ArcGIS Supported Map Projections

		Properties							Suitable Extent						Location or Shape						General Purpose					
Projection	**Type**	Conformal	Equal Area	Equidistant*	True Direction*	Perspective	Compromise	Straight Rhumbs	World	Hemisphere	Continent/Ocean	Region/Sea	Medium Scale	Large Scale	North/South	East/West	Oblique	Equatorial	Midlatitude	Polar/Circular	Topographic	Geologic	Thematic	Presentation	Navigation	USGS
Aitoff	Modified Azimuthal	~	~				√		√										√					√		
Alaska Grid[1]	Modified Planar	√	~		√							√							√				√			√
Alaska Series E	Pseudocylindrical												√								√					√
Albers equal area conic	Conic		√								√	√	√			√			√				√	√		√
Azimuthal equidistant	Planar			√	√				~	√	√	√		~			√	√	√	√	√				√	√
Behrmann equal area cylindrical	Cylindrical		√						√															√		
Berghaus Star	Interrupted, faceted				√		√		√								√							√		
Bipolar oblique conformal conic	Conic (Oblique)	√									√											√		√		√
Bonne	Pseudoconic		√								√				~											
Cassini-Soldner	Cylindrical													√	√						√					
Chamberlin Trimetric	Modified Planar			~							√															
Craster Parabolic	Pseudocylindrical		√						√																	
Cube[2]	Faceted						√																			
Cylindrical equal area	Cylindrical		√		√											√		√						√		
Double Stereographic	Planar	√			√	√				√	√	√					√	√	√	√		√			√	
Eckert I	Pseudocylindrical								√																	
Eckert II	Pseudocylindrical		√						√																	
Eckert III	Pseudocylindrical								√														√			
Eckert IV	Pseudocylindrical		√						√														√			
Eckert V	Pseudocylindrical								√														√			
Eckert VI	Pseudocylindrical		√						√														√			
Equidistant conic	Conic			√							~	√				√			√					√		
Equidistant cylindrical[3]	Cylindrical			√										√												√
Fuller	Faceted						√		√														√	√		
Gall's Stereographic	Cylindrical					√			~															√		
Gauss-Kruger	Cylindrical (Transverse)	√									√	√	√	√	√			√	√		√	√				
Geocentric[4]	Spherical								√																	
Geographic[4]	Spherical								√																	
Gnomonic	Planar				√	√						~					√	√	√	√				√	√	
Goode Homolosine[5]	Interrupted Pseudo-cylindrical Equal-Area		√						√														√	√		
Great Britain National Grid	Cylindrical	√										√	√	√	√						√	√				
Hammer-Aitoff	Modified Planar		√						√														√	√		
Hotine Oblique Mercator	Cylindrical (Oblique)	√									√	√	√	√			√				√					√
Krovak	Conic	√										√	√	√			√				√	√		√	√	
Lambert Azimuthal equal area	Planar		√		√					√	√	√					√	√	√	√			√	√	√	√
Lambert conformal conic	Conic	√									√	√	√	√		√			√		√	√		√	√	√
Local Cartesian System	Planar													√												
Loximuthal	Pseudocylindrical							√																	√	
McBryde-Thomas Flat Polar Quartic	Pseudocylindrical		√						√																	
Mercator	Cylindrical	√						√	~			√	√	√		√		√			√	√			√	√
Miller Cylindrical	Cylindrical						√		√														√			√
Mollweide	Pseudocylindrical		√						√														√			
New Zealand Grid	Modified Cylindrical	√											√	√			√				√	√				
Oblique Mercator	Cylindrical (Oblique)	√									√	√	√	√			√				√					√
Orthographic	Planar				√	√				√	√						√	√	√	√				√		√
Perspective[5]					√	√					√	√					√	√	√	√				√		
Plate-Carée	Cylindrical			√										√												√
Polar Stereographic	Planar	√			√	~				√	√		√							√	√			√		√
Polyconic	Conic			~			√						~	~	√						√					√
Quartic Authalic	Pseudocylindrical		√						√														√			
Robinson	Pseudocylindrical						√		√														√	√		
Rectified Skew Orthomorphic	Cylindrical (Oblique)	√											√	√			√				√					
Simple Conic	Conic			√							~	√				√			√					√		
Sinusoidal	Pseudocylindrical		√	~					√		√				√			√					√			√
Space Oblique Mercator	Modified Cylindrical	~												√							√					√
State Plane [6]		√											√	√							√	√		√		√
Stereographic	Planar	√			√	√				√	√	√					√	√	√	√		√			√	√
Times	Pseudocylindrical						√		√														√	√		
Transverse Mercator	Cylindrical (Transverse)	√										√	√	√	√			√	√		√	√				√
Two Point Equidistant	Modified Planar			√					~		√	√					√						√		~	
Universal Polar Stereographic	Planar	√			√	~					√	√	√	√						√	√	√		√		√
Universal Transverse Mercator (UTM)	Cylindrical (Transverse)	√										√	√	√	√			√	√		√					√
Van der Grinten I	Circular						√		~															√		√
Vertical Near-side Perspective[7]	Planar				√	√					√	√					√	√	√	√				√		
Winkel I	Pseudocylindrical								√															√		
Winkel II	Pseudocylindrical								√															√		
Winkel Tripel	Modified Planar						√		√														√	√		

1 Modified Stereographic Conformal
2 Used in ArcGlobe - true direction in limited areas
3 Also known as Equirectangular
4 Not a map projection. The earth is modeled as a sphere or spheroid
5 Combination of the Mollweide and Sinusoidal projections
6 See Lambert Conformal Conic, Transverse Mercator, and Hotine Oblique Mercator
7 Also known as Perspective or Vertical Perspective

√ = Minimal Distortion
~ = Distortion is moderate for most of the area
* = Distortion is minimal in certain directions or at particular points

Adapted from *Map Projections,* a USGS poster

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