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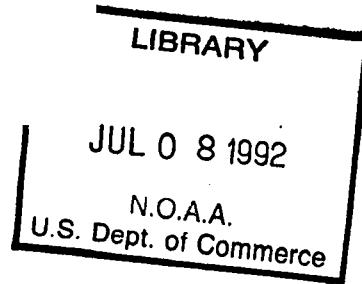
Sinclair Weeks, Secretary

Coast and Geodetic Survey

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Special Publication No. 324

**PLANE COORDINATE PROJECTION TABLES
NEW MEXICO**



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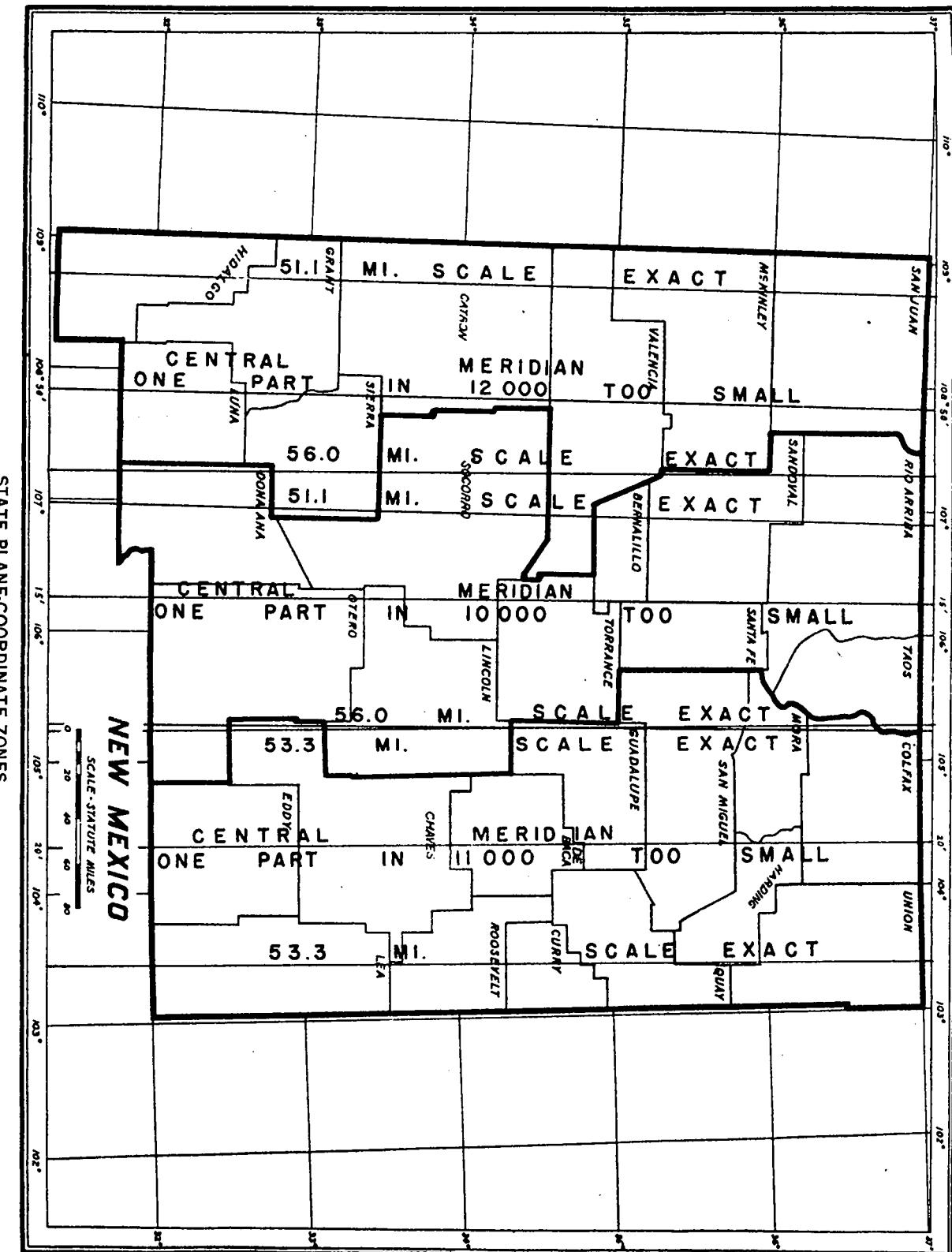
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Foreword

The plane coordinate system used in this State is based on the transverse Mercator projection using a reduced scale for the central meridian of the zone. The tables in this publication are to be used for the conversion of geographic positions to plane coordinates or plane coordinates to geographic positions. The constants of the projection are listed with the tables.

The methods of computation have been designed for machine calculation. All of the functions that are required are given in this publication.

The formulas and sample computations which follow show the general methods for computing either type of coordinates.

Plane coordinates from geographic positions

$$x = x' + 500,000$$

$$x' = H \cdot \Delta \lambda'' \pm a b$$

$$y = y_0 + v \left(\frac{\Delta \lambda''}{100} \right)^2 \pm c$$

Grid azimuth = geodetic azimuth - $\Delta \alpha$ - second term

$$\Delta \alpha'' = \Delta \lambda'' \sin \phi + g$$

where

y_0 , H , V , and a are based on the latitude
of the geographic position,

and

b , c , and g are based on $\Delta \lambda''$.

$$\Delta \lambda'' = \text{Central Meridian} - \lambda$$

and

$\Delta \alpha''$ is the convergence of the meridian at the station with respect to the Central Meridian.

The second term for the reduction of geodetic to grid azimuths may be neglected for most work. However, for lines five miles or more in length if the same degree of accuracy is desired as is obtained by geographic computations, this term should be evaluated and used.

$$\text{Second term} = \frac{(y_2 - y_1) (2x'_1 + x'_2)}{(6\rho_o^2 \sin l'') g}$$

Geographic positions from plane coordinates

$$P(x'/10,000)^2 + d = V(\Delta \lambda''/100)^2 + c$$

$$y_o = y - P(x'/10,000)^2 - d$$

Obtain the latitude from the table of y_o .

Use latitude to obtain H from the table.

$$x' = x - 500,000$$

$$\text{approximate } \Delta \lambda'' = x' \div H.$$

Determine a from latitude and b from approximate $\Delta \lambda$
then

$$\Delta \lambda'' = (x' + a b) \div H$$

$$\Delta \alpha'' = Mx' - e$$

M is based on the y, and e on the x and y of the plane coordinates.

PLANE COORDINATES ON TRANSVERSE MERCATOR PROJECTION
(Condensed form for calculating-machine computation)

State New Mexico Zone East Central meridian $104^{\circ} 20' 00.00''$

Station	<u>Wade, 1922</u>	<u>Hondo, 1935</u>			
ϕ	<u>$33^{\circ} 17' 21.732$</u>	<u>$33^{\circ} 22' 32.349$</u>			
λ	<u>$104^{\circ} 11' 42.410$</u>	<u>$104^{\circ} 47' 37.948$</u>			
$\Delta\lambda = \text{Central mer.} - \lambda$	<u>$+ 0^{\circ} 08' 17.590$</u>	<u>$- 0^{\circ} 27' 37.948$</u>			
$\Delta\lambda''$	<u>$+ 497.590$</u>	<u>$- 1,657.948$</u>			
$\left(\frac{\Delta\lambda''}{100}\right)^2$	<u>24.760</u>	<u>274.879</u>			
H	<u>84.886 014</u>	<u>84.802 359</u>			
V	<u>1.129 599</u>	<u>1.131 072</u>			
a	<u>-0.827</u>	<u>+1.822</u>	<u>-0.819</u>	<u>+5.397</u>	
$x' = H \cdot \Delta\lambda \pm ab$	<u>+ 42,236.92</u>	<u>- 140,593.48</u>			
$V \left(\frac{\Delta\lambda''}{100}\right)^2 \pm c$	<u>27.96</u>	<u>310.85</u>			
Tabular y	<u>832,792.34</u>	<u>864,184.89</u>			
x	<u>542,236.92</u>	<u>359,406.52</u>			
y	<u>832,820.30</u>	<u>864,495.74</u>			
$\Delta\alpha''$	<u>+ 273.11</u>	<u>- 912.09</u>			
$\Delta\alpha$	<u>$+ 0^{\circ} 04' 33.1$</u>	<u>$- 0^{\circ} 15' 12.1$</u>			
Geod. Az. to Az. Mk.	<u>48 02 24</u>	<u>76 12 22.6</u>			
Grid Az. to Az. Mk.	<u>47 57 51</u>	<u>76 27 35</u>			

$$x = x' + 500,000$$

$$y = \text{Tab. } y + V \left(\frac{\Delta\lambda''}{100} \right)^2 \pm c$$

$$\Delta\alpha'' = \Delta\lambda'' \sin \phi + g$$

$$\text{Grid Az.} = \text{Geod. Az.} - \Delta\alpha$$

H and $V = \text{Tab. } H$ and $\text{Tab. } V$.

When ab is $-$, decrease $H \cdot \Delta\lambda$ numerically.

g increases $\Delta\lambda'' \cdot \sin \phi$ numerically.

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES
(CALCULATING MACHINE COMPUTATION)

STATE - ZONE New Mexico - East

Station Wade, 1922

X	542,236.92	Y	832,820.30
C	- 500,000.00	$P(\frac{X}{10,000})^2 + d$	- 27.97
X'	+ 42,236.92	Y_0	832,792.33
P	1.56723	Approx. $\Delta\lambda = X' \div H$	+ 498"
d	+ 0.01	$\Delta\lambda = (X' + ab) \div H$	+ 497".590
H	84.886 014	$\Delta\lambda$	+ 0° 08' 17".590
a b	- 0.827	Central Meridian	104 20 00.000
φ	33° 17' 21".732	$\lambda = C.M. - \Delta\lambda$	104° 11' 42".410

Station Hondo, 1935

X	359,406.52	Y	864,495.74
C	- 500,000.00	$P(\frac{X}{10,000})^2 + d$	- 310.85
X'	- 140,593.48	Y_0	864,184.89
P	1.57241	Approx. $\Delta\lambda = X' \div H$	- 1,658"
d	+ 0.04	$\Delta\lambda = (X' + ab) \div H$	- 1,657".948
H	84.802 359	$\Delta\lambda$	- 0° 27' 37".948
a b	- 0.819	Central Meridian	104 20 00.000
φ	33° 22' 32".349	$\lambda = C.M. - \Delta\lambda$	104° 47' 37".948

Station

X		Y	
C	-	$P(\frac{X}{10,000})^2 + d$	-
X'		Y_0	"
P		Approx. $\Delta\lambda = X' \div H$	"
d		$\Delta\lambda = (X' + ab) \div H$	"
H		$\Delta\lambda$	° ′ ″
a b	°	Central Meridian	° ′ ″
φ	° ′ ″	$\lambda = C.M. - \Delta\lambda$	° ′ ″

Station

X		Y	
C	-	$P(\frac{X}{10,000})^2 + d$	-
X'		Y_0	"
P		Approx. $\Delta\lambda = X' \div H$	"
d		$\Delta\lambda = (X' + ab) \div H$	"
H		$\Delta\lambda$	° ′ ″
a b	°	Central Meridian	° ′ ″
φ	° ′ ″	$\lambda = C.M. - \Delta\lambda$	° ′ ″

When $a b$ is +, decrease X' numerically
-, increase X' numerically

Constants for New Mexico

Constant	Zone		
	East	Central	West
Central Meridian	104° 20' 00".000	106° 15' 00".000	107° 50' 00".000
log R	-394.8	-434.3	-361.9
Scale reduction (Central Meridian)	1 : 11,000	1 : 10,000	1 : 12,000
$\log \left(\frac{1}{2} \right) g$	4.581 6237 -20	4.581 6316 -20	4.581 6411 -20
$\log \left(\frac{1}{2} \sin 1" \right) g$	9.896 0488 -20	9.896 0567 -20	9.896 0662 -20
$\left(\frac{1}{2} \right) g$	0.7871×10^{-10}	0.7871×10^{-10}	0.7872×10^{-10}

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
EAST ZONE

Lat.	y_0 feet	Δy_0 per second	H	ΔH per second	V	ΔV per second	a
31 00	0.00	101.027 50	86.034 700	252.40	1.086 810	5.62	-1.000
31 01	6 061.65	101.027 83	86.019 556	252.53	1.087 147	5.60	-.999
31 02	12 123.32	101.028 00	87.004 404	252.65	1.087 483	5.60	-.997
31 03	18 185.00	101.028 33	86.989 245	252.77	1.087 819	5.60	-.996
31 04	24 246.70	101.028 67	86.974 079	252.88	1.088 155	5.60	-.995
31 05	30 308.42	101.028 83	86.958 906	253.02	1.088 491	5.58	-.994
31 06	36 370.15	101.029 17	86.943 725	253.15	1.088 826	5.57	-.992
31 07	42 431.90	101.029 50	86.928 536	253.27	1.089 160	5.58	-.991
31 08	48 493.67	101.029 67	86.913 340	253.38	1.089 495	5.55	-.990
31 09	54 555.45	101.029 83	86.898 137	253.50	1.089 828	5.57	-.988
31 10	60 617.24	101.030 17	86.882 927	253.63	1.090 162	5.55	-.987
31 11	66 679.05	101.030 50	86.867 709	253.75	1.090 495	5.55	-.986
31 12	72 740.86	101.030 67	86.852 484	253.88	1.090 828	5.53	-.985
31 13	78 802.72	101.031 00	86.837 251	254.00	1.091 160	5.53	-.983
31 14	84 864.58	101.031 17	86.822 011	254.12	1.091 492	5.53	-.982
31 15	90 926.45	101.031 67	86.806 764	254.23	1.091 824	5.52	-.981
31 16	96 988.35	101.031 83	86.791 510	254.37	1.092 155	5.52	-.980
31 17	103 050.26	101.032 00	86.776 248	254.50	1.092 486	5.52	-.979
31 18	109 112.18	101.032 33	86.760 978	254.60	1.092 817	5.50	-.977
31 19	115 174.12	101.032 50	86.745 702	254.73	1.093 147	5.50	-.976
31 20	121 236.07	101.032 83	86.730 418	254.85	1.093 477	5.50	-.975
31 21	127 298.04	101.033 17	86.715 127	254.98	1.093 807	5.48	-.974
31 22	133 360.03	101.033 33	86.699 828	255.10	1.094 136	5.48	-.972
31 23	139 422.03	101.033 67	86.684 522	255.22	1.094 465	5.47	-.971
31 24	145 484.05	101.033 83	86.669 209	255.33	1.094 793	5.47	-.970
31 25	151 546.08	101.034 17	86.653 889	255.47	1.095 121	5.47	-.969
31 26	157 608.13	101.034 50	86.638 561	255.58	1.095 449	5.45	-.967
31 27	163 670.20	101.034 67	86.623 226	255.72	1.095 776	5.45	-.966
31 28	169 732.28	101.035 00	86.607 883	255.83	1.096 103	5.45	-.965
31 29	175 794.38	101.035 33	86.592 533	255.95	1.096 430	5.43	-.963
31 30	181 856.50	101.035 50	86.577 176	256.08	1.096 756	5.43	-.962
31 31	187 918.63	101.035 67	86.561 811	256.20	1.097 082	5.42	-.961
31 32	193 980.77	101.036 00	86.546 439	256.32	1.097 407	5.42	-.959
31 33	200 1042.93	101.036 33	86.531 060	256.45	1.097 732	5.42	-.958
31 34	206 105.11	101.036 67	86.515 673	256.57	1.098 057	5.40	-.957
31 35	212 167.31	101.036 83	86.500 279	256.68	1.098 381	5.40	-.956
31 36	218 229.52	101.037 00	86.484 878	256.82	1.098 705	5.38	-.954
31 37	224 291.74	101.037 33	86.469 469	256.92	1.099 028	5.40	-.953
31 38	230 353.98	101.037 67	86.454 054	257.07	1.099 352	5.38	-.952
31 39	236 416.24	101.038 00	86.438 630	257.17	1.099 675	5.37	-.950
31 40	242 478.52	101.038 17	86.423 200	257.30	1.099 997	5.37	-.949
31 41	248 540.81	101.038 33	86.407 762	257.42	1.100 319	5.37	-.948
31 42	254 603.12	101.038 83	86.392 317	257.53	1.100 641	5.35	-.947
31 43	260 665.44	101.039 00	86.376 865	257.67	1.100 962	5.37	-.945
31 44	266 727.78	101.039 17	86.361 405	257.78	1.101 284	5.33	-.944
31 45	272 790.13	101.039 50	86.345 938	257.90	1.101 604	5.35	-.943
31 46	278 852.50	101.039 83	86.330 464	258.02	1.101 925	5.32	-.942
31 47	284 914.89	101.040 00	86.314 983	258.15	1.102 244	5.33	-.941
31 48	290 977.29	101.040 33	86.299 494	258.28	1.102 564	5.32	-.939
31 49	297 039.71	101.040 50	86.283 997	258.38	1.102 883	5.32	-.938
31 50	303 102.14	101.040 83	86.268 494	258.52	1.103 202	5.30	-.937
31 51	309 164.59	101.041 17	86.252 983	258.63	1.103 520	5.30	-.936
31 52	315 227.06	101.041 33	86.237 465	258.75	1.103 838	5.30	-.934
31 53	321 289.54	101.041 67	86.221 940	258.88	1.104 156	5.28	-.933
31 54	327 352.04	101.042 00	86.206 407	259.00	1.104 473	5.28	-.932
31 55	333 414.56	101.042 17	86.190 867	259.12	1.104 790	5.28	-.931
31 56	339 477.09	101.042 33	86.175 320	259.25	1.105 107	5.27	-.929
31 57	345 539.63	101.042 83	86.159 765	259.37	1.105 423	5.27	-.928
31 58	351 602.20	101.043 00	86.144 203	259.48	1.105 739	5.25	-.927
31 59	357 664.78	101.043 17	86.128 634	259.62	1.106 054	5.25	-.925
32 00	363 727.37		86.113 057		1.105 369		-.924

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
EAST ZONE

Lat.	y. feet	Δy_0 per second	H	ΔH per second	V	ΔV per second	a
32 0 0	363 727.37	101.043 50	86.113 057	259.73	1.106 369	5.25	-.924
32 0 1	369 789.98	101.043 83	86.097 473	259.87	1.106 684	5.23	-.923
32 0 2	375 852.61	101.044 17	86.081 881	259.97	1.106 998	5.23	-.921
32 0 3	381 915.26	101.044 33	86.066 283	260.10	1.107 312	5.22	-.920
32 0 4	387 977.92	101.044 50	86.050 677	260.22	1.107 625	5.22	-.919
32 0 5	394 040.59	101.045 00	86.035 064	260.35	1.107 938	5.22	-.918
32 0 6	400 103.29	101.045 17	86.019 443	260.45	1.108 251	5.20	-.916
32 0 7	406 166.00	101.045 33	86.003 816	260.58	1.108 563	5.20	-.915
32 0 8	412 228.72	101.045 67	85.988 181	260.72	1.108 875	5.20	-.914
32 0 9	418 291.46	101.046 00	85.972 538	260.82	1.109 187	5.18	-.912
32 1 0	424 354.22	101.046 17	85.956 889	260.95	1.109 498	5.18	-.911
32 1 1	430 416.99	101.046 50	85.941 232	261.07	1.109 809	5.17	-.910
32 1 2	436 479.78	101.046 83	85.925 568	261.18	1.110 119	5.17	-.909
32 1 3	442 542.59	101.047 00	85.909 897	261.30	1.110 429	5.17	-.907
32 1 4	448 605.41	101.047 33	85.894 219	261.43	1.110 739	5.17	-.906
32 1 5	454 668.25	101.047 50	85.878 533	261.55	1.111 049	5.15	-.905
32 1 6	460 731.10	101.047 83	85.862 840	261.67	1.111 358	5.13	-.904
32 1 7	466 793.97	101.048 17	85.847 140	261.80	1.111 666	5.15	-.903
32 1 8	472 856.86	101.048 33	85.831 432	261.92	1.111 975	5.12	-.901
32 1 9	478 919.76	101.048 67	85.815 717	262.03	1.112 282	5.13	-.900
32 2 0	484 982.68	101.048 83	85.799 995	262.17	1.112 590	5.12	-.899
32 2 1	491 045.61	101.049 17	85.784 265	262.27	1.112 897	5.12	-.898
32 2 2	497 108.56	101.049 50	85.768 529	262.42	1.113 204	5.10	-.896
32 2 3	503 171.53	101.049 83	85.752 784	262.52	1.113 510	5.12	-.895
32 2 4	509 234.52	101.050 00	85.737 033	262.63	1.113 817	5.08	-.894
32 2 5	515 297.52	101.050 33	85.721 275	262.77	1.114 122	5.10	-.893
32 2 6	521 360.54	101.050 50	85.705 509	262.88	1.114 428	5.07	-.891
32 2 7	527 423.57	101.050 83	85.689 736	263.02	1.114 732	5.08	-.890
32 2 8	533 486.62	101.051 00	85.673 955	263.12	1.115 037	5.07	-.889
32 2 9	539 549.68	101.051 33	85.658 168	263.25	1.115 341	5.07	-.887
32 3 0	545 612.76	101.051 67	85.642 373	263.37	1.115 645	5.05	-.886
32 3 1	551 675.86	101.051 83	85.626 571	263.48	1.115 948	5.05	-.885
32 3 2	557 738.97	101.052 17	85.610 762	263.62	1.116 251	5.05	-.884
32 3 3	563 802.10	101.052 50	85.594 945	263.73	1.116 554	5.03	-.882
32 3 4	569 865.25	101.052 67	85.579 121	263.83	1.116 856	5.03	-.881
32 3 5	575 928.41	101.053 00	85.563 291	263.98	1.117 158	5.03	-.880
32 3 6	581 991.59	101.053 33	85.547 452	264.08	1.117 460	5.02	-.879
32 3 7	588 054.79	101.053 50	85.531 607	264.22	1.117 761	5.02	-.878
32 3 8	594 118.00	101.053 83	85.515 754	264.33	1.118 062	5.00	-.876
32 3 9	600 181.23	101.054 00	85.499 894	264.45	1.118 362	5.00	-.875
32 4 0	606 244.47	101.054 33	85.484 027	264.57	1.118 662	5.00	-.874
32 4 1	612 307.73	101.054 67	85.468 153	264.70	1.118 962	4.98	-.873
32 4 2	618 371.01	101.054 83	85.452 271	264.82	1.119 261	4.98	-.871
32 4 3	624 434.30	101.055 17	85.436 382	264.93	1.119 560	4.97	-.870
32 4 4	630 497.61	101.055 50	85.420 486	265.07	1.119 858	4.97	-.869
32 4 5	636 560.94	101.055 67	85.404 582	265.17	1.120 156	4.97	-.868
32 4 6	642 624.28	101.056 00	85.388 672	265.30	1.120 454	4.95	-.866
32 4 7	648 687.64	101.056 17	85.372 754	265.42	1.120 751	4.95	-.865
32 4 8	654 751.01	101.056 50	85.356 829	265.53	1.121 048	4.95	-.864
32 4 9	660 814.40	101.056 83	85.340 897	265.67	1.121 345	4.93	-.862
32 5 0	666 877.81	101.057 17	85.324 957	265.78	1.121 641	4.93	-.861
32 5 1	672 941.24	101.057 33	85.309 010	265.90	1.121 937	4.92	-.860
32 5 2	679 004.68	101.057 50	85.293 056	266.02	1.122 232	4.92	-.858
32 5 3	685 068.13	101.057 83	85.277 095	266.15	1.122 527	4.92	-.857
32 5 4	691 131.60	101.058 17	85.261 126	266.25	1.122 822	4.90	-.856
32 5 5	697 195.09	101.058 50	85.245 151	266.38	1.123 116	4.90	-.855
32 5 6	703 258.60	101.058 67	85.229 168	266.50	1.123 410	4.90	-.853
32 5 7	709 322.12	101.059 00	85.213 178	266.63	1.123 704	4.88	-.852
32 5 8	715 385.66	101.059 17	85.197 180	266.73	1.123 997	4.88	-.851
32 5 9	721 449.21	101.059 50	85.181 176	266.87	1.124 290	4.87	-.849
33 0 0	727 512.78		85.165 164		1.124 582		-.848

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
EAST ZONE

Lat.	y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
33 0 0	727 512.78	101.059 83	85.165 164	266.98	1.124 582	4.87	- .848
33 0 1	733 576.37	101.060 17	85.149 145	267.10	1.124 874	4.87	- .847
33 0 2	739 639.98	101.060 33	85.133 119	267.22	1.125 166	4.85	- .846
33 0 3	745 703.60	101.060 50	85.117 086	267.35	1.125 457	4.85	- .844
33 0 4	751 767.23	101.061 00	85.101 045	267.47	1.125 748	4.85	- .843
33 0 5	757 830.89	101.061 17	85.084 997	267.58	1.126 039	4.83	- .842
33 0 6	763 894.56	101.061 33	85.068 942	267.70	1.126 329	4.83	- .841
33 0 7	769 958.24	101.061 83	85.052 880	267.82	1.126 619	4.82	- .840
33 0 8	776 021.95	101.062 00	85.036 811	267.95	1.126 908	4.82	- .838
33 0 9	782 085.67	101.062 17	85.020 734	268.07	1.127 197	4.82	- .837
33 1 0	788 149.40	101.062 50	85.004 650	268.18	1.127 486	4.80	- .836
33 1 1	794 213.15	101.062 83	84.988 559	268.32	1.127 774	4.80	- .835
33 1 2	800 276.92	101.063 00	84.972 460	268.42	1.128 062	4.78	- .833
33 1 3	806 340.70	101.063 50	84.956 355	268.55	1.128 349	4.80	- .832
33 1 4	812 404.51	101.063 67	84.940 242	268.67	1.128 637	4.77	- .831
33 1 5	818 468.33	101.063 83	84.924 122	268.78	1.128 923	4.78	- .830
33 1 6	824 532.16	101.064 17	84.907 995	268.92	1.129 210	4.75	- .828
33 1 7	830 596.01	101.064 33	84.891 860	269.02	1.129 495	4.77	- .827
33 1 8	836 659.87	101.064 83	84.875 719	269.15	1.129 781	4.75	- .826
33 1 9	842 723.76	101.065 00	84.859 570	269.27	1.130 066	4.75	- .824
33 2 0	848 787.66	101.065 33	84.843 414	269.38	1.130 351	4.73	- .823
33 2 1	854 851.58	101.065 50	84.827 251	269.50	1.130 635	4.73	- .822
33 2 2	860 915.51	101.065 83	84.811 081	269.63	1.130 919	4.73	- .820
33 2 3	866 979.46	101.066 00	84.794 903	269.73	1.131 203	4.72	- .819
33 2 4	873 043.42	101.066 33	84.778 719	269.87	1.131 486	4.72	- .818
33 2 5	879 107.40	101.066 67	84.762 527	269.98	1.131 769	4.72	- .817
33 2 6	885 171.40	101.067 00	84.746 328	270.10	1.132 052	4.70	- .815
33 2 7	891 235.42	101.067 17	84.730 122	270.23	1.132 334	4.70	- .814
33 2 8	897 299.45	101.067 50	84.713 908	270.33	1.132 616	4.68	- .813
33 2 9	903 363.50	101.067 67	84.697 688	270.47	1.132 897	4.68	- .811
33 3 0	909 427.56	101.068 00	84.681 460	270.58	1.133 178	4.68	- .810
33 3 1	915 491.64	101.068 33	84.665 225	270.70	1.133 459	4.67	- .809
33 3 2	921 555.74	101.068 67	84.648 983	270.82	1.133 739	4.67	- .808
33 3 3	927 619.86	101.068 83	84.632 734	270.95	1.134 019	4.65	- .806
33 3 4	933 683.99	101.069 17	84.616 477	271.05	1.134 298	4.65	- .805
33 3 5	939 748.14	101.069 33	84.600 214	271.18	1.134 577	4.65	- .804
33 3 6	945 812.30	101.069 66	84.583 943	271.30	1.134 856	4.63	- .803
33 3 7	951 876.48	101.070 00	84.567 665	271.42	1.135 134	4.63	- .802
33 3 8	957 940.68	101.070 17	84.551 380	271.55	1.135 412	4.63	- .800
33 3 9	964 004.89	101.070 50	84.535 087	271.65	1.135 690	4.62	- .799
33 4 0	970 069.12	101.070 83	84.518 788	271.78	1.135 967	4.62	- .798
33 4 1	976 133.37	101.071 00	84.502 481	271.88	1.136 244	4.60	- .797
33 4 2	982 197.63	101.071 33	84.486 168	272.02	1.136 520	4.60	- .795
33 4 3	988 261.91	101.071 50	84.469 847	272.13	1.136 796	4.60	- .794
33 4 4	994 326.20	101.072 00	84.453 519	272.27	1.137 072	4.58	- .793
33 4 5	1 000 390.52	101.072 17	84.437 183	272.37	1.137 347	4.58	- .792
33 4 6	1 006 454.85	101.072 33	84.420 841	272.50	1.137 622	4.58	- .790
33 4 7	1 012 519.19	101.072 83	84.404 491	272.60	1.137 897	4.57	- .789
33 4 8	1 018 583.56	101.073 00	84.388 135	272.73	1.138 171	4.57	- .788
33 4 9	1 024 647.94	101.073 17	84.371 771	272.85	1.138 445	4.55	- .786
33 5 0	1 030 712.33	101.073 67	84.355 400	272.97	1.138 718	4.55	- .785
33 5 1	1 036 776.75	101.073 83	84.339 022	273.10	1.138 991	4.55	- .784
33 5 2	1 042 841.18	101.074 00	84.322 636	273.20	1.139 264	4.53	- .782
33 5 3	1 048 905.62	101.074 33	84.306 244	273.33	1.139 536	4.52	- .781
33 5 4	1 054 970.08	101.074 67	84.289 844	273.43	1.139 807	4.53	- .780
33 5 5	1 061 034.56	101.075 00	84.273 438	273.57	1.140 079	4.52	- .779
33 5 6	1 067 099.06	101.075 17	84.257 024	273.68	1.140 350	4.50	- .777
33 5 7	1 073 163.57	101.075 50	84.240 603	273.80	1.140 620	4.52	- .776
33 5 8	1 079 228.10	101.075 83	84.224 175	273.93	1.140 891	4.50	- .775
33 5 9	1 085 292.65	101.076 00	84.207 739	274.03	1.141 161	4.48	- .773
34 0 0	1 091 357.21		84.191 297		1.141 430		- .772

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
EAST ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
34 0 0	1	0 91 357.21	101.076 33	84.191 297	274.17	1.141 430	4.48	.772
34 0 1	1	0 97 421.79	101.076 50	84.174 847	274.27	1.141 699	4.48	.771
34 0 2	1	1 03 486.38	101.076 83	84.158 391	274.40	1.141 968	4.47	.770
34 0 3	1	1 09 550.99	101.077 17	84.141 927	274.52	1.142 236	4.47	.768
34 0 4	1	1 15 615.62	101.077 50	84.125 456	274.63	1.142 504	4.45	.767
34 0 5	1	1 21 680.27	101.077 67	84.108 978	274.75	1.142 771	4.45	.766
34 0 6	1	1 27 744.93	101.078 00	84.092 493	274.87	1.143 038	4.45	.765
34 0 7	1	1 33 809.61	101.078 33	84.076 001	275.00	1.143 305	4.43	.764
34 0 8	1	1 39 874.31	101.078 50	84.059 501	275.10	1.143 571	4.43	.762
34 0 9	1	1 45 939.02	101.078 83	84.042 995	275.23	1.143 837	4.43	.761
34 1 0	1	1 52 003.75	101.079 00	84.026 481	275.35	1.144 103	4.42	.760
34 1 1	1	1 58 068.49	101.079 33	84.009 960	275.47	1.144 368	4.42	.759
34 1 2	1	1 64 133.25	101.079 67	83.993 432	275.58	1.144 633	4.42	.757
34 1 3	1	1 70 198.03	101.080 00	83.976 897	275.70	1.144 898	4.40	.756
34 1 4	1	1 76 262.83	101.080 17	83.960 355	275.83	1.145 162	4.38	.755
34 1 5	1	1 82 327.64	101.080 50	83.943 805	275.93	1.145 425	4.40	.754
34 1 6	1	1 88 392.47	101.080 83	83.927 249	276.07	1.145 689	4.38	.752
34 1 7	1	1 94 457.32	101.081 00	83.910 685	276.17	1.145 952	4.37	.751
34 1 8	1	2 00 522.18	101.081 33	83.894 115	276.30	1.146 214	4.37	.750
34 1 9	1	2 06 587.06	101.081 50	83.877 537	276.42	1.146 476	4.37	.748
34 2 0	1	2 12 651.95	101.081 83	83.860 952	276.53	1.146 738	4.35	.747
34 2 1	1	2 18 716.86	101.082 17	83.844 360	276.65	1.146 999	4.35	.746
34 2 2	1	2 24 781.79	101.082 50	83.827 761	276.77	1.147 260	4.35	.745
34 2 3	1	2 30 846.74	101.082 83	83.811 155	276.88	1.147 521	4.33	.743
34 2 4	1	2 36 911.71	101.083 00	83.794 542	277.02	1.147 781	4.33	.742
34 2 5	1	2 42 976.69	101.083 17	83.777 921	277.12	1.148 041	4.32	.741
34 2 6	1	2 49 041.68	101.083 50	83.761 294	277.25	1.148 300	4.32	.740
34 2 7	1	2 55 106.69	101.083 83	83.744 659	277.35	1.148 559	4.32	.739
34 2 8	1	2 61 171.72	101.084 17	83.728 018	277.48	1.148 818	4.30	.737
34 2 9	1	2 67 236.77	101.084 33	83.711 369	277.60	1.149 076	4.30	.736
34 3 0	1	2 73 301.83	101.084 67	83.694 713	277.72	1.149 334	4.28	.735
34 3 1	1	2 79 366.91	101.085 00	83.678 050	277.83	1.149 591	4.28	.734
34 3 2	1	2 85 432.01	101.085 17	83.661 380	277.95	1.149 848	4.28	.732
34 3 3	1	2 91 497.12	101.085 50	83.644 703	278.08	1.150 105	4.27	.731
34 3 4	1	2 97 562.25	101.085 83	83.628 018	278.18	1.150 361	4.27	.730
34 3 5	1	3 03 627.40	101.086 00	83.611 327	278.32	1.150 617	4.27	.729
34 3 6	1	3 09 692.56	101.086 33	83.594 628	278.42	1.150 873	4.25	.727
34 3 7	1	3 15 757.74	101.086 67	83.577 923	278.55	1.151 128	4.25	.726
34 3 8	1	3 21 822.94	101.086 83	83.561 210	278.65	1.151 383	4.23	.725
34 3 9	1	3 27 888.15	101.087 17	83.544 491	278.78	1.151 637	4.23	.723
34 4 0	1	3 33 953.38	101.087 50	83.527 764	278.90	1.151 891	4.23	.722
34 4 1	1	3 40 018.63	101.087 83	83.511 030	279.02	1.152 145	4.22	.721
34 4 2	1	3 46 083.90	101.088 00	83.494 289	279.12	1.152 398	4.22	.720
34 4 3	1	3 52 149.18	101.088 17	83.477 542	279.25	1.152 651	4.20	.718
34 4 4	1	3 58 214.47	101.088 50	83.460 787	279.37	1.152 903	4.20	.717
34 4 5	1	3 64 279.78	101.089 00	83.444 025	279.50	1.153 155	4.20	.716
34 4 6	1	3 70 345.12	101.089 17	83.427 255	279.60	1.153 407	4.18	.715
34 4 7	1	3 76 410.47	101.089 50	83.410 479	279.72	1.153 658	4.18	.714
34 4 8	1	3 82 475.84	101.089 67	83.393 696	279.85	1.153 909	4.18	.712
34 4 9	1	3 88 541.22	101.090 00	83.376 905	279.95	1.154 160	4.17	.711
34 5 0	1	3 94 606.62	101.090 17	83.360 108	280.08	1.154 410	4.17	.710
34 5 1	1	4 00 672.03	101.090 67	83.343 303	280.18	1.154 660	4.15	.709
34 5 2	1	4 06 737.47	101.090 83	83.326 492	280.32	1.154 909	4.15	.707
34 5 3	1	4 12 802.92	101.091 00	83.309 673	280.43	1.155 158	4.15	.706
34 5 4	1	4 18 868.38	101.091 33	83.292 847	280.55	1.155 407	4.13	.705
34 5 5	1	4 24 933.86	101.091 67	83.276 014	280.67	1.155 655	4.13	.704
34 5 6	1	4 30 999.36	101.092 00	83.259 174	280.78	1.155 903	4.12	.702
34 5 7	1	4 37 064.88	101.092 33	83.242 327	280.90	1.156 150	4.12	.701
34 5 8	1	4 43 130.42	101.092 50	83.225 473	281.02	1.156 397	4.12	.700
34 5 9	1	4 49 195.97	101.092 67	83.208 612	281.13	1.156 644	4.10	.698
35 0 0	1	4 55 261.53		83.191 744		1.156 890		.697

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
EAST ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
35 0 0	1	455 261.53	101.093 17	83.191 744	281.25	1.156 890	4.10	.697
35 0 1	1	461 327.12	101.093 33	83.174 869	281.38	1.157 136	4.08	.696
35 0 2	1	467 392.72	101.093 67	83.157 986	281.48	1.157 381	4.10	.695
35 0 3	1	473 458.34	101.093 83	83.141 097	281.62	1.157 627	4.07	.693
35 0 4	1	479 523.97	101.094 17	83.124 200	281.72	1.157 871	4.08	.692
35 0 5	1	485 589.62	101.094 50	83.107 297	281.85	1.158 116	4.05	.691
35 0 6	1	491 655.29	101.094 83	83.090 386	281.95	1.158 359	4.07	.690
35 0 7	1	497 720.98	101.095 00	83.073 469	282.08	1.158 603	4.05	.689
35 0 8	1	503 786.68	101.095 33	83.056 544	282.18	1.158 846	4.05	.687
35 0 9	1	509 852.40	101.095 67	83.039 613	282.32	1.159 089	4.03	.686
35 1 0	1	515 918.14	101.095 83	83.022 674	282.43	1.159 331	4.03	.685
35 1 1	1	521 983.89	101.096 17	83.005 728	282.53	1.159 573	4.02	.684
35 1 2	1	528 049.66	101.096 50	82.988 776	282.67	1.159 814	4.02	.682
35 1 3	1	534 115.45	101.096 67	82.971 816	282.78	1.160 055	4.02	.681
35 1 4	1	540 181.25	101.097 00	82.954 849	282.90	1.160 296	4.00	.680
35 1 5	1	546 247.07	101.097 33	82.937 875	283.02	1.160 536	4.00	.679
35 1 6	1	552 312.91	101.097 67	82.920 894	283.12	1.160 776	4.00	.677
35 1 7	1	558 378.77	101.097 83	82.903 907	283.25	1.161 016	3.98	.676
35 1 8	1	564 444.64	101.098 17	82.886 912	283.37	1.161 255	3.98	.675
35 1 9	1	570 510.53	101.098 33	82.869 910	283.48	1.161 494	3.97	.673
35 2 0	1	576 576.43	101.098 83	82.852 901	283.60	1.161 732	3.97	.672
35 2 1	1	582 642.36	101.099 00	82.835 885	283.72	1.161 970	3.97	.671
35 2 2	1	588 708.30	101.099 17	82.818 862	283.83	1.162 208	3.95	.670
35 2 3	1	594 774.25	101.099 67	82.801 832	283.95	1.162 445	3.93	.668
35 2 4	1	600 840.23	101.099 83	82.784 795	284.07	1.162 681	3.95	.667
35 2 5	1	606 906.22	101.100 00	82.767 751	284.18	1.162 918	3.93	.666
35 2 6	1	612 972.22	101.100 50	82.750 700	284.30	1.163 154	3.92	.665
35 2 7	1	619 038.25	101.100 67	82.733 642	284.42	1.163 389	3.93	.664
35 2 8	1	625 104.29	101.101 00	82.716 577	284.53	1.163 625	3.92	.662
35 2 9	1	631 170.35	101.101 17	82.699 505	284.65	1.163 860	3.90	.661
35 3 0	1	637 236.42	101.101 50	82.682 426	284.77	1.164 094	3.90	.660
35 3 1	1	643 302.51	101.101 83	82.665 340	284.90	1.164 328	3.90	.659
35 3 2	1	649 368.62	101.102 17	82.648 246	285.00	1.164 562	3.88	.657
35 3 3	1	655 434.75	101.102 33	82.631 146	285.12	1.164 795	3.88	.656
35 3 4	1	661 500.89	101.102 67	82.614 039	285.23	1.165 028	3.88	.655
35 3 5	1	667 567.05	101.103 00	82.596 925	285.37	1.165 261	3.87	.654
35 3 6	1	673 633.23	101.103 33	82.579 803	285.47	1.165 493	3.85	.652
35 3 7	1	679 699.43	101.103 50	82.562 675	285.58	1.165 724	3.87	.651
35 3 8	1	685 765.64	101.103 83	82.545 540	285.72	1.165 956	3.85	.650
35 3 9	1	691 831.87	101.104 00	82.528 397	285.82	1.166 187	3.83	.648
35 4 0	1	697 898.11	101.104 33	82.511 248	285.93	1.166 417	3.83	.647
35 4 1	1	703 964.37	101.104 67	82.494 092	286.07	1.166 647	3.83	.646
35 4 2	1	710 030.65	101.105 00	82.476 928	286.17	1.166 877	3.82	.645
35 4 3	1	716 096.95	101.105 17	82.459 758	286.30	1.167 106	3.82	.643
35 4 4	1	722 163.26	101.105 50	82.442 580	286.40	1.167 335	3.80	.642
35 4 5	1	728 229.59	101.105 83	82.425 396	286.52	1.167 563	3.80	.641
35 4 6	1	734 295.94	101.106 00	82.408 205	286.63	1.167 791	3.80	.640
35 4 7	1	740 362.30	101.106 33	82.391 007	286.77	1.168 019	3.80	.639
35 4 8	1	746 428.68	101.106 67	82.373 801	286.87	1.168 247	3.77	.637
35 4 9	1	752 495.08	101.106 83	82.356 589	286.98	1.168 473	3.78	.636
35 5 0	1	758 561.49	101.107 17	82.339 370	287.10	1.168 700	3.77	.635
35 5 1	1	764 627.92	101.107 67	82.322 144	287.22	1.168 926	3.77	.634
35 5 2	1	770 694.38	101.107 83	82.304 911	287.33	1.169 152	3.75	.632
35 5 3	1	776 760.85	101.108 00	82.287 671	287.45	1.169 377	3.75	.631
35 5 4	1	782 827.33	101.108 33	82.270 424	287.57	1.169 602	3.75	.630
35 5 5	1	788 893.83	101.108 57	82.253 170	287.68	1.169 827	3.73	.629
35 5 6	1	794 960.35	101.108 83	82.235 909	287.80	1.170 051	3.73	.627
35 5 7	1	801 026.88	101.109 17	82.218 641	287.92	1.170 275	3.72	.626
35 5 8	1	807 093.43	101.109 50	82.201 366	288.03	1.170 498	3.72	.625
35 5 9	1	813 160.00	101.109 83	82.184 084	288.15	1.170 721	3.72	.623
36 0 0	1	819 226.59		82.166 795		1.170 244		.622

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
EAST ZONE

Lat.		y. feet	Δy. per second	H	ΔH per second	V	ΔV per second	a
36 00	1	619 226.59	101.110 17	82.166 795	288.27	1.170 944	3.70	-.622
36 01	1	625 293.20	101.110 33	82.149 499	288.38	1.171 166	3.70	-.621
36 02	1	831 359.82	101.110 50	82.132 196	288.50	1.171 388	3.68	-.620
36 03	1	837 426.45	101.111 00	82.114 886	288.62	1.171 609	3.68	-.618
36 04	1	843 493.11	101.111 17	82.097 569	288.73	1.171 830	3.68	-.617
36 05	1	849 559.78	101.111 50	82.080 245	288.85	1.172 051	3.67	-.616
36 06	1	655 626.47	101.111 67	82.062 914	288.97	1.172 271	3.67	-.615
36 07	1	661 693.17	101.112 17	82.045 576	289.08	1.172 491	3.65	-.614
36 08	1	667 759.90	101.112 33	82.028 231	289.18	1.172 710	3.65	-.612
36 09	1	873 826.64	101.112 50	82.010 880	289.32	1.172 929	3.65	-.611
36 10	1	879 893.39	101.113 00	81.993 521	289.42	1.173 148	3.63	-.610
36 11	1	885 960.17	101.113 17	81.976 156	289.55	1.173 366	3.63	-.609
36 12	1	892 026.96	101.113 50	81.958 783	289.65	1.173 584	3.62	-.608
36 13	1	898 093.77	101.113 67	81.941 404	289.77	1.173 801	3.62	-.606
36 14	1	904 160.59	101.114 00	81.924 018	289.90	1.174 018	3.62	-.605
36 15	1	910 227.43	101.114 33	81.906 624	290.00	1.174 235	3.60	-.604
36 16	1	916 294.29	101.114 67	81.889 224	290.12	1.174 451	3.60	-.603
36 17	1	922 361.17	101.115 00	81.871 817	290.23	1.174 667	3.58	-.602
36 18	1	928 428.07	101.115 17	81.854 403	290.35	1.174 882	3.58	-.600
36 19	1	934 494.98	101.115 33	81.836 982	290.47	1.175 097	3.58	-.599
36 20	1	940 561.90	101.115 83	81.819 554	290.58	1.175 312	3.57	-.598
36 21	1	946 628.85	101.116 00	81.802 119	290.70	1.175 526	3.57	-.597
36 22	1	952 695.81	101.116 33	81.784 677	290.82	1.175 740	3.57	-.595
36 23	1	958 762.79	101.116 67	81.767 228	290.93	1.175 954	3.55	-.594
36 24	1	964 829.79	101.116 83	81.749 772	291.03	1.176 167	3.55	-.593
36 25	1	970 896.80	101.117 17	81.732 310	291.17	1.176 380	3.53	-.592
36 26	1	976 963.83	101.117 50	81.714 840	291.28	1.176 592	3.53	-.590
36 27	1	983 030.88	101.117 67	81.697 363	291.38	1.176 804	3.52	-.589
36 28	1	989 097.94	101.118 17	81.679 880	291.52	1.177 015	3.52	-.588
36 29	1	995 165.03	101.118 33	81.662 389	291.62	1.177 226	3.52	-.586
36 30	2	001 232.13	101.118 67	81.644 892	291.73	1.177 437	3.50	-.585
36 31	2	007 299.25	101.118 83	81.627 388	291.87	1.177 647	3.50	-.584
36 32	2	013 366.38	101.119 17	81.609 876	291.97	1.177 857	3.50	-.583
36 33	2	019 433.53	101.119 50	81.592 358	292.08	1.178 067	3.48	-.581
36 34	2	025 500.70	101.119 83	81.574 833	292.20	1.178 276	3.47	-.580
36 35	2	031 567.89	101.120 00	81.557 301	292.30	1.178 484	3.48	-.579
36 36	2	037 635.09	101.120 33	81.539 763	292.43	1.178 693	3.47	-.578
36 37	2	043 702.31	101.120 67	81.522 217	292.55	1.178 901	3.45	-.577
36 38	2	049 769.55	101.120 83	81.504 664	292.67	1.179 108	3.45	-.575
36 39	2	055 836.80	101.121 17	81.487 104	292.77	1.179 315	3.45	-.574
36 40	2	061 904.07	101.121 50	81.469 538	292.88	1.179 522	3.43	-.573
36 41	2	067 971.36	101.121 83	81.451 965	293.02	1.179 728	3.43	-.572
36 42	2	074 038.67	101.122 00	81.434 384	293.12	1.179 934	3.43	-.571
36 43	2	080 105.99	101.122 33	81.416 797	293.23	1.180 140	3.42	-.569
36 44	2	086 173.33	101.122 67	81.399 203	293.35	1.180 345	3.42	-.568
36 45	2	092 240.69	101.123 00	81.381 602	293.47	1.180 550	3.42	-.567
36 46	2	098 308.07	101.123 17	81.363 994	293.58	1.180 755	3.40	-.566
36 47	2	104 375.46	101.123 50	81.346 379	293.70	1.180 959	3.38	-.565
36 48	2	110 442.87	101.123 83	81.328 757	293.80	1.181 162	3.38	-.563
36 49	2	116 510.30	101.124 00	81.311 129	293.93	1.181 365	3.38	-.562
36 50	2	122 577.74	101.124 33	81.293 493	294.03	1.181 568	3.37	-.561
36 51	2	128 645.20	101.124 67	81.275 851	294.17	1.181 770	3.37	-.560
36 52	2	134 712.68	101.125 00	81.258 201	294.27	1.181 972	3.37	-.559
36 53	2	140 780.18	101.125 17	81.240 545	294.38	1.182 174	3.35	-.557
36 54	2	146 847.69	101.125 50	81.222 882	294.50	1.182 375	3.35	-.556
36 55	2	152 915.22	101.125 83	81.205 212	294.62	1.182 576	3.33	-.555
36 56	2	158 982.77	101.126 00	81.187 535	294.73	1.182 776	3.33	-.554
36 57	2	165 050.33	101.126 33	81.169 851	294.83	1.182 976	3.32	-.553
36 58	2	171 117.91	101.126 67	81.152 161	294.97	1.183 175	3.32	-.551
36 59	2	177 185.51	101.127 00	81.134 463	295.07	1.183 374	3.32	-.550
37 00	2	183 253.13		81.116 759		1.183 573		-.549

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
EAST ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
37 00	2	183 253.13	101.127 17	81.116 759	295.18	1.183 573	3.30	-.549
37 01	2	189 320.76	101.127 50	81.099 048	295.30	1.183 771	3.30	-.548
37 02	2	195 388.41	101.127 83	81.081 330	295.42	1.183 969	3.30	-.547
37 03	2	201 456.08	101.128 17	81.063 605	295.53	1.184 167	3.28	-.545
37 04	2	207 523.77	101.128 33	81.045 873	295.65	1.184 364	3.28	-.544
37 05	2	213 591.47	101.128 67	81.028 134	295.77	1.184 561	3.27	-.543
37 06	2	219 659.19	101.129 00	81.010 388	295.87	1.184 757	3.27	-.542
37 07	2	225 726.93	101.129 17	80.992 636	296.00	1.184 953	3.25	-.541
37 08	2	231 794.68	101.129 50	80.974 876	296.10	1.185 148	3.25	-.539
37 09	2	237 862.45	101.129 83	80.957 110	296.22	1.185 343	3.25	-.538
37 10	2	243 930.24	101.130 17	80.939 337	296.33	1.185 538	3.23	-.537
37 11	2	249 998.05	101.130 50	80.921 557	296.45	1.185 732	3.23	-.536
37 12	2	256 065.88	101.130 67	80.903 770	296.57	1.185 926	3.23	-.534
37 13	2	262 133.72	101.130 83	80.885 976	296.68	1.186 120	3.22	-.533
37 14	2	268 201.57	101.131 33	80.868 175	296.78	1.186 313	3.22	-.532
37 15	2	274 269.45	101.131 50	80.850 368	296.92	1.186 506	3.20	-.531
37 16	2	280 337.34	101.131 83	80.832 553	297.02	1.186 698	3.20	-.529
37 17	2	286 405.25	101.132 17	80.814 732	297.13	1.186 890	3.18	-.528
37 18	2	292 473.18	101.132 50	80.796 904	297.25	1.187 081	3.18	-.527
37 19	2	298 541.13	101.132 67	80.779 069	297.37	1.187 272	3.18	-.525
37 20	2	304 609.09		80.761 227		1.187 463		-.524

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
CENTRAL ZONE

Lat.	y. feet	Δy. per second	H	ΔH per second	V	ΔV per second	a
31 0 0	0 . 0 0	1 0 1 . 0 2 6 6 7	8 7 . 0 3 3 9 0 8	2 5 2 . 4 0	1 . 0 8 6 8 0 0	5 . 6 2	- 1 . 0 0 0
31 0 1	6 0 6 1 . 6 0	1 0 1 . 0 2 6 8 3	8 7 . 0 1 8 7 6 4	2 5 2 . 5 3	1 . 0 8 7 1 3 7	5 . 6 0	- . 9 9 9
31 0 2	1 2 1 2 3 . 2 1	1 0 1 . 0 2 7 1 7	8 7 . 0 0 3 6 1 2	2 5 2 . 6 3	1 . 0 8 7 4 7 3	5 . 6 0	- . 9 9 7
31 0 3	1 8 1 8 4 . 8 4	1 0 1 . 0 2 7 3 3	8 6 . 9 8 8 4 5 4	2 5 2 . 7 8	1 . 0 8 7 8 0 9	5 . 6 0	- . 9 9 6
31 0 4	2 4 2 4 6 . 4 8	1 0 1 . 0 2 7 8 3	8 6 . 9 7 3 2 8 7	2 5 2 . 8 8	1 . 0 8 8 1 4 5	5 . 6 0	- . 9 9 5
31 0 5	3 0 3 0 8 . 1 5	1 0 1 . 0 2 7 8 3	8 6 . 9 5 8 1 1 4	2 5 3 . 0 2	1 . 0 8 8 4 8 1	5 . 5 8	- . 9 9 4
31 0 6	3 6 3 6 9 . 8 2	1 0 1 . 0 2 8 3 3	8 6 . 9 4 2 9 3 3	2 5 3 . 1 3	1 . 0 8 8 8 1 6	5 . 5 7 *	- . 9 9 2
31 0 7	4 2 4 3 1 . 5 2	1 0 1 . 0 2 8 5 0	8 6 . 9 2 7 7 4 5	2 5 3 . 2 7	1 . 0 8 9 1 5 0	5 . 5 8	- . 9 9 1
31 0 8	4 8 4 9 3 . 2 3	1 0 1 . 0 2 8 6 7	8 6 . 9 1 2 5 4 9	2 5 3 . 3 8	1 . 0 8 9 4 8 5	5 . 5 5	- . 9 9 0
31 0 9	5 4 5 5 4 . 9 5	1 0 1 . 0 2 9 0 0	8 6 . 8 9 7 3 4 6	2 5 3 . 5 0	1 . 0 8 9 8 1 8	5 . 5 7	- . 9 8 8
31 1 0	6 0 6 1 6 . 6 9	1 0 1 . 0 2 9 3 3	8 6 . 8 8 2 1 3 6	2 5 3 . 6 3	1 . 0 9 0 1 5 2	5 . 5 5	- . 9 8 7
31 1 1	6 6 6 7 8 . 4 5	1 0 1 . 0 2 9 5 0	8 6 . 8 6 6 9 1 8	2 5 3 . 7 5	1 . 0 9 0 4 8 5	5 . 5 5	- . 9 8 6
31 1 2	7 2 7 4 0 . 2 2	1 0 1 . 0 2 9 8 3	8 6 . 8 5 1 6 9 3	2 5 3 . 8 7	1 . 0 9 0 8 1 8	5 . 5 3	- . 9 8 5
31 1 3	7 8 8 0 2 . 0 1	1 0 1 . 0 3 0 0 0	8 6 . 8 3 6 4 6 1	2 5 4 . 0 0	1 . 0 9 1 1 5 0	5 . 5 3	- . 9 8 3
31 1 4	8 4 8 6 3 . 8 1	1 0 1 . 0 3 0 3 3	8 6 . 8 2 1 2 2 1	2 5 4 . 1 2	1 . 0 9 1 4 8 2	5 . 5 3	- . 9 8 2
31 1 5	9 0 9 2 5 . 6 3	1 0 1 . 0 3 0 6 7	8 6 . 8 0 5 9 7 4	2 5 4 . 2 3	1 . 0 9 1 8 1 4	5 . 5 2	- . 9 8 1
31 1 6	9 6 9 8 7 . 4 7	1 0 1 . 0 3 0 8 3	8 6 . 7 9 0 7 2 0	2 5 4 . 3 7	1 . 0 9 2 1 4 5	5 . 5 2	- . 9 8 0
31 1 7	1 0 3 0 4 9 . 3 2	1 0 1 . 0 3 1 1 7	8 6 . 7 7 5 4 5 8	2 5 4 . 4 8	1 . 0 9 2 4 7 6	5 . 5 2	- . 9 7 9
31 1 8	1 0 9 1 1 1 . 1 9	1 0 1 . 0 3 1 3 3	8 6 . 7 6 0 1 8 9	2 5 4 . 5 0	1 . 0 9 2 8 0 7	5 . 5 0	- . 9 7 7
31 1 9	1 1 5 1 7 3 . 0 7	1 0 1 . 0 3 1 6 7	8 6 . 7 4 4 9 1 3	2 5 4 . 7 3	1 . 0 9 3 1 3 7	5 . 5 0	- . 9 7 6
31 2 0	1 2 1 2 3 4 . 9 7	1 0 1 . 0 3 2 0 0	8 6 . 7 2 9 6 2 9	2 5 4 . 8 5	1 . 0 9 3 4 6 7	5 . 5 0	- . 9 7 5
31 2 1	1 2 7 2 9 6 . 8 9	1 0 1 . 0 3 2 1 7	8 6 . 7 1 4 3 3 8	2 5 4 . 9 8	1 . 0 9 3 7 9 7	5 . 4 8	- . 9 7 4
31 2 2	1 3 3 3 5 8 . 8 2	1 0 1 . 0 3 2 3 3	8 6 . 6 9 9 0 3 9	2 5 5 . 0 8	1 . 0 9 4 1 2 6	5 . 4 8	- . 9 7 2
31 2 3	1 3 9 4 2 0 . 7 6	1 0 1 . 0 3 2 8 3	8 6 . 6 8 3 7 3 4	2 5 5 . 2 2	1 . 0 9 4 4 5 5	5 . 4 7	- . 9 7 1
31 2 4	1 4 5 4 8 2 . 7 3	1 0 1 . 0 3 3 0 0	8 6 . 6 6 8 4 2 1	2 5 5 . 3 5	1 . 0 9 4 7 8 3	5 . 4 7	- . 9 7 0
31 2 5	1 5 1 5 4 4 . 7 1	1 0 1 . 0 3 3 1 7	8 6 . 6 5 3 1 0 0	2 5 5 . 4 7	1 . 0 9 5 1 1 1	5 . 4 7	- . 9 6 9
31 2 6	1 5 7 6 0 6 . 7 0	1 0 1 . 0 3 3 5 0	8 6 . 6 3 7 7 7 2	2 5 5 . 5 8	1 . 0 9 5 4 3 9	5 . 4 5	- . 9 6 7
31 2 7	1 6 3 6 6 8 . 7 1	1 0 1 . 0 3 3 8 3	8 6 . 6 2 2 4 3 7	2 5 5 . 7 0	1 . 0 9 5 7 6 6	5 . 4 5	- . 9 6 6
31 2 8	1 6 9 7 3 0 . 7 4	1 0 1 . 0 3 4 0 0	8 6 . 6 0 7 0 9 5	2 5 5 . 8 3	1 . 0 9 6 0 9 3	5 . 4 5	- . 9 6 5
31 2 9	1 7 5 7 9 2 . 7 8	1 0 1 . 0 3 4 3 3	8 6 . 5 9 1 7 4 5	2 5 5 . 9 5	1 . 0 9 6 4 2 0	5 . 4 3	- . 9 6 3
31 3 0	1 8 1 8 5 4 . 8 4	1 0 1 . 0 3 4 6 7	8 6 . 5 7 6 3 8 8	2 5 6 . 0 8	1 . 0 9 6 7 4 6	5 . 4 3	- . 9 6 2
31 3 1	1 8 7 9 1 6 . 9 2	1 0 1 . 0 3 4 8 3	8 6 . 5 6 1 0 2 3	2 5 6 . 1 8	1 . 0 9 7 0 7 2	5 . 4 2	- . 9 6 1
31 3 2	1 9 3 9 7 9 . 0 1	1 0 1 . 0 3 5 1 7	8 6 . 5 4 5 6 5 2	2 5 6 . 3 2	1 . 0 9 7 3 9 7	5 . 4 2	- . 9 5 9
31 3 3	2 0 0 0 4 1 . 1 2	1 0 1 . 0 3 5 3 3	8 6 . 5 3 0 2 7 3	2 5 6 . 4 5	1 . 0 9 7 7 2 2	5 . 4 2	- . 9 5 8
31 3 4	2 0 6 1 0 3 . 2 4	1 0 1 . 0 3 5 6 7	8 6 . 5 1 4 8 8 6	2 5 6 . 5 7	1 . 0 9 8 0 4 7	5 . 4 0	- . 9 5 7
31 3 5	2 1 2 1 6 5 . 3 8	1 0 1 . 0 3 5 8 3	8 6 . 4 9 9 4 9 2	2 5 6 . 6 8	1 . 0 9 8 3 7 1	5 . 4 0	- . 9 5 6
31 3 6	2 1 8 2 2 7 . 5 3	1 0 1 . 0 3 6 1 7	8 6 . 4 8 4 0 9 1	2 5 6 . 8 0	1 . 0 9 8 6 9 5	5 . 3 8	- . 9 5 4
31 3 7	2 2 4 2 8 9 . 7 0	1 0 1 . 0 3 6 5 0	8 6 . 4 6 8 6 8 3	2 5 6 . 9 3	1 . 0 9 9 0 1 8	5 . 4 0	- . 9 5 3
31 3 8	2 3 0 3 5 1 . 8 9	1 0 1 . 0 3 6 6 7	8 6 . 4 5 3 2 6 7	2 5 7 . 0 5	1 . 0 9 9 3 4 2	5 . 3 8	- . 9 5 2
31 3 9	2 3 6 4 1 4 . 0 9	1 0 1 . 0 3 7 0 0	8 6 . 4 3 7 8 4 4	2 5 7 . 1 7	1 . 0 9 9 6 6 5 5	5 . 3 7	- . 9 5 0
31 4 0	2 4 2 4 7 6 . 3 1	1 0 1 . 0 3 7 3 3	8 6 . 4 2 2 4 1 4	2 5 7 . 3 0	1 . 0 9 9 9 9 8 7	5 . 3 7	- . 9 4 9
31 4 1	2 4 8 5 3 8 . 5 5	1 0 1 . 0 3 7 5 0	8 6 . 4 0 6 9 7 6	2 5 7 . 4 2	1 . 1 0 0 3 0 9	5 . 3 7	- . 9 4 8
31 4 2	2 5 4 6 0 0 . 8 0	1 0 1 . 0 3 7 8 3	8 6 . 3 9 1 5 3 1	2 5 7 . 5 3	1 . 1 0 0 6 3 1	5 . 3 5	- . 9 4 7
31 4 3	2 6 0 6 6 3 . 0 7	1 0 1 . 0 3 8 0 0	8 6 . 3 7 6 0 7 9	2 5 7 . 6 5	1 . 1 0 0 9 5 2	5 . 3 7	- . 9 4 5
31 4 4	2 6 6 7 2 5 . 3 5	1 0 1 . 0 3 8 3 3	8 6 . 3 6 0 6 2 0	2 5 7 . 7 8	1 . 1 0 1 2 7 4	5 . 3 3	- . 9 4 4
31 4 5	2 7 2 7 8 7 . 6 5	1 0 1 . 0 3 8 5 0	8 6 . 3 4 5 1 5 3	2 5 7 . 9 0	1 . 1 0 1 5 9 4	5 . 3 5	- . 9 4 3
31 4 6	2 7 8 8 4 9 . 9 6	1 0 1 . 0 3 9 0 0	8 6 . 3 2 9 6 7 9	2 5 8 . 0 3	1 . 1 0 1 9 1 5	5 . 3 2	- . 9 4 2
31 4 7	2 8 4 9 1 2 . 3 0	1 0 1 . 0 3 9 0 0	8 6 . 3 1 4 1 9 7	2 5 8 . 1 5	1 . 1 0 2 2 3 4	5 . 3 3	- . 9 4 1
31 4 8	2 9 0 9 7 4 . 6 4	1 0 1 . 0 3 9 5 0	8 6 . 2 9 8 7 0 8	2 5 8 . 2 7	1 . 1 0 2 5 5 4	5 . 3 2	- . 9 3 9
31 4 9	2 9 7 0 3 7 . 0 1	1 0 1 . 0 3 9 6 7	8 6 . 2 8 3 2 1 2	2 5 8 . 3 8	1 . 1 0 2 8 7 3	5 . 3 2	- . 9 3 8
31 5 0	3 0 3 0 9 9 . 3 9	1 0 1 . 0 3 9 8 3	8 6 . 2 6 7 7 0 9	2 5 8 . 5 2	1 . 1 0 3 1 9 2	5 . 3 0	- . 9 3 7
31 5 1	3 0 9 1 6 1 . 7 8	1 0 1 . 0 4 0 1 7	8 6 . 2 5 2 1 9 8	2 5 8 . 6 3	1 . 1 0 3 5 1 0	5 . 3 0	- . 9 3 6
31 5 2	3 1 5 2 2 4 . 1 9	1 0 1 . 0 4 0 5 0	8 6 . 2 3 6 6 8 0	2 5 8 . 7 5	1 . 1 0 3 8 2 8	5 . 3 0	- . 9 3 4
31 5 3	3 2 1 2 8 6 . 6 2	1 0 1 . 0 4 0 6 7	8 6 . 2 2 1 1 5 5	2 5 8 . 8 8	1 . 1 0 4 1 4 6	5 . 2 8	- . 9 3 3
31 5 4	3 2 7 3 4 9 . 0 6	1 0 1 . 0 4 1 0 0	8 6 . 2 0 5 6 2 2	2 5 9 . 0 0	1 . 1 0 4 4 6 3	5 . 2 8	- . 9 3 2
31 5 5	3 3 3 4 1 1 . 5 2	1 0 1 . 0 4 1 3 3	8 6 . 1 9 0 0 8 2	2 5 9 . 1 2	1 . 1 0 4 7 8 0	5 . 2 8	- . 9 3 1
31 5 6	3 3 9 4 7 4 . 0 0	1 0 1 . 0 4 1 5 0	8 6 . 1 7 4 5 3 5	2 5 9 . 2 5	1 . 1 0 5 0 9 7	5 . 2 7	- . 9 2 9
31 5 7	3 4 5 5 3 6 . 4 9	1 0 1 . 0 4 1 8 3	8 6 . 1 5 8 9 8 0	2 5 9 . 3 5	1 . 1 0 5 4 1 3	5 . 2 7	- . 9 2 8
31 5 8	3 5 1 5 9 9 . 0 0	1 0 1 . 0 4 2 1 7	8 6 . 1 4 3 4 1 9	2 5 9 . 5 0	1 . 1 0 5 7 2 9	5 . 2 5	- . 9 2 7
31 5 9	3 5 7 6 6 1 . 5 3	1 0 1 . 0 4 2 3 3	8 6 . 1 2 7 8 4 9	2 5 9 . 6 0	1 . 1 0 6 0 4 4	5 . 2 5	- . 9 2 5
32 0 0	3 6 3 7 2 4 . 0 7		8 6 . 1 1 2 2 7 3		1 . 1 0 6 3 5 9		- . 9 2 4

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
CENTRAL ZONE

Lat.	y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
32 0 0	363 724.07	101.042 50	86.112 273	259.73	1.106 359	5.25	- .924
32 0 1	369 786.62	101.043 00	86.096 689	259.85	1.106 674	5.23	- .923
32 0 2	375 849.20	101.043 00	86.081 098	259.97	1.106 988	5.23	- .921
32 0 3	381 911.78	101.043 50	86.065 500	260.10	1.107 302	5.22	- .920
32 0 4	387 974.39	101.043 67	86.049 894	260.22	1.107 615	5.22	- .919
32 0 5	394 037.01	101.044 00	86.034 281	260.33	1.107 928	5.22	- .918
32 0 6	400 099.65	101.044 17	86.018 661	260.47	1.108 241	5.20	- .916
32 0 7	406 162.30	101.044 50	86.003 033	260.58	1.108 553	5.20	- .915
32 0 8	412 224.97	101.044 83	85.987 398	260.70	1.108 865	5.20	- .914
32 0 9	418 287.66	101.045 00	85.971 756	260.82	1.109 177	5.18	- .912
32 1 0	424 350.36	101.045 33	85.956 107	260.95	1.109 488	5.18	- .911
32 1 1	430 413.08	101.045 50	85.940 450	261.05	1.109 799	5.17	- .910
32 1 2	436 475.81	101.045 83	85.924 787	261.20	1.110 109	5.17	- .909
32 1 3	442 538.56	101.046 17	85.909 115	261.30	1.110 419	5.17	- .907
32 1 4	448 601.33	101.046 33	85.893 437	261.43	1.110 729	5.17	- .906
32 1 5	454 664.11	101.046 67	85.877 751	261.55	1.111 039	5.15	- .905
32 1 6	460 726.91	101.047 00	85.862 058	261.67	1.111 348	5.13	- .904
32 1 7	466 789.73	101.047 17	85.846 358	261.78	1.111 656	5.15	- .903
32 1 8	472 852.56	101.047 50	85.830 651	261.92	1.111 965	5.12	- .901
32 1 9	478 915.41	101.047 67	85.814 936	262.03	1.112 272	5.13	- .900
32 2 0	484 978.27	101.048 00	85.799 214	262.15	1.112 580	5.12	- .899
32 2 1	491 041.15	101.048 33	85.783 485	262.28	1.112 887	5.12	- .898
32 2 2	497 104.05	101.048 50	85.767 748	262.40	1.113 194	5.10	- .896
32 2 3	503 166.96	101.048 83	85.752 004	262.52	1.113 500	5.12	- .895
32 2 4	509 229.89	101.049 00	85.736 253	262.63	1.113 807	5.08	- .894
32 2 5	515 292.83	101.049 50	85.720 495	262.77	1.114 112	5.10	- .893
32 2 6	521 355.80	101.049 50	85.704 729	262.88	1.114 418	5.07	- .891
32 2 7	527 418.77	101.050 00	85.688 956	263.00	1.114 722	5.08	- .890
32 2 8	533 481.77	101.050 17	85.673 176	263.12	1.115 027	5.07	- .889
32 2 9	539 544.78	101.050 33	85.657 389	263.25	1.115 331	5.07	- .887
32 3 0	545 607.80	101.050 67	85.641 594	263.37	1.115 635	5.05	- .886
32 3 1	551 670.84	101.051 00	85.625 792	263.48	1.115 938	5.05	- .885
32 3 2	557 733.90	101.051 33	85.609 983	263.62	1.116 241	5.05	- .884
32 3 3	563 796.98	101.051 50	85.594 166	263.72	1.116 544	5.03	- .882
32 3 4	569 860.07	101.051 83	85.578 343	263.85	1.116 846	5.03	- .881
32 3 5	575 923.18	101.052 00	85.562 512	263.97	1.117 148	5.03	- .880
32 3 6	581 986.30	101.052 33	85.546 674	264.10	1.117 450	5.02	- .879
32 3 7	588 049.44	101.052 67	85.530 828	264.20	1.117 751	5.02	- .878
32 3 8	594 112.60	101.052 83	85.514 976	264.33	1.118 052	5.00	- .876
32 3 9	600 175.77	101.053 17	85.499 116	264.45	1.118 352	5.00	- .875
32 4 0	606 238.96	101.053 50	85.483 249	264.57	1.118 652	5.00	- .874
32 4 1	612 302.17	101.053 67	85.467 375	264.70	1.118 952	4.98	- .873
32 4 2	618 365.39	101.054 00	85.451 493	264.80	1.119 251	4.98	- .871
32 4 3	624 428.63	101.054 17	85.435 605	264.93	1.119 550	4.97	- .870
32 4 4	630 491.88	101.054 50	85.419 709	265.05	1.119 848	4.97	- .869
32 4 5	636 555.15	101.054 83	85.403 806	265.18	1.120 146	4.97	- .868
32 4 6	642 618.44	101.055 00	85.387 895	265.30	1.120 444	4.95	- .866
32 4 7	648 681.74	101.055 33	85.371 977	265.40	1.120 741	4.95	- .865
32 4 8	654 745.06	101.055 67	85.356 053	265.55	1.121 038	4.95	- .864
32 4 9	660 808.40	101.055 83	85.340 120	265.65	1.121 335	4.93	- .862
32 5 0	666 871.75	101.056 17	85.324 181	265.78	1.121 631	4.93	- .861
32 5 1	672 935.12	101.056 33	85.308 234	265.90	1.121 927	4.92	- .860
32 5 2	678 998.50	101.056 67	85.292 280	266.02	1.122 222	4.92	- .858
32 5 3	685 061.90	101.057 00	85.276 319	266.13	1.122 517	4.92	- .857
32 5 4	691 125.32	101.057 33	85.260 351	266.27	1.122 812	4.90	- .856
32 5 5	697 188.76	101.057 50	85.244 375	266.38	1.123 106	4.90	- .855
32 5 6	703 252.21	101.057 67	85.228 392	266.50	1.123 400	4.90	- .853
32 5 7	709 315.57	101.058 17	85.212 402	266.62	1.123 694	4.88	- .852
32 5 8	715 379.16	101.058 33	85.196 405	266.73	1.123 987	4.88	- .851
32 5 9	721 442.66	101.058 50	85.180 401	266.87	1.124 280	4.87	- .849
33 0 0	727 506.17		85.164 389		1.124 572		- .848

TRANSVERSE MERCATOR PROJECTION

NEW MEXICO
CENTRAL ZONE

Lat.	y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
33 0 0	727 506.17	101.058 83	85.164 389	266.98	1.124 572	4.87	- .848
33 0 1	733 569.70	101.059 33	85.148 370	267.10	1.124 864	4.87	- .847
33 0 2	739 633.26	101.059 33	85.132 344	267.22	1.125 156	4.85	- .846
33 0 3	745 696.82	101.059 67	85.116 311	267.35	1.125 447	4.85	- .844
33 0 4	751 760.40	101.060 00	85.100 270	267.45	1.125 738	4.85	- .843
33 0 5	757 824.00	101.060 17	85.084 223	267.58	1.126 029	4.83	- .842
33 0 6	763 887.61	101.060 50	85.068 168	267.70	1.126 319	4.83	- .841
33 0 7	769 951.24	101.060 83	85.052 106	267.83	1.126 609	4.82	- .840
33 0 8	776 014.89	101.061 17	85.036 036	267.93	1.126 898	4.82	- .838
33 0 9	782 078.56	101.061 33	85.019 960	268.07	1.127 187	4.82	- .837
33 1 0	788 142.24	101.061 50	85.003 876	268.18	1.127 476	4.80	- .836
33 1 1	794 205.93	101.062 00	84.987 785	268.30	1.127 764	4.80	- .835
33 1 2	800 269.65	101.062 17	84.971 687	268.43	1.128 052	4.78	- .833
33 1 3	806 333.38	101.062 33	84.955 581	268.53	1.128 339	4.80	- .832
33 1 4	812 397.12	101.062 67	84.939 469	268.67	1.128 627	4.77	- .831
33 1 5	818 460.88	101.063 00	84.923 349	268.78	1.128 913	4.78	- .830
33 1 6	824 524.66	101.063 33	84.907 222	268.90	1.129 200	4.75	- .828
33 1 7	830 588.46	101.063 50	84.891 088	269.03	1.129 485	4.77	- .827
33 1 8	836 652.27	101.063 83	84.874 946	269.13	1.129 771	4.75	- .826
33 1 9	842 716.10	101.064 00	84.858 798	269.27	1.130 056	4.75	- .824
33 2 0	848 779.94	101.064 33	84.842 642	269.38	1.130 341	4.73	- .823
33 2 1	854 843.80	101.064 67	84.826 479	269.50	1.130 625	4.73	- .822
33 2 2	860 907.68	101.065 00	84.810 309	269.63	1.130 909	4.73	- .820
33 2 3	866 971.58	101.065 17	84.794 131	269.73	1.131 193	4.72	- .819
33 2 4	873 035.49	101.065 33	84.777 947	269.87	1.131 476	4.72	- .818
33 2 5	879 099.41	101.065 83	84.761 755	269.98	1.131 759	4.72	- .817
33 2 6	885 163.36	101.066 00	84.745 556	270.10	1.132 042	4.70	- .815
33 2 7	891 227.32	101.066 17	84.729 350	270.22	1.132 324	4.70	- .814
33 2 8	897 291.29	101.066 67	84.713 137	270.33	1.132 606	4.68	- .813
33 2 9	903 355.29	101.066 83	84.696 917	270.47	1.132 887	4.68	- .811
33 3 0	909 419.30	101.067 00	84.680 689	270.58	1.133 168	4.68	- .810
33 3 1	915 483.32	101.067 33	84.664 454	270.70	1.133 449	4.67	- .809
33 3 2	921 547.36	101.067 67	84.648 212	270.82	1.133 729	4.67	- .808
33 3 3	927 611.42	101.068 00	84.631 963	270.93	1.134 009	4.65	- .806
33 3 4	933 675.50	101.068 17	84.615 707	271.05	1.134 288	4.65	- .805
33 3 5	939 739.59	101.068 50	84.599 444	271.18	1.134 567	4.65	- .804
33 3 6	945 803.70	101.068 83	84.583 173	271.30	1.134 846	4.63	- .803
33 3 7	951 867.83	101.069 00	84.566 895	271.42	1.135 124	4.63	- .802
33 3 8	957 931.97	101.069 33	84.550 610	271.53	1.135 402	4.63	- .800
33 3 9	963 996.13	101.069 50	84.534 318	271.65	1.135 680	4.62	- .799
33 4 0	970 060.30	101.069 83	84.518 019	271.78	1.135 957	4.62	- .798
33 4 1	976 124.49	101.070 17	84.501 712	271.88	1.136 234	4.60	- .797
33 4 2	982 188.70	101.070 50	84.485 399	272.02	1.136 510	4.60	- .795
33 4 3	988 252.93	101.070 67	84.469 078	272.13	1.136 786	4.60	- .794
33 4 4	994 317.17	101.070 83	84.452 750	272.25	1.137 062	4.58	- .793
33 4 5	1 000 381.42	101.071 33	84.436 415	272.38	1.137 337	4.58	- .792
33 4 6	1 006 445.70	101.071 50	84.420 072	272.48	1.137 612	4.58	- .790
33 4 7	1 012 509.99	101.071 83	84.403 723	272.60	1.137 887	4.57	- .789
33 4 8	1 018 574.30	101.072 00	84.387 367	272.73	1.138 161	4.57	- .788
33 4 9	1 024 638.62	101.072 33	84.371 003	272.85	1.138 435	4.55	- .786
33 5 0	1 030 702.96	101.072 67	84.354 632	272.97	1.138 708	4.55	- .785
33 5 1	1 036 767.32	101.073 00	84.338 254	273.08	1.138 981	4.55	- .784
33 5 2	1 042 831.70	101.073 17	84.321 869	273.20	1.139 254	4.53	- .782
33 5 3	1 048 896.09	101.073 33	84.305 477	273.33	1.139 526	4.52	- .781
33 5 4	1 054 960.49	101.073 83	84.289 077	273.43	1.139 797	4.53	- .780
33 5 5	1 061 024.92	101.074 00	84.272 671	273.57	1.140 069	4.52	- .779
33 5 6	1 067 089.36	101.074 33	84.256 257	273.68	1.140 340	4.50	- .777
33 5 7	1 073 153.82	101.074 50	84.239 836	273.80	1.140 610	4.52	- .776
33 5 8	1 079 218.29	101.074 83	84.223 408	273.92	1.140 881	4.50	- .775
33 5 9	1 085 282.78	101.075 17	84.206 973	274.03	1.141 151	4.48	- .773
34 0 0	1 091 347.29		84.190 531		1.141 420		- .772

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
CENTRAL ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
34 0 0	1	0 91	347.29	101.075 33	84.190 531	274.15	1.141 420	4.48
34 0 1	1	0 97	411.81	101.075 67	84.174 082	274.28	1.141 689	4.48
34 0 2	1	1 03	476.35	101.076 00	84.157 625	274.40	1.141 958	4.47
34 0 3	1	1 09	540.91	101.076 17	84.141 161	274.52	1.142 226	4.47
34 0 4	1	1 15	605.48	101.076 50	84.124 690	274.62	1.142 494	4.45
34 0 5	1	1 21	670.07	101.076 83	84.108 213	274.77	1.142 761	4.45
34 0 6	1	1 27	734.68	101.077 00	84.091 727	274.87	1.143 028	4.45
34 0 7	1	1 33	799.30	101.077 33	84.075 235	274.98	1.143 295	4.43
34 0 8	1	1 39	863.94	101.077 67	84.058 736	275.10	1.143 561	4.43
34 0 9	1	1 45	928.60	101.077 83	84.042 230	275.23	1.143 827	4.43
34 1 0	1	1 51	993.27	101.078 17	84.025 716	275.35	1.144 093	4.42
34 1 1	1	1 58	057.96	101.078 50	84.009 195	275.47	1.144 358	4.42
34 1 2	1	1 64	122.67	101.078 83	83.992 667	275.57	1.144 623	4.42
34 1 3	1	1 70	187.40	101.079 00	83.976 133	275.70	1.144 888	4.40
34 1 4	1	1 76	252.14	101.079 17	83.959 591	275.83	1.145 152	4.38
34 1 5	1	1 82	316.89	101.079 67	83.943 041	275.93	1.145 415	4.40
34 1 6	1	1 88	381.67	101.079 83	83.926 485	276.05	1.145 679	4.38
34 1 7	1	1 94	446.46	101.080 00	83.909 922	276.18	1.145 942	4.37
34 1 8	1	2 00	511.26	101.080 50	83.893 351	276.28	1.146 204	4.37
34 1 9	1	2 06	576.09	101.080 67	83.876 774	276.42	1.146 466	4.37
34 2 0	1	2 12	640.93	101.080 83	83.860 189	276.53	1.146 728	4.35
34 2 1	1	2 18	705.78	101.081 33	83.843 597	276.65	1.146 989	4.35
34 2 2	1	2 24	770.66	101.081 50	83.826 998	276.77	1.147 250	4.35
34 2 3	1	2 30	835.55	101.081 83	83.810 392	276.88	1.147 511	4.33
34 2 4	1	2 36	900.46	101.082 00	83.793 779	277.00	1.147 771	4.33
34 2 5	1	2 42	965.38	101.082 33	83.777 159	277.13	1.148 031	4.32
34 2 6	1	2 49	030.32	101.082 67	83.760 531	277.23	1.148 290	4.32
34 2 7	1	2 55	095.28	101.083 00	83.743 897	277.37	1.148 549	4.32
34 2 8	1	2 61	160.26	101.083 17	83.727 255	277.47	1.148 808	4.30
34 2 9	1	2 67	225.25	101.083 33	83.710 607	277.60	1.149 066	4.30
34 3 0	1	2 73	290.25	101.083 83	83.693 951	277.72	1.149 324	4.28
34 3 1	1	2 79	355.28	101.084 00	83.677 288	277.83	1.149 581	4.28
34 3 2	1	2 85	420.32	101.084 33	83.660 618	277.95	1.149 838	4.28
34 3 3	1	2 91	485.38	101.084 50	83.643 941	278.07	1.150 095	4.27
34 3 4	1	2 97	550.45	101.084 83	83.627 257	278.18	1.150 351	4.27
34 3 5	1	3 03	615.54	101.085 17	83.610 566	278.30	1.150 607	4.27
34 3 6	1	3 09	680.65	101.085 50	83.593 868	278.43	1.150 863	4.25
34 3 7	1	3 15	745.78	101.085 67	83.577 162	278.53	1.151 118	4.25
34 3 8	1	3 21	810.92	101.086 00	83.560 450	278.65	1.151 373	4.23
34 3 9	1	3 27	876.08	101.086 33	83.543 731	278.78	1.151 627	4.23
34 4 0	1	3 33	941.26	101.086 50	83.527 004	278.90	1.151 881	4.23
34 4 1	1	3 40	006.45	101.086 83	83.510 270	279.00	1.152 135	4.22
34 4 2	1	3 46	071.66	101.087 00	83.493 530	279.13	1.152 388	4.22
34 4 3	1	3 52	136.88	101.087 50	83.476 782	279.25	1.152 641	4.20
34 4 4	1	3 58	202.13	101.087 67	83.460 027	279.37	1.152 893	4.22
34 4 5	1	3 64	267.39	101.087 83	83.443 265	279.48	1.153 146	4.18
34 4 6	1	3 70	332.66	101.088 33	83.426 496	279.60	1.153 397	4.20
34 4 7	1	3 76	397.96	101.088 50	83.409 720	279.72	1.153 649	4.17
34 4 8	1	3 82	463.27	101.088 83	83.392 937	279.85	1.153 899	4.18
34 4 9	1	3 88	528.60	101.089 00	83.376 146	279.95	1.154 150	4.17
34 5 0	1	3 94	593.94	101.089 33	83.359 349	280.07	1.154 400	4.17
34 5 1	1	4 00	659.30	101.089 67	83.342 545	280.20	1.154 650	4.15
34 5 2	1	4 06	724.68	101.089 83	83.325 733	280.30	1.154 899	4.15
34 5 3	1	4 12	790.07	101.090 17	83.308 915	280.43	1.155 148	4.13
34 5 4	1	4 18	855.48	101.090 50	83.292 089	280.55	1.155 396	4.13
34 5 5	1	4 24	920.91	101.090 83	83.275 256	280.65	1.155 644	4.13
34 5 6	1	4 30	986.36	101.091 00	83.258 417	280.78	1.155 892	4.12
34 5 7	1	4 37	051.82	101.091 33	83.241 570	280.90	1.156 139	4.12
34 5 8	1	4 43	117.30	101.091 50	83.224 716	281.02	1.156 386	4.12
34 5 9	1	4 49	182.79	101.091 83	83.207 855	281.15	1.156 633	4.10
35 0 0	1	4 55	248.30		83.190 987			- .697

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
CENTRAL ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
35 0 0	1	455 248.30	101.092 33	83.190 987	281.25	1.156 879	4.10	-.697
35 0 1	1	461 313.84	101.092 33	83.174 112	281.37	1.157 125	4.08	-.696
35 0 2	1	467 379.38	101.092 67	83.157 230	281.48	1.157 370	4.10	-.695
35 0 3	1	473 444.94	101.093 00	83.140 341	281.62	1.157 616	4.07	-.693
35 0 4	1	479 510.52	101.093 33	83.123 444	281.72	1.157 860	4.08	-.692
35 0 5	1	485 576.12	101.093 50	83.106 541	281.83	1.158 105	4.05	-.691
35 0 6	1	491 641.73	101.093 83	83.089 631	281.97	1.158 348	4.07	-.690
35 0 7	1	497 707.36	101.094 17	83.072 713	282.07	1.158 592	4.05	-.689
35 0 8	1	503 773.01	101.094 50	83.055 789	282.20	1.158 835	4.05	-.687
35 0 9	1	509 838.68	101.094 67	83.038 857	282.30	1.159 078	4.03	-.686
35 1 0	1	515 904.36	101.095 00	83.021 919	282.43	1.159 320	4.03	-.685
35 1 1	1	521 970.06	101.095 17	83.004 973	282.53	1.159 562	4.02	-.684
35 1 2	1	528 035.77	101.095 50	82.988 021	282.67	1.159 803	4.02	-.682
35 1 3	1	534 101.50	101.095 83	82.971 061	282.78	1.160 044	4.02	-.681
35 1 4	1	540 167.25	101.096 17	82.954 094	282.88	1.160 285	4.00	-.680
35 1 5	1	546 233.02	101.096 33	82.937 121	283.02	1.160 525	4.00	-.679
35 1 6	1	552 298.80	101.096 67	82.920 140	283.13	1.160 765	4.00	-.677
35 1 7	1	558 364.60	101.096 83	82.903 152	283.23	1.161 005	3.98	-.676
35 1 8	1	564 430.41	101.097 33	82.886 158	283.37	1.161 244	3.98	-.675
35 1 9	1	570 496.25	101.097 50	82.869 156	283.48	1.161 483	3.97	-.673
35 2 0	1	576 562.10	101.097 83	82.852 147	283.60	1.161 721	3.97	-.672
35 2 1	1	582 627.97	101.098 00	82.835 131	283.72	1.161 959	3.97	-.671
35 2 2	1	588 693.85	101.098 33	82.818 108	283.82	1.162 197	3.95	-.670
35 2 3	1	594 759.75	101.098 67	82.801 079	283.95	1.162 434	3.93	-.668
35 2 4	1	600 825.67	101.099 00	82.784 042	284.07	1.162 670	3.95	-.667
35 2 5	1	606 891.61	101.099 17	82.766 998	284.18	1.162 907	3.93	-.666
35 2 6	1	612 957.56	101.099 50	82.749 947	284.30	1.163 143	3.92	-.665
35 2 7	1	619 023.53	101.099 83	82.732 889	284.42	1.163 378	3.93	-.664
35 2 8	1	625 089.52	101.100 00	82.715 824	284.53	1.163 614	3.92	-.662
35 2 9	1	631 155.52	101.100 33	82.698 752	284.65	1.163 849	3.90	-.661
35 3 0	1	637 221.54	101.100 67	82.681 673	284.77	1.164 083	3.90	-.660
35 3 1	1	643 287.58	101.100 83	82.664 587	284.88	1.164 317	3.90	-.659
35 3 2	1	649 353.63	101.101 17	82.647 494	285.00	1.164 551	3.88	-.657
35 3 3	1	655 419.70	101.101 50	82.630 394	285.12	1.164 784	3.88	-.656
35 3 4	1	661 485.79	101.101 67	82.613 287	285.23	1.165 017	3.88	-.655
35 3 5	1	667 551.89	101.102 17	82.596 173	285.37	1.165 250	3.87	-.654
35 3 6	1	673 618.02	101.102 33	82.579 051	285.47	1.165 482	3.85	-.652
35 3 7	1	679 684.16	101.102 50	82.561 923	285.58	1.165 713	3.87	-.651
35 3 8	1	685 750.31	101.102 83	82.544 788	285.70	1.165 945	3.85	-.650
35 3 9	1	691 816.48	101.103 17	82.527 646	285.82	1.166 176	3.83	-.648
35 4 0	1	697 882.67	101.103 50	82.510 497	285.93	1.166 406	3.83	-.647
35 4 1	1	703 948.88	101.103 67	82.493 341	286.05	1.166 636	3.83	-.646
35 4 2	1	710 015.10	101.104 17	82.476 178	286.18	1.166 866	3.82	-.645
35 4 3	1	716 081.35	101.104 33	82.459 007	286.28	1.167 095	3.82	-.643
35 4 4	1	722 147.61	101.104 50	82.441 830	286.40	1.167 324	3.80	-.642
35 4 5	1	728 213.88	101.104 83	82.424 646	286.52	1.167 552	3.80	-.641
35 4 6	1	734 280.17	101.105 17	82.407 455	286.63	1.167 780	3.80	-.640
35 4 7	1	740 346.48	101.105 50	82.390 257	286.75	1.168 008	3.80	-.639
35 4 8	1	746 412.81	101.105 67	82.373 052	286.87	1.168 236	3.77	-.637
35 4 9	1	752 479.15	101.106 00	82.355 840	286.98	1.168 462	3.78	-.636
35 5 0	1	758 545.51	101.106 33	82.338 621	287.10	1.168 689	3.77	-.635
35 5 1	1	764 611.89	101.106 50	82.321 395	287.22	1.168 915	3.77	-.634
35 5 2	1	770 678.28	101.106 83	82.304 162	287.33	1.169 141	3.75	-.632
35 5 3	1	776 744.69	101.107 17	82.286 922	287.45	1.169 366	3.75	-.631
35 5 4	1	782 811.12	101.107 50	82.269 675	287.57	1.169 591	3.75	-.630
35 5 5	1	788 877.57	101.107 67	82.252 421	287.68	1.169 816	3.73	-.629
35 5 6	1	794 944.03	101.108 00	82.235 160	287.80	1.170 040	3.73	-.627
35 5 7	1	801 010.51	101.108 33	82.217 892	287.90	1.170 264	3.72	-.626
35 5 8	1	807 077.01	101.108 50	82.200 618	288.03	1.170 487	3.72	-.625
35 5 9	1	813 143.52	101.108 83	82.183 336	288.15	1.170 710	3.72	-.623
36 0 0	1	819 210.05		82.166 047		1.170 933		-.622

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
CENTRAL ZONE

Lat.		y_o feet	Δy_o per second	H	ΔH per second	V	ΔV per second	a	
36 0 0	1	819	210.05	101.109 17	82.166 047	288.27	1.170 933	3.70	-.622
36 0 1	1	825	276.60	101.109 33	82.148 751	288.38	1.171 155	3.70	-.621
36 0 2	1	831	343.16	101.109 83	82.131 448	288.48	1.171 377	3.68	-.620
36 0 3	1	837	409.75	101.110 00	82.114 139	288.62	1.171 598	3.68	-.618
36 0 4	1	843	476.35	101.110 17	82.096 822	288.73	1.171 819	3.68	-.617
36 0 5	1	849	542.96	101.110 67	82.079 498	288.83	1.172 040	3.67	-.616
36 0 6	1	855	609.60	101.110 83	82.062 168	288.97	1.172 260	3.67	-.615
36 0 7	1	861	676.25	101.111 00	82.044 830	289.07	1.172 480	3.65	-.614
36 0 8	1	867	742.91	101.111 50	82.027 486	289.20	1.172 699	3.65	-.612
36 0 9	1	873	809.60	101.111 67	82.010 134	289.30	1.172 918	3.65	-.611
36 1 0	1	879	876.30	101.112 00	81.992 776	289.42	1.173 137	3.63	-.610
36 1 1	1	885	943.02	101.112 33	81.975 411	289.55	1.173 355	3.63	-.609
36 1 2	1	892	009.76	101.112 50	81.958 038	289.65	1.173 573	3.62	-.608
36 1 3	1	898	076.51	101.112 83	81.940 659	289.77	1.173 790	3.62	-.606
36 1 4	1	904	143.28	101.113 17	81.923 273	289.88	1.174 007	3.62	-.605
36 1 5	1	910	210.07	101.113 33	81.905 880	290.00	1.174 224	3.60	-.604
36 1 6	1	916	276.87	101.113 67	81.888 480	290.12	1.174 440	3.60	-.603
36 1 7	1	922	343.69	101.114 00	81.871 073	290.23	1.174 656	3.58	-.602
36 1 8	1	928	410.53	101.114 33	81.853 659	290.35	1.174 871	3.58	-.600
36 1 9	1	934	477.39	101.114 50	81.836 238	290.47	1.175 086	3.58	-.599
36 2 0	1	940	544.26	101.114 83	81.818 810	290.58	1.175 301	3.57	-.598
36 2 1	1	946	611.15	101.115 17	81.801 375	290.70	1.175 515	3.57	-.597
36 2 2	1	952	678.06	101.115 33	81.783 933	290.80	1.175 729	3.57	-.595
36 2 3	1	958	744.98	101.115 83	81.766 485	290.93	1.175 943	3.55	-.594
36 2 4	1	964	811.93	101.115 83	81.749 029	291.03	1.176 156	3.55	-.593
36 2 5	1	970	878.88	101.116 33	81.731 567	291.17	1.176 369	3.53	-.592
36 2 6	1	976	945.86	101.116 50	81.714 097	291.27	1.176 581	3.53	-.590
36 2 7	1	983	012.85	101.116 83	81.696 621	291.40	1.176 793	3.52	-.589
36 2 8	1	989	079.86	101.117 17	81.679 137	291.50	1.177 004	3.52	-.588
36 2 9	1	995	146.89	101.117 50	81.661 647	291.62	1.177 215	3.52	-.586
36 3 0	2	001	213.94	101.117 67	81.644 150	291.73	1.177 426	3.50	-.585
36 3 1	2	007	281.00	101.118 00	81.626 646	291.85	1.177 636	3.50	-.584
36 3 2	2	013	348.08	101.118 17	81.609 135	291.97	1.177 846	3.50	-.583
36 3 3	2	019	415.17	101.118 67	81.591 617	292.08	1.178 056	3.48	-.581
36 3 4	2	025	482.29	101.118 83	81.574 092	292.20	1.178 265	3.47	-.580
36 3 5	2	031	549.42	101.119 17	81.556 560	292.32	1.178 473	3.48	-.579
36 3 6	2	037	616.57	101.119 33	81.539 021	292.43	1.178 682	3.47	-.578
36 3 7	2	043	683.73	101.119 67	81.521 475	292.53	1.178 890	3.45	-.577
36 3 8	2	049	750.91	101.120 00	81.503 923	292.67	1.179 097	3.45	-.575
36 3 9	2	055	818.11	101.120 33	81.486 363	292.77	1.179 304	3.45	-.574
36 4 0	2	061	885.33	101.120 50	81.468 797	292.88	1.179 511	3.43	-.573
36 4 1	2	067	952.56	101.120 83	81.451 224	293.00	1.179 717	3.43	-.572
36 4 2	2	074	019.81	101.121 17	81.433 644	293.12	1.179 923	3.43	-.571
36 4 3	2	080	087.08	101.121 50	81.416 057	293.23	1.180 129	3.42	-.569
36 4 4	2	086	154.37	101.121 67	81.398 463	293.35	1.180 334	3.42	-.568
36 4 5	2	092	221.67	101.122 00	81.380 862	293.47	1.180 539	3.42	-.567
36 4 6	2	098	288.99	101.122 33	81.363 254	293.58	1.180 744	3.40	-.566
36 4 7	2	104	356.33	101.122 50	81.345 639	293.68	1.180 948	3.38	-.565
36 4 8	2	110	423.68	101.122 83	81.328 018	293.82	1.181 151	3.38	-.563
36 4 9	2	116	491.05	101.123 17	81.310 389	293.92	1.181 354	3.38	-.562
36 5 0	2	122	558.44	101.123 50	81.292 754	294.03	1.181 557	3.37	-.561
36 5 1	2	128	625.85	101.123 67	81.275 112	294.17	1.181 759	3.37	-.560
36 5 2	2	134	693.27	101.124 00	81.257 462	294.27	1.181 961	3.37	-.559
36 5 3	2	140	760.71	101.124 33	81.239 806	294.38	1.182 163	3.35	-.557
36 5 4	2	146	828.17	101.124 50	81.222 143	294.48	1.182 364	3.35	-.556
36 5 5	2	152	895.64	101.125 00	81.204 474	294.62	1.182 565	3.33	-.555
36 5 6	2	158	963.14	101.125 17	81.186 797	294.73	1.182 765	3.33	-.554
36 5 7	2	165	030.65	101.125 33	81.169 113	294.83	1.182 965	3.32	-.553
36 5 8	2	171	098.17	101.125 83	81.151 423	294.97	1.183 164	3.32	-.551
36 5 9	2	177	165.72	101.126 00	81.133 725	295.07	1.183 363	3.32	-.550
37 0 0	2	183	233.28		81.116 021		1.183 562		-.549

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
CENTRAL ZONE

Lat.		y. feet	Δy . per second	H	ΔH per second	V	ΔV per second	a
37 00	2	183	233.28	101.126 33	81.116 021	295.18	1.183 562	3.30
37 01	2	189	300.86	101.126 67	81.098 310	295.30	1.183 760	3.30
37 02	2	195	368.46	101.126 83	81.080 592	295.42	1.183 958	3.30
37 03	2	201	436.07	101.127 17	81.062 867	295.53	1.184 156	3.28
37 04	2	207	503.70	101.127 50	81.045 135	295.65	1.184 353	3.28
37 05	2	213	571.35	101.127 67	81.027 396	295.75	1.184 550	3.27
37 06	2	219	639.01	101.128 00	81.009 651	295.88	1.184 746	3.27
37 07	2	225	706.69	101.128 33	80.991 898	295.98	1.184 942	3.25
37 08	2	231	774.39	101.128 67	80.974 139	296.10	1.185 137	3.25
37 09	2	237	842.11	101.129 00	80.956 373	296.22	1.185 332	3.25
37 10	2	243	909.85	101.129 17	80.938 600	296.33	1.185 527	3.23
37 11	2	249	977.60	101.129 33	80.920 820	296.45	1.185 721	3.23
37 12	2	256	045.36	101.129 83	80.903 033	296.55	1.185 915	3.23
37 13	2	262	113.15	101.130 17	80.885 240	296.68	1.186 109	3.22
37 14	2	268	180.96	101.130 33	80.867 439	296.78	1.186 302	3.22
37 15	2	274	248.78	101.130 67	80.849 632	296.90	1.186 495	3.20
37 16	2	280	316.62	101.130 83	80.831 818	297.02	1.186 687	3.20
37 17	2	286	384.47	101.131 17	80.813 997	297.13	1.186 879	3.18
37 18	2	292	452.34	101.131 50	80.796 169	297.25	1.187 070	3.18
37 19	2	298	520.23	101.131 83	80.778 334	297.37	1.187 261	3.18
37 20	2	304	588.14		80.760 492		1.187 452	- .524

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
WEST ZONE

Lat.	y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
31 0 0	6 061.70	101.028 33	87.035 359	252.40	1.086 818	5.62	- 1.000
31 0 1	12 123.41	101.028 83	87.020 215	252.53	1.087 155	5.60	- .999
31 0 2	18 185.14	101.029 17	87.005 063	252.65	1.087 491	5.60	- .997
31 0 3	24 246.89	101.029 33	86.989 904	252.78	1.087 827	5.60	- .996
31 0 4			86.974 737	252.90	1.088 163	5.60	- .995
31 0 5	30 308.65	101.029 67	86.959 563	253.02	1.088 499	5.58	- .994
31 0 6	36 370.43	101.029 83	86.944 382	253.13	1.088 834	5.57	- .992
31 0 7	42 432.22	101.030 17	86.929 194	253.27	1.089 168	5.58	- .991
31 0 8	48 494.03	101.030 50	86.913 998	253.38	1.089 503	5.55	- .990
31 0 9	54 555.86	101.030 67	86.898 795	253.52	1.089 836	5.57	- .988
31 1 0	60 617.70	101.031 00	86.883 584	253.63	1.090 170	5.55	- .987
31 1 1	66 679.56	101.031 17	86.868 366	253.75	1.090 503	5.55	- .986
31 1 2	72 741.43	101.031 50	86.853 141	253.88	1.090 836	5.53	- .985
31 1 3	78 803.32	101.031 83	86.837 908	253.98	1.091 168	5.53	- .983
31 1 4	84 865.23	101.032 00	86.822 669	254.13	1.091 500	5.53	- .982
31 1 5	90 927.15	101.032 17	86.807 421	254.23	1.091 832	5.52	- .981
31 1 6	96 989.08	101.032 50	86.792 167	254.37	1.092 163	5.52	- .980
31 1 7	103 051.03	101.032 83	86.776 905	254.48	1.092 494	5.52	- .979
31 1 8	109 113.00	101.033 17	86.761 636	254.62	1.092 825	5.50	- .977
31 1 9	115 174.99	101.033 33	86.746 359	254.73	1.093 155	5.50	- .976
31 2 0	121 236.99	101.033 67	86.731 075	254.85	1.093 485	5.50	- .975
31 2 1	127 299.01	101.033 83	86.715 784	254.98	1.093 815	5.48	- .974
31 2 2	133 361.04	101.034 17	86.700 485	255.10	1.094 144	5.48	- .972
31 2 3	139 423.09	101.034 33	86.685 179	255.23	1.094 473	5.47	- .971
31 2 4	145 485.15	101.034 67	86.669 865	255.33	1.094 801	5.47	- .970
31 2 5	151 547.23	101.035 00	86.654 545	255.47	1.095 129	5.47	- .969
31 2 6	157 609.33	101.035 17	86.639 217	255.60	1.095 457	5.45	- .967
31 2 7	163 671.44	101.035 50	86.623 881	255.72	1.095 784	5.45	- .966
31 2 8	169 733.57	101.035 67	86.608 538	255.83	1.096 111	5.45	- .965
31 2 9	175 795.71	101.036 00	86.593 188	255.95	1.096 438	5.43	- .963
31 3 0	181 857.87	101.036 33	86.577 831	256.08	1.096 764	5.43	- .962
31 3 1	187 920.05	101.036 50	86.562 466	256.20	1.097 090	5.42	- .961
31 3 2	193 982.24	101.036 83	86.547 094	256.32	1.097 415	5.42	- .959
31 3 3	200 044.45	101.037 00	86.531 715	256.45	1.097 740	5.42	- .958
31 3 4	206 106.67	101.037 33	86.516 328	256.57	1.098 065	5.40	- .957
31 3 5	212 168.91	101.037 67	86.500 934	256.70	1.098 389	5.40	- .956
31 3 6	218 231.17	101.037 83	86.485 532	256.80	1.098 713	5.38	- .954
31 3 7	224 293.44	101.038 17	86.470 124	256.93	1.099 036	5.40	- .953
31 3 8	230 355.73	101.038 50	86.454 708	257.05	1.099 360	5.38	- .952
31 3 9	236 418.04	101.038 67	86.439 285	257.18	1.099 683	5.37	- .950
31 4 0	242 480.36	101.038 83	86.423 854	257.30	1.100 005	5.37	- .949
31 4 1	248 542.69	101.039 17	86.408 416	257.42	1.100 327	5.37	- .948
31 4 2	254 605.04	101.039 50	86.392 971	257.53	1.100 649	5.35	- .947
31 4 3	260 667.41	101.039 83	86.377 519	257.67	1.100 970	5.37	- .945
31 4 4	266 729.80	101.040 00	86.362 059	257.78	1.101 292	5.33	- .944
31 4 5	272 792.20	101.040 17	86.346 592	257.90	1.101 612	5.35	- .943
31 4 6	278 854.61	101.040 50	86.331 118	258.03	1.101 933	5.32	- .942
31 4 7	284 917.04	101.040 83	86.315 636	258.15	1.102 252	5.33	- .941
31 4 8	290 979.49	101.041 17	86.300 147	258.27	1.102 572	5.32	- .939
31 4 9	297 041.96	101.041 33	86.284 651	258.40	1.102 891	5.32	- .938
31 5 0	303 104.44	101.041 67	86.269 147	258.52	1.103 210	5.30	- .937
31 5 1	309 166.94	101.041 83	86.253 636	258.63	1.103 528	5.30	- .936
31 5 2	315 229.45	101.042 17	86.238 118	258.77	1.103 846	5.30	- .934
31 5 3	321 291.98	101.042 33	86.222 592	258.88	1.104 164	5.28	- .933
31 5 4	327 354.52	101.042 67	86.207 059	259.00	1.104 481	5.28	- .932
31 5 5	333 417.08	101.043 00	86.191 519	259.13	1.104 798	5.28	- .931
31 5 6	339 479.66	101.043 17	86.175 971	259.25	1.105 115	5.27	- .929
31 5 7	345 542.25	101.043 50	86.160 416	259.37	1.105 431	5.27	- .928
31 5 8	351 604.86	101.043 83	86.144 854	259.48	1.105 747	5.25	- .927
31 5 9	357 667.49	101.044 00	86.129 285	259.62	1.106 062	5.25	- .925
32 0 0	363 730.13		86.113 708		1.106 377		- .924

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
WEST ZONE

Lat.		y_0 feet	Δy_0 per second	H	ΔH per second	V	ΔV per second	a	
32	U 0	363	730.13	101.044 33	86.113 708	259.73	1.106 377	5.25	-.924
32	U 1	369	792.79	101.044 50	86.098 124	259.85	1.106 692	5.23	-.923
32	U 2	375	855.46	101.044 83	86.082 533	259.98	1.107 006	5.22	-.921
32	U 3	381	918.15	101.045 17	86.066 934	260.10	1.107 319	5.23	-.920
32	U 4	387	980.86	101.045 33	86.051 328	260.22	1.107 633	5.22	-.919
32	0 5	394	043.58	101.045 67	86.035 715	260.33	1.107 946	5.22	-.918
32	0 6	400	106.32	101.045 83	86.020 095	260.47	1.108 259	5.20	-.916
32	0 7	406	169.07	101.046 17	86.004 467	260.58	1.108 571	5.20	-.915
32	0 8	412	231.84	101.046 50	85.988 832	260.70	1.108 883	5.20	-.914
32	0 9	418	294.63	101.046 67	85.973 190	260.83	1.109 195	5.18	-.912
32	1 0	424	357.43	101.047 00	85.957 540	260.95	1.109 506	5.18	-.911
32	1 1	430	420.25	101.047 33	85.941 883	261.07	1.109 817	5.18	-.910
32	1 2	436	483.09	101.047 50	85.926 219	261.18	1.110 128	5.17	-.909
32	1 3	442	545.94	101.047 83	85.910 548	261.32	1.110 438	5.17	-.907
32	1 4	448	608.81	101.048 00	85.894 869	261.43	1.110 748	5.15	-.906
32	1 5	454	671.69	101.048 33	85.879 183	261.55	1.111 057	5.15	-.905
32	1 6	460	734.59	101.048 67	85.863 490	261.68	1.111 366	5.15	-.904
32	1 7	466	797.51	101.048 83	85.847 789	261.80	1.111 675	5.13	-.903
32	1 8	472	860.44	101.049 17	85.832 081	261.92	1.111 983	5.13	-.901
32	1 9	478	923.39	101.049 33	85.816 366	262.03	1.112 291	5.13	-.900
32	2 0	484	986.35	101.049 67	85.800 644	262.17	1.112 599	5.12	-.899
32	2 1	491	149.33	101.050 00	85.784 914	262.28	1.112 906	5.12	-.898
32	2 2	497	112.33	101.050 33	85.769 177	262.40	1.113 213	5.10	-.896
32	2 3	503	175.35	101.050 50	85.753 433	262.52	1.113 519	5.12	-.895
32	2 4	509	238.38	101.050 67	85.737 682	262.65	1.113 826	5.08	-.894
32	2 5	515	301.42	101.051 00	85.721 923	262.77	1.114 131	5.10	-.893
32	2 6	521	364.48	101.051 33	85.706 157	262.88	1.114 437	5.07	-.891
32	2 7	527	427.56	101.051 67	85.690 384	263.00	1.114 741	5.08	-.890
32	2 8	533	490.66	101.051 83	85.674 604	263.13	1.115 046	5.07	-.889
32	2 9	539	553.77	101.052 17	85.658 816	263.25	1.115 350	5.07	-.887
32	3 0	545	616.90	101.052 33	85.643 021	263.37	1.115 654	5.05	-.886
32	3 1	551	680.04	101.052 67	85.627 219	263.48	1.115 957	5.05	-.885
32	3 2	557	743.20	101.053 00	85.611 410	263.62	1.116 260	5.05	-.884
32	3 3	563	806.38	101.053 17	85.595 593	263.73	1.116 563	5.03	-.882
32	3 4	569	869.57	101.053 50	85.579 769	263.85	1.116 865	5.03	-.881
32	3 5	575	932.78	101.053 67	85.563 938	263.97	1.117 167	5.03	-.880
32	3 6	581	996.00	101.054 00	85.548 100	264.10	1.117 469	5.02	-.879
32	3 7	588	1059.24	101.054 33	85.532 254	264.22	1.117 770	5.02	-.878
32	3 8	594	122.50	101.054 67	85.516 401	264.33	1.118 071	5.00	-.876
32	3 9	600	185.78	101.054 83	85.500 541	264.45	1.118 371	5.00	-.875
32	4 0	606	249.07	101.055 00	85.484 674	264.58	1.118 671	5.00	-.874
32	4 1	612	312.37	101.055 33	85.468 799	264.68	1.118 971	4.98	-.873
32	4 2	618	375.69	101.055 67	85.452 918	264.82	1.119 270	4.98	-.871
32	4 3	624	439.03	101.056 00	85.437 029	264.95	1.119 569	4.97	-.870
32	4 4	630	502.39	101.056 17	85.421 132	265.05	1.119 867	4.97	-.869
32	4 5	636	565.76	101.056 50	85.405 229	265.18	1.120 165	4.97	-.868
32	4 6	642	629.15	101.056 67	85.389 318	265.30	1.120 463	4.95	-.866
32	4 7	648	692.55	101.057 00	85.373 400	265.42	1.120 760	4.95	-.865
32	4 8	654	755.97	101.057 33	85.357 475	265.53	1.121 057	4.95	-.864
32	4 9	660	819.41	101.057 50	85.341 543	265.67	1.121 354	4.93	-.862
32	5 0	666	882.86	101.057 83	85.325 603	265.78	1.121 650	4.93	-.861
32	5 1	672	946.33	101.058 17	85.309 656	265.90	1.121 946	4.92	-.860
32	5 2	679	1009.82	101.058 33	85.293 702	266.02	1.122 241	4.92	-.858
32	5 3	685	1073.32	101.058 67	85.277 741	266.15	1.122 536	4.92	-.857
32	5 4	691	136.84	101.059 00	85.261 772	266.27	1.122 831	4.90	-.856
32	5 5	697	200.38	101.059 17	85.245 796	266.38	1.123 125	4.90	-.855
32	5 6	703	263.93	101.059 50	85.229 813	266.50	1.123 419	4.90	-.853
32	5 7	709	327.50	101.059 67	85.213 823	266.62	1.123 713	4.88	-.852
32	5 8	715	391.08	101.060 00	85.197 826	266.75	1.124 006	4.88	-.851
32	5 9	721	454.68	101.060 33	85.181 821	266.87	1.124 299	4.87	-.849
33	0 0	727	518.30		85.165 809		1.124 591		-.848

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
WEST ZONE

Lat.	y. feet	Δy . per second	H	ΔH per second	V	ΔV per second	a
33 0 0	727 518.30	101.060 50	85.165 809	266.98	1.124 591	4.87	-.848
33 0 1	733 581.93	101.060 83	85.149 790	267.12	1.124 883	4.87	-.847
33 0 2	739 645.58	101.061 17	85.133 763	267.22	1.125 175	4.85	-.846
33 0 3	745 709.25	101.061 33	85.117 730	267.35	1.125 466	4.85	-.844
33 0 4	751 772.93	101.061 67	85.101 689	267.47	1.125 757	4.85	-.843
33 0 5	757 836.63	101.062 00	85.085 641	267.58	1.126 048	4.83	-.842
33 0 6	763 900.35	101.062 17	85.069 586	267.70	1.126 338	4.83	-.841
33 0 7	769 964.08	101.062 50	85.053 524	267.83	1.126 628	4.82	-.840
33 0 8	776 027.83	101.062 67	85.037 454	267.95	1.126 917	4.82	-.838
33 0 9	782 091.59	101.063 00	85.021 377	268.07	1.127 206	4.82	-.837
33 1 0	788 155.37	101.063 33	85.005 293	268.18	1.127 495	4.80	-.836
33 1 1	794 219.17	101.063 50	84.989 202	268.32	1.127 783	4.80	-.835
33 1 2	800 282.98	101.063 83	84.973 103	268.43	1.128 071	4.78	-.833
33 1 3	806 346.81	101.064 17	84.956 997	268.55	1.128 358	4.80	-.832
33 1 4	812 410.66	101.064 50	84.940 884	268.67	1.128 646	4.77	-.831
33 1 5	818 474.53	101.064 67	84.924 764	268.78	1.128 932	4.78	-.830
33 1 6	824 538.41	101.064 83	84.908 637	268.90	1.129 219	4.75	-.828
33 1 7	830 602.30	101.065 17	84.892 503	269.03	1.129 504	4.77	-.827
33 1 8	836 666.21	101.065 50	84.876 361	269.15	1.129 790	4.75	-.826
33 1 9	842 730.14	101.065 83	84.860 212	269.27	1.130 075	4.75	-.824
33 2 0	848 794.09	101.066 00	84.844 056	269.38	1.130 360	4.73	-.823
33 2 1	854 858.05	101.066 33	84.827 893	269.52	1.130 644	4.73	-.822
33 2 2	860 922.03	101.066 67	84.811 722	269.63	1.130 928	4.73	-.820
33 2 3	866 986.03	101.066 83	84.795 544	269.73	1.131 212	4.72	-.819
33 2 4	873 050.04	101.067 17	84.779 360	269.87	1.131 495	4.72	-.818
33 2 5	879 114.07	101.067 33	84.763 168	270.00	1.131 778	4.72	-.817
33 2 6	885 178.11	101.067 67	84.746 968	270.10	1.132 061	4.70	-.815
33 2 7	891 242.17	101.068 00	84.730 762	270.23	1.132 343	4.70	-.814
33 2 8	897 306.25	101.068 17	84.714 548	270.33	1.132 625	4.68	-.813
33 2 9	903 370.34	101.068 50	84.698 328	270.47	1.132 906	4.68	-.811
33 3 0	909 434.45	101.068 83	84.682 100	270.58	1.133 187	4.68	-.810
33 3 1	915 498.58	101.069 17	84.665 865	270.70	1.133 468	4.67	-.809
33 3 2	921 562.73	101.069 33	84.649 623	270.82	1.133 748	4.67	-.808
33 3 3	927 626.89	101.069 50	84.633 374	270.95	1.134 028	4.65	-.806
33 3 4	933 691.06	101.070 00	84.617 117	271.05	1.134 307	4.65	-.805
33 3 5	939 755.26	101.070 17	84.600 854	271.18	1.134 586	4.65	-.804
33 3 6	945 819.47	101.070 33	84.584 583	271.30	1.134 865	4.63	-.803
33 3 7	951 883.69	101.070 67	84.568 305	271.42	1.135 143	4.63	-.802
33 3 8	957 947.93	101.071 00	84.552 020	271.53	1.135 421	4.63	-.800
33 3 9	964 012.19	101.071 33	84.535 728	271.67	1.135 699	4.62	-.799
33 4 0	970 076.47	101.071 50	84.519 428	271.78	1.135 976	4.62	-.798
33 4 1	976 140.76	101.071 83	84.503 121	271.90	1.136 253	4.60	-.797
33 4 2	982 205.07	101.072 17	84.486 807	272.02	1.136 529	4.60	-.795
33 4 3	988 269.40	101.072 33	84.470 486	272.13	1.136 805	4.60	-.794
33 4 4	994 333.74	101.072 67	84.454 158	272.27	1.137 081	4.58	-.793
33 4 5	1 000 398.10	101.073 00	84.437 822	272.37	1.137 356	4.58	-.792
33 4 6	1 006 462.48	101.073 17	84.421 480	272.50	1.137 631	4.58	-.790
33 4 7	1 012 526.87	101.073 50	84.405 130	272.62	1.137 906	4.57	-.789
33 4 8	1 018 591.28	101.073 67	84.388 773	272.73	1.138 180	4.57	-.788
33 4 9	1 024 655.70	101.074 00	84.372 409	272.85	1.138 454	4.55	-.786
33 5 0	1 030 720.14	101.074 33	84.356 038	272.97	1.138 727	4.55	-.785
33 5 1	1 036 784.60	101.074 67	84.339 660	273.10	1.139 000	4.55	-.784
33 5 2	1 042 849.08	101.074 83	84.323 274	273.20	1.139 273	4.53	-.782
33 5 3	1 048 913.57	101.075 17	84.306 882	273.33	1.139 545	4.52	-.781
33 5 4	1 054 978.08	101.075 33	84.290 482	273.45	1.139 816	4.53	-.780
33 5 5	1 061 042.60	101.075 67	84.274 075	273.57	1.140 088	4.52	-.779
33 5 6	1 067 107.14	101.076 00	84.257 661	273.68	1.140 359	4.50	-.777
33 5 7	1 073 171.70	101.076 33	84.241 240	273.80	1.140 629	4.52	-.776
33 5 8	1 079 236.28	101.076 50	84.224 812	273.93	1.140 900	4.50	-.775
33 5 9	1 085 300.87	101.076 83	84.208 576	274.03	1.141 170	4.48	-.773
34 0 0	1 091 365.48		84.191 934		1.141 439		-.772

TRANSVERSE MERCATOR PROJECTION

NEW MEXICO
WEST ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
34 00	1	0 91 365.48	101.077 00	84.191 934	274.17	1.141 439	4.48	- .772
34 01	1	0 97 430.10	101.077 33	84.175 484	274.27	1.141 708	4.48	- .771
34 02	1	1 03 494.74	101.077 67	84.159 028	274.40	1.141 977	4.47	- .770
34 03	1	1 09 559.40	101.078 00	84.142 564	274.52	1.142 245	4.47	- .768
34 04	1	1 15 624.08	101.078 17	84.126 093	274.63	1.142 513	4.45	- .767
34 05	1	1 21 688.77	101.078 50	84.109 615	274.77	1.142 780	4.45	- .766
34 06	1	1 27 753.48	101.078 67	84.093 129	274.87	1.143 047	4.45	- .765
34 07	1	1 33 818.20	101.079 00	84.076 637	275.00	1.143 314	4.43	- .764
34 08	1	1 39 882.94	101.079 33	84.060 137	275.10	1.143 580	4.43	- .762
34 09	1	1 45 947.70	101.079 50	84.043 631	275.23	1.143 846	4.43	- .761
34 10	1	1 52 012.47	101.079 83	84.027 117	275.35	1.144 112	4.42	- .760
34 11	1	1 58 077.26	101.080 17	84.010 596	275.47	1.144 377	4.42	- .759
34 12	1	1 64 142.07	101.080 50	83.994 068	275.58	1.144 642	4.42	- .757
34 13	1	1 70 206.90	101.080 67	83.977 533	275.72	1.144 907	4.40	- .756
34 14	1	1 76 271.74	101.081 00	83.960 990	275.82	1.145 171	4.38	- .755
34 15	1	1 82 336.60	101.081 17	83.944 441	275.95	1.145 434	4.40	- .754
34 16	1	1 88 401.47	101.081 50	83.927 884	276.05	1.145 698	4.38	- .752
34 17	1	1 94 466.36	101.081 83	83.911 321	276.18	1.145 961	4.37	- .751
34 18	1	2 00 531.27	101.082 17	83.894 750	276.30	1.146 223	4.37	- .750
34 19	1	2 06 596.20	101.082 33	83.878 172	276.42	1.146 485	4.37	- .748
34 20	1	2 12 661.14	101.082 67	83.861 587	276.53	1.146 747	4.35	- .747
34 21	1	2 18 726.10	101.082 83	83.844 995	276.65	1.147 008	4.35	- .746
34 22	1	2 24 791.07	101.083 17	83.828 396	276.78	1.147 269	4.35	- .745
34 23	1	2 30 856.06	101.083 50	83.811 789	276.88	1.147 530	4.33	- .743
34 24	1	2 36 921.07	101.083 83	83.795 176	277.02	1.147 790	4.33	- .742
34 25	1	2 42 986.10	101.084 00	83.778 555	277.13	1.148 050	4.32	- .741
34 26	1	2 49 051.14	101.084 33	83.761 927	277.23	1.148 309	4.32	- .740
34 27	1	2 55 116.20	101.084 67	83.745 293	277.37	1.148 568	4.32	- .739
34 28	1	2 61 181.28	101.084 83	83.728 651	277.48	1.148 827	4.30	- .737
34 29	1	2 67 246.37	101.085 17	83.712 002	277.60	1.149 085	4.30	- .736
34 30	1	2 73 311.48	101.085 33	83.695 346	277.72	1.149 343	4.28	- .735
34 31	1	2 79 376.60	101.085 67	83.678 683	277.83	1.149 600	4.28	- .734
34 32	1	2 85 441.74	101.086 00	83.662 013	277.97	1.149 857	4.28	- .732
34 33	1	2 91 506.90	101.086 33	83.645 335	278.07	1.150 114	4.27	- .731
34 34	1	2 97 572.08	101.086 50	83.628 651	278.18	1.150 370	4.27	- .730
34 35	1	3 03 637.27	101.086 83	83.611 960	278.32	1.150 626	4.27	- .729
34 36	1	3 09 702.48	101.087 17	83.595 261	278.43	1.150 882	4.25	- .727
34 37	1	3 15 767.71	101.087 33	83.578 555	278.53	1.151 137	4.25	- .726
34 38	1	3 21 832.95	101.087 67	83.561 843	278.67	1.151 392	4.23	- .725
34 39	1	3 27 898.21	101.088 00	83.545 123	278.78	1.151 646	4.23	- .723
34 40	1	3 33 963.49	101.088 17	83.528 396	278.90	1.151 900	4.23	- .722
34 41	1	3 40 028.78	101.088 50	83.511 662	279.02	1.152 154	4.22	- .721
34 42	1	3 46 094.09	101.088 83	83.494 921	279.13	1.152 407	4.22	- .720
34 43	1	3 52 159.42	101.089 17	83.478 173	279.25	1.152 660	4.20	- .718
34 44	1	3 58 224.77	101.089 33	83.461 418	279.38	1.152 912	4.22	- .717
34 45	1	3 64 290.13	101.089 50	83.444 655	279.48	1.153 165	4.18	- .716
34 46	1	3 70 355.50	101.090 00	83.427 886	279.60	1.153 416	4.20	- .715
34 47	1	3 76 420.90	101.090 17	83.411 110	279.73	1.153 668	4.17	- .714
34 48	1	3 82 486.31	101.090 50	83.394 326	279.83	1.153 918	4.18	- .712
34 49	1	3 88 551.74	101.090 67	83.377 536	279.97	1.154 169	4.17	- .711
34 50	1	3 94 617.18	101.091 00	83.360 738	280.08	1.154 419	4.17	- .710
34 51	1	4 00 682.64	101.091 33	83.343 933	280.18	1.154 669	4.15	- .709
34 52	1	4 06 748.12	101.091 67	83.327 122	280.32	1.154 918	4.15	- .707
34 53	1	4 12 813.62	101.091 83	83.310 303	280.43	1.155 167	4.13	- .706
34 54	1	4 18 879.13	101.092 17	83.293 477	280.55	1.155 415	4.13	- .705
34 55	1	4 24 944.66	101.092 50	83.276 644	280.67	1.155 663	4.13	- .704
34 56	1	4 31 010.21	101.092 67	83.259 804	280.78	1.155 911	4.12	- .702
34 57	1	4 37 075.77	101.093 00	83.242 957	280.90	1.156 158	4.12	- .701
34 58	1	4 43 141.35	101.093 33	83.226 103	281.02	1.156 405	4.12	- .700
34 59	1	4 49 206.95	101.093 50	83.209 242	281.13	1.156 652	4.10	- .698
35 00	1	4 55 272.56		83.192 374		1.156 898		- .697

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
WEST ZONE

Lat.		y_0 feet	Δy_0 per second	H	ΔH per second	V	ΔV per second	a
35 0 0	1	455 272.56	101.093 83	83.192 374	281.25	1.156 898	4.10	.697
35 0 1	1	461 338.19	101.094 17	83.175 499	281.38	1.157 144	4.08	.696
35 0 2	1	467 403.84	101.094 33	83.158 616	281.48	1.157 389	4.10	.695
35 0 3	1	473 469.50	101.094 67	83.141 727	281.62	1.157 635	4.07	.693
35 0 4	1	479 535.18	101.095 00	83.124 830	281.72	1.157 879	4.08	.692
35 0 5	1	485 600.88	101.095 33	83.107 927	281.85	1.158 124	4.05	.691
35 0 6	1	491 666.60	101.095 50	83.091 016	281.97	1.158 367	4.07	.690
35 0 7	1	497 732.33	101.095 83	83.074 098	282.07	1.158 611	4.05	.689
35 0 8	1	503 798.08	101.096 00	83.057 174	282.20	1.158 854	4.05	.687
35 0 9	1	509 863.84	101.096 33	83.040 242	282.32	1.159 097	4.03	.686
35 1 0	1	515 929.62	101.096 67	83.023 303	282.43	1.159 339	4.03	.685
35 1 1	1	521 995.42	101.097 00	83.006 357	282.55	1.159 581	4.02	.684
35 1 2	1	528 061.24	101.097 17	82.989 404	282.67	1.159 822	4.02	.682
35 1 3	1	534 127.07	101.097 50	82.972 444	282.78	1.160 063	4.02	.681
35 1 4	1	540 192.92	101.097 83	82.955 477	282.90	1.160 304	4.00	.680
35 1 5	1	546 258.79	101.098 00	82.938 503	283.02	1.160 544	4.00	.679
35 1 6	1	552 324.67	101.098 33	82.921 522	283.13	1.160 784	4.00	.677
35 1 7	1	558 390.57	101.098 67	82.904 534	283.25	1.161 024	3.98	.676
35 1 8	1	564 456.49	101.099 00	82.887 539	283.37	1.161 263	3.98	.675
35 1 9	1	570 522.43	101.099 17	82.870 537	283.48	1.161 502	3.97	.673
35 2 0	1	576 588.38	101.099 50	82.853 528	283.60	1.161 740	3.97	.672
35 2 1	1	582 654.35	101.099 67	82.836 512	283.72	1.161 978	3.97	.671
35 2 2	1	588 720.33	101.100 00	82.819 489	283.83	1.162 216	3.95	.670
35 2 3	1	594 786.33	101.100 33	82.802 459	283.97	1.162 453	3.93	.668
35 2 4	1	600 852.35	101.100 67	82.785 421	284.07	1.162 689	3.95	.667
35 2 5	1	606 918.39	101.100 83	82.768 377	284.18	1.162 926	3.93	.666
35 2 6	1	612 984.44	101.101 17	82.751 326	284.30	1.163 168	3.92	.665
35 2 7	1	619 050.51	101.101 50	82.734 268	284.42	1.163 397	3.93	.664
35 2 8	1	625 116.60	101.101 83	82.717 203	284.55	1.163 633	3.92	.662
35 2 9	1	631 182.71	101.102 00	82.700 130	284.65	1.163 868	3.90	.661
35 3 0	1	637 248.83	101.102 33	82.683 051	284.77	1.164 102	3.90	.660
35 3 1	1	643 314.97	101.102 50	82.665 965	284.90	1.164 336	3.90	.659
35 3 2	1	649 381.12	101.102 83	82.648 871	285.00	1.164 570	3.88	.657
35 3 3	1	655 447.29	101.103 17	82.631 771	285.13	1.164 803	3.88	.656
35 3 4	1	661 513.48	101.103 50	82.614 663	285.23	1.165 036	3.88	.655
35 3 5	1	667 579.69	101.103 67	82.597 549	285.37	1.165 269	3.87	.654
35 3 6	1	673 645.91	101.104 00	82.580 427	285.47	1.165 501	3.85	.652
35 3 7	1	679 712.15	101.104 33	82.563 299	285.58	1.165 732	3.87	.651
35 3 8	1	685 778.41	101.104 50	82.546 164	285.72	1.165 964	3.85	.650
35 3 9	1	691 844.68	101.104 83	82.529 021	285.82	1.166 195	3.83	.648
35 4 0	1	697 910.97	101.105 17	82.511 872	285.93	1.166 425	3.83	.647
35 4 1	1	703 977.28	101.105 50	82.494 716	286.07	1.166 655	3.83	.646
35 4 2	1	710 043.61	101.105 67	82.477 552	286.17	1.166 885	3.82	.645
35 4 3	1	716 109.95	101.106 00	82.460 382	286.28	1.167 114	3.82	.643
35 4 4	1	722 176.31	101.106 33	82.443 205	286.42	1.167 343	3.80	.642
35 4 5	1	728 242.69	101.106 50	82.426 020	286.52	1.167 571	3.80	.641
35 4 6	1	734 309.08	101.106 83	82.408 829	286.63	1.167 799	3.80	.640
35 4 7	1	740 375.49	101.107 17	82.391 631	286.75	1.168 027	3.78	.639
35 4 8	1	746 441.92	101.107 33	82.374 426	286.88	1.168 254	3.78	.637
35 4 9	1	752 508.36	101.107 67	82.357 213	286.98	1.168 481	3.78	.636
35 5 0	1	758 574.82	101.108 00	82.339 994	287.10	1.168 708	3.77	.635
35 5 1	1	764 641.30	101.108 17	82.322 768	287.23	1.168 934	3.77	.634
35 5 2	1	770 707.79	101.108 67	82.305 534	287.33	1.169 160	3.77	.632
35 5 3	1	776 774.31	101.108 83	82.288 294	287.45	1.169 386	3.75	.631
35 5 4	1	782 840.84	101.109 17	82.271 047	287.57	1.169 611	3.75	.630
35 5 5	1	788 907.39	101.109 33	82.253 793	287.70	1.169 836	3.73	.629
35 5 6	1	794 973.95	101.109 67	82.236 531	287.80	1.170 060	3.73	.627
35 5 7	1	801 040.53	101.110 00	82.219 263	287.92	1.170 284	3.72	.626
35 5 8	1	807 107.13	101.110 17	82.201 988	288.03	1.170 507	3.72	.625
35 5 9	1	813 173.74	101.110 50	82.184 706	288.15	1.170 730	3.72	.623
36 0 0	1	819 240.37		82.167 417		1.170 953		.622

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
WEST ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
36 00	1	819 240.37	101.110 83	82.167 417	288.27	1.170 953	3.70	-.622
36 01	1	825 307.02	101.111 17	82.150 121	288.38	1.171 175	3.70	-.621
36 02	1	831 373.69	101.111 33	82.132 818	288.50	1.171 397	3.68	-.620
36 03	1	837 440.37	101.111 67	82.115 508	288.62	1.171 618	3.68	-.618
36 04	1	843 507.07	101.112 00	82.098 191	288.73	1.171 839	3.68	-.617
36 05	1	849 573.79	101.112 33	82.080 867	288.85	1.172 060	3.67	-.616
36 06	1	855 640.53	101.112 50	82.063 536	288.97	1.172 280	3.67	-.615
36 07	1	861 707.28	101.112 83	82.046 198	289.08	1.172 500	3.65	-.614
36 08	1	867 774.05	101.113 00	82.028 853	289.18	1.172 719	3.65	-.612
36 09	1	873 840.83	101.113 33	82.011 502	289.32	1.172 938	3.65	-.611
36 10	1	879 907.63	101.113 67	81.994 143	289.43	1.173 157	3.63	-.610
36 11	1	885 974.45	101.114 00	81.976 777	289.53	1.173 375	3.63	-.609
36 12	1	892 041.29	101.114 33	81.959 405	289.67	1.173 593	3.62	-.608
36 13	1	898 108.15	101.114 50	81.942 025	289.77	1.173 810	3.62	-.606
36 14	1	904 175.02	101.114 83	81.934 639	289.90	1.174 027	3.62	-.605
36 15	1	910 241.91	101.115 00	81.907 245	290.00	1.174 244	3.60	-.604
36 16	1	916 308.81	101.115 33	81.889 845	290.12	1.174 460	3.60	-.603
36 17	1	922 375.73	101.115 67	81.872 438	290.25	1.174 676	3.58	-.602
36 18	1	928 442.67	101.116 00	81.855 023	290.35	1.174 891	3.58	-.600
36 19	1	934 509.63	101.116 33	81.837 602	290.47	1.175 106	3.58	-.599
36 20	1	940 576.61	101.116 50	81.820 174	290.58	1.175 321	3.57	-.598
36 21	1	946 643.60	101.116 83	81.802 739	290.70	1.175 535	3.57	-.597
36 22	1	952 710.61	101.117 00	81.785 297	290.82	1.175 749	3.57	-.595
36 23	1	958 777.63	101.117 33	81.767 848	290.93	1.175 963	3.55	-.594
36 24	1	964 844.67	101.117 67	81.750 392	291.05	1.176 176	3.55	-.593
36 25	1	970 911.73	101.118 00	81.732 929	291.17	1.176 389	3.53	-.592
36 26	1	976 978.81	101.118 17	81.715 459	291.27	1.176 601	3.53	-.590
36 27	1	983 045.90	101.118 67	81.697 983	291.40	1.176 813	3.52	-.589
36 28	1	989 113.02	101.118 83	81.680 499	291.52	1.177 024	3.52	-.588
36 29	1	995 180.15	101.119 00	81.663 008	291.62	1.177 235	3.52	-.586
36 30	2	001 247.29	101.119 33	81.645 511	291.75	1.177 446	3.50	-.585
36 31	2	007 314.45	101.119 67	81.628 006	291.85	1.177 656	3.50	-.584
36 32	2	013 381.63	101.120 00	81.610 495	291.97	1.177 866	3.50	-.583
36 33	2	019 448.83	101.120 33	81.592 977	292.10	1.178 076	3.48	-.581
36 34	2	025 516.05	101.120 50	81.575 451	292.20	1.178 285	3.47	-.580
36 35	2	031 583.28	101.120 83	81.557 919	292.32	1.178 493	3.48	-.579
36 36	2	037 650.53	101.121 00	81.540 380	292.43	1.178 702	3.47	-.578
36 37	2	043 717.79	101.121 50	81.522 834	292.55	1.178 910	3.45	-.577
36 38	2	049 785.08	101.121 67	81.505 281	292.65	1.179 117	3.45	-.575
36 39	2	055 852.38	101.122 00	81.487 722	292.78	1.179 324	3.45	-.574
36 40	2	061 919.70	101.122 17	81.470 155	292.90	1.179 531	3.43	-.573
36 41	2	067 987.03	101.122 50	81.452 581	293.00	1.179 737	3.43	-.572
36 42	2	074 054.38	101.122 83	81.435 001	293.12	1.179 943	3.43	-.571
36 43	2	080 121.75	101.123 17	81.417 414	293.25	1.180 149	3.42	-.569
36 44	2	086 189.14	101.123 33	81.399 819	293.35	1.180 354	3.42	-.568
36 45	2	092 256.54	101.123 67	81.382 218	293.47	1.180 559	3.42	-.567
36 46	2	098 323.96	101.124 00	81.364 610	293.58	1.180 764	3.40	-.566
36 47	2	104 391.40	101.124 33	81.346 995	293.70	1.180 968	3.38	-.565
36 48	2	110 458.86	101.124 50	81.329 373	293.80	1.181 171	3.38	-.563
36 49	2	116 526.33	101.124 83	81.311 745	293.93	1.181 374	3.38	-.562
36 50	2	122 593.82	101.125 17	81.294 109	294.05	1.181 577	3.37	-.561
36 51	2	128 661.33	101.125 33	81.276 466	294.15	1.181 779	3.37	-.560
36 52	2	134 728.85	101.125 67	81.258 817	294.28	1.181 981	3.37	-.559
36 53	2	140 796.39	101.126 00	81.241 160	294.38	1.182 183	3.35	-.557
36 54	2	146 863.95	101.126 33	81.223 497	294.50	1.182 384	3.35	-.556
36 55	2	152 931.53	101.126 50	81.205 827	294.62	1.182 585	3.33	-.555
36 56	2	158 999.12	101.126 83	81.188 150	294.73	1.182 785	3.33	-.554
36 57	2	165 066.73	101.127 17	81.170 466	294.85	1.182 985	3.32	-.553
36 58	2	171 134.36	101.127 50	81.152 775	294.95	1.183 184	3.32	-.551
36 59	2	177 202.01	101.127 67	81.135 078	295.08	1.183 383	3.32	-.550
37 00	2	183 269.67		81.117 373		1.193 582		-.549

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
WEST ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
37 0 0	2	183 269.67	101.128 00	81.117 373	295.18	1.183 582	3.30	-.549
37 0 1	2	189 337.35	101.128 33	81.099 662	295.32	1.183 780	3.30	-.548
37 0 2	2	195 405.05	101.128 50	81.081 943	295.42	1.183 978	3.30	-.547
37 0 3	2	201 472.76	101.128 83	81.064 218	295.53	1.184 176	3.28	-.545
37 0 4	2	207 540.49	101.129 17	81.046 486	295.65	1.184 373	3.28	-.544
37 0 5	2	213 608.24	101.129 50	81.028 747	295.77	1.184 570	3.27	-.543
37 0 6	2	219 676.01	101.129 67	81.011 001	295.88	1.184 766	3.27	-.542
37 0 7	2	225 743.79	101.130 00	80.993 248	295.98	1.184 962	3.25	-.541
37 0 8	2	231 811.59	101.130 33	80.975 489	296.12	1.185 157	3.25	-.539
37 0 9	2	237 879.41	101.130 67	80.957 722	296.22	1.185 352	3.25	-.538
37 1 0	2	243 947.25	101.130 83	80.939 949	296.33	1.185 547	3.23	-.537
37 1 1	2	250 015.10	101.131 17	80.922 169	296.45	1.185 741	3.23	-.536
37 1 2	2	256 082.97	101.131 50	80.904 382	296.57	1.185 935	3.23	-.534
37 1 3	2	262 150.86	101.131 67	80.886 588	296.68	1.186 129	3.22	-.533
37 1 4	2	268 218.76	101.132 00	80.868 787	296.80	1.186 322	3.22	-.532
37 1 5	2	274 286.68	101.132 33	80.850 979	296.90	1.186 515	3.20	-.531
37 1 6	2	280 354.62	101.132 67	80.833 165	297.03	1.186 707	3.20	-.529
37 1 7	2	286 422.58	101.132 83	80.815 343	297.13	1.186 899	3.18	-.528
37 1 8	2	292 490.55	101.133 17	80.797 515	297.25	1.187 090	3.18	-.527
37 1 9	2	298 558.54	101.133 50	80.779 680	297.37	1.187 281	3.18	-.525
37 2 0	2	304 626.55		80.761 838		1.187 472		-.524

TRANSVERSE MERCATOR PROJECTION

NEW MEXICO

All Zones

$\Delta\lambda''$	b	Δb	c	$\Delta\lambda''$	b	Δb	c
0	0.000	+0.370	0.000	3100	+6.697	-0.110	-0.133
100	+0.370	+0.370	0.000	3200	+6.587	-0.141	-0.135
200	+0.740	+0.367	-0.001	3300	+6.446	-0.173	-0.136
300	+1.107	+0.364	-0.002	3400	+6.273	-0.205	-0.135
400	+1.471	+0.360	-0.003	3500	+6.068	-0.239	-0.133
500	+1.831	+0.355	-0.005	3600	+5.829	-0.273	-0.131
600	+2.186	+0.350	-0.007	3700	+5.556	-0.309	-0.128
700	+2.536	+0.343	-0.010	3800	+5.247	-0.346	-0.124
800	+2.879	+0.335	-0.014	3900	+4.901	-0.382	-0.120
900	+3.214	+0.326	-0.018	4000	+4.519	-0.422	-0.115
1000	+3.540	+0.315	-0.022	4100	+4.097	-0.462	-0.109
1100	+3.855	+0.305	-0.027	4200	+3.635	-0.503	-0.101
1200	+4.160	+0.294	-0.032	4300	+3.132	-0.544	-0.091
1300	+4.454	+0.282	-0.038	4400	+2.588	-0.585	-0.078
1400	+4.736	+0.268	-0.043	4500	+2.003	-0.626	-0.063
1500	+5.004	+0.255	-0.049	4600	+1.377	-0.667	-0.045
1600	+5.259	+0.239	-0.055	4700	+0.710	-0.710	-0.025
1700	+5.498	+0.223	-0.061	4800	0.000	-0.755	0.000
1800	+5.721	+0.206	-0.067	4900	-0.755	-0.807	+0.026
1900	+5.927	+0.188	-0.073	5000	-1.562	-0.860	+0.053
2000	+6.115	+0.169	-0.079	5100	-2.422	-0.911	+0.084
2100	+6.284	+0.149	-0.085	5200	-3.333	-0.960	+0.117
2200	+6.433	+0.128	-0.091	5300	-4.293	-1.014	+0.153
2300	+6.561	+0.105	-0.096	5400	-5.307	-1.067	+0.191
2400	+6.666	+0.082	-0.101	5500	-6.374	-1.120	+0.232
2500	+6.748	+0.058	-0.106	5600	-7.494	-1.172	+0.275
2600	+6.806	+0.033	-0.111	5700	-8.666	-1.225	+0.321
2700	+6.839	+0.007	-0.116	5800	-9.891	-1.277	+0.371
2800	+6.846	-0.021	-0.121	5900	-11.168	-1.331	+0.426
2900	+6.825	-0.049	-0.125	6000	-12.499		+0.487
3000	+6.776	-0.079	-0.130				

$$F = 7.47 \times 10^{-13}$$

TRANSVERSE MERCATOR PROJECTION

TABLE FOR g

$$\Delta\alpha'' = \sin \phi (\Delta\lambda'') + g$$

Lat-i-tude	$\Delta\lambda''$						
	0"	1000"	2000"	3000"	4000"	5000"	6000"
24°	0.00	0.00	0.02	0.07	0.17	0.33	0.58
25	0	0	0.02	0.07	0.17	0.34	0.59
26°	0.00	0.00	0.02	0.08	0.18	0.35	0.60
27	0	0	0.02	0.08	0.18	0.35	0.61
28	0	0	0.02	0.08	0.18	0.36	0.62
29	0	0	0.02	0.08	0.19	0.37	0.63
30	0	0	0.02	0.08	0.19	0.37	0.64
31°	0.00	0.00	0.02	0.08	0.19	0.37	0.64
32	0	0	0.02	0.08	0.19	0.38	0.65
33	0	0	0.02	0.08	0.19	0.38	0.65
34	0	0	0.02	0.08	0.19	0.38	0.65
35	0	0	0.02	0.08	0.19	0.38	0.65
36°	0.00	0.00	0.02	0.08	0.19	0.38	0.65
37	0	0	0.02	0.08	0.19	0.38	0.65
38	0	0	0.02	0.08	0.19	0.38	0.65
39	0	0	0.02	0.08	0.19	0.37	0.64
40	0	0	0.02	0.08	0.19	0.37	0.64
41°	0.00	0.00	0.02	0.08	0.19	0.37	0.63
42	0	0	0.02	0.08	0.18	0.36	0.63
43	0	0	0.02	0.08	0.18	0.36	0.62
44	0	0	0.02	0.08	0.18	0.35	0.61
45	0	0	0.02	0.08	0.18	0.35	0.60
46°	0.00	0.00	0.02	0.07	0.17	0.34	0.59
47	0	0	0.02	0.07	0.17	0.33	0.58
48	0	0	0.02	0.07	0.17	0.33	0.56
49	0	0	0.02	0.07	0.16	0.32	0.55
50	0.00	0.00	0.02	0.07	0.16	0.31	0.54

$$g = \left[\frac{C (\sin 1'') \cos^3 \phi}{2A^2} + F \right] (\Delta\lambda'')^3$$

A, C and F are position factors.

Y CORRECTION FOR COMPUTATION OF GEOGRAPHIC
POSITIONS FROM PLANE COORDINATES
TRANSVERSE MERCATOR PROJECTION, NEW MEXICO-EAST ZONE

$$P(x'/10,000)^2 + d = V(\Delta Y/100)^2 + c$$

P taken out for y-coordinate
d taken out for x'

y	P	ΔP	x'	d	
0	1.43432	1562	0	0.00	
100,000	1.44994	1570	50,000	+ 0.01	
200,000	1.46564	1580	100,000	+ 0.02	
300,000	1.48144	1589	150,000	+ 0.04	
400,000	1.49733	1598	200,000	+ 0.09	
500,000	1.51331	1609	250,000	+ 0.09	
600,000	1.52940	1617	300,000	+ 0.10	
700,000	1.54557	1628	350,000	+ 0.08	
800,000	1.56185	1638	400,000	+ 0.03	
900,000	1.57823	1649	450,000	- 0.05	
1,000,000	1.59472	1658			
1,100,000	1.61130	1670			
1,200,000	1.62800	1680			
1,300,000	1.64480	1692			
1,400,000	1.66172	1702			
1,500,000	1.67874	1714	y	P	ΔP
1,600,000	1.69588	1726	2,000,000	1.76562	1774
1,700,000	1.71314	1737	2,100,000	1.78336	1787
1,800,000	1.73051	1750	2,200,000	1.80123	1800
1,900,000	1.74801	1761	2,300,000	1.81923	

Y CORRECTION FOR COMPUTATION OF GEOGRAPHIC
 POSITIONS FROM PLANE COORDINATES
TRANSVERSE MERCATOR PROJECTION, NEW MEXICO-CENTRAL ZONE

$$P(x'/10,000)^2 + d = V(\Delta Y_{100})^2 + c$$

P taken out for y-coordinate
 d taken out for x'

<u>y</u>	P	ΔP	<u>x'</u>	d	
0	1.43434	1562	0	0.00	
100,000	1.44996	1570	50,000	0.01	
200,000	1.46566	1580	100,000	+ 0.02	
300,000	1.48146	1589	150,000	+ 0.04	
400,000	1.49735	1593	200,000	+ 0.08	
500,000	1.51333	1608	250,000	+ 0.10	
600,000	1.52941	1618	300,000	+ 0.11	
700,000	1.54559	1628	350,000	+ 0.09	
800,000	1.56187	1638	400,000	+ 0.04	
900,000	1.57825	1649	450,000	- 0.05	
1,000,000	1.59474	1658			
1,100,000	1.61132	1670			
1,200,000	1.62802	1680			
1,300,000	1.64482	1692			
1,400,000	1.66174	1702			
1,500,000	1.67876	1714	<u>y</u>	P	ΔP
1,600,000	1.69590	1726	2,000,000	1.76564	1775
1,700,000	1.71316	1738	2,100,000	1.78339	1786
1,800,000	1.73054	1749	2,200,000	1.80125	1800
1,900,000	1.74803	1761	2,300,000	1.81925	

Y CORRECTION FOR COMPUTATION OF GEOGRAPHIC
POSITIONS FROM PLANE COORDINATES
TRANSVERSE MERCATOR PROJECTION, NEW MEXICO-WEST ZONE

$$P(x'/10,000)^2 + d = V(\Delta Y 100)^2 + c$$

P taken out for y-coordinate
d taken out for x'

<u>y</u>	<u>P</u>	<u>ΔP</u>	<u>x'</u>	<u>d</u>	
0	1.43432	1561	0	0.00	
100,000	1.44993	1571	50,000	+ 0.01	
200,000	1.46564	1579	100,000	+ 0.02	
300,000	1.48143	1589	150,000	+ 0.04	
400,000	1.49732	1598	200,000	+ 0.07	
500,000	1.51330	1609	250,000	+ 0.09	
600,000	1.52939	1617	300,000	+ 0.10	
700,000	1.54556	1628	350,000	+ 0.08	
800,000	1.56184	1638	400,000	+ 0.03	
900,000	1.57822	1649	450,000	- 0.07	
1,000,000	1.59471	1659			
1,100,000	1.61130	1669			
1,200,000	1.62799	1680			
1,300,000	1.64479	1692			
1,400,000	1.66171	1702			
1,500,000	1.67873	1714	<u>y</u>	<u>P</u>	<u>ΔP</u>
1,600,000	1.69587	1726	2,000,000	1.76561	1774
1,700,000	1.71313	1737	2,100,000	1.78335	1787
1,800,000	1.73050	1750	2,200,000	1.80122	1799
1,900,000	1.74800	1761	2,300,000	1.81921	

TRANSVERSE MERCATOR PROJECTION

New Mexico

All zones

$$\Delta \alpha = Mx' - e$$

y	M	ΔM	y	M	ΔM
0	0.005 9176	645	1,500,000	0.006 9261	707
100,000	0.005 9821	648	1,600,000	0.006 9968	712
200,000	0.006 0469	651	1,700,000	0.007 0680	717
300,000	0.006 1120	656	1,800,000	0.007 1397	722
400,000	0.006 1776	660	1,900,000	0.007 2119	727
500,000	0.006 2436	663	2,000,000	0.007 2846	732
600,000	0.006 3099	668	2,100,000	0.007 3578	737
700,000	0.006 3767	671	2,200,000	0.007 4315	743
800,000	0.006 4438	676	2,300,000	0.007 5058	
900,000	0.006 5114	680			
1,000,000	0.006 5794	685			
1,100,000	0.006 6479	689			
1,200,000	0.006 7168	693			
1,300,000	0.006 7861	698			
1,400,000	0.006 8559	702			

e

x'	200,000	300,000	400,000	500,000
y	0	0.1	0.3	0.6
1,000,000	0.0	0.1	0.4	0.8
2,000,000	0.0	0.2	0.5	1.0

TRANSVERSE MERCATOR PROJECTION

NEW MEXICO

East Zone

x' (feet)	Scale in units of 7th place of logs	Scale expressed as a ratio	x' (feet)	Scale in units of 7th place of logs	Scale expressed as a ratio
0	-394.8	0.9999091	175,000	-242.6	0.9999441
5,000	-394.7	0.9999091	180,000	-233.7	0.9999462
10,000	-394.3	0.9999092	185,000	-224.7	0.9999483
15,000	-393.7	0.9999093	190,000	-215.3	0.9999504
20,000	-392.8	0.9999096	195,000	-205.8	0.9999526
25,000	-391.7	0.9999098	200,000	-196.0	0.9999549
30,000	-390.3	0.9999101	205,000	-185.9	0.9999572
35,000	-388.7	0.9999105	210,000	-175.6	0.9999596
40,000	-386.8	0.9999109	215,000	-165.0	0.9999620
45,000	-384.7	0.9999114	220,000	-154.2	0.9999645
50,000	-382.4	0.9999119	225,000	-143.1	0.9999671
55,000	-379.8	0.9999126	230,000	-131.8	0.9999697
60,000	-376.9	0.9999132	235,000	-120.3	0.9999723
65,000	-373.8	0.9999140	240,000	-108.5	0.9999750
70,000	-370.4	0.9999147	245,000	-96.4	0.9999778
75,000	-366.8	0.9999156	250,000	-84.1	0.9999806
80,000	-363.0	0.9999164	255,000	-71.6	0.9999835
85,000	-358.9	0.9999174	260,000	-58.8	0.9999865
90,000	-354.5	0.9999184	265,000	-45.7	0.9999895
95,000	-349.9	0.9999194	270,000	-32.4	0.9999925
100,000	-345.1	0.9999205	275,000	-18.9	0.9999956
105,000	-340.0	0.9999217	280,000	-5.1	0.9999988
110,000	-334.6	0.9999230	285,000	+9.0	1.0000021
115,000	-329.1	0.9999242	290,000	+23.3	1.0000054
120,000	-323.2	0.9999256	295,000	+37.8	1.0000087
125,000	-317.1	0.9999270	300,000	+52.6	1.0000121
130,000	-310.8	0.9999284	305,000	+67.6	1.0000156
135,000	-304.2	0.9999300	310,000	+82.9	1.0000191
140,000	-297.4	0.9999315	315,000	+98.5	1.0000227
145,000	-290.3	0.9999332	320,000	+114.2	1.0000263
150,000	-283.0	0.9999348	325,000	+130.3	1.0000300
155,000	-275.4	0.9999366	330,000	+146.6	1.0000338
160,000	-267.5	0.9999384	335,000	+163.1	1.0000376
165,000	-259.5	0.9999402	340,000	+179.9	1.0000414
170,000	-251.1	0.9999422	345,000	+196.9	1.0000453

TRANSVERSE MERCATOR PROJECTION

NEW MEXICO

East Zone

x' (feet)	Scale in units of 7th place of logs	Scale expressed as a ratio	x' (feet)	Scale in units of 7th place of logs	Scale expressed as a ratio
350,000	+214.2	1.0000493	525,000	+975.4	1.0002246
355,000	+231.7	1.0000534	530,000	+1001.6	1.0002306
360,000	+249.5	1.0000574			
365,000	+267.5	1.0000616			
370,000	+285.7	1.0000658			
375,000	+304.3	1.0000701			
380,000	+323.0	1.0000744			
385,000	+342.0	1.0000787			
390,000	+361.3	1.0000832			
395,000	+380.8	1.0000877			
400,000	+400.6	1.0000922			
405,000	+420.6	1.0000968			
410,000	+440.8	1.0001015			
415,000	+461.3	1.0001062			
420,000	+482.1	1.0001110			
425,000	+503.1	1.0001158			
430,000	+524.4	1.0001207			
435,000	+545.9	1.0001257			
440,000	+567.6	1.0001307			
445,000	+589.6	1.0001358			
450,000	+611.8	1.0001409			
455,000	+634.3	1.0001461			
460,000	+657.1	1.0001513			
465,000	+680.1	1.0001566			
470,000	+703.3	1.0001619			
475,000	+726.8	1.0001674			
480,000	+750.5	1.0001728			
485,000	+774.5	1.0001783			
490,000	+798.8	1.0001839			
495,000	+823.2	1.0001895			
500,000	+848.0	1.0001953			
505,000	+872.9	1.0002010			
510,000	+898.2	1.0002068			
515,000	+923.7	1.0002127			
520,000	+949.4	1.0002186			

TRANSVERSE MERCATOR PROJECTION

NEW MEXICO

Central Zone

x' feet	Scale in units of 7th place of logs	Scale expressed as a ratio	x' feet	Scale in units of 7th place of logs	Scale expressed as a ratio
0	-434.3	0.9999000	175,000	-282.0	0.9999351
5,000	-434.2	0.9999000	180,000	-273.2	0.9999371
10,000	-433.8	0.9999001	185,000	-264.1	0.9999392
15,000	-433.2	0.9999003	190,000	-254.8	0.9999413
20,000	-432.3	0.9999005	195,000	-245.2	0.9999435
25,000	-431.2	0.9999007	200,000	-235.4	0.9999458
30,000	-429.8	0.9999010	205,000	-225.3	0.9999481
35,000	-428.2	0.9999014	210,000	-215.0	0.9999505
40,000	-426.4	0.9999018	215,000	-204.5	0.9999529
45,000	-424.3	0.9999023	220,000	-193.7	0.9999554
50,000	-421.9	0.9999029	225,000	-182.6	0.9999580
55,000	-419.3	0.9999035	230,000	-171.3	0.9999606
60,000	-416.4	0.9999041	235,000	-159.7	0.9999632
65,000	-413.3	0.9999048	240,000	-147.9	0.9999659
70,000	-410.0	0.9999056	245,000	-135.9	0.9999687
75,000	-406.4	0.9999064	250,000	-123.6	0.9999715
80,000	-402.5	0.9999073	255,000	-111.0	0.9999744
85,000	-398.4	0.9999083	260,000	-98.2	0.9999774
90,000	-394.0	0.9999093	265,000	-85.2	0.9999804
95,000	-389.4	0.9999103	270,000	-71.9	0.9999834
100,000	-384.6	0.9999114	275,000	-58.4	0.9999866
105,000	-379.5	0.9999126	280,000	-44.6	0.9999897
110,000	-374.1	0.9999139	285,000	-30.5	0.9999930
115,000	-368.5	0.9999151	290,000	-16.2	0.9999963
120,000	-362.7	0.9999165	295,000	-01.7	0.9999996
125,000	-356.6	0.9999179	300,000	+ 13.1	1.0000030
130,000	-350.3	0.9999193	305,000	+ 28.1	1.0000065
135,000	-343.7	0.9999209	310,000	+ 43.4	1.0000100
140,000	-336.8	0.9999224	315,000	+ 59.0	1.0000136
145,000	-329.7	0.9999241	320,000	+ 74.8	1.0000172
150,000	-322.4	0.9999258	325,000	+ 90.8	1.0000209
155,000	-314.8	0.9999275	330,000	+107.1	1.0000247
160,000	-307.0	0.9999293	335,000	+123.6	1.0000285
165,000	-298.9	0.9999312	340,000	+140.4	1.0000323
170,000	-290.6	0.9999331	345,000	+157.4	1.0000362

TRANSVERSE MERCATOR PROJECTION

NEW MEXICO

Central Zone

x' feet	Scale in units of 7th place of logs	Scale expressed as a ratio
350,000	+174.7	1.0000402
355,000	+192.2	1.0000443
360,000	+210.0	1.0000484
365,000	+228.0	1.0000525
370,000	+246.3	1.0000567
375,000	+264.8	1.0000610
380,000	+283.6	1.0000653
385,000	+302.6	1.0000697
390,000	+321.8	1.0000741
395,000	+341.3	1.0000786
400,000	+361.1	1.0000831
405,000	+381.1	1.0000878
410,000	+401.4	1.0000924
415,000	+421.9	1.0000971
420,000	+442.6	1.0001019
425,000	+463.6	1.0001067
430,000	+484.9	1.0001117
435,000	+506.4	1.0001166
440,000	+528.2	1.0001216
445,000	+550.2	1.0001267
450,000	+572.4	1.0001318
455,000	+594.9	1.0001370
460,000	+617.6	1.0001422
465,000	+640.6	1.0001475
470,000	+663.9	1.0001529
475,000	+687.4	1.0001583
480,000	+711.1	1.0001637
485,000	+735.1	1.0001693
490,000	+759.4	1.0001749
495,000	+783.9	1.0001805
500,000	+808.6	1.0001862
505,000	+833.6	1.0001919
510,000	+858.8	1.0001977
515,000	+884.3	1.0002036
520,000	+910.0	1.0002095
525,000	+936.0	1.0002155

TRANSVERSE MERCATOR PROJECTION

NEW MEXICO

West Zone

x' (feet)	Scale in units of 7th place of logs	Scale expressed as a ratio	x' (feet)	Scale in units of 7th place of logs	Scale expressed as a ratio
0	-361.9	0.9999167	175,000	-209.7	0.9999517
5,000	-361.8	0.9999167	180,000	-200.8	0.9999538
10,000	-361.4	0.9999168	185,000	-191.8	0.9999558
15,000	-360.8	0.9999169	190,000	-182.4	0.9999580
20,000	-359.9	0.9999171	195,000	-172.9	0.9999602
25,000	-358.8	0.9999174	200,000	-163.0	0.9999625
30,000	-357.4	0.9999177	205,000	-153.0	0.9999648
35,000	-355.8	0.9999181	210,000	-142.7	0.9999671
40,000	-353.9	0.9999185	215,000	-132.1	0.9999696
45,000	-351.8	0.9999190	220,000	-121.3	0.9999721
50,000	-349.5	0.9999195	225,000	-110.2	0.9999746
55,000	-346.9	0.9999201	230,000	-98.9	0.9999772
60,000	-344.0	0.9999208	235,000	-87.4	0.9999799
65,000	-340.9	0.9999215	240,000	-75.6	0.9999826
70,000	-337.5	0.9999223	245,000	-63.5	0.9999854
75,000	-333.9	0.9999231	250,000	-51.2	0.9999882
80,000	-330.1	0.9999240	255,000	-38.6	0.9999911
85,000	-326.0	0.9999249	260,000	-25.8	0.9999941
90,000	-321.6	0.9999259	265,000	-12.8	0.9999971
95,000	-317.0	0.9999270	270,000	+0.5	1.0000001
100,000	-312.2	0.9999281	275,000	+14.1	1.0000032
105,000	-307.1	0.9999293	280,000	+27.9	1.0000064
110,000	-301.7	0.9999305	285,000	+41.9	1.0000096
115,000	-296.2	0.9999318	290,000	+56.2	1.0000129
120,000	-290.3	0.9999332	295,000	+70.7	1.0000163
125,000	-284.2	0.9999346	300,000	+85.5	1.0000197
130,000	-277.9	0.9999360	305,000	+100.6	1.0000232
135,000	-271.3	0.9999375	310,000	+115.8	1.0000267
140,000	-264.5	0.9999391	315,000	+131.4	1.0000303
145,000	-257.4	0.9999407	320,000	+147.2	1.0000339
150,000	-250.0	0.9999424	325,000	+163.2	1.0000376
155,000	-242.5	0.9999442	330,000	+179.5	1.0000413
160,000	-234.6	0.9999460	335,000	+196.0	1.0000451
165,000	-226.6	0.9999478	340,000	+212.8	1.0000490
170,000	-218.2	0.9999498	345,000	+229.8	1.0000529

TRANSVERSE MERCATOR PROJECTION
NEW MEXICO
West Zone

x' (feet)	Scale in units of 7th place of logs	Scale expressed as a ratio
350,000	+247.1	1.0000569
355,000	+264.6	1.0000609
360,000	+282.4	1.0000650
365,000	+300.4	1.0000692
370,000	+318.7	1.0000734
375,000	+337.2	1.0000776
380,000	+356.0	1.0000820
385,000	+375.0	1.0000863
390,000	+394.2	1.0000908
395,000	+413.8	1.0000953
400,000	+433.5	1.0000998
405,000	+453.5	1.0001044
410,000	+473.8	1.0001090
415,000	+494.3	1.0001138
420,000	+515.0	1.0001186
425,000	+536.0	1.0001234
430,000	+557.3	1.0001283
435,000	+578.8	1.0001333
440,000	+600.6	1.0001383
445,000	+622.6	1.0001434
450,000	+644.8	1.0001485
455,000	+667.3	1.0001537
460,000	+690.0	1.0001589
465,000	+713.0	1.0001642
470,000	+736.3	1.0001695
475,000	+759.8	1.0001750
480,000	+783.5	1.0001804
485,000	+807.5	1.0001859
490,000	+831.7	1.0001915
495,000	+856.2	1.0001971
500,000	+880.9	1.0002028
505,000	+905.9	1.0002086
510,000	+931.1	1.0002144
515,000	+956.6	1.0002203
520,000	+982.4	1.0002262
525,000	+1008.3	1.0002322

CORRECTIONS TO NATURAL SCALE RATIOS*

(in units of the 7th decimal place)

For Lambert Projection				For Lambert or transverse Mercator Projection	
$\Delta\phi'$ as argument				Δy or Δx	Corr'n (Plus)
$\Delta\phi'$	Corr'n (Plus)	$\Delta\phi'$	Corr'n (Plus)		
1	0	31	34	10,000	0
2	0	32	36	20,000	0
3	0	33	38	30,000	1
4	1	34	40	40,000	2
5	1	35	43	50,000	2
6	1	36	45	60,000	3
7	2	37	48	70,000	5
8	2	38	51	80,000	6
9	3	39	53	90,000	8
10	4	40	56	100,000	10
11	4	41	59	110,000	11
12	5	42	62	120,000	14
13	6	43	65	130,000	16
14	7	44	68	140,000	19
15	8	45	71	150,000	21
16	9	46	74	160,000	24
17	10	47	77	170,000	27
18	11	48	81	180,000	31
19	13	49	84	190,000	34
20	14	50	88	200,000	38
21	15	51	91	210,000	42
22	17	52	95	220,000	46
23	19	53	98	230,000	50
24	20	54	102	240,000	55
25	22	55	106	250,000	59
26	24	56	110	260,000	64
27	26	57	114	270,000	69
28	27	58	118	280,000	74
29	29	59	122	290,000	80
30	32	60	126	300,000	86
$\Delta\phi'$ is the difference in latitude in minutes of the ends of the line.				310,000	91
				320,000	97
				330,000	103
				340,000	110
				350,000	116

*Scale ratio interpolated for mean latitude or mean x' of the ends of a line and corrected by the above table is a true mean value accurate to within one in the seventh decimal place.