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Coast and Geodetic Survey

Robert F. A. Studds, Director

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**PLANE COORDINATE PROJECTION TABLES
IDAHO**



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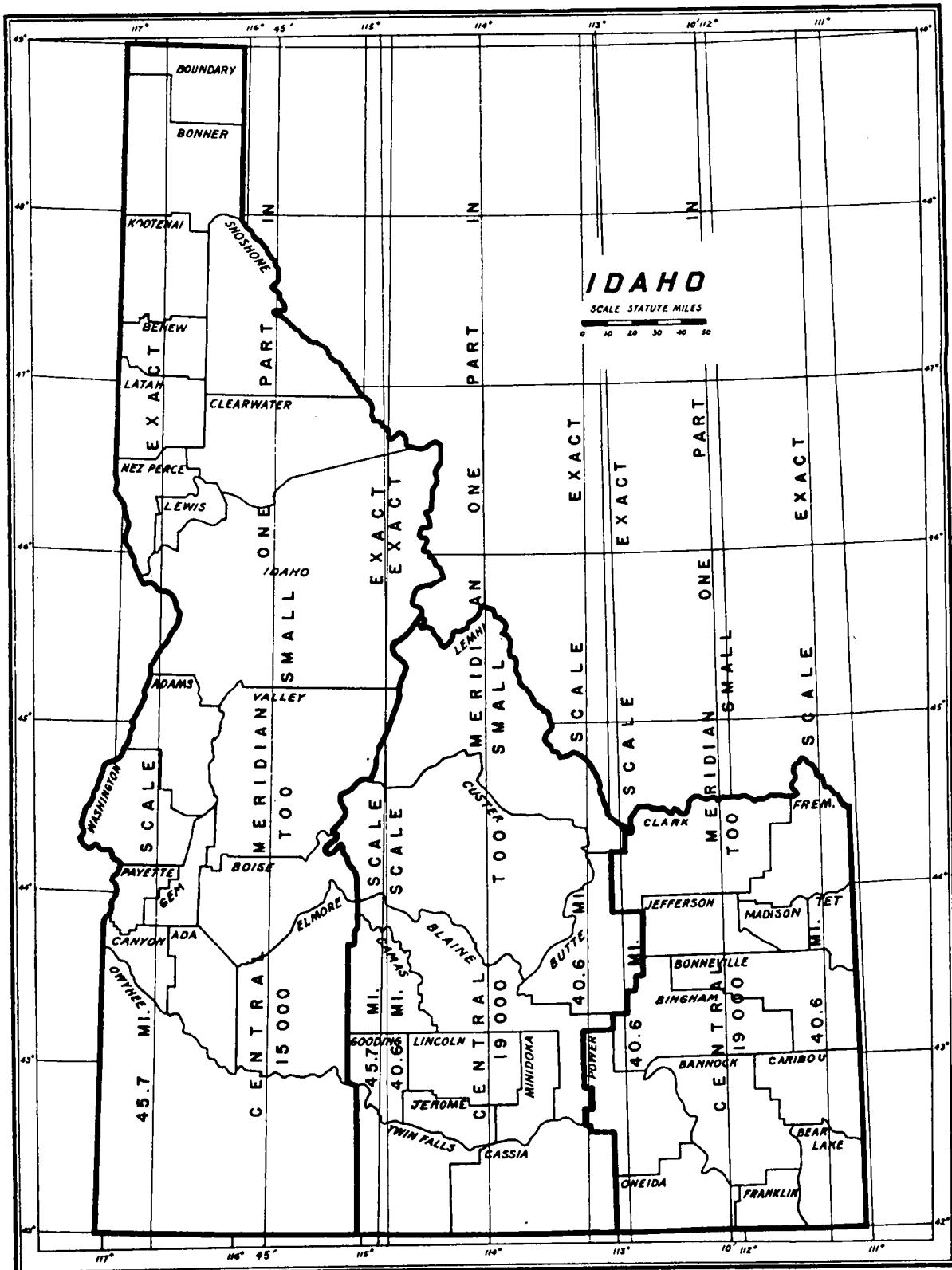
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Foreword

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

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

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

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 Idaho Zone East Central meridian $112^{\circ}10'00.000$

Station	<u>Walker, 1946</u>	<u>Pinhead, 1946</u>			
ϕ	<u>$43^{\circ}48'07.616$</u>	<u>$43^{\circ}35'26.260$</u>			
λ	<u>$111^{\circ}42'29.824$</u>	<u>$112^{\circ}22'35.516$</u>			
$\Delta\lambda = \text{Central mer.} - \lambda$	<u>$+0^{\circ}27'30.176$</u>	<u>$-0^{\circ}12'35.516$</u>			
$\Delta\lambda''$	<u>$+1,650.176$</u>	<u>-755.516</u>			
$\left(\frac{\Delta\lambda''}{100}\right)^2$	<u>272.308</u>	<u>57.080</u>			
H	<u>73.336 360</u>	<u>73.594 594</u>			
V	<u>1.230 701</u>	<u>1.230 273</u>			
a	<u>-0.357</u>	<u>+1.175</u>	<u>-0.418</u>	<u>+0.595</u>	
$x' = H \cdot \Delta\lambda \pm ab$	<u>+121,017.48</u>	<u>-55,601.64</u>			
$V \left(\frac{\Delta\lambda''}{100}\right)^2 \pm c$	<u>335.07</u>	<u>70.21</u>			
Tabular y	<u>778,234.67</u>	<u>701,147.74</u>			
x	<u>621,017.48</u>	<u>444,398.36</u>			
y	<u>778,569.74</u>	<u>701,217.95</u>			
$\Delta\alpha''$	<u>$+1,142.21$</u>	<u>-520.93</u>			
$\Delta\alpha$	<u>$+0^{\circ}19'02.2$</u>	<u>$-0^{\circ}08'40.9$</u>			
Geod. Az. to Az. Mk.	<u>53 26 16.7</u>	<u>200 33 42.8</u>			
Grid Az. to Az. Mk.	<u>53 07 14</u>	<u>200 42 24</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.
 $+$ increase $H \cdot \Delta\lambda$ numerically.

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

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES
(CALCULATING MACHINE COMPUTATION)

STATE - ZONE Idaho - East

Station Walker, 1946

X	621,017.48	Y	778,569.74
C	- 500,000.00	$P(\frac{X}{10,000})^2 + d$	- 335.08
X'	+ 121,017.48	Y_0	778,234.66
P	2.28775	Approx. $\Delta\lambda = X' \div H$	+ 1,650"
d	+ 0.03	$\Delta\lambda = (X' + ab) \div H$	+ 1,650."176
H	73.336 360	$\Delta\lambda$	+ 0° 27' 30."176
a b	- 0.357 + 1.1745	Central Meridian	112 10 00.000
φ	43° 48' 07".616	$\lambda = C.M. - \Delta\lambda$	111° 42' 29."824

Station Pinhead, 1946

X	444,398.36	Y	701,217.95
C	- 500,000.00	$P(\frac{X}{10,000})^2 + d$	- 70.21
X'	- 55,601.64	Y_0	701,147.74
P	2.27087	Approx. $\Delta\lambda = X' \div H$	- 756"
d	+ 0.01	$\Delta\lambda = (X' + ab) \div H$	- 755."516
H	73.594 594	$\Delta\lambda$	- 0° 12' 35."516
a b	- 0.418 + 0.595	Central Meridian	112 10 00.000
φ	43° 35' 26".260	$\lambda = C.M. - \Delta\lambda$	112° 22' 35."516

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 ab is $+$, decrease X' numerically
 $-$, increase X' numerically

Constants for Idaho

Constant	Zone		
	East	Central	West
Central Meridian	112° 10' 00"000	114° 00' 00"000	115° 45' 00"000
log R	-228.6	-228.6	-289.5
Scale reduction (Central Meridian)	1 : 19,000	1 : 19,000	1 : 15,000
$\log \left(\frac{1}{6\rho_0^2} \right) g$	4.580 6540 -20	4.580 6540 -20	4.580 4947 -20
$\log \left(\frac{1}{6\rho_0^2 \sin 1''} \right) g$	9.895 0791 -20	9.895 0791 -20	9.894 9198 -20
$\left(\frac{1}{6\rho_0^2 \sin 1''} \right) g$	0.7854×10^{-10}	0.7854×10^{-10}	0.7851×10^{-10}

TRANSVERSE MERCATOR PROJECTION
IDAHO
EAST AND CENTRAL ZONES

Lat.	y. feet	Δy. per second	H	ΔH per second	V	ΔV per second	a
41 40	0.00	101.213 33	75.897 083	326.33	1.223 306	1.40	1.000
41 41	6 0'2.80	101.213 50	75.877 503	326.43	1.223 390	1.40	- .995
41 42	12 145.61	101.213 83	75.857 917	326.55	1.223 474	1.38	- .989
41 43	18 218.44	101.214 17	75.838 324	326.66	1.223 557	1.38	- .984
41 44	24 291.29	101.214 50	75.818 724	326.75	1.223 640	1.38	- .979
41 45	30 364.16	101.214 83	75.799 119	326.88	1.223 723	1.36	- .974
41 46	36 437.05	101.215 00	75.779 506	326.96	1.223 805	1.36	- .968
41 47	42 509.95	101.215 33	75.759 888	327.08	1.223 887	1.35	- .963
41 48	48 582.87	101.215 67	75.740 263	327.20	1.223 968	1.35	- .958
41 49	54 655.81	101.216 00	75.720 631	327.30	1.224 049	1.33	- .952
41 50	60 728.77	101.216 17	75.700 993	327.41	1.224 129	1.33	- .947
41 51	66 801.74	101.216 50	75.681 348	327.51	1.224 209	1.33	- .942
41 52	72 874.73	101.217 00	75.661 697	327.61	1.224 289	1.31	- .937
41 53	78 947.75	101.217 17	75.642 040	327.73	1.224 368	1.30	- .931
41 54	85 020.78	101.217 33	75.622 376	327.85	1.224 446	1.31	- .926
41 55	91 093.82	101.217 83	75.602 706	327.95	1.224 525	1.30	- .921
41 56	97 166.89	101.218 00	75.583 029	328.05	1.224 603	1.28	- .916
41 57	103 239.97	101.218 33	75.563 346	328.16	1.224 680	1.28	- .911
41 58	109 313.07	101.218 67	75.543 656	328.26	1.224 757	1.28	- .905
41 59	115 386.19	101.218 83	75.523 960	328.36	1.224 834	1.26	- .900
42 00	121 459.32		75.504 258		1.224 910		- .895

TRANSVERSE MERCATOR PROJECTION
IDAHO
EAST AND CENTRAL ZONES

Lat.	y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
42 0 0	121 459.32	101.219 33	75.504 258	328.48	1.224 910	1.26	.895
42 0 1	127 532.48	101.219 50	75.484 549	328.58	1.224 986	1.25	.890
42 0 2	133 605.65	101.219 83	75.464 834	328.70	1.225 061	1.25	.885
42 0 3	139 678.84	101.220 00	75.445 112	328.80	1.225 136	1.25	.880
42 0 4	145 752.04	101.220 50	75.425 384	328.90	1.225 211	1.23	.875
42 0 5	151 825.27	101.220 67	75.405 650	329.01	1.225 285	1.21	.870
42 0 6	157 898.51	101.221 17	75.385 909	329.13	1.225 358	1.23	.864
42 0 7	163 971.76	101.221 33	75.366 161	329.21	1.225 432	1.20	.859
42 0 8	170 045.06	101.221 50	75.346 408	329.33	1.225 504	1.21	.854
42 0 9	176 118.35	101.222 00	75.326 648	329.45	1.225 577	1.20	.849
42 1 0	182 191.67	101.222 17	75.306 881	329.55	1.225 649	1.20	.844
42 1 1	188 265.00	101.222 50	75.287 108	329.65	1.225 721	1.18	.839
42 1 2	194 338.35	101.222 83	75.267 329	329.76	1.225 792	1.18	.834
42 1 3	200 411.72	101.223 17	75.247 543	329.86	1.225 863	1.16	.829
42 1 4	206 485.11	101.223 33	75.227 751	329.96	1.225 933	1.16	.824
42 1 5	212 558.51	101.223 83	75.207 953	330.08	1.226 003	1.16	.819
42 1 6	218 631.94	101.224 00	75.188 148	330.20	1.226 073	1.15	.813
42 1 7	224 705.38	101.224 17	75.168 336	330.28	1.226 142	1.15	.808
42 1 8	230 778.83	101.224 67	75.148 519	330.40	1.226 211	1.13	.803
42 1 9	236 852.31	101.224 83	75.128 695	330.51	1.226 279	1.13	.798
42 2 0	242 925.80	101.225 33	75.108 864	330.61	1.226 347	1.11	.793
42 2 1	248 999.32	101.225 50	75.089 027	330.73	1.226 414	1.11	.788
42 2 2	255 072.85	101.225 67	75.069 183	330.81	1.226 481	1.11	.783
42 2 3	261 146.39	101.226 17	75.049 334	330.93	1.226 548	1.10	.778
42 2 4	267 219.96	101.226 33	75.029 478	331.05	1.226 614	1.10	.773
42 2 5	273 293.54	101.226 67	75.009 615	331.15	1.226 680	1.10	.768
42 2 6	279 367.14	101.227 00	74.989 746	331.25	1.226 746	1.08	.762
42 2 7	285 440.76	101.227 33	74.969 871	331.36	1.226 811	1.06	.757
42 2 8	291 514.40	101.227 50	74.949 989	331.46	1.226 875	1.06	.752
42 2 9	297 588.05	101.228 00	74.930 101	331.56	1.226 939	1.06	.747
42 3 0	303 661.73	101.228 17	74.910 207	331.68	1.227 003	1.05	.742
42 3 1	309 735.42	101.228 50	74.890 306	331.78	1.227 066	1.05	.737
42 3 2	315 809.13	101.228 83	74.870 399	331.88	1.227 129	1.05	.732
42 3 3	321 882.86	101.229 00	74.850 486	332.00	1.227 192	1.03	.727
42 3 4	327 956.60	101.229 50	74.830 566	332.10	1.227 254	1.03	.722
42 3 5	334 030.37	101.229 67	74.810 640	332.20	1.227 316	1.01	.717
42 3 6	340 104.15	101.229 83	74.790 708	332.31	1.227 377	1.01	.711
42 3 7	346 177.94	101.230 33	74.770 769	332.43	1.227 438	1.00	.706
42 3 8	352 251.76	101.230 67	74.750 823	332.51	1.227 498	1.00	.701
42 3 9	358 325.60	101.230 83	74.730 872	332.63	1.227 558	1.00	.696
42 4 0	364 399.45	101.231 17	74.710 914	332.75	1.227 618	.98	.691
42 4 1	370 473.32	101.231 33	74.690 950	332.85	1.227 677	.98	.686
42 4 2	376 547.20	101.231 83	74.670 979	332.95	1.227 736	.96	.681
42 4 3	382 621.11	101.232 17	74.651 002	333.06	1.227 794	.96	.676
42 4 4	388 695.04	101.232 33	74.631 018	333.15	1.227 852	.96	.671
42 4 5	394 768.98	101.232 67	74.611 029	333.26	1.227 910	.95	.666
42 4 6	400 842.94	101.233 00	74.591 033	333.38	1.227 967	.93	.661
42 4 7	406 916.92	101.233 33	74.571 030	333.46	1.228 023	.95	.656
42 4 8	412 990.92	101.233 50	74.551 022	333.50	1.228 080	.93	.651
42 4 9	419 064.93	101.233 83	74.531 006	333.68	1.228 136	.91	.646
42 5 0	425 138.96	101.234 17	74.510 985	333.80	1.228 191	.91	.641
42 5 1	431 213.01	101.234 50	74.490 957	333.90	1.228 246	.91	.636
42 5 2	437 287.08	101.234 83	74.470 923	334.01	1.228 301	.90	.631
42 5 3	443 361.17	101.235 00	74.450 882	334.10	1.228 355	.90	.626
42 5 4	449 435.27	101.235 33	74.430 836	334.21	1.228 409	.88	.621
42 5 5	455 509.39	101.235 67	74.410 783	334.35	1.228 462	.88	.616
42 5 6	461 583.53	101.235 83	74.390 723	334.43	1.228 515	.88	.611
42 5 7	467 657.68	101.236 33	74.370 657	334.53	1.228 568	.86	.606
42 5 8	473 731.86	101.236 50	74.350 585	334.63	1.228 620	.86	.601
42 5 9	479 806.05	101.237 00	74.330 507	334.75	1.228 672	.85	.596
43 0 0	485 880.27		74.310 422		1.228 723		- .591

TRANSVERSE MERCATOR PROJECTION
IDAHO
EAST AND CENTRAL ZONES

Lat.	y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
43 00	485 880.27	101.237 17	74.310 422	334.85	1.228 723	.85	.591
43 01	491 954.50	101.237 50	74.290 331	334.96	1.228 774	.85	.586
43 02	498 028.75	101.237 67	74.270 233	335.05	1.228 825	.83	.581
43 03	504 103.01	101.238 17	74.250 130	335.16	1.228 875	.83	.576
43 04	510 177.30	101.238 33	74.230 020	335.28	1.228 925	.81	.571
43 05	516 251.60	101.238 50	74.209 903	335.36	1.228 974	.81	.566
43 06	522 325.91	101.239 00	74.189 781	335.48	1.229 023	.80	.561
43 07	528 400.25	101.239 17	74.169 652	335.60	1.229 071	.80	.556
43 08	534 474.60	101.239 67	74.149 516	335.68	1.229 119	.80	.551
43 09	540 548.98	101.239 83	74.129 375	335.80	1.229 167	.78	.546
43 10	546 623.37	101.240 17	74.109 227	335.90	1.229 214	.78	.541
43 11	552 697.78	101.240 50	74.089 073	336.01	1.229 261	.76	.536
43 12	558 772.21	101.240 67	74.068 912	336.10	1.229 307	.76	.531
43 13	564 846.65	101.241 00	74.048 746	336.21	1.229 353	.75	.526
43 14	570 921.11	101.241 33	74.028 573	336.33	1.229 398	.75	.521
43 15	576 995.59	101.241 67	74.008 393	336.41	1.229 443	.75	.517
43 16	583 070.09	101.242 00	73.988 208	336.53	1.229 488	.73	.512
43 17	589 144.61	101.242 33	73.968 016	336.65	1.229 532	.73	.507
43 18	595 219.15	101.242 50	73.947 817	336.73	1.229 576	.71	.502
43 19	601 293.70	101.242 83	73.927 613	336.85	1.229 619	.71	.497
43 20	607 368.27	101.243 17	73.907 402	336.95	1.229 662	.71	.492
43 21	613 442.85	101.243 33	73.887 185	337.06	1.229 705	.70	.487
43 22	619 517.46	101.243 83	73.866 961	337.16	1.229 747	.68	.482
43 23	625 592.09	101.244 00	73.846 731	337.26	1.229 788	.70	.478
43 24	631 666.75	101.244 33	73.826 495	337.36	1.229 830	.68	.473
43 25	637 741.39	101.244 67	73.806 253	337.48	1.229 871	.66	.468
43 26	643 816.07	101.245 00	73.786 004	337.58	1.229 911	.66	.463
43 27	649 890.77	101.245 17	73.765 749	337.68	1.229 951	.66	.458
43 28	655 965.48	101.245 50	73.745 488	337.78	1.229 991	.65	.454
43 29	662 040.21	101.245 83	73.725 221	337.90	1.230 030	.65	.449
43 30	668 114.96	101.246 17	73.704 947	338.00	1.230 069	.65	.444
43 31	674 189.73	101.246 50	73.684 667	338.11	1.230 108	.63	.439
43 32	680 264.52	101.246 67	73.664 380	338.20	1.230 146	.61	.434
43 33	686 339.32	101.247 00	73.644 088	338.31	1.230 183	.63	.430
43 34	692 414.14	101.247 33	73.623 789	338.41	1.230 221	.60	.425
43 35	698 488.98	101.247 67	73.603 484	338.53	1.230 257	.61	.420
43 36	704 563.84	101.248 00	73.583 172	338.63	1.230 294	.60	.415
43 37	710 638.72	101.248 17	73.562 854	338.71	1.230 330	.58	.410
43 38	716 713.61	101.248 67	73.542 531	338.85	1.230 365	.58	.406
43 39	722 788.53	101.248 83	73.522 200	338.93	1.230 400	.58	.401
43 40	728 863.46	101.249 17	73.501 864	339.05	1.230 435	.56	.396
43 41	734 938.41	101.249 33	73.481 521	339.13	1.230 469	.56	.391
43 42	741 013.37	101.249 83	73.461 173	339.26	1.230 503	.55	.386
43 43	747 088.36	101.250 00	73.440 817	339.35	1.230 536	.55	.382
43 44	753 163.36	101.250 33	73.420 456	339.45	1.230 569	.55	.377
43 45	759 238.38	101.250 67	73.400 089	339.56	1.230 602	.53	.372
43 46	765 313.42	101.250 83	73.379 715	339.66	1.230 634	.51	.367
43 47	771 388.47	101.251 17	73.359 335	339.78	1.230 665	.53	.362
43 48	777 463.54	101.251 50	73.338 948	339.86	1.230 697	.51	.358
43 49	783 538.63	101.251 83	73.318 556	339.98	1.230 728	.50	.353
43 50	789 613.74	101.252 17	73.298 157	340.08	1.230 758	.50	.348
43 51	795 688.87	101.252 50	73.277 752	340.18	1.230 788	.50	.343
43 52	801 764.02	101.252 67	73.257 341	340.30	1.230 818	.48	.338
43 53	807 839.18	101.253 17	73.236 923	340.40	1.230 847	.48	.334
43 54	813 914.37	101.253 33	73.216 499	340.50	1.230 876	.48	.329
43 55	819 989.57	101.253 50	73.196 069	340.60	1.230 905	.46	.324
43 56	826 064.78	101.254 00	73.175 633	340.70	1.230 933	.46	.319
43 57	832 140.02	101.254 17	73.155 191	340.81	1.230 961	.45	.314
43 58	838 215.27	101.254 50	73.134 742	340.91	1.230 988	.45	.310
43 59	844 290.54	101.254 83	73.114 287	341.01	1.231 015	.43	.305
44 00	850 365.83		73.093 826		1.231 041		.300

TRANSVERSE MERCATOR PROJECTION
IDAHO
EAST AND CENTRAL ZONES

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a	
44	U 0	850	365.83	101.255 17	73.093 826	341.11	1.231 041	.43	-.300
44	U 1	856	441.14	101.255 50	73.073 359	341.23	1.231 067	.41	-.295
44	U 2	662	516.47	101.255 67	73.052 885	341.33	1.231 092	.41	-.290
44	U 3	868	591.81	101.256 00	73.032 405	341.43	1.231 117	.41	-.286
44	U 4	674	667.17	101.256 33	73.011 919	341.53	1.231 142	.40	-.281
44	U 5	880	742.55	101.256 67	72.991 427	341.65	1.231 166	.40	-.276
44	U 6	886	817.95	101.257 00	72.970 928	341.75	1.231 190	.38	-.271
44	U 7	892	893.37	101.257 17	72.950 423	341.85	1.231 213	.38	-.266
44	U 8	898	968.80	101.257 50	72.929 912	341.95	1.231 236	.38	-.262
44	U 9	905	044.25	101.257 83	72.909 395	348.05	1.231 259	.36	-.257
44	1 0	911	119.72	101.258 17	72.888 872	348.16	1.231 281	.36	-.252
44	1 1	917	195.21	101.258 50	72.868 342	342.25	1.231 303	.35	-.247
44	1 2	923	270.72	101.258 67	72.847 807	342.36	1.231 324	.35	-.242
44	1 3	929	346.24	101.259 00	72.827 265	342.46	1.231 345	.35	-.238
44	1 4	935	421.78	101.259 33	72.806 717	342.58	1.231 366	.33	-.233
44	1 5	941	497.34	101.259 67	72.786 162	342.66	1.231 386	.31	-.228
44	1 6	947	572.92	101.260 00	72.765 602	342.78	1.231 405	.33	-.223
44	1 7	953	648.52	101.260 17	72.745 035	342.88	1.231 425	.30	-.218
44	1 8	959	724.13	101.260 50	72.724 462	342.98	1.231 443	.31	-.214
44	1 9	965	799.76	101.260 83	72.703 883	343.08	1.231 462	.30	-.209
44	2 0	971	875.41	101.261 17	72.683 298	343.20	1.231 480	.30	-.204
44	2 1	977	951.08	101.261 33	72.662 706	343.28	1.231 498	.28	-.199
44	2 2	984	026.76	101.261 83	72.642 109	343.40	1.231 515	.28	-.195
44	2 3	990	102.47	101.262 00	72.621 505	343.50	1.231 532	.26	-.190
44	2 4	996	178.19	101.262 33	72.600 895	343.60	1.231 548	.26	-.185
44	2 5	1 002	253.93	101.262 67	72.580 279	343.71	1.231 564	.26	-.181
44	2 6	1 008	329.69	101.262 83	72.559 656	343.80	1.231 580	.25	-.176
44	2 7	1 014	405.46	101.263 33	72.539 028	343.91	1.231 595	.25	-.171
44	2 8	1 020	481.26	101.263 50	72.518 393	344.01	1.231 610	.23	-.166
44	2 9	1 026	557.07	101.263 83	72.497 752	344.11	1.231 624	.23	-.162
44	3 0	1 032	632.90	101.264 17	72.477 105	344.21	1.231 638	.21	-.157
44	3 1	1 038	708.75	101.264 33	72.456 458	344.33	1.231 651	.23	-.152
44	3 2	1 044	784.61	101.264 83	72.435 792	344.41	1.231 665	.20	-.148
44	3 3	1 050	860.50	101.265 00	72.415 127	344.53	1.231 677	.20	-.143
44	3 4	1 056	936.40	101.265 33	72.394 455	344.63	1.231 689	.20	-.138
44	3 5	1 063	012.32	101.265 67	72.373 777	344.73	1.231 701	.20	-.134
44	3 6	1 069	088.26	101.265 83	72.353 093	344.83	1.231 713	.18	-.129
44	3 7	1 075	164.21	101.266 17	72.332 403	344.95	1.231 724	.16	-.124
44	3 8	1 081	240.18	101.266 50	72.311 706	345.03	1.231 734	.16	-.119
44	3 9	1 087	316.17	101.266 83	72.291 004	345.15	1.231 744	.16	-.115
44	4 0	1 093	392.18	101.267 17	72.270 295	345.25	1.231 754	.15	-.110
44	4 1	1 099	468.21	101.267 50	72.249 580	345.35	1.231 763	.15	-.105
44	4 2	1 105	544.26	101.267 67	72.228 859	345.45	1.231 778	.13	-.101
44	4 3	1 111	620.32	101.268 00	72.208 132	345.55	1.231 780	.13	-.096
44	4 4	1 117	696.40	101.268 33	72.187 399	345.66	1.231 788	.13	-.091
44	4 5	1 123	772.50	101.268 67	72.166 659	345.75	1.231 796	.11	-.087
44	4 6	1 129	848.62	101.269 00	72.145 914	345.86	1.231 803	.11	-.082
44	4 7	1 135	924.76	101.269 17	72.125 162	345.96	1.231 810	.10	-.077
44	4 8	1 142	000.91	101.269 50	72.104 404	346.06	1.231 816	.10	-.072
44	4 9	1 148	077.08	101.269 83	72.083 640	346.16	1.231 822	.10	-.068
44	5 0	1 154	153.27	101.270 17	72.062 870	346.26	1.231 828	.08	-.063
44	5 1	1 160	229.48	101.270 50	72.042 094	346.38	1.231 833	.08	-.058
44	5 2	1 166	305.71	101.270 67	72.021 311	346.46	1.231 838	.08	-.054
44	5 3	1 172	381.95	101.271 00	72.000 583	346.58	1.231 843	.06	-.049
44	5 4	1 178	458.21	101.271 33	71.979 728	346.68	1.231 847	.05	-.044
44	5 5	1 184	534.49	101.271 67	71.958 927	346.78	1.231 850	.06	-.040
44	5 6	1 190	610.79	101.272 00	71.938 120	346.88	1.231 854	.03	-.035
44	5 7	1 196	687.11	101.272 17	71.917 307	346.98	1.231 856	.05	-.030
44	5 8	1 202	763.44	101.272 50	71.896 488	347.10	1.231 859	.03	-.025
44	5 9	1 208	839.79	101.272 83	71.875 662	347.18	1.231 861	.01	-.021
45	0 0	1 214	916.16		71.854 831		1.231 862		-.016

TRANSVERSE MERCATOR PROJECTION
IDAHO
EAST AND CENTRAL ZONES

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
45 0 0	1	214 916.16	101.273 17	71.854 831	347.30	1.231 862	.01	.016
45 0 1	1	220 992.55	101.273 50	71.833 993	347.38	1.231 863	.00	.011
45 0 2	1	227 068.96	101.273 67	71.813 150	347.50	1.231 863	.01	.007
45 0 3	1	233 145.38	101.274 00	71.792 300	347.60	1.231 864	.01	.002
45 0 4	1	239 221.82	101.274 33	71.771 444	347.70	1.231 863	.00	.003
45 0 5	1	245 298.28	101.274 67	71.750 582	347.80	1.231 863	.01	.008
45 0 6	1	251 374.76	101.275 00	71.729 714	347.91	1.231 862	.00	.012
45 0 7	1	257 451.26	101.275 17	71.708 839	348.00	1.231 860	.03	.017
45 0 8	1	263 527.77	101.275 50	71.687 959	348.10	1.231 858	.03	.022
45 0 9	1	269 604.30	101.275 83	71.667 073	348.21	1.231 856	.05	.026
45 1 0	1	275 680.85	101.276 17	71.646 180	348.31	1.231 853	.05	.031
45 1 1	1	281 757.42	101.276 33	71.625 281	348.41	1.231 850	.06	.036
45 1 2	1	287 834.00	101.276 83	71.604 376	348.50	1.231 846	.06	.040
45 1 3	1	293 910.61	101.277 00	71.583 466	348.61	1.231 842	.06	.045
45 1 4	1	299 987.23	101.277 33	71.562 549	348.71	1.231 838	.08	.049
45 1 5	1	306 063.87	101.277 67	71.541 626	348.83	1.231 833	.08	.054
45 1 6	1	312 140.53	101.278 00	71.520 696	348.91	1.231 828	.10	.059
45 1 7	1	318 217.21	101.278 17	71.499 761	349.01	1.231 822	.10	.063
45 1 8	1	324 293.90	101.278 50	71.478 820	349.13	1.231 816	.10	.068
45 1 9	1	330 370.61	101.278 83	71.457 872	349.21	1.231 810	.11	.072
45 2 0	1	336 447.34	101.279 17	71.436 919	349.33	1.231 803	.11	.077
45 2 1	1	342 524.09	101.279 50	71.415 959	349.41	1.231 796	.13	.082
45 2 2	1	348 600.86	101.279 67	71.394 994	349.53	1.231 788	.13	.086
45 2 3	1	354 677.64	101.280 00	71.374 022	349.63	1.231 780	.15	.091
45 2 4	1	360 754.44	101.280 33	71.353 044	349.73	1.231 771	.15	.095
45 2 5	1	366 831.26	101.280 67	71.332 060	349.83	1.231 762	.15	.100
45 2 6	1	372 908.10	101.281 00	71.311 070	349.93	1.231 753	.16	.105
45 2 7	1	378 984.90	101.281 17	71.290 074	350.03	1.231 743	.16	.109
45 2 8	1	385 061.83	101.281 50	71.269 072	350.13	1.231 733	.18	.114
45 2 9	1	391 138.72	101.281 83	71.248 064	350.23	1.231 722	.18	.118
45 3 0	1	397 215.63	101.282 17	71.227 050	350.33	1.231 711	.20	.123
45 3 1	1	403 292.56	101.282 50	71.206 030	350.45	1.231 699	.18	.128
45 3 2	1	409 369.51	101.282 67	71.185 003	350.53	1.231 688	.21	.132
45 3 3	1	415 446.47	101.283 00	71.163 971	350.65	1.231 675	.21	.137
45 3 4	1	421 523.45	101.283 33	71.142 932	350.73	1.231 662	.21	.141
45 3 5	1	427 600.45	101.283 67	71.121 888	350.85	1.231 649	.21	.146
45 3 6	1	433 677.47	101.283 83	71.100 837	350.95	1.231 636	.23	.151
45 3 7	1	439 754.50	101.284 33	71.079 780	351.03	1.231 622	.25	.155
45 3 8	1	445 831.56	101.284 50	71.058 718	351.15	1.231 607	.25	.160
45 3 9	1	451 908.63	101.284 83	71.037 649	351.25	1.231 592	.25	.164
45 4 0	1	457 985.72	101.285 17	71.016 574	351.35	1.231 577	.26	.169
45 4 1	1	464 062.83	101.285 50	70.995 493	351.45	1.231 561	.26	.174
45 4 2	1	470 139.96	101.285 67	70.974 406	351.55	1.231 545	.26	.178
45 4 3	1	476 217.10	101.286 00	70.953 313	351.66	1.231 529	.28	.183
45 4 4	1	482 294.26	101.286 33	70.932 213	351.75	1.231 512	.30	.187
45 4 5	1	488 371.44	101.286 67	70.911 108	351.85	1.231 494	.30	.192
45 4 6	1	494 448.64	101.287 00	70.889 997	351.95	1.231 476	.30	.196
45 4 7	1	500 525.86	101.287 17	70.868 880	352.06	1.231 458	.30	.201
45 4 8	1	506 603.09	101.287 50	70.847 756	352.15	1.231 440	.33	.205
45 4 9	1	512 680.34	101.287 83	70.826 627	352.25	1.231 420	.31	.210
45 5 0	1	518 757.61	101.288 17	70.805 492	352.35	1.231 401	.33	.214
45 5 1	1	524 834.90	101.288 50	70.784 351	352.45	1.231 381	.33	.219
45 5 2	1	530 912.21	101.288 67	70.763 204	352.56	1.231 361	.35	.223
45 5 3	1	536 989.53	101.289 17	70.742 050	352.65	1.231 340	.35	.228
45 5 4	1	543 066.88	101.289 33	70.720 891	352.75	1.231 319	.36	.232
45 5 5	1	549 144.24	101.289 50	70.699 726	352.85	1.231 297	.36	.237
45 5 6	1	555 221.61	101.290 00	70.678 555	352.96	1.231 275	.36	.242
45 5 7	1	561 299.01	101.290 17	70.657 377	353.05	1.231 253	.38	.246
45 5 8	1	567 376.42	101.290 50	70.636 194	353.16	1.231 230	.38	.251
45 5 9	1	573 453.85	101.291 00	70.615 004	353.25	1.231 207	.40	.255
46 0 0	1	579 531.31		70.593 809		1.231 183		+ .260

TRANSVERSE MERCATOR PROJECTION
IDAHO
WEST ZONE

Lat.	y_0 feet	Δy_0 per second	H	ΔH per second	V	ΔV per second	a
41 40	0.00	101.211 83	75.896 018	326.33	1.223 288	1.40	-1.000
41 41	6 072.71	101.212 17	75.876 438	326.43	1.223 372	1.40	-.995
41 42	12 145.44	101.212 50	75.856 852	326.55	1.223 456	1.38	-.989
41 43	18 218.19	101.212 67	75.837 259	326.65	1.223 539	1.38	-.984
41 44	24 290.95	101.213 00	75.817 660	326.75	1.223 622	1.38	-.979
41 45	30 363.73	101.213 33	75.798 055	326.88	1.223 705	1.36	-.974
41 46	36 436.53	101.213 67	75.778 442	326.96	1.223 787	1.36	-.968
41 47	42 509.35	101.214 00	75.758 824	327.06	1.223 869	1.35	-.963
41 48	48 582.19	101.214 17	75.739 199	327.18	1.223 950	1.35	-.958
41 49	54 655.04	101.214 50	75.719 568	327.30	1.224 031	1.33	-.952
41 50	60 727.91	101.214 83	75.699 930	327.40	1.224 111	1.33	-.947
41 51	66 800.80	101.215 17	75.680 286	327.51	1.224 191	1.33	-.942
41 52	72 873.71	101.215 50	75.660 635	327.61	1.224 271	1.31	-.937
41 53	78 946.64	101.215 67	75.640 978	327.73	1.224 350	1.30	-.931
41 54	85 019.58	101.216 00	75.621 314	327.83	1.224 428	1.31	-.926
41 55	91 092.54	101.216 33	75.601 644	327.93	1.224 507	1.30	-.921
41 56	97 165.52	101.216 67	75.581 968	328.05	1.224 585	1.28	-.916
41 57	103 238.52	101.216 83	75.562 285	328.15	1.224 662	1.28	-.911
41 58	109 311.53	101.217 33	75.542 596	328.26	1.224 739	1.28	-.905
41 59	115 384.57	101.217 50	75.522 900	328.36	1.224 816	1.26	-.900
42 00	121 457.62		75.503 198		1.224 892		-.895

TRANSVERSE MERCATOR PROJECTION
IDAHO
WEST ZONE

Lat.	y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
42 0 0	121 457.62	101.217 83	75.503 198	328.48	1.224 892	1.26	-.895
42 0 1	127 530.69	101.218 00	75.483 489	328.58	1.224 968	1.25	-.890
42 0 2	133 603.77	101.218 50	75.463 774	328.68	1.225 043	1.25	-.885
42 0 3	139 676.88	101.218 67	75.444 053	328.80	1.225 118	1.25	-.880
42 0 4	145 750.00	101.219 00	75.424 325	328.90	1.225 193	1.23	-.875
42 0 5	151 823.14	101.219 33	75.404 591	329.01	1.225 267	1.21	-.870
42 0 6	157 896.30	101.219 67	75.384 850	329.11	1.225 340	1.23	-.864
42 0 7	163 969.48	101.219 83	75.365 103	329.21	1.225 414	1.20	-.859
42 0 8	170 042.67	101.220 17	75.345 350	329.33	1.225 486	1.21	-.854
42 0 9	176 115.88	101.220 50	75.325 590	329.43	1.225 559	1.20	-.849
42 1 0	182 189.11	101.220 83	75.305 824	329.55	1.225 631	1.20	-.844
42 1 1	188 262.36	101.221 00	75.286 051	329.65	1.225 703	1.18	-.839
42 1 2	194 335.62	101.221 50	75.266 272	329.75	1.225 774	1.18	-.834
42 1 3	200 408.91	101.221 67	75.246 487	329.86	1.225 845	1.16	-.829
42 1 4	206 482.21	101.222 00	75.226 695	329.96	1.225 915	1.16	-.824
42 1 5	212 555.53	101.222 33	75.206 897	330.08	1.225 985	1.16	-.819
42 1 6	218 628.87	101.222 50	75.187 092	330.18	1.226 055	1.15	-.813
42 1 7	224 702.22	101.222 83	75.167 281	330.28	1.226 184	1.15	-.808
42 1 8	230 775.59	101.223 33	75.147 464	330.40	1.226 193	1.13	-.803
42 1 9	236 848.99	101.223 50	75.127 640	330.50	1.226 261	1.13	-.798
42 2 0	242 922.40	101.223 67	75.107 810	330.61	1.226 329	1.11	-.793
42 2 1	248 995.82	101.224 17	75.087 973	330.71	1.226 396	1.11	-.788
42 2 2	255 069.27	101.224 33	75.068 130	330.81	1.226 463	1.11	-.783
42 2 3	261 142.73	101.224 67	75.048 281	330.93	1.226 530	1.10	-.778
42 2 4	267 216.21	101.225 00	75.028 425	331.03	1.226 596	1.10	-.773
42 2 5	273 289.71	101.225 17	75.008 563	331.15	1.226 662	1.10	-.768
42 2 6	279 363.22	101.225 67	74.988 694	331.25	1.226 728	1.08	-.762
42 2 7	285 436.76	101.225 83	74.968 819	331.35	1.226 793	1.06	-.757
42 2 8	291 510.31	101.226 17	74.948 938	331.46	1.226 857	1.06	-.752
42 2 9	297 583.88	101.226 50	74.929 050	331.56	1.226 921	1.06	-.747
42 3 0	303 657.47	101.226 67	74.909 156	331.68	1.226 985	1.05	-.742
42 3 1	309 731.07	101.227 17	74.889 255	331.76	1.227 048	1.05	-.737
42 3 2	315 804.70	101.227 33	74.869 349	331.90	1.227 111	1.05	-.732
42 3 3	321 878.34	101.227 67	74.849 435	331.98	1.227 174	1.03	-.727
42 3 4	327 952.00	101.228 00	74.829 516	332.10	1.227 236	1.03	-.722
42 3 5	334 025.68	101.228 17	74.809 590	332.20	1.227 298	1.01	-.717
42 3 6	340 099.37	101.228 67	74.789 658	332.31	1.227 359	1.01	-.711
42 3 7	346 173.09	101.228 83	74.769 719	332.41	1.227 420	1.00	-.706
42 3 8	352 246.82	101.229 17	74.749 774	332.51	1.227 480	1.00	-.701
42 3 9	358 320.57	101.229 33	74.729 823	332.63	1.227 540	1.00	-.696
42 4 0	364 394.35	101.229 83	74.709 865	332.73	1.227 600	.98	-.691
42 4 1	370 468.12	101.230 00	74.689 901	332.83	1.227 659	.98	-.686
42 4 2	376 541.92	101.230 33	74.669 931	332.95	1.227 718	.96	-.681
42 4 3	382 615.74	101.230 67	74.649 954	333.05	1.227 776	.96	-.676
42 4 4	388 689.58	101.231 00	74.629 971	333.16	1.227 834	.96	-.671
42 4 5	394 763.44	101.231 33	74.609 981	333.26	1.227 892	.95	-.666
42 4 6	400 837.32	101.231 50	74.589 985	333.36	1.227 949	.93	-.661
42 4 7	406 911.21	101.231 83	74.569 983	333.46	1.228 005	.95	-.656
42 4 8	412 985.12	101.232 17	74.549 975	333.58	1.228 062	.93	-.651
42 4 9	419 059.05	101.232 33	74.529 960	333.68	1.228 118	.91	-.646
42 5 0	425 132.99	101.232 83	74.509 939	333.80	1.228 173	.91	-.641
42 5 1	431 206.96	101.233 00	74.489 911	333.88	1.228 228	.91	-.636
42 5 2	437 280.94	101.233 33	74.469 878	334.01	1.228 283	.90	-.631
42 5 3	443 354.94	101.233 67	74.449 837	334.10	1.228 337	.90	-.626
42 5 4	449 428.96	101.234 00	74.429 791	334.21	1.228 391	.88	-.621
42 5 5	455 503.00	101.234 17	74.409 738	334.31	1.228 444	.88	-.616
42 5 6	461 577.05	101.234 50	74.389 679	334.43	1.228 497	.88	-.611
42 5 7	467 651.12	101.234 83	74.369 613	334.51	1.228 550	.86	-.606
42 5 8	473 725.21	101.235 17	74.349 542	334.65	1.228 602	.86	-.601
42 5 9	479 799.32	101.235 50	74.329 463	334.73	1.228 654	.85	-.596
43 0 0	485 873.45		74.309 379		1.228 705		-.591

TRANSVERSE MERCATOR PROJECTION
IDAHO
WEST ZONE

Lat.	y. feet	$\Delta y.$ per second	H	ΔH per second	V	ΔV per second	a
43 00	485 873.45	101.255 67	74.309 379	334.85	1.228 705	.85	-.591
43 01	491 947.59	101.256 00	74.289 288	334.95	1.228 756	.85	-.586
43 02	498 021.75	101.256 33	74.269 191	335.05	1.228 807	.83	-.581
43 03	504 095.95	101.256 67	74.249 088	335.16	1.228 857	.83	-.576
43 04	510 170.15	101.257 00	74.228 978	335.26	1.228 907	.81	-.571
43 05	516 244.35	101.257 17	74.208 862	335.38	1.228 956	.81	-.566
43 06	522 318.58	101.257 50	74.188 739	335.46	1.229 005	.80	-.561
43 07	528 392.83	101.257 83	74.168 611	335.58	1.229 053	.80	-.556
43 08	534 467.10	101.258 17	74.148 476	335.68	1.229 101	.80	-.551
43 09	540 541.39	101.258 50	74.128 335	335.80	1.229 149	.78	-.546
43 10	546 615.70	101.258 67	74.108 187	335.90	1.229 196	.78	-.541
43 11	552 690.02	101.259 00	74.088 033	336.00	1.229 243	.76	-.536
43 12	558 764.36	101.259 33	74.067 873	336.10	1.229 289	.76	-.531
43 13	564 838.72	101.259 67	74.047 707	336.21	1.229 335	.75	-.526
43 14	570 913.10	101.240 00	74.027 534	336.31	1.229 380	.75	-.521
43 15	576 987.50	101.240 17	74.007 355	336.41	1.229 425	.75	-.517
43 16	583 061.91	101.240 50	73.987 170	336.55	1.229 470	.73	-.512
43 17	589 136.34	101.240 83	73.966 978	336.65	1.229 514	.73	-.507
43 18	595 210.79	101.241 17	73.946 780	336.75	1.229 558	.71	-.502
43 19	601 285.26	101.241 33	73.926 576	336.85	1.229 601	.71	-.497
43 20	607 359.74	101.241 83	73.906 365	336.95	1.229 644	.71	-.492
43 21	613 434.25	101.242 00	73.886 148	337.05	1.229 687	.70	-.487
43 22	619 508.77	101.242 33	73.865 925	337.16	1.229 729	.68	-.482
43 23	625 583.31	101.242 67	73.845 695	337.26	1.229 770	.70	-.478
43 24	631 657.87	101.242 83	73.825 459	337.36	1.229 812	.68	-.473
43 25	637 732.44	101.243 17	73.805 217	337.48	1.229 853	.66	-.468
43 26	643 807.03	101.243 67	73.784 968	337.56	1.229 893	.66	-.463
43 27	649 881.65	101.243 83	73.764 714	337.68	1.229 933	.66	-.458
43 28	655 956.28	101.244 00	73.744 453	337.78	1.229 973	.65	-.454
43 29	662 030.92	101.244 50	73.724 186	337.90	1.230 012	.65	-.449
43 30	668 105.59	101.244 67	73.703 912	338.00	1.230 051	.65	-.444
43 31	674 180.27	101.245 00	73.683 632	338.10	1.230 090	.63	-.439
43 32	680 254.97	101.245 33	73.663 346	338.20	1.230 128	.61	-.434
43 33	686 329.69	101.245 67	73.643 054	338.31	1.230 165	.63	-.430
43 34	692 404.43	101.245 83	73.622 755	338.41	1.230 203	.60	-.425
43 35	698 479.18	101.246 17	73.602 450	338.51	1.230 239	.61	-.420
43 36	704 553.95	101.246 50	73.582 139	338.61	1.230 276	.60	-.415
43 37	710 628.74	101.246 83	73.561 822	338.73	1.230 312	.58	-.410
43 38	716 703.55	101.247 17	73.541 498	338.85	1.230 347	.58	-.405
43 39	722 778.38	101.247 50	73.521 168	338.95	1.230 382	.58	-.401
43 40	728 853.25	101.247 67	73.500 832	339.05	1.230 417	.56	-.396
43 41	734 928.09	101.248 00	73.480 490	339.15	1.230 451	.56	-.391
43 42	741 002.97	101.248 33	73.460 141	339.25	1.230 485	.55	-.386
43 43	747 077.87	101.248 67	73.439 786	339.35	1.230 518	.55	-.382
43 44	753 152.79	101.248 83	73.419 425	339.45	1.230 551	.55	-.377
43 45	759 227.72	101.249 17	73.399 058	339.56	1.230 584	.53	-.372
43 46	765 302.67	101.249 50	73.378 684	339.65	1.230 616	.51	-.367
43 47	771 377.64	101.249 83	73.358 305	339.76	1.230 647	.53	-.362
43 48	777 452.63	101.250 17	73.337 919	339.88	1.230 679	.51	-.358
43 49	783 527.64	101.250 33	73.317 526	339.96	1.230 710	.50	-.353
43 50	789 602.66	101.250 83	73.297 128	340.08	1.230 740	.50	-.348
43 51	795 677.71	101.251 00	73.276 723	340.18	1.230 770	.50	-.343
43 52	801 752.77	101.251 33	73.256 312	340.28	1.230 800	.48	-.338
43 53	807 827.85	101.251 50	73.235 895	340.38	1.230 829	.48	-.334
43 54	813 902.94	101.252 00	73.215 472	340.50	1.230 858	.48	-.329
43 55	819 978.06	101.252 17	73.195 042	340.60	1.230 887	.46	-.324
43 56	826 053.19	101.252 50	73.174 606	340.70	1.230 915	.46	-.319
43 57	832 128.34	101.252 83	73.154 164	340.81	1.230 943	.45	-.314
43 58	838 203.51	101.253 00	73.133 715	340.90	1.230 970	.45	-.310
43 59	844 278.69	101.253 50	73.113 261	341.01	1.230 997	.43	-.305
44 00	850 353.90		73.092 800		1.231 023		-.300

TRANSVERSE MERCATOR PROJECTION
IDAHO
WEST ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
44 0 0		850 353.90	101.253 67	73.098 800	341.11	1.231 023	.43	-.300
44 0 1		856 429.12	101.254 00	73.072 333	341.23	1.231 049	.41	-.295
44 0 2		862 504.36	101.254 33	73.051 859	341.31	1.231 074	.41	-.290
44 0 3		868 579.62	101.254 67	73.031 380	341.43	1.231 099	.41	-.286
44 0 4		874 654.90	101.254 83	73.010 894	341.55	1.231 124	.40	-.281
44 0 5		880 730.19	101.255 33	72.990 402	341.63	1.231 148	.40	-.276
44 0 6		886 805.51	101.255 50	72.969 904	341.75	1.231 172	.38	-.271
44 0 7		892 880.84	101.255 67	72.949 399	341.83	1.231 195	.38	-.266
44 0 8		898 956.18	101.256 17	72.928 889	341.95	1.231 218	.38	-.262
44 0 9		905 031.55	101.256 33	72.908 372	342.05	1.231 241	.36	-.257
44 1 0		911 106.93	101.256 83	72.887 849	342.15	1.231 263	.36	-.252
44 1 1		917 182.34	101.257 00	72.867 320	342.26	1.231 285	.35	-.247
44 1 2		923 257.76	101.257 33	72.846 784	342.35	1.231 306	.35	-.242
44 1 3		929 333.20	101.257 50	72.826 243	342.46	1.231 327	.35	-.238
44 1 4		935 408.65	101.258 00	72.805 695	342.56	1.231 348	.33	-.233
44 1 5		941 484.13	101.258 17	72.785 141	342.66	1.231 368	.31	-.228
44 1 6		947 559.62	101.258 50	72.764 581	342.78	1.231 387	.33	-.223
44 1 7		953 635.13	101.258 83	72.744 014	342.86	1.231 407	.30	-.218
44 1 8		959 710.66	101.259 17	72.723 442	342.98	1.231 425	.31	-.214
44 1 9		965 786.21	101.259 33	72.702 863	343.08	1.231 444	.30	-.209
44 2 0		971 861.77	101.259 67	72.682 278	343.18	1.231 462	.30	-.204
44 2 1		977 937.35	101.260 00	72.661 687	343.30	1.231 480	.28	-.199
44 2 2		984 012.95	101.260 33	72.641 089	343.38	1.231 497	.28	-.195
44 2 3		990 088.57	101.260 67	72.620 486	343.50	1.231 514	.26	-.190
44 2 4		996 164.21	101.260 83	72.599 876	343.60	1.231 530	.26	-.185
44 2 5	1	002 239.86	101.261 17	72.579 260	343.70	1.231 546	.26	-.181
44 2 6	1	008 315.53	101.261 50	72.558 638	343.80	1.231 562	.25	-.176
44 2 7	1	014 391.22	101.261 83	72.538 010	343.91	1.231 577	.25	-.171
44 2 8	1	020 466.93	101.262 17	72.517 375	344.00	1.231 592	.23	-.166
44 2 9	1	026 542.66	101.262 33	72.496 735	344.11	1.231 606	.23	-.162
44 3 0	1	032 618.40	101.262 83	72.476 088	344.21	1.231 620	.21	-.157
44 3 1	1	038 694.17	101.263 00	72.455 435	344.31	1.231 633	.23	-.152
44 3 2	1	044 769.95	101.263 33	72.434 776	344.43	1.231 647	.20	-.148
44 3 3	1	050 845.75	101.263 50	72.414 110	344.51	1.231 659	.20	-.143
44 3 4	1	056 921.56	101.264 00	72.393 439	344.63	1.231 671	.20	-.138
44 3 5	1	062 997.40	101.264 17	72.372 761	344.71	1.231 683	.20	-.134
44 3 6	1	069 073.25	101.264 50	72.352 078	344.83	1.231 695	.18	-.129
44 3 7	1	075 149.12	101.264 83	72.331 388	344.93	1.231 706	.16	-.124
44 3 8	1	081 225.01	101.265 00	72.310 692	345.05	1.231 716	.16	-.119
44 3 9	1	087 300.91	101.265 50	72.289 989	345.13	1.231 726	.16	-.115
44 4 0	1	093 376.84	101.265 67	72.269 281	345.25	1.231 736	.15	-.110
44 4 1	1	099 452.78	101.266 00	72.248 566	345.33	1.231 745	.15	-.105
44 4 2	1	105 528.74	101.266 33	72.227 846	345.45	1.231 754	.13	-.101
44 4 3	1	111 604.72	101.266 67	72.207 119	345.55	1.231 762	.13	-.096
44 4 4	1	117 680.72	101.266 83	72.186 386	345.65	1.231 770	.13	-.091
44 4 5	1	123 756.73	101.267 17	72.165 647	345.76	1.231 778	.11	-.087
44 4 6	1	129 832.76	101.267 50	72.144 901	345.85	1.231 785	.11	-.082
44 4 7	1	135 908.81	101.267 83	72.124 150	345.95	1.231 792	.10	-.077
44 4 8	1	141 984.88	101.268 17	72.103 393	346.06	1.231 798	.10	-.072
44 4 9	1	148 060.97	101.268 33	72.082 629	346.16	1.231 804	.10	-.068
44 5 0	1	154 137.07	101.268 83	72.061 859	346.26	1.231 810	.08	-.063
44 5 1	1	160 213.20	101.269 00	72.041 083	346.36	1.231 815	.08	-.058
44 5 2	1	166 289.34	101.269 33	72.020 301	346.48	1.231 820	.08	-.054
44 5 3	1	172 365.50	101.269 50	71.999 512	346.56	1.231 825	.06	-.049
44 5 4	1	178 441.67	101.270 00	71.978 718	346.66	1.231 829	.05	-.044
44 5 5	1	184 517.87	101.270 17	71.957 918	346.78	1.231 832	.06	-.040
44 5 6	1	190 594.08	101.270 50	71.937 111	346.88	1.231 836	.03	-.035
44 5 7	1	196 670.31	101.270 83	71.916 298	346.98	1.231 838	.05	-.030
44 5 8	1	202 746.56	101.271 17	71.895 479	347.08	1.231 841	.03	-.025
44 5 9	1	208 822.83	101.271 33	71.874 654	347.18	1.231 843	.01	-.021
45 0 0	1	214 899.11		71.853 823		1.231 844		-.016

TRANSVERSE MERCATOR PROJECTION
IDAHO
WEST ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
45 00	1	214 899.11	101.271 67	71.853 823	347.28	1.231 844	.01	-.016
45 01	1	220 975.41	101.272 00	71.832 986	347.40	1.231 845	.00	-.011
45 02	1	227 051.73	101.272 33	71.812 142	347.48	1.231 845	.01	-.007
45 03	1	233 128.07	101.272 67	71.791 293	347.60	1.231 846	.01	-.002
45 04	1	239 204.43	101.272 83	71.770 437	347.70	1.231 845	.00	+.003
45 05	1	245 280.80	101.273 33	71.749 575	347.80	1.231 845	.01	.008
45 06	1	251 357.20	101.273 50	71.728 707	347.90	1.231 844	.03	.012
45 07	1	257 433.61	101.273 67	71.707 833	348.00	1.231 842	.03	.017
45 08	1	263 510.03	101.274 17	71.686 953	348.10	1.231 840	.03	.022
45 09	1	269 586.48	101.274 50	71.666 067	348.20	1.231 838	.05	.026
45 10	1	275 662.95	101.274 67	71.645 175	348.30	1.231 835	.05	.031
45 11	1	281 739.43	101.275 00	71.624 277	348.41	1.231 832	.06	.036
45 12	1	287 815.93	101.275 33	71.603 372	348.51	1.231 828	.06	.040
45 13	1	293 892.45	101.275 50	71.582 461	348.60	1.231 824	.06	.045
45 14	1	299 968.98	101.276 00	71.561 545	348.71	1.231 820	.08	.049
45 15	1	306 045.54	101.276 17	71.540 622	348.81	1.231 815	.08	.054
45 16	1	312 122.11	101.276 50	71.519 693	348.91	1.231 810	.10	.059
45 17	1	318 198.70	101.276 83	71.498 758	349.01	1.231 804	.10	.063
45 18	1	324 275.31	101.277 17	71.477 817	349.11	1.231 798	.10	.068
45 19	1	330 351.94	101.277 33	71.456 870	349.21	1.231 792	.11	.072
45 20	1	336 428.58	101.277 83	71.435 917	349.31	1.231 785	.11	.077
45 21	1	342 505.25	101.278 00	71.414 958	349.43	1.231 778	.13	.082
45 22	1	348 581.93	101.278 17	71.393 992	349.51	1.231 770	.13	.086
45 23	1	354 658.62	101.278 67	71.373 021	349.63	1.231 762	.15	.091
45 24	1	360 735.34	101.278 83	71.352 043	349.71	1.231 753	.15	.095
45 25	1	366 812.07	101.279 33	71.331 060	349.83	1.231 744	.15	.100
45 26	1	372 888.83	101.279 50	71.310 070	349.91	1.231 735	.16	.105
45 27	1	378 965.60	101.279 83	71.289 075	350.03	1.231 725	.16	.109
45 28	1	385 042.39	101.280 17	71.268 073	350.13	1.231 715	.18	.114
45 29	1	391 119.20	101.280 33	71.247 065	350.23	1.231 704	.18	.118
45 30	1	397 196.02	101.280 67	71.226 051	350.33	1.231 693	.20	.123
45 31	1	403 272.86	101.281 00	71.205 031	350.43	1.231 681	.18	.128
45 32	1	409 349.72	101.281 33	71.184 005	350.53	1.231 670	.21	.132
45 33	1	415 426.60	101.281 67	71.162 973	350.63	1.231 657	.21	.137
45 34	1	421 503.50	101.281 83	71.141 935	350.75	1.231 644	.21	.141
45 35	1	427 580.41	101.282 33	71.120 890	350.83	1.231 631	.21	.146
45 36	1	433 657.35	101.282 50	71.099 840	350.93	1.231 618	.23	.151
45 37	1	439 734.30	101.282 83	71.078 784	351.05	1.231 604	.25	.155
45 38	1	445 811.27	101.283 00	71.057 721	351.13	1.231 589	.25	.160
45 39	1	451 888.25	101.283 50	71.036 653	351.25	1.231 574	.25	.164
45 40	1	457 965.26	101.283 67	71.015 578	351.35	1.231 559	.26	.169
45 41	1	464 042.28	101.284 00	70.994 497	351.45	1.231 543	.26	.174
45 42	1	470 119.32	101.284 33	70.973 410	351.53	1.231 527	.26	.178
45 43	1	476 196.38	101.284 67	70.952 318	351.65	1.231 511	.28	.183
45 44	1	482 273.46	101.284 83	70.931 219	351.75	1.231 494	.30	.187
45 45	1	488 350.55	101.285 33	70.910 114	351.85	1.231 476	.30	.192
45 46	1	494 427.67	101.285 50	70.889 003	351.95	1.231 458	.30	.196
45 47	1	500 504.80	101.285 83	70.867 886	352.05	1.231 440	.30	.201
45 48	1	506 581.95	101.286 00	70.846 763	352.15	1.231 422	.33	.205
45 49	1	512 659.11	101.286 50	70.825 634	352.25	1.231 402	.31	.210
45 50	1	518 736.30	101.286 67	70.804 499	352.35	1.231 383	.33	.214
45 51	1	524 813.50	101.287 00	70.783 358	352.45	1.231 363	.33	.219
45 52	1	530 890.72	101.287 33	70.762 211	352.55	1.231 343	.35	.223
45 53	1	536 967.96	101.287 67	70.741 058	352.65	1.231 322	.35	.228
45 54	1	543 045.22	101.287 83	70.719 899	352.75	1.231 301	.36	.232
45 55	1	549 122.49	101.288 17	70.698 734	352.85	1.231 279	.36	.237
45 56	1	555 199.78	101.288 50	70.677 563	352.95	1.231 257	.36	.242
45 57	1	561 277.09	101.288 83	70.656 386	353.06	1.231 235	.38	.246
45 58	1	567 354.42	101.289 17	70.635 202	353.15	1.231 212	.38	.251
45 59	1	573 431.77	101.289 50	70.614 013	353.25	1.231 189	.40	.255
46 00	1	579 509.14		70.592 818		1.231 165		+.260

TRANSVERSE MERCATOR PROJECTION
IDAHO
WEST ZONE

Lat.	y. feet	Δy_0 per second	H	ΔH per second	V	ΔV per second	a
46 00	1 579 509.14	101.289 67	70.598 818	353.35	1.231 165	- .40	.260
46 01	1 585 586.52	101.290 00	70.571 617	353.46	1.231 141	- .41	.265
46 02	1 591 663.92	101.290 33	70.550 409	353.55	1.231 116	- .41	.269
46 03	1 597 741.34	101.290 67	70.529 196	353.65	1.231 091	- .41	.274
46 04	1 603 818.78	101.290 83	70.507 977	353.75	1.231 066	- .43	.278
46 05	1 609 896.23	101.291 17	70.486 752	353.86	1.231 040	- .43	.283
46 06	1 615 973.70	101.291 50	70.465 520	353.95	1.231 014	- .45	.287
46 07	1 622 051.19	101.291 83	70.444 283	354.05	1.230 987	- .45	.292
46 08	1 628 128.70	101.292 17	70.423 040	354.16	1.230 960	- .45	.296
46 09	1 634 206.23	101.292 33	70.401 790	354.25	1.230 933	- .46	.301
46 10	1 640 283.77	101.292 83	70.380 535	354.35	1.230 905	- .46	.305
46 11	1 646 361.34	101.293 00	70.359 274	354.46	1.230 877	- .48	.310
46 12	1 652 438.92	101.293 33	70.338 006	354.55	1.230 848	- .48	.314
46 13	1 658 516.52	101.293 50	70.316 733	354.66	1.230 819	- .48	.319
46 14	1 664 594.13	101.294 00	70.295 453	354.75	1.230 790	- .50	.323
46 15	1 670 671.77	101.294 17	70.274 168	354.85	1.230 760	- .51	.328
46 16	1 676 749.42	101.294 50	70.252 877	354.95	1.230 729	- .50	.333
46 17	1 682 827.09	101.294 83	70.231 580	355.06	1.230 699	- .51	.337
46 18	1 688 904.78	101.295 17	70.210 276	355.15	1.230 668	- .53	.342
46 19	1 694 982.49	101.295 33	70.188 967	355.25	1.230 636	- .53	.346
46 20	1 701 060.21	101.295 83	70.167 652	355.35	1.230 604	- .53	.351
46 21	1 707 137.96	101.296 00	70.146 331	355.45	1.230 572	- .55	.355
46 22	1 713 215.72	101.296 33	70.125 004	355.55	1.230 539	- .55	.360
46 23	1 719 293.50	101.296 50	70.103 671	355.65	1.230 506	- .56	.364
46 24	1 725 371.29	101.297 00	70.082 332	355.75	1.230 472	- .56	.369
46 25	1 731 449.11	101.297 17	70.060 987	355.85	1.230 438	- .58	.373
46 26	1 737 526.94	101.297 50	70.039 636	355.95	1.230 403	- .58	.377
46 27	1 743 604.75	101.297 83	70.018 279	356.05	1.230 368	- .58	.382
46 28	1 749 682.66	101.298 17	69.996 916	356.15	1.230 333	- .60	.386
46 29	1 755 760.55	101.298 33	69.975 547	356.25	1.230 297	- .60	.391
46 30	1 761 838.45	101.298 83	69.954 172	356.35	1.230 261	- .61	.395
46 31	1 767 916.38	101.299 00	69.932 791	356.45	1.230 224	- .61	.399
46 32	1 773 994.32	101.299 17	69.911 404	356.55	1.230 187	- .61	.404
46 33	1 780 072.27	101.299 57	69.890 011	356.63	1.230 150	- .63	.408
46 34	1 786 150.25	101.300 00	69.868 613	356.75	1.230 112	- .63	.413
46 35	1 792 228.25	101.300 17	69.847 208	356.85	1.230 074	- .65	.417
46 36	1 798 306.26	101.300 50	69.825 797	356.93	1.230 035	- .65	.421
46 37	1 804 384.29	101.300 83	69.804 381	357.05	1.229 996	- .66	.426
46 38	1 810 462.34	101.301 17	69.782 958	357.15	1.229 956	- .66	.430
46 39	1 816 540.41	101.301 33	69.761 529	357.25	1.229 916	- .66	.435
46 40	1 822 618.49	101.301 67	69.740 095	357.35	1.229 876	- .68	.439
46 41	1 828 696.59	101.302 00	69.718 654	357.43	1.229 835	- .68	.443
46 42	1 834 774.71	101.302 33	69.697 208	357.55	1.229 794	- .68	.448
46 43	1 840 852.85	101.302 67	69.675 755	357.63	1.229 753	- .70	.452
46 44	1 846 931.01	101.302 83	69.654 297	357.73	1.229 711	- .71	.457
46 45	1 853 009.18	101.303 33	69.632 833	357.83	1.229 668	- .71	.461
46 46	1 859 087.38	101.303 50	69.611 363	357.93	1.229 625	- .71	.465
46 47	1 865 165.59	101.303 67	69.589 887	358.03	1.229 582	- .71	.470
46 48	1 871 243.81	101.304 17	69.568 405	358.13	1.229 539	- .75	.474
46 49	1 877 322.06	101.304 50	69.546 917	358.23	1.229 494	- .73	.479
46 50	1 883 400.35	101.304 67	69.525 423	358.33	1.229 450	- .75	.483
46 51	1 889 478.61	101.305 00	69.503 923	358.41	1.229 405	- .75	.487
46 52	1 895 556.91	101.305 33	69.482 418	358.53	1.229 360	- .76	.492
46 53	1 901 635.23	101.305 50	69.460 906	358.61	1.229 314	- .76	.496
46 54	1 907 713.56	101.306 00	69.439 389	358.73	1.229 268	- .78	.500
46 55	1 913 791.92	101.306 17	69.417 865	358.81	1.229 221	- .78	.505
46 56	1 919 870.29	101.306 50	69.396 336	358.91	1.229 174	- .78	.509
46 57	1 925 948.68	101.306 83	69.374 801	359.01	1.229 127	- .80	.513
46 58	1 932 027.09	101.307 00	69.353 260	359.11	1.229 079	- .80	.517
46 59	1 938 105.51	101.307 50	69.331 713	359.21	1.229 031	- .81	.522
47 00	1 944 183.96		69.310 160		1.228 982		+ .526

TRANSVERSE MERCATOR PROJECTION
IDAHO
WEST ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
47 00	1	944 183.96	101.307 67	69.310 160	359.31	1.228 982	.81	.526
47 01	1	950 262.42	101.308 00	69.288 601	359.41	1.228 933	.83	.530
47 02	1	956 340.90	101.308 33	69.267 036	359.50	1.228 883	.83	.535
47 03	1	962 419.40	101.308 67	69.245 466	359.61	1.228 833	.83	.539
47 04	1	968 497.92	101.308 83	69.223 889	359.70	1.228 783	.85	.543
47 05	1	974 576.45	101.309 17	69.202 307	359.81	1.228 732	.85	.548
47 06	1	980 655.00	101.309 50	69.180 718	359.90	1.228 681	.86	.552
47 07	1	986 733.57	101.309 83	69.159 124	360.00	1.228 629	.86	.556
47 08	1	992 812.16	101.310 17	69.137 524	360.10	1.228 577	.86	.560
47 09	1	998 890.77	101.310 33	69.115 918	360.20	1.228 525	.88	.565
47 10	2	004 969.39	101.310 67	69.094 306	360.30	1.228 472	.88	.569
47 11	2	011 048.03	101.311 00	69.072 688	360.40	1.228 419	.90	.573
47 12	2	017 126.69	101.311 33	69.051 064	360.50	1.228 365	.90	.578
47 13	2	023 205.37	101.311 67	69.029 434	360.58	1.228 311	.90	.582
47 14	2	029 284.07	101.311 83	69.007 799	360.70	1.228 257	.91	.587
47 15	2	035 362.78	101.312 17	68.986 157	360.78	1.228 202	.93	.591
47 16	2	041 441.51	101.312 50	68.964 510	360.88	1.228 146	.91	.595
47 17	2	047 520.26	101.312 83	68.942 857	360.98	1.228 091	.93	.600
47 18	2	053 599.03	101.313 00	68.921 198	361.08	1.228 035	.95	.604
47 19	2	059 677.81	101.313 50	68.899 533	361.18	1.227 978	.95	.609
47 20	2	065 756.62	101.313 67	68.877 862	361.28	1.227 921	.95	.613
47 21	2	071 835.44	101.314 00	68.856 185	361.36	1.227 864	.96	.617
47 22	2	077 914.28	101.314 33	68.834 503	361.48	1.227 806	.96	.622
47 23	2	083 993.14	101.314 50	68.812 814	361.56	1.227 748	.98	.626
47 24	2	090 072.01	101.314 83	68.791 120	361.66	1.227 689	.98	.630
47 25	2	096 150.90	101.315 33	68.769 420	361.76	1.227 630	1.00	.635
47 26	2	102 229.82	101.315 50	68.747 714	361.86	1.227 570	1.00	.639
47 27	2	108 308.75	101.315 67	68.726 002	361.95	1.227 510	1.00	.643
47 28	2	114 387.69	101.316 17	68.704 285	362.06	1.227 450	1.01	.647
47 29	2	120 466.66	101.316 33	68.682 561	362.15	1.227 389	1.01	.652
47 30	2	126 545.64	101.316 67	68.660 832	362.25	1.227 328	1.03	.656
47 31	2	132 624.64	101.317 00	68.639 097	362.35	1.227 266	1.03	.660
47 32	2	138 703.66	101.317 33	68.617 356	362.45	1.227 204	1.03	.664
47 33	2	144 782.70	101.317 50	68.595 609	362.55	1.227 142	1.05	.669
47 34	2	150 861.75	101.318 00	68.573 856	362.63	1.227 079	1.05	.673
47 35	2	156 940.83	101.318 17	68.552 098	362.75	1.227 016	1.06	.677
47 36	2	163 019.92	101.318 50	68.530 333	362.83	1.226 952	1.06	.681
47 37	2	169 099.03	101.318 67	68.508 563	362.93	1.226 888	1.08	.685
47 38	2	175 178.15	101.319 17	68.486 787	363.03	1.226 823	1.08	.690
47 39	2	181 257.30	101.319 33	68.465 005	363.13	1.226 758	1.08	.694
47 40	2	187 336.46	101.319 67	68.443 217	363.23	1.226 693	1.10	.698
47 41	2	193 415.64	101.320 00	68.421 423	363.31	1.226 627	1.10	.702
47 42	2	199 494.84	101.320 33	68.399 624	363.43	1.226 561	1.10	.707
47 43	2	205 574.06	101.320 50	68.377 818	363.51	1.226 495	1.11	.711
47 44	2	211 653.29	101.320 83	68.356 007	363.61	1.226 428	1.11	.715
47 45	2	217 732.54	101.321 17	68.334 190	363.71	1.226 361	1.13	.720
47 46	2	223 811.81	101.321 50	68.312 367	363.80	1.226 293	1.13	.724
47 47	2	229 891.10	101.321 83	68.290 539	363.91	1.226 225	1.15	.728
47 48	2	235 970.41	101.322 00	68.268 704	364.00	1.226 156	1.15	.732
47 49	2	242 049.73	101.322 33	68.246 864	364.10	1.226 087	1.15	.737
47 50	2	248 129.07	101.322 67	68.225 018	364.20	1.226 018	1.16	.741
47 51	2	254 208.43	101.323 00	68.203 166	364.30	1.225 948	1.16	.745
47 52	2	260 287.81	101.323 33	68.181 308	364.40	1.225 878	1.18	.749
47 53	2	266 367.21	101.323 50	68.159 444	364.48	1.225 807	1.18	.753
47 54	2	272 446.62	101.323 83	68.137 575	364.58	1.225 736	1.20	.757
47 55	2	278 526.05	101.324 17	68.115 700	364.68	1.225 664	1.20	.762
47 56	2	284 605.50	101.324 50	68.093 819	364.78	1.225 592	1.20	.766
47 57	2	290 684.97	101.324 67	68.071 932	364.86	1.225 520	1.21	.770
47 58	2	296 764.45	101.325 17	68.050 040	364.98	1.225 447	1.21	.774
47 59	2	302 843.96	101.325 33	68.028 141	365.06	1.225 374	1.23	.778
48 00	2	308 923.48		68.006 237		1.225 300		+ .782

TRANSVERSE MERCATOR PROJECTION
IDAHO
WEST ZONE

Lat.		y. feet	Δy . per second	H	ΔH per second	V	ΔV per second	a
48 0 0	2	308 923.48	101.325 67	68.006 237	365.16	1.225 300	- 1.23	+ .782
48 0 1	2	315 003.02	101.326 00	67.984 327	365.26	1.225 226	- 1.23	.786
48 0 2	2	321 082.58	101.326 17	67.962 411	365.35	1.225 152	- 1.25	.790
48 0 3	2	327 162.15	101.326 50	67.940 490	365.46	1.225 077	- 1.26	.795
48 0 4	2	333 241.74	101.326 83	67.918 562	365.55	1.225 001	- 1.25	.799
48 0 5	2	339 321.35	101.327 17	67.896 629	365.65	1.224 926	- 1.26	.803
48 0 6	2	345 400.98	101.327 50	67.874 690	365.73	1.224 850	- 1.28	.807
48 0 7	2	351 480.63	101.327 83	67.852 746	365.85	1.224 773	- 1.28	.811
48 0 8	2	357 560.30	101.328 00	67.830 795	365.93	1.224 696	- 1.28	.816
48 0 9	2	363 639.98	101.328 33	67.808 839	366.03	1.224 619	- 1.30	.820
48 1 0	2	369 719.68	101.328 67	67.786 877	366.13	1.224 541	- 1.30	.824
48 1 1	2	375 799.40	101.328 83	67.764 909	366.21	1.224 463	- 1.31	.828
48 1 2	2	381 879.13	101.329 33	67.742 936	366.33	1.224 384	- 1.31	.832
48 1 3	2	387 958.89	101.329 50	67.720 956	366.41	1.224 305	- 1.31	.837
48 1 4	2	394 038.66	101.329 83	67.698 971	366.51	1.224 226	- 1.33	.841
48 1 5	2	400 118.45	101.330 17	67.676 980	366.61	1.224 146	- 1.35	.845
48 1 6	2	406 198.26	101.330 33	67.654 983	366.70	1.224 065	- 1.33	.849
48 1 7	2	412 278.08	101.330 83	67.632 981	366.80	1.223 985	- 1.35	.853
48 1 8	2	418 357.93	101.331 00	67.610 973	366.90	1.223 904	- 1.36	.858
48 1 9	2	424 437.79	101.331 33	67.588 959	367.00	1.223 822	- 1.36	.862
48 2 0	2	430 517.67	101.331 67	67.566 939	367.10	1.223 740	- 1.36	.866
48 2 1	2	436 597.57	101.331 83	67.544 913	367.18	1.223 658	- 1.38	.870
48 2 2	2	442 677.48	101.332 33	67.522 882	367.28	1.223 575	- 1.40	.874
48 2 3	2	448 757.42	101.332 50	67.500 845	367.38	1.223 491	- 1.38	.878
48 2 4	2	454 837.37	101.332 83	67.478 802	367.48	1.223 408	- 1.40	.882
48 2 5	2	460 917.34	101.333 00	67.456 753	367.56	1.223 324	- 1.41	.887
48 2 6	2	466 997.38	101.333 50	67.434 699	367.66	1.223 239	- 1.41	.891
48 2 7	2	473 077.33	101.333 67	67.412 639	367.76	1.223 154	- 1.41	.895
48 2 8	2	479 157.35	101.334 00	67.390 573	367.86	1.223 069	- 1.43	.899
48 2 9	2	485 237.39	101.334 33	67.368 501	367.95	1.222 983	- 1.43	.903
48 3 0	2	491 317.45	101.334 67	67.346 424	368.05	1.222 897	- 1.45	.907
48 3 1	2	497 397.53	101.334 83	67.324 341	368.15	1.222 810	- 1.43	.911
48 3 2	2	503 477.62	101.335 17	67.302 252	368.25	1.222 724	- 1.46	.915
48 3 3	2	509 557.73	101.335 50	67.280 157	368.33	1.222 636	- 1.46	.919
48 3 4	2	515 637.86	101.335 83	67.258 057	368.43	1.222 548	- 1.46	.923
48 3 5	2	521 718.01	101.336 17	67.235 951	368.53	1.222 460	- 1.46	.928
48 3 6	2	527 798.18	101.336 33	67.213 839	368.63	1.222 372	- 1.48	.932
48 3 7	2	533 878.36	101.336 67	67.191 721	368.71	1.222 283	- 1.50	.936
48 3 8	2	539 958.56	101.337 00	67.169 598	368.81	1.222 193	- 1.50	.940
48 3 9	2	546 038.78	101.337 33	67.147 469	368.91	1.222 103	- 1.50	.944
48 4 0	2	552 119.02	101.337 50	67.125 334	369.01	1.222 013	- 1.51	.948
48 4 1	2	558 199.27	101.338 00	67.103 193	369.10	1.221 922	- 1.51	.952
48 4 2	2	564 279.55	101.338 17	67.081 047	369.20	1.221 831	- 1.51	.956
48 4 3	2	570 359.84	101.338 50	67.058 895	369.30	1.221 740	- 1.53	.960
48 4 4	2	576 440.15	101.338 67	67.036 737	369.38	1.221 648	- 1.55	.964
48 4 5	2	582 520.47	101.339 17	67.014 574	369.50	1.221 555	- 1.55	.968
48 4 6	2	588 600.82	101.339 33	66.992 404	369.58	1.221 462	- 1.55	.972
48 4 7	2	594 681.18	101.339 67	66.970 229	369.66	1.221 369	- 1.56	.976
48 4 8	2	600 761.56	101.340 00	66.948 049	369.78	1.221 275	- 1.56	.980
48 4 9	2	606 841.96	101.340 33	66.925 862	369.86	1.221 181	- 1.56	.984
48 5 0	2	612 922.38	101.340 50	66.903 670	369.96	1.221 087	- 1.58	.988
48 5 1	2	619 002.81	101.340 83	66.881 472	370.06	1.220 992	- 1.58	.992
48 5 2	2	625 083.26	101.341 17	66.859 268	370.15	1.220 897	- 1.60	.996
48 5 3	2	631 163.73	101.341 50	66.837 059	370.25	1.220 801	- 1.60	1.000
48 5 4	2	637 244.22	101.341 67	66.814 844	370.35	1.220 705	- 1.60	1.004
48 5 5	2	643 324.72	101.342 17	66.792 623	370.43	1.220 609	- 1.61	1.009
48 5 6	2	649 405.25	101.342 33	66.770 397	370.53	1.220 512	- 1.61	1.013
48 5 7	2	655 485.79	101.342 67	66.748 165	370.63	1.220 415	- 1.63	1.017
48 5 8	2	661 566.35	101.342 83	66.725 927	370.73	1.220 317	- 1.63	1.021
48 5 9	2	667 646.92	101.343 33	66.703 683	370.81	1.220 219	- 1.65	1.025
49 0 0	2	673 727.52		66.681 434		1.220 120		+1.029

TRANSVERSE MERCATOR PROJECTION
IDAHO
WEST ZONE

Lat.		y _o feet	Δy _o per second	H	ΔH per second	V	ΔV per second	a
49 0 0	2	673 727.52	101.343 50	66.681 434	370.91	1.220 120	- 1.65	+1.029
49 0 1	2	679 808.13	101.343 83	66.659 179	371.01	1.220 021	- 1.66	1.033
49 0 2	2	685 888.76	101.344 17	66.636 918	371.10	1.219 921	- 1.65	1.037
49 0 3	2	691 969.41	101.344 50	66.614 652	371.21	1.219 822	- 1.68	1.041
49 0 4	2	698 050.08	101.344 67	66.592 379	371.28	1.219 721	- 1.66	1.045
49 0 5	2	704 130.76	101.345 00	66.570 102	371.40	1.219 621	- 1.68	1.049
49 0 6	2	710 211.46	101.345 33	66.547 818	371.48	1.219 520	- 1.70	1.053
49 0 7	2	716 292.18	101.345 67	66.525 529	371.58	1.219 418	- 1.70	1.057
49 0 8	2	722 372.92	101.346 00	66.503 234	371.68	1.219 316	- 1.70	1.061
49 0 9	2	728 453.68	101.346 17	66.480 933	371.76	1.219 214	- 1.71	1.065
49 1 0	2	734 534.45	101.346 50	66.458 627	371.86	1.219 111	- 1.71	1.069
49 1 1	2	740 615.24	101.346 83	66.436 315	371.96	1.219 008	- 1.73	1.073
49 1 2	2	746 696.05	101.347 17	66.413 997	372.05	1.218 904	- 1.73	1.077
49 1 3	2	752 776.88	101.347 33	66.391 674	372.15	1.218 800	- 1.73	1.081
49 1 4	2	758 857.72	101.347 67	66.369 345	372.25	1.218 696	- 1.75	1.085
49 1 5	2	764 938.58	101.348 00	66.347 010	372.35	1.218 591	- 1.75	1.089
49 1 6	2	771 019.46	101.348 33	66.324 670	372.45	1.218 486	- 1.76	1.093
49 1 7	2	777 100.36	101.348 67	66.302 323	372.51	1.218 380	- 1.76	1.097
49 1 8	2	783 181.28	101.348 83	66.279 972	372.63	1.218 274	- 1.76	1.101
49 1 9	2	789 262.21	101.349 17	66.257 614	372.71	1.218 168	- 1.78	1.105
49 2 0	2	795 343.16		66.235 251		1.218 061		+1.109

TRANSVERSE MERCATOR PROJECTION

IDAHO

All Zones

$\Delta\lambda''$	b	Δb	c	$\Delta\lambda''$	b	Δb	c
0	0.000	+0.081	0.000				
100	+0.081	+0.081	0.000	3100	+1.459	-0.024	-0.133
200	+0.162	+0.080	-0.001	3200	+1.435	-0.031	-0.135
300	+0.242	+0.079	-0.002	3300	+1.404	-0.037	-0.136
400	+0.321	+0.078	-0.003	3400	+1.367	-0.045	-0.135
500	+0.399	+0.078	-0.005	3500	+1.322	-0.052	-0.133
600	+0.477	+0.076	-0.007	3600	+1.270	-0.059	-0.131
700	+0.553	+0.075	-0.010	3700	+1.211	-0.067	-0.128
800	+0.628	+0.073	-0.014	3800	+1.144	-0.075	-0.124
900	+0.701	+0.071	-0.018	3900	+1.069	-0.084	-0.120
1000	+0.772	+0.070	-0.022	4000	+0.985	-0.091	-0.115
1100	+0.842	+0.068	-0.027	4100	+0.894	-0.101	-0.109
1200	+0.910	+0.065	-0.032	4200	+0.793	-0.109	-0.101
1300	+0.975	+0.061	-0.038	4300	+0.684	-0.118	-0.091
1400	+1.036	+0.058	-0.043	4400	+0.566	-0.127	-0.078
1500	+1.094	+0.055	-0.049	4500	+0.439	-0.137	-0.063
1600	+1.149	+0.051	-0.055	4600	+0.302	-0.146	-0.045
1700	+1.200	+0.048	-0.061	4700	+0.156	-0.156	-0.025
1800	+1.248	+0.045	-0.067	4800	0.000	-0.167	0.000
1900	+1.293	+0.041	-0.073	4900	-0.167	-0.177	+0.026
2000	+1.334	+0.037	-0.079	5000	-0.344	-0.187	+0.053
2100	+1.371	+0.032	-0.085	5100	-0.531	-0.198	+0.084
2200	+1.403	+0.028	-0.091	5200	-0.729	-0.209	+0.117
2300	+1.431	+0.023	-0.096	5300	-0.938	-0.220	+0.153
2400	+1.454	+0.017	-0.101	5400	-1.158	-0.231	+0.191
2500	+1.471	+0.013	-0.106	5500	-1.389	-0.243	+0.232
2600	+1.484	+0.007	-0.111	5600	-1.632	-0.255	+0.275
2700	+1.491	+0.001	-0.116	5700	-1.887	-0.267	+0.321
2800	+1.492	-0.005	-0.121	5800	-2.154	-0.278	+0.371
2900	+1.487	-0.011	-0.125	5900	-2.432	-0.292	+0.426
3000	+1.476	-0.017	-0.130	6000	-2.724		+0.487

TRANSVERSE MERCATOR PROJECTION

TABLE FOR g

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

Latitude	$\Delta\lambda''$						
	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, IDAHO-EAST & CENTRAL ZONES

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

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	2.12307	2053	0	0.00
100,000	2.14360	2071	50,000	+ 0.01
200,000	2.16431	2089	100,000	+ 0.02
300,000	2.18520	2106	150,000	+ 0.04
400,000	2.20626	2126	200,000	+ 0.07
500,000	2.22752	2144	250,000	+ 0.07
600,000	2.24896	2164	300,000	+ 0.06
700,000	2.27060	2183	350,000	+ 0.03
800,000	2.29243	2204	400,000	- 0.06
900,000	2.31447	2224		
1,000,000	2.33671	2244		
1,100,000	2.35915	2266		
1,200,000	2.38181	2288		
1,300,000	2.40469	2310		
1,400,000	2.42779	2332		
1,500,000	2.45111			

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

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

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

y	P	ΔP	x'	d	
0	2.12306	2053	0	0.00	
100,000	2.14359	2071	50,000	+ 0.01	
200,000	2.16430	2088	100,000	+ 0.02	
300,000	2.18518	2107	150,000	+ 0.05	
400,000	2.20625	2125	200,000	+ 0.08	
500,000	2.22750	2145	250,000	+ 0.10	
600,000	2.24895	2163	300,000	+ 0.11	
700,000	2.27058	2184	350,000	+ 0.08	
800,000	2.29242	2203	400,000	+ 0.01	
900,000	2.31445	2224	430,000	- 0.06	
1,000,000	2.33669	2245			
1,100,000	2.35914	2266			
1,200,000	2.38180	2288			
1,300,000	2.40468	2310	y	P	ΔP
1,400,000	2.42778	2332	2,100,000	2.59600	2502
1,500,000	2.45110	2355	2,200,000	2.62102	2529
1,600,000	2.47465	2379	2,300,000	2.64631	2555
1,700,000	2.49844	2402	2,400,000	2.67186	2583
1,800,000	2.52246	2426	2,500,000	2.69769	2610
1,900,000	2.54672	2451	2,600,000	2.72379	2639
2,000,000	2.57123	2477	2,700,000	2.75018	

TRANSVERSE MERCATOR PROJECTION

Idaho

$$\Delta\alpha = Mx^1 - e$$

y	East and central zones		West zone	
	M	ΔM	M	ΔM
0	0.008 7592	847	0.008 7593	847
100,000	0.008 8439	854	0.008 8440	854
200,000	0.008 9293	862	0.008 9294	862
300,000	0.009 0155	869	0.009 0156	870
400,000	0.009 1024	877	0.009 1026	877
500,000	0.009 1901	885	0.009 1903	884
600,000	0.009 2786	893	0.009 2787	893
700,000	0.009 3679	901	0.009 3680	901
800,000	0.009 4580	909	0.009 4581	909
900,000	0.009 5489	918	0.009 5490	918
1,000,000	0.009 6407	926	0.009 6408	926
1,100,000	0.009 7333	934	0.009 7334	935
1,200,000	0.009 8267	944	0.009 8269	944
1,300,000	0.009 9211	953	0.009 9213	953
1,400,000	0.010 0164	962	0.010 0166	962
1,500,000	0.010 1126	972	0.010 1128	972
1,600,000	0.010 2098		0.010 2100	981
1,700,000			0.010 3081	991
1,800,000			0.010 4072	1001
1,900,000			0.010 5073	1012
2,000,000			0.010 6085	1022
2,100,000			0.010 7107	1032
2,200,000			0.010 8139	1043
2,300,000			0.010 9182	1055
2,400,000			0.011 0237	1065
2,500,000			0.011 1302	1078
2,600,000			0.011 2380	1089
2,700,000			0.011 3469	1101
2,800,000			0.011 4570	

Idaho

East, central, and west zones

e

y \ x'	100,000	200,000	300,000	400,000
0	0.0	0.1	0.3	0.7
500,000	0.0	0.1	0.3	0.8
1,000,000	0.0	0.1	0.4	0.9
1,500,000	0.0	0.1	0.4	1.0
2,000,000	0.0	0.2	0.5	1.1
2,500,000	0.0	0.2	0.5	1.3

TRANSVERSE MERCATOR PROJECTION

IDAHO

East and Central Zones

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	-228.6	0.9999474	175,000	-76.7	0.9999823
5,000	-228.5	0.9999474	180,000	-67.9	0.9999844
10,000	-228.1	0.9999475	185,000	-58.8	0.9999865
15,000	-227.5	0.9999476	190,000	-49.5	0.9999886
20,000	-226.6	0.9999478	195,000	-40.0	0.9999908
25,000	-225.5	0.9999481	200,000	-30.2	0.9999930
30,000	-224.1	0.9999484	205,000	-20.1	0.9999954
35,000	-222.5	0.9999488	210,000	-9.8	0.9999977
40,000	-220.7	0.9999492	215,000	+0.7	1.0000002
45,000	-218.6	0.9999497	220,000	+11.5	1.0000026
50,000	-216.2	0.9999502	225,000	+22.5	1.0000052
55,000	-213.6	0.9999508	230,000	+33.8	1.0000078
60,000	-210.7	0.9999515	235,000	+45.3	1.0000104
65,000	-207.6	0.9999522	240,000	+57.1	1.0000131
70,000	-204.3	0.9999530	245,000	+69.2	1.0000159
75,000	-200.7	0.9999538	250,000	+81.5	1.0000188
80,000	-196.9	0.9999547	255,000	+94.0	1.0000216
85,000	-192.8	0.9999556	260,000	+106.8	1.0000246
90,000	-188.4	0.9999566	265,000	+119.8	1.0000276
95,000	-183.8	0.9999577	270,000	+133.0	1.0000306
100,000	-179.0	0.9999588	275,000	+146.5	1.0000337
105,000	-173.9	0.9999600	280,000	+160.3	1.0000369
110,000	-168.6	0.9999612	285,000	+174.3	1.0000401
115,000	-163.0	0.9999625	290,000	+188.6	1.0000434
120,000	-157.2	0.9999638	295,000	+203.1	1.0000468
125,000	-151.1	0.9999652	300,000	+217.9	1.0000502
130,000	-144.8	0.9999667	305,000	+232.9	1.0000536
135,000	-138.2	0.9999682	310,000	+248.1	1.0000571
140,000	-131.4	0.9999697	315,000	+263.6	1.0000607
145,000	-124.3	0.9999714	320,000	+279.4	1.0000643
150,000	-117.0	0.9999731	325,000	+295.4	1.0000680
155,000	-109.4	0.9999748	330,000	+311.6	1.0000717
160,000	-101.6	0.9999766	335,000	+328.1	1.0000755
165,000	-93.5	0.9999785	340,000	+344.9	1.0000794
170,000	-85.2	0.9999804	345,000	+361.9	1.0000833

TRANSVERSE MERCATOR PROJECTION

IDAHO

East and Central Zones

x' (feet)	Scale in units of 7th place of logs	Scale expressed as a ratio
350,000	+379.1	1.0000873
355,000	+396.6	1.0000913
360,000	+414.3	1.0000954
365,000	+432.3	1.0000995
370,000	+450.5	1.0001037
375,000	+469.0	1.0001080
380,000	+487.7	1.0001123
385,000	+506.7	1.0001167
390,000	+525.9	1.0001211
395,000	+545.4	1.0001256
400,000	+565.1	1.0001301
405,000	+585.1	1.0001347
410,000	+605.3	1.0001394
415,000	+625.8	1.0001441
420,000	+646.5	1.0001489
425,000	+667.4	1.0001537
430,000	+688.6	1.0001586
435,000	+710.1	1.0001635
440,000	+731.8	1.0001685
445,000	+753.7	1.0001735
450,000	+775.9	1.0001787

TRANSVERSE MERCATOR PROJECTION

IDAHO

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	-289.5	0.9999333	175,000	-137.6	0.9999683
5,000	-289.4	0.9999334	180,000	-128.8	0.9999703
10,000	-289.0	0.9999335	185,000	-119.8	0.9999724
15,000	-288.4	0.9999336	190,000	-110.5	0.9999746
20,000	-287.5	0.9999338	195,000	-101.0	0.9999767
25,000	-286.4	0.9999341	200,000	-91.2	0.9999790
30,000	-285.0	0.9999344	205,000	-81.1	0.9999813
35,000	-283.4	0.9999347	210,000	-70.8	0.9999837
40,000	-281.6	0.9999352	215,000	-60.3	0.9999861
45,000	-279.5	0.9999356	220,000	-49.5	0.9999886
50,000	-277.1	0.9999362	225,000	-38.5	0.9999911
55,000	-274.5	0.9999368	230,000	-27.2	0.9999937
60,000	-271.6	0.9999375	235,000	-15.7	0.9999964
65,000	-268.5	0.9999382	240,000	-3.9	0.9999991
70,000	-265.2	0.9999389	245,000	+8.1	1.0000019
75,000	-261.6	0.9999398	250,000	+20.4	1.0000047
80,000	-257.8	0.9999406	255,000	+32.9	1.0000076
85,000	-253.7	0.9999416	260,000	+45.7	1.0000105
90,000	-249.3	0.9999426	265,000	+58.7	1.0000135
95,000	-244.7	0.9999437	270,000	+72.0	1.0000166
100,000	-239.9	0.9999448	275,000	+85.5	1.0000197
105,000	-234.8	0.9999459	280,000	+99.2	1.0000228
110,000	-229.5	0.9999472	285,000	+113.2	1.0000261
115,000	-223.9	0.9999484	290,000	+127.5	1.0000294
120,000	-218.1	0.9999498	295,000	+142.0	1.0000327
125,000	-212.0	0.9999512	300,000	+156.8	1.0000361
130,000	-205.7	0.9999526	305,000	+171.8	1.0000396
135,000	-199.1	0.9999542	310,000	+187.0	1.0000431
140,000	-192.3	0.9999557	315,000	+202.5	1.0000466
145,000	-185.2	0.9999574	320,000	+218.2	1.0000502
150,000	-177.9	0.9999590	325,000	+234.2	1.0000539
155,000	-170.4	0.9999608	330,000	+250.5	1.0000577
160,000	-162.6	0.9999626	335,000	+267.0	1.0000615
165,000	-154.5	0.9999644	340,000	+283.7	1.0000653
170,000	-146.2	0.9999663	345,000	+300.7	1.0000692

TRANSVERSE MERCATOR PROJECTION

IDAHO

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
350,000	+317.9	1.0000732	425,000	+606.1	1.0001396
355,000	+335.4	1.0000772	430,000	+627.3	1.0001444
360,000	+353.1	1.0000813	435,000	+648.8	1.0001494
365,000	+371.1	1.0000854	440,000	+670.5	1.0001544
370,000	+389.3	1.0000896	445,000	+692.4	1.0001594
375,000	+407.8	1.0000939	450,000	+714.6	1.0001645
380,000	+426.5	1.0000982	455,000	+737.0	1.0001697
385,000	+445.5	1.0001026	460,000	+759.7	1.0001749
390,000	+464.7	1.0001070	465,000	+782.6	1.0001802
395,000	+484.1	1.0001115	470,000	+805.8	1.0001855
400,000	+503.8	1.0001160	475,000	+829.2	1.0001909
405,000	+523.8	1.0001206	480,000	+852.9	1.0001964
410,000	+544.0	1.0001253	485,000	+876.8	1.0002019
415,000	+564.5	1.0001300	490,000	+901.0	1.0002075
420,000	+585.2	1.0001347	495,000	+925.4	1.0002131
			500,000	+950.1	1.0002188

CORRECTIONS TO NATURAL SCALE RATIOS*
(in units of the 7th decimal place)

For Lambert Projection

$\Delta\phi'$ as argument

<u>$\Delta\phi'$</u>	<u>Corr'n (Plus)</u>	<u>$\Delta\phi'$</u>	<u>Corr'n (Plus)</u>
1	0	31	34
2	0	32	36
3	0	33	38
4	1	34	40
5	1	35	43
6	1	36	45
7	2	37	48
8	2	38	51
9	3	39	53
10	4	40	56
11	4	41	59
12	5	42	62
13	6	43	65
14	7	44	68
15	8	45	71
16	9	46	74
17	10	47	77
18	11	48	81
19	13	49	84
20	14	50	88
21	15	51	91
22	17	52	95
23	19	53	98
24	20	54	102
25	22	55	106
26	24	56	110
27	26	57	114
28	27	58	118
29	29	59	122
30	32	60	126

$\Delta\phi'$ is the difference in latitude in minutes of the ends of the line.

For Lambert or transverse Mercator Projection

<u>Δ_y or</u>	<u>Δ_x</u>	<u>Corr'n (Plus)</u>
10,000		0
20,000		0
30,000		1
40,000		2
50,000		2
60,000		3
70,000		5
80,000		6
90,000		8
100,000		10
110,000		11
120,000		14
130,000		16
140,000		19
150,000		21
160,000		24
170,000		27
180,000		31
190,000		34
200,000		38
210,000		42
220,000		46
230,000		50
240,000		55
250,000		59
260,000		64
270,000		69
280,000		74
290,000		80
300,000		86
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.