveway at 4696 FM 535
215	1215	TOGO	Asphalt, center of Quail Run Rd. edge of Hwy 230 Loop.
216	1216	WINCHESTER	Gravel, center of Private Rd. 6004.
217	1217	WARDA	Asphalt, center of driveway at entrance of Camp Tetas PR 6024.
230	1230	CARMINE	Gravel, center of Hoade Rd.
233	1233	JARRELL	Gravel, at centerline 371 south of County Road 384.
234	1234	WEIR	Asphalt, centerline County road 154 N. of FM 971.
235	1235	GRANGER	Asphalt, centerline of County rd. 345, S. of County Road 346 and E. of rail road tracks
236	1236	THORNDALE	Asphalt, centerline road at 600 County Road 437.
237	1237	THRALL	Asphalt, centerline County Road 451 and County Road 455.
238	1238	COUPLAND	Asphalt, center of driveway at 16705 Lund Carlson Rd.
239	1239	ELGIN EAST	Asphalt, center of driveway entrance to Forterra at edge of Hwy 290 west.
240	1240	FEDOR	Gravel, center of driveway at address 229 Longhorn Trl.
241	1241	SMITHVILLE	
242	1242	BASTROP	Gravel, center of driveway at address 172 Hills Prarie rd.
243	1243	ROSANKY	Asphalt, center of Rosanky Cattle Co. Rd. on edge of Hwy 304.
244	1244	DELHI	Asphalt, center of Ott Rd. edge of Hwy 304
245	1245	TOGO	Gravel, center of Patterson Rd.
247	1247	LEDBETTER	Asphalt, center of turn around lane at end of double yellow stripes on Hwy 290.
270	1270	SMITHVILLE NW	Asphalt, center of driveway at edge of Hwy 21, address 1794 Hwy 21.



## TNRIS Central Texas LiDAR

271	1271	THRALL	Gravel, centerline drive at E. side of County Road 432.
272	1272	BARTLETT	Asphalt, at centerline Lutheran Rd. At S.W. end of stop bar strip E. of SH 95
273	1273	PAIGE	Asphalt, Center of asphalt driveway at 4296 Hwy 290 East.
276	1276	TOGO	Gravel, center of Flying Bar Ranch Rd. at Flying Bar Ranch entrance gate.
277	1277	HUTTO	Asphalt, centerline driveway E. side FM 1660 N. of Chandler Rd. FM 1431.
15006AA	15006AAA	HUTTO	Asphalt, N.W. corner stop bar at SH 130's North bound frontage road E. of SH 130
15006AB	115006AB	PFLUGERVILLE EAST	Asphalt, end of stop bar in center of dead end rd. at Cameron Rd.
15006AE	15006AEA	SHINGLE HILLS	Asphalt, centerline of Hamilton Pool Rd. and TX Hwy 12.
15006AK	115006AK	MANOR	Asphalt, center of Golden Valley Dr. at end of white paint stripe.
15006AL	15006ALA	WEBBERVILLE	Asphalt, centerline of Fall well Ln. and Frontage Rd. SH 130.
15006AP	15006APA	PACE BEND	Asphalt, center of entrance to Muleshoe Bend recreation area at the end of Muleshoe Bend Dr.
15006AX	15006AXA	MANSFIELD DAM	Asphalt, N. side of Hwy 620, across from "Travis County West Service Ctr", 4501 Hwy 620 N.
15006AY	15006AYA	AUSTIN WEST	Asphalt, centerline of Beverly Rd. and 34th St.
15006AZ	15006AZA	NAMELESS	Asphalt, centerline of Summit View Rd. and Ranch Rd.
15006BC	15006BCA	LYTTON SPRINGS	Asphalt, centerline of FM 812 and Doyle rd.
15006BK	15006BKA	JARRELL	Asphalt, N.W. corner stop bar N. side IH 35 N. bound access road.
15006BL	15006BLA	GRANGER LAKE	Asphalt, centerline FM 1063 at N.W. corner stop bar s. of FM 1331
15006BW	115006BW	ELGIN WEST	Asphalt, center of Ballerstedt Rd. near 12338 Ballerstedt Rd. driveway
15006CE	115006CE	JEDDO	Asphalt, center of FM 1296 edge of FM 913
15006CF	15006CFA	RED ROCK	Asphalt, centerline of Sand Hills Rd. and Goertz Dr. E SE. of RR Trk.

### LA GRANGE STATIONS

The sixty-seven (67) newly surveyed LiDAR points and five (5) check shots were a combination of gravel, dirt, asphalt and concrete all in open terrain. The below table summarizes the new stations:

Station Name	GPSID	USGS Quad	Description
115	1115	DRIPPING SPRINGS	Asphalt, center of Cul De Sac on east end of Barton Ranch Rd.
116	1116	SIGNAL HILL	Asphalt, center of Cul De Sac on Spanish Oak Circle, Western most Cul De Sac on St.
117	1117	BUDA	Asphalt, center of cul d' sac on Thyme Springs and Rosemary Hollow
118	1118	BUDA	Asphalt, center of Graef Rd. at Graef Rd. and Rohde Rd. intersection
119	1119	LOCKHART NORTH	Dirt, center of Witter Rd. and FM 672
120	1120	PAYTON	Concrete, centerline concrete driveway at Blanco River Ranch Ent. off Narrows St.
121	1121	DEVILS BACKBONE	Gravel, on El Rancho Cima Rd.(Boy Scouts of America) at entrance to Council
122	1122	HUNTER	Asphalt, centerline of Lost Trail and Wagoner.
123	1123	SAN MARCOS SOUTH	Asphalt, centerline of Francis Harris Ln. and Old Bastrop Hwy.
124	1124	GERONIMO	Gravel, centerline of driveway at 4848
125	1125	KINGSBURY	Gravel, centerline of driveway on Wilk Rd.
126	1126	NEW BRAUNFELS EAST	Concrete, centerline of concrete driveway at 1857 S. Seguin Ave.
127	1127	SEGUIN	Asphalt, centerline of West New Braunfels St. and Traeger St.
145	1145	HENLY	Asphalt, centerline of Martin rd. at intersection of US Hwy 290





## TNRIS Central Texas LiDAR

147	1147	ROUGH HOLLOW	Asphalt, edge of Pump Station Road at entrance of Faith Ranch Community. 3419 Pump Station Rd.
148	1148	DRIFTWOOD	Dirt, on North Rainbow Ranch Rd. in the Rainbow Ranch residential area.
149	1149	ROUGH HOLLOW	Asphalt, center of Toro Pass Cul De Sac
150	1150	WIMBERLEY	Asphalt, 100" +/- N. of Spooke Hollow Rd. and Hillview .
151	1151	MOUNTAIN CITY	Concrete, centerline of drive at 8300 Old Kyle Rd.
152	1152	SAN MARCOS NORTH	Asphalt, centerline of Opal Ln. and South Old Stagecoach Rd.
153	1153	SAN MARCOS NORTH	Asphalt, center of Cul De Sac on Morning Wood Dr.
154	1154	SAN MARCOS SOUTH	Asphalt, center of entrance to Blind Salamander RV Park at intersection of County Line Rd.
155	1155	UHLAND	Asphalt, centerline of Cistern Rd. and TX Hwy 142
156	1156	MARTINDALE	Asphalt, center of Political Rd. at intersection of TX Hwy 80
157	1157	NEW BRAUNFELS EAST	Asphalt, centerline of Barbarossa St. and FM 758
162	1162	DALE	Asphalt, center of Dale Ln. at intersection of FM 672
163	1163	DRIPPING SPRINGS	Asphalt, center of dr. of Cemetery at the intersection of FM 12 and FM 150. Entrance is W. of intersection.
214	1214	DALE	Gravel, center of walnut dr. at intersection of Sandy Creek Rd.
218	1218	WINCHESTER	Asphalt, center of Raymond Rd. and FM 153 on asphalt
219	1219	WEST POINT	Dirt, center of driveway off West Old Lockhart Rd.
220	1220	CISTERN	Asphalt, centerline drive of Spirit Haven Ranch at intersection of Anchor Ranch Rd.
221	1221	FLATONIA NW	Gravel, centerline of Sparta Field Rd. with Pastures on both sides
222	1222	SCHULENBURG	Asphalt, centerline of East County Line Rd. opposite 515 east County Line Rd.
223	1223	WELMAR	Gravel, centerline private dr. at East edge of FM 485
224	1224	COLUMBUS	Gravel, center of driveway at 1390 FM 106
225	1225	COLUMBUS	Asphalt, on N. side of TX Hwy 90, E. of bridge
226	1226	BERNARDO	Gravel, at intersection of Baily Rd. and Zimmerscheidt Rd.
227	1227	NEW ULM	Asphalt, centerline dr. at Circle H Ranch 16790 FM 1094.
228	1228	REXVILLE	Dirt, east of County Road 210-B intersection and Cassidy Road
229	1229	REXVILLE	Gravel, center of driveway at Quail Creek Oil Corp. at gate
231	1231	ROUND TOP	Asphalt, centerline of Weyland Rd. and Round Top Rd.
232	1232	NECHANITZ	Gravel, centerline of Wynne Rd. at the NE quad of gravel driveway.
246	1246	TOGO	Asphalt, center of Vista Ranch Rd. and Old Smithville Rd.
248	1248	NECHANITZ	Gravel, centerline gravel dr. Goehring Rd. NE of oil field Ent.
249	1249	LA GRANGE WEST	Asphalt, centerline of Race Track Rd. SE of "Energy Transfer Chisholm Processing Unit".
250	1250	LA GRANGE WEST	Asphalt, centerline of Egypt Rd. in front of 1602 Egypt Rd.
251	1251	SWISS ALP	Dirt, centerline of dr. at O'Quinn Branch Rd.
252	1252	MULDON	Dirt, centerline Dr. extended at the North intersection of FM 2237.
253	1253	FLATONIA NW	Asphalt, centerline of FM 2762 and Rd. and with no name. Dead end
254	1254	MOULTON	Asphalt, centerline drive at 3838 TX Hwy 95.
255	1255	SCHULENBURG	Asphalt, centerline asphalt drive at US Hwy 77.
256	1256	AMMANNSVILLE	Asphalt, centerline of Marlyns Ln. and FM 1383.
257	1257	LA GRANGE EAST	Asphalt, center of intersection S. of TX. Hwy 71 and private dr.
258	1258	ROUND TOP	Gravel, centerline of Neumann Rd. and N Nassau Rd.
259	1259	FAYETTEVILLE	Gravel, center of dr. at 2522 TX Hwy 159.
260	1260	ELLINGER	Dirt, on Banks Ranch
261	1261	BORDEN	Asphalt, centerline of FM 210 at intersection with TX Hwy 90
262	1262	BORDEN	Gravel, centerline driveway at 1569 FM 1890
263	1263	FRELSBURG	Asphalt, at the Big Easy Ranch one thousand feet +/- off Brunas Mill Rd.
264	1264	FRELSBURG	Asphalt, North side of Zimmerscheidt Rd. at unknown property entrance
265	1265	FAYETTEVILLE	Asphalt, centerline of Cimmins Stiern Rd. and FM 1291
266	1266	NEW ULM	Asphalt, centerline of Henkhaus Rd. and FM 109.



## TNRIS Central Texas LiDAR

267	1267	CAT SPRING	Asphalt, centerline of Cat spring Rd. and Sealy Rd.
268	1268	EAGLE LAKE	Asphalt, centerline of County Rd. 48 and FM 102
269	1269	EAGLE LAKE NE	Asphalt, centerline of County Rd. 92 and FM 2761
274	1274	FLATONIA	Gravel, centerline of County Rd. 253 with pasture to the East.
275	1275	COLUMBUS	Concrete, North driveway entrance to Basic Energy Services.
15006AU	15006AU	UHLAND	Asphalt, tip of left lane turn arrow in center of TX Hwy 21.
15006BB	15006BB	MOUNTAIN CITY	Asphalt, centerline of Brangus and Nature View Loop.
15006BS	15006BS	FLATONIA	Asphalt, centerline of FM 2238 and US Hwy 90.
15006BU	15006BU	INDUSTRY	Asphalt, centerline of FM 954 and FM 159
15006BV	15006BV	WEST POINT	Asphalt, SE corner of Lady Bird Loop, at turn around between E and W bound Hwy 71.

### SAN ANTONIO STATIONS

The thirty-six (36) newly surveyed LiDAR points were a combination of gravel, dirt, asphalt and concrete all in open terrain. The below table summarizes the new stations:

Station Name	GPSID	USGS Quad	Description
300	1300	SAN GERONIMO	Asphalt, centerline of driveway at address 18955 Bandera Rd. south side of Bandera Rd.
301	1301	HELOTES	Asphalt, at address 12861 Galm Rd. on a Park Service Road to Government Canyon State Natural Area
302	1302	HELOTES	Asphalt, centerline driveway at address 7480 Farm to Market Highway No. 1560 east side of FM 1560
303	1303	CULEBRA HILL	Asphalt, center of cul d' sac on Cedar Village east of Arrowhead Trail
304	1304	SAN ANTONIO WEST	Asphalt, centerline intersection of Sherwood Dr. and Interstate Highway No. 10 frontage road
305	1305	CASTLE HILLS	Asphalt, north side of entrance road to Elm Creek Community at intersection Wurzbach Rd.
306	1306	CAMP BULLIS	Asphalt, north corner of Old Camp Bullis Rd. and Camp Bullis Rd.
307	1307	VAN RAUB	Asphalt, centerline of Diet Elkhorn Rd. and Preakness Ln.
308	1308	BULVERDE	Asphalt, centerline of driveway at address 27981 Smithson Valley Rd.
309	1309	BULVERDE	Asphalt, centerline of driveway at address 5067 Evans Rd. north side of Evans Rd.
310	1310	SCHERTZ	Asphalt, center of cul d' sac on Forest Deer Ct. north of Forest Moon
311	1311	SAINT HEDWIG	Asphalt, centerline of driveway at FM 1518 at address 920 FM 1518
312	1312	MARTINEZ	Asphalt, centerline Zigmont Rd. and Kirkner Rd.
313	1313	SOUTHTON	Asphalt, centerline of South Ww White Rd. and Southeast Military Drive
314	1314	SOUTHTON	Asphalt, centerline of cul d' sac at east end of 99th St.
315	1315	TERRELL WELLS	Asphalt, centerline of Hunters Pond and Interstate Highway No. 410 access road 37 feet west of stop sign
316	1316	TERRELL WELLS	Dirt, 57 feet southeast of Campground Rd. and Fisher Rd.
317	1317	LOSOYA	Asphalt, center of cul d' sac on South Black Jack Bend south of Sandy Pass
318	1318	LOSOYA	Asphalt, center of cul d' sac on Blue Beach Rd. off Grand Spring Rd.
319	1319	SASPAMCO	Asphalt, center of cul d' sac southeast of County Road No. 125 in Graytown Park Disc Golf
320	1320	FLORESVILLE	Asphalt, centerline driveway at Chaparral Dr. at address 137 Chaparral Dr.
321	1321	ELMENDORF	Gravel, centerline of driveway at Stuart Rd. at address 11121 Stuart Rd.
322	1322	LOSOYA	Asphalt, centerline of Donop Rd. and Interstate Highway No. 35 frontage road at entrance to Braunig Park
323	1323	SAN ANTONIO WEST	Asphalt, centerline of east driveway address 205 Billy Mitchell Blvd. north side of Billy Mitchell Blvd.



## TNRIS Central Texas LiDAR

324	1324	SAN ANTONIO WEST	Concrete, centerline of driveway at west entrance gate to address 5511 Dietrich Rd. north side of Dietrich Rd.
325	1325	SAN ANTONIO WEST	Gravel, in gravel driveway at address 5713 El Verde Rd. northwest side of El Verde Rd.
326	1326	HELOTES	Asphalt, centerline cul d' sac on Pearl Lagoon east of Ranchwell Cove
327	1327	VAN RAUB	Asphalt, on northsat corner of driveway on Scenic Loop Rd.
328	1328	LONGHORN	Asphalt, centerline of Burning Trails St. at intersection of Jones-Maltsberger Rd.
329	1329	BULVERDE	Asphalt, north entrance at The Springs at Stone Creek community at Granite Springs Rd. and Stone Oak Rd.
330	1330	CAMP BULLIS	Asphalt, centerline intersection of Farm to Market Highway No. 2696 and Old Blanco Rd.
331	1331	VAN RAUB	Asphalt, center cul d' sac on south end of Flemingfeld south of Der Flagplatz
332	1332	SAN ANTONIO EAST	Asphalt, centerline intersection of Poso Hondo St. and Monumental St.
333	1333	LONGHORN	Asphalt, east side of intersection of Oakwell Farms Parkway and Oakwell Ct.
334	1334	SAN ANTONIO WEST	Asphalt, centerline of Elmer Blvd. east of Pinn Rd.
335	1335	SOUTHTON	Dirt, north side of dirt driveway 52 feet east of railroad crossing

## GPS DATA PROCESSING

The data was downloaded to a PC and processed using Trimble Business center, version 3.80. All of the lines between the CORs and the newly surveyed stations were processed using the single baseline method with precise ephemeris. All of the baselines were integer bias fixed solutions. The baselines to be processed were based on the proximity to the nearest CORS. The table below shows the result of the baseline processing:

From Point ID	To Point ID	H. Precision (95%)	V. Precision (95%)	Satellites	Epochs	Vector Length (meters)
SMPS_g10	1100	0.023	0.034	15	30	34116.603
SMPS_g10	1101	0.041	0.046	15	30	48069.723
SCOT_g12	1102	0.020	0.062	11	30	42642.333
SWSH_g1012	1103	0.014	0.021	13	31	12330.824
SWSH_g1012	1104	0.018	0.028	13	31	13343.047
SWSH_g1012	1105	0.018	0.026	13	6	17236.717
SWSH_g1012	1105	0.021	0.031	13	31	17236.716
SWSH_g1012	1106	0.021	0.026	13	31	22758.862
SMNM_g1012	1107	0.024	0.036	11	31	24716.347
SMNM_g1012	1108	0.019	0.027	15	30	26712.482
SMNM_g1012	1109	0.020	0.031	14	31	18451.137
PRS370780058369	1110	0.017	0.025	12	31	13904.278
PRS370780058369	1111	0.015	0.020	14	31	15669.004
SMNM_g1012	1112	0.029	0.053	14	31	29784.578
HLSR_g1012	1113	0.107	0.156	13	31	95167.147
PRS131436241462	1114	0.026	0.032	13	31	28107.71
SSAT_g1012	1115	0.014	0.027	13	31	22269.341
SSAT_g1012	1116	0.017	0.021	15	31	14816.716
SSAT_g1012	1117	0.020	0.032	15	31	16506.724
SSAT_g1012	1118	0.026	0.039	14	31	26164.043
SSAT_g1012	1119	0.021	0.026	15	31	41461.75



## TNRIS Central Texas LiDAR

SGEO_g0913	1120	0.015	0.022	13	31	7341.774
SGEO_g0913	1121	0.014	0.020	15	31	9257.004
SGEO_g0913	1122	0.024	0.032	14	31	23151.657
SGVD_g1113	1123	0.019	0.027	16	31	29624.531
SGVD_g1113	1124	0.024	0.037	16	31	26941.058
SGVD_g1113	1125	0.018	0.029	15	31	27553.801
SGVD_g1113	1126	0.018	0.020	14	31	15549.152
SGVD_g1113	1127	0.014	0.021	15	31	11132.014
HRTK_g1012	1128	0.024	0.037	14	31	100908.105
HRTK_g1012	1129	0.105	0.187	10	3	99405.165
SMNM_g1012	1130	0.018	0.028	14	31	24773.671
SMNM_g1012	1131	0.013	0.021	14	31	11619.349
SSAT_g1012	1132	0.017	0.023	14	6	13471.092
SSAT_g1012	1132	0.018	0.024	14	31	13471.091
SMPS_g10	1133	0.052	0.041	13	30	36342.837
SMNM_g1012	1134	0.019	0.025	15	30	33064.168
SSAT_g1012	1135	0.020	0.026	15	30	36247.245
SMPS_g10	1136	0.023	0.035	14	30	42026.91
SWSH_g1012	1137	0.025	0.030	14	31	21732.878
SMPS_g10	1138	0.030	0.053	14	30	46110.828
SMNM_g1012	1139	0.031	0.061	12	30	36718.02
SMNM_g1012	1140	0.018	0.026	14	31	19964.825
SWSH_g1012	1141	0.016	0.027	14	31	29700.274
SSAT_g1012	1142	0.018	0.022	13	31	10588.847
SMNM_g1012	1143	0.015	0.025	14	31	6191.893
SSAT_g1012	1144	0.018	0.019	13	31	7779.279
SBKR_g1012	1145	0.017	0.025	15	31	24445.165
PRS786193644091	1146	0.015	0.023	14	31	12462.005
SGEO_g0913	1147	0.017	0.019	14	31	14775.176
SGEO_g0913	1148	0.022	0.026	13	31	20506.199
SGEO_g0913	1149	0.015	0.017	15	31	8328.001
SGEO_g0913	1150	0.019	0.021	14	31	16917.923
SSAT_g1012	1151	0.022	0.032	14	30	25601.832
SSAT_g1012	1152	0.017	0.025	15	31	29140.376
SGEO_g0913	1153	0.022	0.034	14	31	26338.711
SGEO_g0913	1154	0.016	0.029	13	31	37386.003
SSAT_g1012	1155	0.016	0.030	13	31	40384.483
SGVD_g1113	1156	0.028	0.039	15	31	37903.965
SGVD_g1113	1157	0.017	0.022	13	31	18824.681
SSAT_g1012	1158	0.016	0.024	13	31	24754.155
SMNM_g1012	1159	0.020	0.031	14	30	27963.298
SMPS_g10	1160	0.023	0.037	14	30	36925.276
SWSH_g1012	1161	0.020	0.026	13	31	18898.049
SSAT_g1012	1162	0.019	0.024	15	31	40852.972
SSAT_g1012	1163	0.020	0.031	14	31	25370.966
SSAT_g1012	1164	0.018	0.026	12	31	5220.846
SMNM_g1012	1165	0.025	0.031	13	31	27874.907
SCOT_g12	1200	0.026	0.042	14	30	45281.917
SCOT_g12	1201	0.028	0.046	13	30	38115.375
SCOT_g1215	1202	0.024	0.028	14	30	39433.361
SMNM_g1012	1203	0.021	0.037	15	30	50006.004
SMNM_g1012	1204	0.019	0.025	15	30	33782.624
SMNM_g1012	1205	0.020	0.032	15	30	24533.953
SWBS_g1012	1206	0.021	0.025	15	30	44410.586
SWBS_g1012	1207	0.021	0.030	15	30	45092.919



## TNRIS Central Texas LiDAR

SWBS_g1012	1208	0.027	0.048	15	30	48436.434
PRS104624788080	1209	0.030	0.036	11	31	30995.794
PRS104624788080	1210	0.027	0.030	13	30	32233.144
PRS104624788080	1211	0.021	0.034	15	31	37130.422
HRTK_g1012	1212	0.047	0.060	10	31	91008.762
HRTK_g1012	1213	0.044	0.056	12	31	93300.55
SSAT_g1012	1214	0.024	0.029	14	31	43918.363
PRS104624788080	1215	0.022	0.029	13	31	28609.349
PRS104624788080	1216	0.013	0.024	14	31	12351.994
PRS104624788080	1217	0.016	0.019	14	31	9644.846
SWBS_g1012	1218	0.023	0.031	12	31	20703.401
SWBS_g1012	1219	0.019	0.028	14	31	37110.191
SWBS_g1012	1220	0.021	0.029	15	31	48293.188
SWBS_g1012	1221	0.018	0.031	13	31	58952.306
SWBS_g1012	1222	0.029	0.036	14	31	61113.509
HRTK_g1012	1223	0.015	0.023	15	31	22945.268
HRTK_g1012	1224	0.017	0.022	14	31	11029.152
HRTK_g1012	1225	0.020	0.028	11	31	3954.262
HRTK_g1012	1226	0.014	0.026	14	31	12601.832
HRTK_g1012	1227	0.016	0.028	15	31	24388.124
HRTK_g1012	1228	0.017	0.027	14	31	33481.527
HRTK_g1012	1229	0.019	0.027	15	31	33004.942
PRS104624788080	1230	0.018	0.025	15	31	27154.539
SWBS_g1012	1231	0.019	0.029	15	31	23872.797
SWBS_g1012	1232	0.022	0.036	14	31	24437.786
SCOT_g12	1233	0.027	0.042	15	30	39772.558
SMNM_g1012	1234	0.022	0.032	13	30	43827.294
SCOT_g1215	1235	0.020	0.031	13	30	46993.573
SWBS_g1012	1236	0.038	0.053	14	30	54263.9
SCOT_g1215	1237	0.023	0.036	13	1	46993.568
PRS370780058369	1238	0.022	0.026	14	31	34639.648
PRS370780058369	1239	0.022	0.028	14	31	40332.219
PRS104624788080	1240	0.021	0.028	13	31	20278.286
PRS104624788080	1241	0.016	0.026	14	31	27938.619
PRS104624788080	1242	0.025	0.033	16	31	40639.65
PRS104624788080	1243	0.027	0.034	14	31	45101.049
PRS104624788080	1244	0.031	0.030	14	31	56609.726
PRS104624788080	1245	0.028	0.026	14	31	44727.354
SWBS_g1012	1246	0.031	0.037	13	31	35237.096
PRS104624788080	1247	0.016	0.020	14	31	11922.418
SWBS_g1012	1248	0.015	0.023	16	31	16199.315
SWBS_g1012	1249	0.021	0.030	13	31	20676.519
SWBS_g1012	1250	0.025	0.027	14	31	27044.623
HRTK_g1012	1251	0.026	0.034	13	31	42847.767
HRTK_g1012	1252	0.025	0.035	15	31	47881.149
SWBS_g1012	1253	0.025	0.041	15	31	57289.915
SWBS_g1012	1254	0.022	0.037	17	31	64867.474
SWBS_g1012	1255	0.029	0.026	15	31	52685.767
HRTK_g1012	1256	0.016	0.029	15	31	30205.13
SWBS_g1012	1257	0.024	0.036	16	31	33394.77
SWBS_g1012	1258	0.015	0.029	14	31	31873.637
SWBS_g1012	1259	0.028	0.041	17	31	36135.486
HRTK_g1012	1260	0.015	0.020	16	31	18098.005
HRTK_g1012	1261	0.015	0.021	16	31	14352.765
SWBS_g1012	1262	0.022	0.036	16	31	56770.747



TNRIS Central Texas LiDAR

HRTK_g1012	1263	0.015	0.019	14	31	10103.304
HRTK_g1012	1264A	0.014	0.019	15	31	12163.38
HRTK_g1012	1265	0.017	0.019	16	31	20250.757
HRTK_g1012	1266	0.018	0.027	16	31	23605.953
HRTK_g1012	1267	0.020	0.027	17	31	22965.845
HRTK_g1012	1268	0.016	0.026	12	31	21467.793
HRTK_g1012	1269	0.022	0.031	14	31	19343.869
PRS104624788080	1270	0.025	0.035	14	31	24085.213
SMNM_g1012	1271	0.023	0.027	15	30	50704.496
SCOT_g12	1272	0.026	0.034	15	3	33206.116
SCOT_g12	1272	0.022	0.029	15	30	33206.139
PRS104624788080	1273	0.017	0.023	14	31	14321.02
SMNM_g1012	1273	0.024	0.026	15	30	44007.451
SWBS_g1012	1273	0.017	0.024	15	31	14321.963
SWBS_g1012	1274	0.041	0.076	13	3	62395.353
HRTK_g1012	1275	0.014	0.018	14	31	11953.348
PRS104624788080	1276	0.020	0.023	15	31	35554.238
SMNM_g1012	1277	0.024	0.035	11	30	36333.381
SMNM_g1012	1278	0.037	0.057	5	20	36340.115
SWEI_g0814	1300	0.017	0.023	14	32	21101.935
SWEI_g0814	1301	0.018	0.027	14	31	30264.744
SFDE_g0913	1302	0.016	0.020	14	28	30233.412
SSIA_g1012	1303	0.016	0.020	15	26	28655.557
SFDE_g0913	1304	0.018	0.021	15	31	12508.065
SFDE_g0913	1305	0.016	0.018	15	31	12472.927
SFDE_g0913	1306	0.025	0.033	14	31	19911.336
SWEI_g0814	1307	0.021	0.033	10	32	13987.256
SFDE_g0913	1308	0.024	0.034	13	31	19308.201
SFDE_g0913	1309	0.014	0.018	15	31	11729.249
SFDE_g0913	1310	0.013	0.019	14	31	6724.939
PRS14805128501	1311	0.016	0.023	14	29	17241.829
SSIA_g1012	1312	0.014	0.019	14	31	9043.23
SSIA_g1012	1313	0.008	0.010	13	30	1452.378
SSIA_g1012	1314	0.011	0.014	15	32	8143.704
SSIA_g1012	1315	0.014	0.019	15	6	14735.68
SSIA_g1012	1316	0.015	0.021	14	30	21557.826
SSIA_g1012	1317	0.022	0.025	11	21	23325.088
SSIA_g1012	1318	0.015	0.022	12	31	20733.549
SSIA_g1012	1319	0.016	0.020	13	32	19854.44
SSIA_g1012	1320	0.016	0.017	14	28	23837.67
SSIA_g1012	1321	0.012	0.014	15	30	12691.055
SSIA_g1012	1322	0.022	0.033	11	26	13712.748
SSIA_g1012	1323	0.015	0.019	15	32	15028.507
SSIA_g1012	1324	0.012	0.018	15	32	7831.507
SFDE_g0913	1325	0.024	0.035	12	31	20779.99
SFDE_g0913	1326	0.021	0.031	13	31	22842.818
SWEI_g0814	1327	0.012	0.015	14	32	18768.673
SFDE_g0913	1328	0.013	0.018	16	31	4780.136
SFDE_g0913	1329	0.015	0.021	15	31	12963.68
SFDE_g0913	1330	0.038	0.052	16	31	21175.406
SWEI_g0814	1331	0.013	0.018	14	31	10615.496
SSIA_g1012	1332	0.015	0.024	13	32	8191.347
SFDE_g0913	1333	0.013	0.018	15	31	3703.814
SSIA_g1012	1334	0.016	0.022	14	26	21756.524
SSIA_g1012	1335	0.014	0.019	14	23	14574.357



**TNRIS Central Texas LiDAR**

SMNM_g1012	15006AAA	0.021	0.030	13	30	33067.235
SSAT_g1012	15006AEA	0.019	0.040	13	31	22582.939
SMNM_g1012	15006AL	0.015	0.026	14	31	19018.013
SWSH_g1012	15006APA	0.020	0.029	14	31	19586.277
SSAT_g1012	15006AU	0.021	0.028	15	31	33848.288
SMNM_g1012	15006AXA	0.016	0.029	12	31	14729.861
SMNM_g1012	15006AYA	0.017	0.025	12	30	2831.293
SWSH_g1012	15006AZA	0.024	0.030	14	31	28920.337
SSAT_g1012	15006BB	0.021	0.027	15	31	19084.655
SSAT_g1012	15006BB	0.022	0.028	14	31	19084.651
SSAT_g1012	15006BCA	0.018	0.022	13	31	26395.335
SCOT_g12	15006BKA	0.022	0.038	15	30	39681.751
SCOT_g1215	15006BLA	0.023	0.038	14	30	47713.07
SWBS_g1012	15006BS	0.037	0.054	16	31	56093.587
HRTK_g1012	15006BU	0.020	0.022	16	31	27377.443
SWBS_g1012	15006BV	0.021	0.026	13	31	29660.082
SSAT_g1012	15006CFA	0.024	0.027	14	31	48821.791
PRS370780058369	115006AB	0.020	0.024	14	6	18599.531
PRS370780058369	115006AB	0.018	0.021	14	31	18599.529
PRS370780058369	115006AK	0.021	0.027	12	31	22232.226
PRS370780058369	115006BW	0.025	0.032	12	31	27908.145
PRS104624788080	115006CE	0.033	0.032	14	6	55746.95
PRS104624788080	115006CE	0.037	0.035	14	31	55746.948

**SUMMARY**

The one hundred ninety-eight (198) LiDAR ground control points surveyed were positioned at three areas in Texas. The estimated accuracy of the adjusted coordinates is ±0.005m with respect to the NAD 1983 (2011) and NAVD 1988 datums.

**AUSTIN**

Adjusted Coordinates – NAD 1983 (2011) / NAVD 1988

UTM Zone 14 & 15

NAVD 1988 orthometric height – ellipsoidal height + GEOID12B

Station Name	GPSID	Latitude	Longitude	UTM 14 N m	UTM 14 E m	UTM 15 N m	UTM 15 E m	Ellip H m
100	1100	30°51'37.76102" N	97°54'41.40487" W	3,424,486.240	30,162.686	3,414,647.907	604,068.641	323.513
101	1101	30°46'38.92543" N	97°48'06.81205" W	3,414,813.939	40,263.198	3,405,554.907	614,647.371	256.257
102	1102	30°53'53.25668" N	97°43'24.08672" W	3,427,885.172	48,357.644	3,419,010.006	622,010.217	281.454
103	1103	30°40'05.27570" N	98°12'40.54274" W	3,404,431.164	454.307	3,393,088.864	575,558.378	310.375
104	1104	30°40'16.95476" N	98°11'51.51415" W	3,404,730.662	1,778.259	3,393,457.640	576,860.508	316.759
105	1105	30°35'48.81596" N	98°05'59.34165" W	3,396,029.143	10,791.347	3,385,274.058	586,298.004	349.41
106	1106	30°32'27.80564" N	98°02'34.64680" W	3,389,583.161	15,974.350	3,379,130.969	591,801.793	231.523



## TNRIS Central Texas LiDAR

107	1107	30°28'37.48889" N	97°57'18.26564" W	3,382,105.116	24,107.160	3,372,115.537	600,297.892	283.142
108	1108	30°33'37.64062" N	97°50'54.89828" W	3,390,915.241	34,745.475	3,381,455.244	610,425.821	280.846
109	1109	30°29'54.70872" N	97°45'55.18474" W	3,383,699.295	42,452.170	3,374,676.612	618,485.933	248.332
110	1110	30°26'26.62280" N	97°41'13.76668" W	3,376,968.172	49,699.392	3,368,355.101	626,062.794	228.651
111	1111	30°22'35.96509" N	97°36'17.70883" W	3,369,531.163	57,318.595	3,361,348.545	634,047.821	161.117
112	1112	30°16'07.09190" N	97°27'31.57951" W	3,356,979.458	70,910.256	3,349,558.310	648,254.733	120.667
113	1113	30°13'22.36852" N	97°24'11.09299" W	3,351,692.111	76,077.953	3,344,560.928	653,683.658	101.204
114	1114	30°19'51.66194" N	98°11'20.19968" W	3,366,899.026	871.132	3,355,744.343	577,964.812	249.326
128	1128	30°10'23.00867" N	97°28'02.81382" W	3,346,405.100	69,657.320	3,338,953.891	647,562.700	124.904
129	1129	30°05'10.31275" N	97°30'00.17588" W	3,336,889.191	66,132.918	3,329,285.497	644,549.903	107.636
130	1130	30°14'39.11994" N	97°31'22.45916" W	3,354,511.983	64,623.995	3,346,768.044	642,120.086	100.048
131	1131	30°16'18.40634" N	97°39'39.21640" W	3,358,111.086	51,452.674	3,349,660.221	628,806.161	111.456
132	1132	30°09'09.99721" N	97°44'16.53104" W	3,345,209.360	43,480.193	3,336,386.950	621,542.208	150.279
133	1133	30°46'27.00059" N	98°00'10.89438" W	3,415,292.401	20,967.024	3,404,999.100	595,403.029	333.987
134	1134	30°32'11.11491" N	97°30'31.69924" W	3,386,889.584	67,276.461	3,379,173.509	643,050.355	171.043
135	1135	30°30'58.80603" N	97°38'12.23334" W	3,385,159.633	54,894.298	3,376,791.988	630,804.124	177.605
136	1136	30°46'05.21798" N	97°54'17.93272" W	3,414,203.825	30,336.298	3,404,416.144	604,792.284	294.321
137	1137	30°39'14.02744" N	98°04'15.75687" W	3,402,232.956	13,841.115	3,391,613.894	589,004.376	387.236
138	1138	30°42'03.33710" N	97°56'43.05453" W	3,406,914.913	26,141.926	3,396,932.570	601,004.349	302.319
139	1139	30°39'01.59442" N	97°51'55.48073" W	3,400,974.756	33,561.727	3,391,412.050	608,711.235	273.927
140	1140	30°29'21.93652" N	97°51'39.09287" W	3,383,081.156	33,225.516	3,373,571.306	609,327.901	284.437
141	1141	30°22'12.12593" N	98°04'30.26757" W	3,370,733.664	12,033.067	3,360,152.089	588,876.029	265.801
142	1142	30°14'01.21756" N	97°56'46.68970" W	3,355,045.433	23,768.672	3,345,147.991	601,390.571	319.338
143	1143	30°22'49.34882" N	97°47'31.71711" W	3,370,692.747	39,317.541	3,361,553.874	616,052.348	225.872
144	1144	30°18'08.58750" N	97°52'16.30302" W	3,362,360.321	31,336.423	3,352,832.410	608,542.496	199.18
146	1146	30°07'54.80656" N	98°17'13.49417" W	3,345,224.442	-9,612.178	3,333,614.525	568,669.100	461.406
158	1158	30°03'22.46149" N	97°41'19.97632" W	3,334,298.176	47,770.155	3,325,741.505	626,388.442	161.153
159	1159	30°35'03.29147" N	97°46'11.34770" W	3,393,232.560	42,424.064	3,384,171.946	617,951.376	268.301
160	1160	30°55'14.68259" N	97°49'47.32082" W	3,430,833.323	38,276.283	3,421,405.316	611,809.283	271.219
161	1161	30°42'02.04658" N	98°08'49.10512" W	3,407,747.458	6,790.505	3,396,728.654	581,689.865	396.462
164	1164	30°11'41.08970" N	97°51'17.95079" W	3,350,344.414	32,386.468	3,340,919.191	610,221.308	217.831
165	1165	30°25'55.08188" N	98°01'32.87820" W	3,377,397.679	17,082.843	3,367,055.265	593,552.000	197.422





### TNRIS Central Texas LiDAR

200	1200	30°49'12.40723" N	97°41'22.17815" W	3,419,088.625	51,234.721	3,410,400.765	625,348.317	235.109
201	1201	30°51'18.48061" N	97°37'28.66968" W	3,422,716.366	57,609.558	3,414,356.864	631,505.214	217.98
202	1202	30°44'39.17276" N	97°17'28.65772" W	3,409,131.426	89,053.022	3,402,502.128	663,568.892	129.865
203	1203	30°38'28.92492" N	97°22'49.47262" W	3,398,048.999	80,064.895	3,390,975.767	655,201.580	156.887
204	1204	30°31'19.70548" N	97°29'04.80165" W	3,385,212.048	69,532.241	3,377,621.606	645,387.465	158.998
205	1205	30°27'10.79173" N	97°32'44.65685" W	3,377,773.468	63,354.754	3,369,881.114	639,626.144	166.683
206	1206	30°27'15.27709" N	97°16'03.00401" W	3,376,866.861	90,111.269	3,370,395.894	666,341.689	143.317
207	1207	30°30'15.61302" N	97°12'53.76418" W	3,382,235.406	95,372.508	3,376,026.926	671,301.760	130.196
208	1208	30°34'14.42311" N	97°09'33.50162" W	3,389,397.400	100,989.347	3,383,465.741	676,520.900	127.266
209	1209	30°20'12.33563" N	97°11'48.86775" W	3,363,576.216	96,413.653	3,357,479.833	673,328.035	156.093
210	1210	30°16'52.07429" N	97°14'36.01025" W	3,357,570.071	91,713.825	3,351,244.001	668,959.681	128.899
211	1211	30°12'07.05297" N	97°18'47.95493" W	3,349,038.705	84,640.040	3,342,366.789	662,357.569	124.481
212	1212	30°06'38.62488" N	97°23'22.59534" W	3,339,196.131	76,896.131	3,332,149.197	655,155.908	120.083
213	1213	30°02'05.72571" N	97°27'21.81915" W	3,331,032.247	70,156.138	3,323,659.284	648,866.244	109.791
215	1215	29°59'57.06430" N	97°08'15.08797" W	3,325,910.226	100,767.388	3,320,155.212	679,648.864	70.11
216	1216	30°07'36.63597" N	97°02'22.60240" W	3,339,735.684	110,724.106	3,334,462.753	688,852.410	123.91
217	1217	30°05'43.30639" N	96°55'53.67608" W	3,335,878.863	121,022.728	3,331,157.038	699,325.310	94.664
230	1230	30°08'55.98559" N	96°38'56.97911" W	3,340,910.630	148,454.843	3,337,617.015	726,425.491	116.539
233	1233	30°46'17.41632" N	97°30'56.45609" W	3,413,006.979	67,666.415	3,405,220.820	642,046.347	181.569
234	1234	30°40'59.40285" N	97°32'58.35387" W	3,403,334.192	64,022.709	3,395,387.284	638,932.300	189.672
235	1235	30°40'57.68171" N	97°26'37.54814" W	3,402,873.932	74,167.234	3,395,470.000	649,066.292	150.608
236	1236	30°35'58.22801" N	97°13'25.45555" W	3,392,827.616	94,923.126	3,386,562.649	670,290.550	117.993
237	1237	30°30'16.61578" N	97°20'49.42302" W	3,382,748.735	82,677.968	3,375,864.615	658,620.063	130.477
238	1238	30°24'47.51891" N	97°24'41.69351" W	3,372,844.735	76,081.336	3,365,643.453	652,570.242	132.545
239	1239	30°19'44.94646" N	97°20'24.82168" W	3,363,252.000	82,586.408	3,356,426.199	659,561.245	148.406
240	1240	30°15'52.86353" N	97°06'59.38880" W	3,355,295.013	103,862.410	3,349,616.443	681,191.681	137.284
241	1241	30°05'24.87154" N	97°11'53.97666" W	3,336,227.772	95,266.615	3,330,153.891	673,624.106	123.894
242	1242	30°02'42.94161" N	97°19'10.24562" W	3,331,673.016	83,384.059	3,324,990.550	662,017.182	88.266
243	1243	29°56'21.36524" N	97°18'12.58573" W	3,319,853.039	84,487.874	3,313,265.832	663,735.515	119.53
244	1244	29°51'15.72229" N	97°22'41.62341" W	3,310,705.201	76,905.680	3,303,752.088	656,654.595	140.487
245	1245	29°52'54.78360" N	97°14'16.57229" W	3,313,249.594	90,588.366	3,307,001.161	670,161.425	112.792
247	1247	30°09'26.58755" N	96°48'28.86745" W	3,342,354.888	133,171.650	3,338,254.420	711,102.819	104.707



TNRIS Central Texas LiDAR

270	1270	30°10'36.35422" N	97°10'42.26965" W	3,345,757.580	97,540.653	3,339,774.397	675,390.836	121.949
271	1271	30°34'29.45921" N	97°18'43.69516" W	3,390,413.667	86,332.475	3,383,699.048	661,855.399	137.057
272	1272	30°48'21.26871" N	97°25'18.96573" W	3,416,465.828	76,801.601	3,409,156.861	650,965.066	156.116
273	1273	30°11'58.47475" N	97°04'32.86497" W	3,347,929.714	107,523.251	3,342,465.282	685,229.895	123.724
276	1276	29°58'38.12450" N	97°12'43.09601" W	3,323,739.555	93,487.958	3,317,610.415	672,504.681	127.665
277	1277	30°35'50.91139" N	97°32'14.96821" W	3,393,776.598	64,794.087	3,385,904.459	640,210.367	183.916
15006AA	15006AAA	30°35'30.08472" N	97°35'23.61866" W	3,393,338.917	59,736.530	3,385,199.137	635,194.045	215.155
15006AB	115006AB	30°24'13.53436" N	97°35'04.65555" W	3,372,459.889	59,393.448	3,364,376.549	635,960.303	167.416
15006AE	15006AEA	30°17'11.01176" N	98°03'52.92886" W	3,361,402.241	12,615.987	3,350,890.893	589,949.117	351.981
15006AK	115006AK	30°18'58.96256" N	97°31'44.98078" W	3,362,546.692	64,341.139	3,354,759.852	641,414.522	144.758
15006AL	15006ALA	30°12'33.72312" N	97°37'17.80408" W	3,351,029.037	54,954.998	3,342,788.400	632,668.726	103.625
15006AP	15006APA	30°29'12.97200" N	98°05'56.07841" W	3,383,816.602	10,324.820	3,373,088.921	586,482.303	221.22
15006AX	15006AXA	30°23'15.93202" N	97°53'55.57988" W	3,371,952.491	29,090.430	3,362,267.801	605,798.737	198.731
15006AY	15006AYA	30°18'25.69046" N	97°45'13.71846" W	3,362,407.347	42,665.223	3,353,476.989	619,824.909	164.333
15006AZ	15006AZA	30°35'23.82910" N	97°58'35.36015" W	3,394,727.032	22,602.264	3,384,605.871	598,128.700	302.179
15006BC	15006BCA	30°06'09.68426" N	97°36'42.52074" W	3,339,150.542	55,420.000	3,330,977.123	633,756.076	146.19
15006BK	15006BKA	30°49'17.98204" N	97°36'22.91587" W	3,418,928.795	59,205.129	3,410,668.562	633,298.038	246.504
15006BL	15006BLA	30°40'15.23417" N	97°16'24.73101" W	3,400,930.465	90,444.580	3,394,401.494	665,394.084	126.872
15006BW	115006BW	30°20'09.86399" N	97°28'09.95279" W	3,364,503.981	70,178.608	3,357,018.646	647,128.505	118.338
15006CE	115006CE	29°48'30.76257" N	97°18'53.73213" W	3,305,388.853	82,838.102	3,298,761.513	662,844.545	113.533
15006CF	15006CFA	29°57'32.93700" N	97°26'43.46266" W	3,322,582.996	70,858.090	3,315,275.195	650,007.631	121.876

AUSTIN

State Plane Coordinates – NAD 1983 (2011) / NAVD 1988

Station Name	GPSID	SPC N m	SPC E m	NAVD88 m	SPC N ft	SPC E ft	NAVD88 ft
100	1100	3,134,862.117	931,586.329	349.459	10,284,960.129	3,056,379.481	1,146.516
101	1101	3,125,895.888	942,275.254	282.372	10,255,543.427	3,091,448.063	926.416
102	1102	3,139,440.174	949,476.422	307.967	10,299,979.970	3,115,073.894	1,010.388
103	1103	3,112,957.146	903,332.367	334.877	10,213,093.568	2,963,682.941	1,098.677
104	1104	3,113,341.679	904,630.252	341.301	10,214,355.158	2,967,941.084	1,119.753
105	1105	3,105,270.800	914,167.912	374.231	10,187,875.949	2,999,232.558	1,227.789
106	1106	3,099,193.413	919,746.755	256.521	10,167,937.057	3,017,535.812	841.604
107	1107	3,092,280.004	928,328.972	308.403	10,145,255.313	3,045,692.636	1,011.818
108	1108	3,101,743.512	938,344.732	306.469	10,176,303.506	3,078,552.673	1,005.473
109	1109	3,095,062.136	946,487.741	274.106	10,154,383.026	3,105,268.531	899.297



## TNRIS Central Texas LiDAR

110	1110	3,088,832.368	954,141.994	254.539	10,133,944.194	3,130,380.860	835.100
111	1111	3,081,922.832	962,212.886	187.110	10,111,275.159	3,156,860.110	613.875
112	1112	3,070,306.219	976,564.619	146.747	10,073,162.987	3,203,945.753	481.453
113	1113	3,065,375.529	982,055.048	127.319	10,056,986.215	3,221,958.935	417.712
114	1114	3,075,635.172	906,190.853	273.859	10,090,646.393	2,973,061.157	898.485
128	1128	3,059,692.987	976,002.989	151.058	10,038,342.742	3,202,103.141	495.595
129	1129	3,049,986.886	973,109.246	133.855	10,006,498.641	3,192,609.251	439.155
130	1130	3,067,440.540	970,464.049	126.152	10,063,761.172	3,183,930.802	413.884
131	1131	3,070,169.673	957,113.820	137.467	10,072,715.002	3,140,130.923	451.007
132	1132	3,056,805.951	950,011.753	176.280	10,028,870.859	3,116,830.225	578.347
133	1133	3,125,108.117	923,036.063	359.411	10,252,958.880	3,028,327.483	1,179.166
134	1134	3,099,857.822	970,998.271	197.128	10,170,116.870	3,185,683.493	646.744
135	1135	3,097,327.335	958,780.875	203.597	10,161,814.765	3,145,600.255	667.967
136	1136	3,124,638.246	932,433.221	320.097	10,251,417.313	3,059,157.991	1,050.184
137	1137	3,111,644.182	916,798.081	412.190	10,208,785.953	3,007,861.704	1,352.326
138	1138	3,117,108.315	928,735.212	327.818	10,226,712.864	3,047,025.442	1,075.517
139	1139	3,111,680.402	936,509.474	299.611	10,208,904.785	3,072,531.500	982.972
140	1140	3,093,845.518	937,342.337	309.976	10,150,391.505	3,075,263.984	1,016.981
141	1141	3,080,176.160	917,050.609	290.718	10,105,544.619	3,008,690.207	953.798
142	1142	3,065,321.808	929,749.876	344.736	10,056,809.966	3,050,354.386	1,131.021
143	1143	3,081,908.662	944,213.599	251.572	10,111,228.668	3,097,807.448	825.366
144	1144	3,073,094.635	936,809.166	224.749	10,082,311.314	3,073,514.739	737.363
146	1146	3,053,387.351	897,161.695	485.699	10,017,655.000	2,943,437.996	1,593.498
158	1158	3,046,218.593	954,989.485	187.309	9,994,135.500	3,133,161.337	614.530
159	1159	3,104,551.628	945,837.927	294.143	10,185,516.467	3,103,136.597	965.034
160	1160	3,141,713.018	939,246.278	297.540	10,307,436.793	3,081,510.497	976.181
161	1161	3,116,671.396	909,420.881	421.190	10,225,279.404	2,983,658.341	1,381.854
164	1164	3,061,200.184	938,633.703	243.544	10,043,287.604	3,079,500.741	799.028
165	1165	3,087,137.195	921,643.543	222.494	10,128,382.613	3,023,758.859	729.965
200	1200	3,130,870.896	952,918.201	261.542	10,271,865.599	3,126,365.799	858.076
201	1201	3,134,901.178	959,027.517	244.576	10,285,088.281	3,146,409.447	802.414
202	1202	3,123,433.949	991,232.487	156.184	10,247,466.215	3,252,068.583	512.414
203	1203	3,111,807.250	983,005.592	183.102	10,209,320.953	3,225,077.512	600.728
204	1204	3,098,334.385	973,354.232	185.072	10,165,118.727	3,193,413.010	607.190
205	1205	3,090,523.720	967,687.238	192.699	10,139,493.238	3,174,820.548	632.213
206	1206	3,091,364.728	994,395.511	169.323	10,142,252.446	3,262,445.938	555.521
207	1207	3,097,055.800	999,286.248	156.213	10,160,923.903	3,278,491.631	512.510
208	1208	3,104,557.303	1,004,413.931	153.298	10,185,535.084	3,295,314.705	502.944
209	1209	3,078,535.547	1,001,539.585	182.134	10,100,162.039	3,285,884.454	597.550
210	1210	3,072,246.479	997,248.322	154.961	10,079,528.657	3,271,805.538	508.403
211	1211	3,063,288.297	990,755.926	150.594	10,050,138.356	3,250,505.066	494.075
212	1212	3,052,981.748	983,680.422	146.278	10,016,324.285	3,227,291.517	479.914
213	1213	3,044,413.612	977,495.449	136.043	9,988,213.658	3,206,999.654	446.334
215	1215	3,041,291.913	1,008,322.128	96.464	9,977,971.885	3,308,136.847	316.482
216	1216	3,055,712.883	1,017,346.778	150.295	10,025,284.684	3,337,745.220	493.094
217	1217	3,052,538.020	1,027,859.357	121.294	10,014,868.489	3,372,235.240	397.945
230	1230	3,059,334.812	1,054,872.399	143.547	10,037,167.630	3,460,860.529	470.954
233	1233	3,125,892.355	969,678.611	208.045	10,255,531.836	3,181,353.910	682.563
234	1234	3,116,021.402	966,683.517	215.971	10,223,146.883	3,171,527.506	708.565
235	1235	3,116,226.829	976,816.182	176.928	10,223,820.854	3,204,771.091	580.473
236	1236	3,107,577.912	998,146.722	144.085	10,195,445.201	3,274,753.036	472.718
237	1237	3,096,738.716	986,607.688	156.525	10,159,883.603	3,236,895.391	513.532
238	1238	3,086,444.146	980,682.984	158.566	10,126,108.836	3,217,457.424	520.229
239	1239	3,077,312.853	987,786.677	174.435	10,096,150.585	3,240,763.456	572.291
240	1240	3,070,769.879	1,009,499.259	163.449	10,074,684.178	3,311,998.819	536.250



**TNRIS Central Texas LiDAR**

241	1241	3,051,215.209	1,002,173.221	150.107	10,010,528.566	3,287,963.311	492.477
242	1242	3,045,907.893	990,630.500	114.491	9,993,116.145	3,250,093.566	375.626
243	1243	3,034,204.171	992,494.637	145.779	9,954,718.184	3,256,209.488	478.276
244	1244	3,024,601.477	985,531.803	166.770	9,923,213.347	3,233,365.592	547.146
245	1245	3,028,019.440	998,998.978	139.132	9,934,427.114	3,277,549.147	456.470
247	1247	3,059,780.805	1,039,546.033	131.487	10,038,630.858	3,410,577.276	431.388
270	1270	3,060,857.066	1,003,820.612	148.115	10,042,161.891	3,293,368.126	485.940
271	1271	3,104,611.967	989,747.319	163.156	10,185,714.428	3,247,195.995	535.289
272	1272	3,129,935.839	978,549.391	182.670	10,268,797.833	3,210,457.459	599.311
273	1273	3,063,669.502	1,013,625.411	149.996	10,051,389.024	3,325,536.037	492.113
276	1276	3,038,658.106	1,001,209.840	153.940	9,969,330.802	3,284,802.616	505.051
277	1277	3,106,554.186	968,076.519	210.074	10,192,086.524	3,176,097.712	689.219
15006AA	15006AAA	3,105,787.979	963,068.761	241.273	10,189,572.728	3,159,668.095	791.576
15006AB	115006AB	3,084,974.306	964,088.470	193.413	10,121,286.534	3,163,013.588	634.556
15006AE	15006AEA	3,070,926.357	918,236.432	376.962	10,075,197.555	3,012,580.695	1,236.750
15006AK	115006AK	3,075,423.993	969,660.452	170.810	10,089,953.552	3,181,294.333	560.400
15006AL	15006ALA	3,063,344.622	961,060.934	129.716	10,050,323.149	3,153,080.746	425.577
15006AP	15006APA	3,093,086.081	914,499.632	246.051	10,147,899.917	3,000,320.878	807.251
15006AX	15006AXA	3,082,497.847	933,950.133	224.206	10,113,161.685	3,064,134.728	735.582
15006AY	15006AYA	3,073,876.977	948,085.063	190.176	10,084,878.049	3,110,509.078	623.937
15006AZ	15006AZA	3,104,745.563	926,008.211	327.405	10,186,152.735	3,038,078.606	1,074.162
15006BC	15006BCA	3,051,545.585	962,293.579	172.366	10,011,612.475	3,157,124.851	565.503
15006BK	15006BKA	3,131,234.480	960,864.757	273.037	10,273,058.456	3,152,437.123	895.788
15006BL	15006BLA	3,115,356.334	993,155.604	153.073	10,220,964.907	3,258,378.010	502.206
15006BW	115006BW	3,077,752.826	975,346.872	144.387	10,097,594.062	3,199,950.529	473.709
15006CE	115006CE	3,019,687.757	991,784.690	139.893	9,907,092.249	3,253,880.272	458.965
15006CF	15006CFA	3,036,042.983	978,740.838	148.150	9,960,751.019	3,211,085.566	486.055

**LA GRANGE**

Adjusted Coordinates – NAD 1983 (2011) / NAVD 1988

UTM Zone 14 & 15

NAVD 1988 orthometric height – ellipsoidal height + GEOID12B

Station Name	GPSID	Latitude	Longitude	UTM 14 N m	UTM 14 E m	UTM 15 N m	UTM 15 E m	Ellip H m
115	1115	30°14'21.80971" N	98°04'04.18006" W	3,356,197.360	12,081.614	3,345,679.828	589,691.246	295.872
116	1116	30°09'07.88556" N	97°57'12.42359" W	3,346,029.662	22,685.286	3,336,111.860	600,785.655	270.932
117	1117	30°05'34.81100" N	97°52'12.23822" W	3,339,111.992	30,449.021	3,329,629.284	608,881.277	201.756
118	1118	30°00'39.49211" N	97°45'59.45612" W	3,329,583.732	40,064.329	3,320,641.441	618,958.256	150.321
119	1119	29°54'35.26545" N	97°37'56.68322" W	3,317,821.744	52,564.368	3,309,575.858	632,026.172	122.366
120	1120	30°01'58.34478" N	98°18'07.87773" W	3,334,296.705	-11,581.855	3,322,633.083	567,280.971	319.828
121	1121	29°56'32.33523" N	98°10'25.47601" W	3,323,672.095	373.211	3,312,680.438	579,737.989	327.075
122	1122	29°51'25.30439" N	98°03'53.36659" W	3,313,732.150	10,487.140	3,303,310.181	590,326.601	265.139
123	1123	29°48'04.86095" N	97°59'41.07356" W	3,307,253.558	17,000.513	3,297,197.275	597,149.803	164.975



TNRIS Central Texas LiDAR

124	1124	29°44'24.94002" N	97°54'41.25563" W	3,300,124.601	24,774.849	3,290,500.816	605,262.735	131.253
125	1125	29°41'23.29939" N	97°50'40.85997" W	3,294,249.813	31,008.650	3,284,972.308	611,776.413	153.975
126	1126	29°40'50.86182" N	98°06'23.70811" W	3,294,344.154	5,577.304	3,283,749.444	586,443.979	162.323
127	1127	29°34'58.08534" N	97°58'08.04956" W	3,282,882.618	18,457.568	3,273,001.476	599,863.066	139.644
145	1145	30°11'55.36414" N	98°10'49.82598" W	3,352,171.051	1,012.492	3,341,088.377	578,881.579	382.094
147	1147	30°05'47.42437" N	98°11'32.47202" W	3,340,874.565	-648.035	3,329,754.219	577,821.462	395.118
148	1148	30°04'01.90017" N	98°04'30.21084" W	3,337,109.902	10,531.644	3,326,591.629	589,150.243	347.291
149	1149	30°00'52.26718" N	98°11'09.12402" W	3,331,742.353	-435.667	3,320,673.170	578,511.066	296.968
150	1150	29°58'02.09343" N	98°05'09.32447" W	3,326,059.806	8,988.312	3,315,507.608	588,191.390	282.326
151	1151	30°02'48.99174" N	97°59'02.44392" W	3,334,473.808	19,225.675	3,324,421.790	597,946.100	268.229
152	1152	29°58'50.52515" N	97°53'32.97095" W	3,326,737.904	27,750.025	3,317,162.956	606,840.607	207.925
153	1153	29°56'59.20437" N	97°59'23.26522" W	3,323,711.196	18,196.161	3,313,649.547	597,483.421	231.068
154	1154	29°51'26.23702" N	97°53'56.49579" W	3,313,064.612	26,532.762	3,303,480.572	606,341.266	143.649
155	1155	29°52'49.57653" N	97°45'45.21902" W	3,315,078.668	39,843.776	3,306,179.955	619,495.663	155.085
156	1156	29°46'13.81500" N	97°46'54.88910" W	3,302,953.717	37,463.994	3,293,977.370	617,755.514	112.633
157	1157	29°42'04.66473" N	98°00'11.30184" W	3,296,180.872	15,704.910	3,286,102.938	596,434.020	160.464
162	1162	29°58'06.87842" N	97°32'54.81126" W	3,324,020.894	60,931.311	3,316,189.640	640,039.797	122.933
163	1163	30°10'05.12310" N	98°05'13.13842" W	3,348,363.441	9,880.471	3,337,763.315	587,911.462	308.812
214	1214	29°56'46.91785" N	97°31'45.80172" W	3,321,482.382	62,686.142	3,313,751.624	641,921.076	115.788
218	1218	30°00'27.62959" N	97°00'16.22552" W	3,326,395.059	113,645.993	3,321,312.403	692,465.452	74.682
219	1219	29°53'13.76650" N	97°06'35.78289" W	3,313,384.646	102,985.559	3,307,781.976	682,514.614	97.424
220	1220	29°48'20.40748" N	97°10'47.66670" W	3,304,587.334	95,891.885	3,298,641.209	675,899.806	84.548
221	1221	29°43'43.76427" N	97°14'50.66218" W	3,296,299.805	89,045.749	3,290,023.247	669,504.828	73.888
222	1222	29°37'57.87484" N	96°52'42.11705" W	3,284,382.561	124,423.357	3,279,972.298	705,400.120	60.199
223	1223	29°43'42.93531" N	96°47'47.24033" W	3,294,751.714	132,710.854	3,290,744.886	713,129.574	95.409
224	1224	29°37'40.66939" N	96°35'46.19726" W	3,282,969.226	151,754.003	3,279,976.408	732,739.287	53.021
225	1225	29°42'14.18248" N	96°31'27.37915" W	3,291,181.438	158,977.506	3,288,545.430	739,522.021	33.817
226	1226	29°47'11.18601" N	96°27'07.08689" W	3,300,119.891	166,252.094	3,297,843.589	746,317.633	72.408
227	1227	29°52'34.91270" N	96°22'46.23803" W	3,309,884.929	173,554.728	3,307,970.060	753,097.613	76.651
228	1228	29°37'27.82905" N	96°13'55.73165" W	3,281,533.414	187,014.138	3,280,368.158	768,006.181	20.249
229	1229	29°40'55.28054" N	96°13'17.30169" W	3,287,894.807	188,226.364	3,286,781.805	768,886.830	25.458
231	1231	30°04'23.49349" N	96°42'53.46155" W	3,332,719.033	141,848.703	3,329,097.555	720,264.757	89.967



TNRIS Central Texas LiDAR

232	1232	30°00'43.70244" N	96°46'02.18825" W	3,326,112.196	136,567.570	3,322,229.845	715,342.423	124.038
246	1246	29°55'26.01613" N	97°08'28.20849" W	3,317,569.142	100,113.335	3,311,804.462	679,432.514	108.201
248	1248	30°04'14.31894" N	96°49'12.02186" W	3,332,771.104	131,693.691	3,328,616.993	710,131.719	108.018
249	1249	29°59'59.98740" N	96°52'59.53754" W	3,325,139.408	125,329.448	3,320,671.398	704,183.395	81.341
250	1250	29°56'19.45790" N	96°56'38.60855" W	3,318,544.421	119,219.352	3,313,774.377	698,434.062	60.872
251	1251	29°51'27.84884" N	96°58'27.85420" W	3,309,659.167	115,975.991	3,304,743.840	695,662.811	82.980
252	1252	29°47'58.68517" N	97°02'47.20547" W	3,303,456.276	108,782.334	3,298,183.663	688,811.763	84.970
253	1253	29°41'43.00408" N	97°07'36.83281" W	3,292,154.338	100,582.780	3,286,488.355	681,222.282	98.943
254	1254	29°37'27.34417" N	97°07'49.73178" W	3,284,287.428	99,954.111	3,278,611.776	681,002.694	126.392
255	1255	29°42'27.25368" N	96°54'10.08090" W	3,292,763.144	122,335.612	3,288,223.135	702,883.681	87.474
256	1256	29°47'35.19158" N	96°51'39.34876" W	3,302,115.768	126,708.214	3,297,778.750	706,759.422	98.428
257	1257	29°53'55.69707" N	96°48'40.99274" W	3,313,680.921	131,890.646	3,309,584.716	711,326.550	72.206
258	1258	30°02'51.92147" N	96°38'10.16487" W	3,329,653.178	149,350.944	3,326,432.072	727,910.427	107.824
259	1259	29°55'17.82642" N	96°42'12.55184" W	3,315,870.103	142,400.947	3,312,317.081	721,697.295	102.747
260	1260	29°49'10.68732" N	96°42'34.30705" W	3,304,576.621	141,451.744	3,301,000.509	721,338.957	45.741
261	1261	29°41'29.19736" N	96°42'12.61776" W	3,290,338.536	141,577.691	3,286,802.128	722,204.145	70.597
262	1262	29°44'10.44467" N	96°38'22.30771" W	3,295,109.717	147,930.088	3,291,891.979	728,294.559	47.748
263	1263	29°48'39.25660" N	96°34'59.33672" W	3,303,220.878	153,645.287	3,300,282.351	733,575.619	72.142
264	1264	29°49'31.89173" N	96°31'02.13136" W	3,304,645.923	160,068.063	3,302,038.676	739,910.625	69.579
265	1265	29°53'42.98124" N	96°37'34.61664" W	3,312,709.503	149,768.330	3,309,548.159	729,212.806	70.485
266	1266	29°55'39.90719" N	96°29'44.98012" W	3,315,920.769	162,485.633	3,313,416.347	741,735.299	83.672
267	1267	29°46'39.91738" N	96°19'50.52386" W	3,298,811.289	177,955.657	3,297,146.066	758,067.064	52.765
268	1268	29°37'23.64779" N	96°22'07.49037" W	3,281,781.896	173,775.039	3,279,931.000	754,777.495	35.052
269	1269	29°42'03.15747" N	96°21'39.59742" W	3,290,370.559	174,776.047	3,288,555.639	755,331.650	39.611
274	1274	29°37'30.85760" N	97°01'14.91829" W	3,284,021.260	110,588.784	3,278,896.331	691,621.009	91.760
275	1275	29°37'34.13794" N	96°30'11.36772" W	3,282,491.614	160,760.508	3,279,965.849	741,751.560	37.615
15006AU	15006AU	29°56'02.68373" N	97°49'06.82591" W	3,321,259.259	34,676.749	3,312,067.473	614,026.210	168.412
15006BB	15006BB	30°07'22.84633" N	97°58'58.38841" W	3,342,914.385	19,703.602	3,332,852.781	597,979.683	302.677
15006BS	15006BS	29°40'52.37893" N	97°00'33.04744" W	3,290,192.456	111,931.513	3,285,120.059	692,640.608	85.690
15006BU	15006BU	29°57'59.86548" N	96°35'58.33281" W	3,320,542.868	152,601.606	3,317,512.166	731,630.731	100.096
15006BV	15006BV	29°56'33.34752" N	97°03'54.06991" W	3,319,380.853	107,546.508	3,313,998.970	686,749.656	73.276



## TNRIS Central Texas LiDAR

### LA GRANGE

State Plane Coordinates – NAD 1983 (2011) / NAVD 1988

Station Name	GPSID	SPC N m	SPC E m	NAVD88 m	SPC N ft	SPC E ft	NAVD88 ft
115	1115	4,267,023.100	689,723.109	320.888	13,999,391.621	2,262,866.567	1,052.781
116	1116	4,257,450.102	700,818.287	296.437	13,967,984.208	2,299,267.997	972.562
117	1117	4,250,964.244	708,914.231	227.580	13,946,705.192	2,325,829.439	746.653
118	1118	4,241,972.503	718,991.012	176.443	13,917,204.787	2,358,889.678	578.880
119	1119	4,230,902.669	732,058.208	148.694	13,880,886.507	2,401,760.971	487.840
120	1120	4,243,973.693	667,302.434	344.293	13,923,770.358	2,189,308.069	1,129.567
121	1121	4,234,016.806	679,761.396	352.226	13,891,103.470	2,230,183.846	1,155.593
122	1122	4,224,643.066	690,351.127	290.754	13,860,349.793	2,264,926.990	953.914
123	1123	4,218,528.116	697,174.859	190.874	13,840,287.661	2,287,314.516	626.225
124	1124	4,211,829.560	705,288.321	157.388	13,818,310.815	2,313,933.433	516.363
125	1125	4,206,299.537	711,802.280	180.218	13,800,167.731	2,335,304.646	591.267
126	1126	4,205,078.909	686,465.674	188.242	13,796,163.054	2,252,179.466	617.590
127	1127	4,194,328.098	699,886.218	165.829	13,760,891.433	2,296,210.032	544.059
145	1145	4,262,432.517	678,909.317	406.765	13,984,330.683	2,227,388.318	1,334.528
147	1147	4,251,095.280	677,846.907	419.898	13,947,135.098	2,223,902.728	1,377.617
148	1148	4,247,929.918	689,178.114	372.550	13,936,750.071	2,261,078.527	1,222.275
149	1149	4,242,011.701	678,535.287	321.944	13,917,333.389	2,226,161.188	1,056.246
150	1150	4,236,843.428	688,217.186	307.715	13,900,377.146	2,257,925.883	1,009.563
151	1151	4,245,757.932	697,975.629	293.822	13,929,624.150	2,289,941.708	963.982
152	1152	4,238,495.915	706,870.560	233.850	13,905,798.680	2,319,124.495	767.223
153	1153	4,234,983.484	697,510.927	256.778	13,894,274.979	2,288,417.100	842.445
154	1154	4,224,811.221	706,368.781	169.696	13,860,901.482	2,317,478.241	556.744
155	1155	4,227,508.815	719,525.588	181.328	13,869,751.838	2,360,643.534	594.908
156	1156	4,215,304.969	717,783.256	138.913	13,829,713.052	2,354,927.233	455.749
157	1157	4,207,431.927	696,457.718	186.499	13,803,882.912	2,284,961.695	611.872
162	1162	4,237,515.225	740,074.062	149.233	13,902,581.201	2,428,059.651	489.608
163	1163	4,259,104.742	687,941.142	333.863	13,973,412.808	2,257,020.230	1,095.349
214	1214	4,235,076.565	741,954.893	142.099	13,894,580.365	2,434,230.345	466.203
218	1218	4,242,622.069	792,500.437	101.267	13,919,335.904	2,600,061.852	332.239
219	1219	4,229,096.364	782,546.395	123.957	13,874,960.322	2,567,404.297	406.684
220	1220	4,219,958.142	775,929.866	111.088	13,844,979.339	2,545,696.570	364.463
221	1221	4,211,342.173	769,533.579	100.452	13,816,711.779	2,524,711.415	329.565
222	1222	4,201,286.239	805,421.537	87.359	13,783,719.935	2,642,453.827	286.611
223	1223	4,212,054.451	813,151.201	122.548	13,819,048.645	2,667,813.565	402.059
224	1224	4,201,285.288	832,752.055	80.297	13,783,716.815	2,732,120.699	263.440
225	1225	4,209,849.293	839,533.940	61.123	13,811,813.890	2,754,370.934	200.533
226	1226	4,219,141.440	846,329.207	99.718	13,842,299.873	2,776,665.074	327.158
227	1227	4,229,260.783	853,109.570	104.004	13,875,499.751	2,798,910.315	341.221
228	1228	4,201,669.387	868,001.450	47.624	13,784,976.981	2,847,768.090	156.245
229	1229	4,208,078.901	868,883.154	52.862	13,806,005.528	2,850,660.814	173.432
231	1231	4,250,394.458	820,297.699	116.966	13,944,835.817	2,691,260.035	383.746
232	1232	4,243,530.558	815,373.617	151.012	13,922,316.506	2,675,104.943	495.444
246	1246	4,233,119.370	779,465.734	134.623	13,888,159.132	2,557,297.162	441.677
248	1248	4,249,918.491	810,166.736	134.871	13,943,274.250	2,658,022.034	442.491



**TNRIS Central Texas LiDAR**

249	1249	4,241,976.829	804,216.335	108.162	13,917,218.979	2,638,499.761	354.861
250	1250	4,235,083.070	798,465.553	87.661	13,894,601.704	2,619,632.401	287.603
251	1251	4,226,054.906	795,691.965	109.809	13,864,981.803	2,610,532.722	360.264
252	1252	4,219,497.571	788,840.242	111.757	13,843,468.280	2,588,053.360	366.657
253	1253	4,207,805.446	781,249.268	125.748	13,805,108.368	2,563,148.639	412.559
254	1254	4,199,929.892	781,028.403	153.301	13,779,269.986	2,562,424.019	502.956
255	1255	4,209,535.633	802,907.285	114.563	13,810,784.824	2,634,204.984	375.863
256	1256	4,219,088.140	806,784.433	125.481	13,842,125.006	2,646,925.259	411.681
257	1257	4,230,889.948	811,354.022	99.242	13,880,844.772	2,661,917.320	325.595
258	1258	4,247,726.236	827,940.045	134.924	13,936,081.825	2,716,333.296	442.664
259	1259	4,233,617.966	821,722.972	129.855	13,889,794.945	2,695,936.117	426.032
260	1260	4,222,304.893	821,360.968	72.910	13,852,678.635	2,694,748.441	239.205
261	1261	4,208,110.778	822,222.137	97.792	13,806,110.110	2,697,573.795	320.839
262	1262	4,213,197.417	828,311.708	74.973	13,822,798.526	2,717,552.663	245.972
263	1263	4,221,583.207	833,593.244	99.366	13,850,310.904	2,734,880.502	326.003
264	1264	4,223,336.792	839,926.331	96.840	13,856,064.126	2,755,658.303	317.717
265	1265	4,230,847.185	829,235.118	97.668	13,880,704.473	2,720,582.216	320.433
266	1266	4,234,709.154	841,754.449	110.934	13,893,374.949	2,761,656.056	363.955
267	1267	4,218,440.488	858,072.643	80.164	13,840,000.169	2,815,193.328	263.005
268	1268	4,201,235.387	854,780.170	62.408	13,783,553.099	2,804,391.276	204.751
269	1269	4,209,855.382	855,336.113	66.986	13,811,833.865	2,806,215.229	219.770
274	1274	4,200,212.781	791,645.142	118.806	13,780,198.098	2,597,255.771	389.784
275	1275	4,201,272.933	841,760.556	64.936	13,783,676.282	2,761,676.090	213.046
15006AU	15006AU	4,233,398.195	714,056.430	194.530	13,889,073.911	2,342,700.137	638.220
15006BB	15006BB	4,254,190.860	698,010.927	328.138	13,957,291.180	2,290,057.517	1,076.566
15006BS	15006BS	4,206,435.232	792,665.637	112.688	13,800,612.925	2,600,603.844	369.711
15006BU	15006BU	4,238,807.569	831,655.299	127.274	13,906,821.165	2,728,522.427	417.565
15006BV	15006BV	4,235,311.433	786,782.842	99.814	13,895,350.928	2,581,303.375	327.474

**SAN ANTONIO**

Adjusted Coordinates – NAD 1983 (2011) / NAVD 1988

UTM Zone 14 & 15

NAVD 1988 orthometric height – ellipsoidal height + GEOID12B

Station Name	GPSID	Latitude	Longitude	UTM 14 N m	UTM 14 E m	UTM 15 N m	UTM 15 E m	Ellip H m
300	1300	29°37'15.72771" N	98°46'15.54665" W	3,276,816.120	522,171.419	3,290,743.264	59,187.315	402.090
301	1301	29°32'12.47555" N	98°44'51.48096" W	3,267,487.253	524,452.436	3,281,272.513	57,385.674	272.301
302	1302	29°30'28.64208" N	98°43'31.33945" W	3,264,296.358	526,616.970	3,277,961.382	55,381.406	248.777
303	1303	29°25'47.52710" N	98°41'31.36622" W	3,255,652.349	529,869.813	3,269,127.717	52,568.503	245.032
304	1304	29°29'00.12027" N	98°31'38.86818" W	3,261,633.416	545,809.545	3,274,297.199	36,282.300	201.350
305	1305	29°32'57.80377" N	98°32'37.75315" W	3,268,942.581	544,195.126	3,281,706.133	37,521.161	234.015
306	1306	29°37'54.24923" N	98°35'31.34009" W	3,278,049.360	539,491.538	3,291,077.731	41,761.775	325.698
307	1307	29°43'51.68107" N	98°37'46.73132" W	3,289,038.483	535,815.694	3,302,283.486	44,873.013	389.675
308	1308	29°42'49.61690" N	98°24'51.52184" W	3,287,214.341	556,650.188	3,299,368.036	24,089.069	325.473





TNRIS Central Texas LiDAR

309	1309	29°38'32.26208" N	98°23'11.13807" W	3,279,307.098	559,389.334	3,291,302.400	21,756.507	267.399
310	1310	29°32'39.39746" N	98°20'47.22401" W	3,268,467.382	563,319.995	3,280,237.317	18,381.495	246.956
311	1311	29°24'53.88048" N	98°13'58.76080" W	3,254,206.419	574,407.632	3,265,375.802	-8,011.642	160.537
312	1312	29°23'23.16443" N	98°18'46.32231" W	3,251,366.026	566,674.893	3,262,929.569	15,905.354	156.866
313	1313	29°21'35.91649" N	98°24'18.32270" W	3,248,016.015	557,742.868	3,260,034.014	25,027.886	151.906
314	1314	29°20'25.49981" N	98°28'45.04972" W	3,245,814.421	550,561.049	3,258,198.327	32,338.285	152.002
315	1315	29°19'11.01664" N	98°32'34.92975" W	3,243,496.101	544,370.847	3,256,194.140	38,661.579	171.264
316	1316	29°17'57.35237" N	98°36'33.87322" W	3,241,205.579	537,933.571	3,254,230.182	45,231.605	166.307
317	1317	29°10'04.53307" N	98°27'27.46195" W	3,226,712.260	552,741.772	3,238,943.114	31,135.502	165.977
318	1318	29°11'10.23572" N	98°23'40.60708" W	3,228,764.313	558,859.252	3,240,685.567	24,899.931	162.766
319	1319	29°12'40.15614" N	98°18'59.76174" W	3,231,573.437	566,428.167	3,243,111.721	17,171.742	96.784
320	1320	29°14'34.93416" N	98°12'30.91072" W	3,235,172.025	576,903.920	3,246,178.851	-6,491.689	136.923
321	1321	29°18'33.98739" N	98°17'43.38979" W	3,242,475.781	568,424.855	3,253,932.222	14,610.548	136.115
322	1322	29°14'58.58362" N	98°23'40.86400" W	3,235,792.210	558,816.069	3,247,730.033	24,582.164	132.611
323	1323	29°23'04.01401" N	98°33'29.84782" W	3,250,661.488	542,862.481	3,263,453.420	39,803.541	181.244
324	1324	29°26'29.36994" N	98°23'02.50270" W	3,257,058.566	559,739.461	3,268,991.633	22,560.099	182.447
325	1325	29°29'12.17929" N	98°37'16.46016" W	3,261,971.328	536,717.292	3,275,107.048	45,377.524	217.095
326	1326	29°33'31.40908" N	98°39'01.03551" W	3,269,941.117	533,877.279	3,283,242.794	47,810.608	260.701
327	1327	29°38'50.56882" N	98°41'16.01831" W	3,279,753.997	530,218.585	3,293,269.225	50,967.468	408.044
328	1328	29°34'13.08070" N	98°27'00.96675" W	3,271,298.746	553,247.676	3,283,597.223	28,326.939	212.389
329	1329	29°38'36.36528" N	98°28'37.92021" W	3,279,390.295	550,602.486	3,291,843.155	30,556.865	287.401
330	1330	29°42'26.52126" N	98°31'12.66473" W	3,286,456.277	546,412.528	3,299,142.461	34,387.459	355.935
331	1331	29°43'18.84575" N	98°41'56.50717" W	3,288,008.351	529,108.544	3,301,601.177	51,649.649	408.947
332	1332	29°25'16.16853" N	98°28'05.14039" W	3,254,765.422	551,596.537	3,267,114.901	30,838.344	196.952
333	1333	29°30'33.15483" N	98°25'53.33541" W	3,264,538.484	555,100.505	3,276,726.900	26,821.094	190.328
334	1334	29°24'40.23065" N	98°37'26.03958" W	3,253,600.508	536,486.349	3,266,728.719	46,042.368	190.581
335	1335	29°15'59.90259" N	98°29'31.83577" W	3,237,634.473	549,334.831	3,250,063.913	33,988.583	131.274

SAN ANTONIO

State Plane Coordinates – NAD 1983 (2011) / NAVD 1988

Station Name	GPSID	SPC N m	SPC E m	NAVD88 m	SPC N ft	SPC E ft	NAVD88 ft
300	1300	4,198,147.028	622,177.489	426.414	13,773,420.708	2,041,260.645	1,398.993



## TNRIS Central Texas LiDAR

301	1301	4,188,815.645	624,458.967	296.970	13,742,805.997	2,048,745.795	974.309
302	1302	4,185,623.891	626,624.024	273.569	13,732,334.381	2,055,848.984	897.534
303	1303	4,176,977.633	629,877.611	269.969	13,703,967.449	2,066,523.461	885.725
304	1304	4,182,959.977	645,821.367	226.686	13,723,594.524	2,118,832.270	743.718
305	1305	4,190,270.956	644,206.719	259.225	13,747,580.630	2,113,534.878	850.476
306	1306	4,199,380.166	639,502.214	350.572	13,777,466.427	2,098,100.180	1,150.170
307	1307	4,210,372.323	635,825.792	414.125	13,813,529.864	2,086,038.452	1,358.676
308	1308	4,208,546.685	656,665.599	350.646	13,807,540.250	2,154,410.386	1,150.411
309	1309	4,200,637.396	659,404.969	292.843	13,781,591.191	2,163,397.802	960.768
310	1310	4,189,795.047	663,336.051	272.678	13,746,019.251	2,176,295.027	894.611
311	1311	4,175,530.816	674,425.607	186.517	13,699,220.685	2,212,678.011	611.932
312	1312	4,172,689.950	666,691.263	182.736	13,689,900.278	2,187,302.920	599.527
313	1313	4,169,339.279	657,757.288	177.599	13,678,907.286	2,157,992.037	582.673
314	1314	4,167,137.203	650,573.832	177.513	13,671,682.642	2,134,424.314	582.391
315	1315	4,164,818.334	644,382.173	196.586	13,664,074.818	2,114,110.514	644.964
316	1316	4,162,527.239	637,943.343	191.422	13,656,558.116	2,092,985.784	628.025
317	1317	4,148,030.639	652,755.279	191.338	13,608,997.189	2,141,581.277	627.749
318	1318	4,150,083.308	658,874.108	188.232	13,615,731.652	2,161,656.137	617.558
319	1319	4,152,893.218	666,444.606	122.392	13,624,950.500	2,186,493.678	401.549
320	1320	4,156,492.750	676,922.396	162.675	13,636,759.963	2,220,869.561	533.711
321	1321	4,163,797.859	668,441.562	161.917	13,660,726.810	2,193,045.359	531.223
322	1322	4,157,112.769	658,830.784	158.179	13,638,794.144	2,161,513.998	518.959
323	1323	4,171,985.444	642,873.461	206.526	13,687,588.910	2,109,160.680	677.577
324	1324	4,178,383.812	659,754.421	208.187	13,708,580.891	2,164,544.296	683.027
325	1325	4,183,298.126	636,726.887	242.179	13,724,703.936	2,088,994.794	794.549
326	1326	4,191,269.986	633,886.299	285.593	13,750,858.280	2,079,675.299	936.983
327	1327	4,201,085.520	630,226.878	432.554	13,783,061.411	2,067,669.350	1,419.138
328	1328	4,192,627.418	653,261.528	237.828	13,755,311.788	2,143,242.198	780.275
329	1329	4,200,721.023	650,616.013	312.593	13,781,865.555	2,134,562.703	1,025.564
330	1330	4,207,788.974	646,425.320	380.810	13,805,054.325	2,120,813.737	1,249.375
331	1331	4,209,342.144	629,116.771	433.182	13,810,150.016	2,064,027.274	1,421.197
332	1332	4,176,090.270	651,609.618	222.488	13,701,056.160	2,137,822.557	729.946
333	1333	4,185,865.521	655,114.583	215.905	13,733,127.131	2,149,321.762	708.347
334	1334	4,174,925.226	636,495.790	215.687	13,697,233.845	2,088,236.604	707.633
335	1335	4,158,955.346	649,347.364	156.697	13,644,839.330	2,130,400.475	514.098

