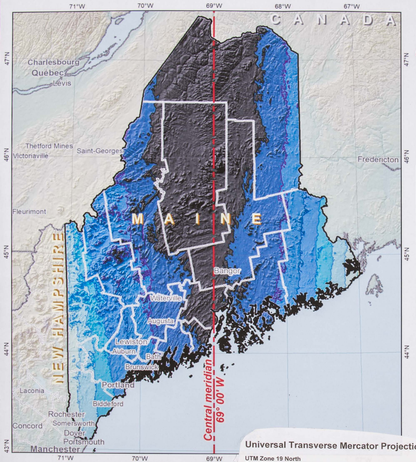
UTM Zone 19 North (IN-USE)



Existing UTM Zone 19 North used as statewide zone:

Maine

NOAA's National Geodetic Survey

Transverse Mercator projection

North American Datum of 1983

Central meridian: 69° 00' W
Cen merid scale: 0.999 6 (exact)

Areas within ±75 ppm distortion (1:13,333 = ±0.40 ft per mile):
0% of population
0% of all cities and towns
0% of entire zone area

Distortion values (ppm)

Entire zone:	*Cities and towns:*
Min = -638	Min, Max = -448, -86
Max = -75	Range = 361
Range = 563	Mean = -305
Mean = -358	(weighted by population)

Linear distortion at topographic surface (parts per million)

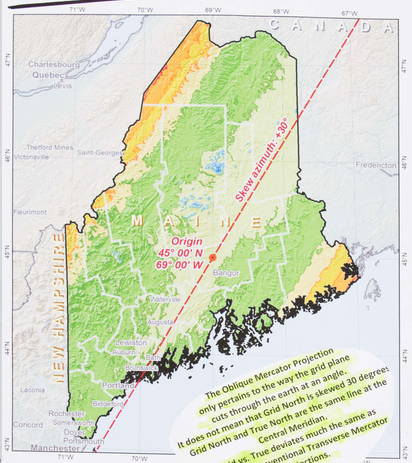
< -400	to -200	to +150
to -400	to -150	to +200
to -350	to -100	to +250
to -300	±50	to +300
to -250	to +100	> +300

0 50 100 150 200 km

Created 01/27/2019

Universal Transverse Mercator Projection

UTM Zone 19 North
Transverse Mercator Projection
Origin Latitude 00 00 00 N
Origin Longitude 69 00 00 W (Central Meridian)
False Northing 0.000m
False Easting 500000m (1,640,416.666...sFT)
Reduction in feet per thousand at Central Meridian:
Grid Coordinate Direction is North and East
SF: 0.9996
1:2500 Maximum Distortion at Central Meridian



The Oblique Mercator Projection only pertains to the way the grid plane cuts through the earth at an angle. It does not mean that Grid North is skewed 30 degrees: Grid North and True North are the same line at the Central Meridian.

Grid vs. True deviates much the same as it does in conventional Transverse Mercator Projections.

Preliminary SPCS2022 statewide zone design:

Maine
(alternative 1)

NOAA's National Geodetic Survey

Oblique Mercator projection

North American Terrestrial Reference Frame of 2022

Origin latitude: 45° 00' N
Origin longitude: 69° 00' W
Skew axis scale: 0.999 95 (exact)
Skew azimuth: +30°

Areas within ±75 ppm distortion (1:13,333 = ±0.40 ft per mile):
99% of population
92% of all cities and towns
83% of entire zone area

Distortion values (ppm)

Entire zone:	*Cities and towns:*
Min = -264	Min, Max = -77, +209
Max = +227	Range = 287
Range = 491	Mean = -40
Mean = -10	(weighted by population)

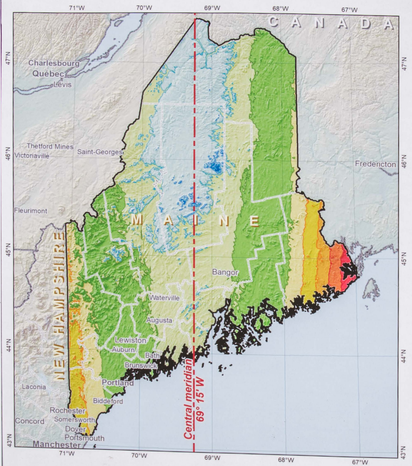
Linear distortion at topographic surface (parts per million)

< -400	to -200	to +150
to -400	to -150	to +200
to -350	to -100	to +250
to -300	±50	to +300
to -250	to +100	> +300

0 50 100 150 200 km

Created 01/28/2019

PROPOSED STATEWIDE SINGLE ZONES



Preliminary SPCS2022 statewide zone design:

Maine
(alternative 2)

NOAA's National Geodetic Survey

Transverse Mercator projection

North American Terrestrial Reference Frame of 2022

Central meridian: 69° 15' W
Cen merid scale: 0.999 93 (exact)

Areas within ±75 ppm distortion (1:13,333 = ±0.40 ft per mile):
90% of population
71% of all cities and towns
54% of entire zone area

Distortion values (ppm)

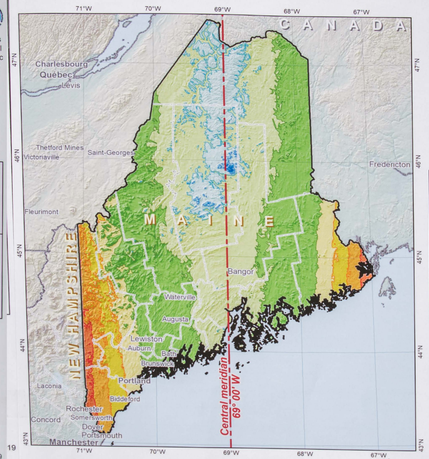
Entire zone:	*Cities and towns:*
Min = -301	Min, Max = -122, +326
Max = +339	Range = 448
Range = 640	Mean = -0.3
Mean = -32	(weighted by population)

Linear distortion at topographic surface (parts per million)

< -400	to -200	to +150
to -400	to -150	to +200
to -350	to -100	to +250
to -300	±50	to +300
to -250	to +100	> +300

0 50 100 150 200 km

Created 01/27/2019



Preliminary SPCS2022 statewide zone design:

Maine
(alternative 3)

NOAA's National Geodetic Survey

Transverse Mercator projection

North American Terrestrial Reference Frame of 2022

Central meridian: 69° 00' W
Cen merid scale: 0.999 94 (exact)

Areas within ±75 ppm distortion (1:13,333 = ±0.40 ft per mile):
75% of population
73% of all cities and towns
60% of entire zone area

Distortion values (ppm)

Entire zone:	*Cities and towns:*
Min = -298	Min, Max = -108, +254
Max = +265	Range = 361
Range = 564	Mean = +35
Mean = -18	(weighted by population)

Linear distortion at topographic surface (parts per million)

< -400	to -200	to +150
to -400	to -150	to +200
to -350	to -100	to +250
to -300	±50	to +300
to -250	to +100	> +300

0 50 100 150 200 km

Created 01/27/2019