
Surveying and Land Records

Glossary of Terms

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Published by:

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Printed in the United States of America

ISBN #: 0-916848-34-5

Glossary of Terms

Compiled by Nancy von Meyer with review support from many in the land records community.

This glossary contains terms that are commonly used in the surveying and land records business. The term definitions reference their source so the user can evaluate whether a definition is appropriate to their use or evaluate among multiple definitions. The sources included many commonly used land surveying texts as well as legal dictionaries and existing geographic information systems glossaries. Another widely used source was the Bureau of Land management's data dictionaries and glossaries. These documents evolved out of large land records modernization projects in the federal government and were used because of the impact of these systems.

Support for the development of this glossary comes in part from the Bureau of Land Management's National Integrated Land System (NILS) project. The author and URISA thank the BLM and NILS for their efforts and contributions to this document.

As with any glossary project, this document will be revised and improved over time. Please send any comments, additions, or suggestions to the URISA publications coordinator

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Surveying and Land Records Glossary of Terms

A Priori

Obtained solely through reasoning from axioms or assumed principles, without appeal to experience.

ASCE-ACSM 1993

From the cause to the effect; from what goes before. A term used in logic to denote an argument founded on analogy or abstract considerations or one which positing a general principle or admitted truth as a cause, proceeds to deduce from it the effects which must necessarily follow

Black, Henry Campbell 1991

Abandoned Military

A military reservation which has been transferred to the Department of the Interior for Administration.

BLM 1980

Abandonment

The surrender, relinquishment, disclaimer, or cession of property or of rights. Voluntary relinquishment of all right, title, claim and possession with the intention of not reclaiming it.

Black, Henry Campbell 1991

Voluntary surrender or relinquishment of possession in real property without vesting this interest in another person.

ASCE-ACSM 1993

To desert or forsake entirely. To voluntarily relinquish possession with the intent of terminating ownership, but without vesting it in any other person. In determining whether one has abandoned his property or rights, intent is the paramount object of inquiry for to abandon, one must intend to abandon. The intent must be clear and the act must be complete. To abandon a homestead one must leave with the intention of never returning. To abandon a mining claim held by location without patent, the holder must leave voluntarily without any intention to retake or resume the claim and regardless of what may become of it in the future. Even in prescriptive rights, non-use is not abandonment.

BLM 1980

About

Approximately; with some approach to exactness in respect to quantity. A deed to land being about 30 feet wide was insufficient to pass title to land (*Tinelite v. Simmott* 5 NYS 439). Has also been interpreted as nearly, more or less, in close correspondence to. About north was interpreted as astronomical north when nothing else was supplied (*Shipp v Miller* 15 US 316)

Brown, Curtis M 1995

Abridgement

A summary of another and larger work, wherein the principal ideas of the larger work are summarily contained.

FGDC - Subcommittee on Cadastral Data 1999

A summary of another and larger work, wherein the principal ideas of the larger work are summarily contained.

Wisconsin Register of Deeds Association 1995

Abrogate

To abolish by authoritative action. To do away with or annul.

BLM 1980

Absentee Owner

By law, one cannot be both a resident and an absentee of a given area, state or country. Therefore, an owner who lives in an area other than the one in which land he owns is situated is an absentee owner.

BLM 1980

Absolute Orientation

The scaling, leveling and attitude correction of photographs in a photogrammetric instrument to fit ground control or the mathematically equivalent process in analytical photogrammetry.

BLM 1980

Abstract

A summary or abridgment. A shortened form of a work or record retaining the general sense and unity of the original. (verb) To summarize. To shorten or condense by the omission of words without sacrifice of sense or continuity.

BLM 1980

A bare or brief statement of facts written in abbreviated words; a statement of the important parts of a deed, trust deed, or other legal instrument, colloquialism for abstract of title

Brown, Curtis M 1995

Abstract

A summary that comprises or concentrates in itself the essential qualities of a larger thing or of several things. A lesser quantity containing the virtue and force of a greater quantity; an abridgement.

Wisconsin Register of Deeds Association 1995

Abstract of Title

A condensed history of the title to land consisting of a synopsis or summary of the material or operative portion of all the conveyances, of whatever kind or nature, which in any manner affect said land or any estate or interest therein together with a statement of all liens charges or liabilities to which the same may be subject and of which it is in any way material for purchasers to be appraised.

Black, Henry Campbell 1991

A condensed history of the title to land consisting of a synopsis or summary of the material or operative position of all the conveyances, which in any manner affects said land or any estate or interest therein, together with a statement of all liens, charges, or liabilities to which the same may be subject.

BLM 1980

A compilation of abstracts of deeds, trust deeds, and other pertinent data that affects the title to a piece of real property, all bound together in abstract order. It is a form of title evidence made for the purpose of title examination

Brown, Curtis M 1995

A condensed history of the title to land, consisting of a synopsis or summary of the material or operative portion of all the conveyances, of whatever kind or nature, which in any manner affect said land, or any estate or interest therein, together with a statement of all liens, charges, or liabilities to which the same may be subject, and of which it is in any way material

Wisconsin Register of Deeds Association 1995

Abstract of Title

(1) A complete summary of all information on public record relating to ownership (title) of a parcel of land. (2) A summary of all conveyances, such as deeds or wills, and legal proceedings giving the names of the parties, the description of the land in question, and the agreements, arranged to show the continuity of ownership. An abstract of title customarily cites the surveys delimiting the parcel of land, refers to plats made from surveys, and lists legal instruments affecting ownership and title, such as deeds, mortgages, liens, and the like. It usually has the information arranged in chronological

order to show the history of ownership. Often referred to simply as an abstract. Rather than referring to an abstract of title as a title, as is sometimes done, the better term would be examination of title or, as is also common, title examination, because legally, an abstract and a title are not the same thing.

ASCE-ACSM 1993

Abstractor Plat

A plat carrying a compilation of all descriptions of land within a given region, showing controlling measurements and other data. Not all dimensions in a deed are shown; those that are a controlling consideration are emphasized.

ASCE-ACSM 1993

Abut

To reach or adjoin. In old law sides of land adjoin where as ends of property abut

Brown, Curtis M 1995

To reach; to touch. In old law, the ends were said to abut the sides to adjoin. The term "abutting" implies a closer proximity than the term adjacent."

New Mexico Assessors 2001

To reach, to touch. To touch at the end, be contiguous, join at the border or boundary terminate on, end at, border on. Abutting implies closer proximity than adjoining

Black, Henry Campbell 1991

To reach; to touch. In old law the ends were, said to abut, the sides to adjoin. The term "abutting" implies a closer proximity than the term "adjacent."

BLM 1980

Abuttal

Boundaries or buttings of land, adjoiners

Brown, Curtis M 1995

The buttings or boundings of lands, showing to what other lands, highways or places they belong or are abutting

Black, Henry Campbell 1991

The boundary of land described in terms of the other pieces of land, highways, etc., that adjoin and bound that land. Also called buttal or butting. For example, abutted on the west by lot number 36. This term has been used to denote the boundaries on the ends as distinguished from those on the sides, as buttings and sidings.

ASCE-ACSM 1993

Abutter

One whose property abuts, is contiguous or joins at a border or boundary as where no other land road or street intervenes
 Black, Henry Campbell 1991

Abutting Owner

An owner of land which abuts or adjoins. The term usually implies that the relative parts actually adjoin, but it is sometimes loosely used without implying more than close proximity.
 Black, Henry Campbell 1991

The butting or bounding of lands, showing to what other lands they adjoin. (abutting property)
 BLM 1980

Access

The right to enter and leave over the lands of another. See Egress and Regress
 BLM 1980

Access Rights

In acquiring freeway, turnpike, or throughway lands, ingress and egress of the abutter called access rights are often denied
 Brown, Curtis M 1995

Accession

Title to real property can be acquired by accession which is the addition of property by growth, increase or labor. Land gradually deposited on the bank of a stream by imperceptible means becomes the land of the upland owner by accession
 Brown, Curtis M 1995

Accessories

Physical objects adjacent to corners that have a measured or known relationship to the corner and can be used to identify original corners. These include memorials, bearing trees, mounds, pits, rocks, and banks. Accessories are often considered as a part of a corner monument itself rather than aiding in a secondary way
 Brown, Curtis M 1995

Accessory

Anything which is joined to another thing as an ornament, or to render it more perfect or which accompanies it or is connected with it as an incident or as subordinate to it or which belongs to or with it.
 Black, Henry Campbell 1991

Accretion

Addition of portions of soil by gradual deposition through the operation of natural causes to that already in possession of owner. Accretion of land is of two kinds: by alluvion i.e. the washing up of sand or soil so as to form firm ground; or by dereliction as when the sea shrinks below the usual water-mark. The term alluvion is applied to the deposit itself, while accretion denotes the act. However, the terms are sometimes used synonymously. Land uncovered by gradual subsidence of water is not accretion but reliction.
 Black, Henry Campbell 1991

Derived from the Latin “accrescere” which means to grow or increase, it is the gradual and imperceptible addition of soil or other material by the natural processes of water-borne sedimentation or by the action of currents against shores and banks. Accretion is the washing of sand, silt or soil so as to form firm ground, called alluvion. In common practice the terms alluvion and accretion have been used almost interchangeably. Usually, however, alluvion means the deposit itself while accretion usually denotes the act. See Alluvion, Reliction, Erosion, Avulsion, Riparian Rights.
 BLM 1980

Increase by external addition; enlargement; the act of growing to a thing. Where from natural causes, land forms by imperceptible degrees upon the bank of a river, stream or lake or tidewater either by the accumulation of material or recession of water. The process is called accretion and the land formed is called accretions
 Brown, Curtis M 1995

(1) The gradual and imperceptible addition of land by natural causes, as out of the sea or a river. Also called alluvion, although that term is also taken to mean the material itself. Accretion occurs principally by the action of water and is of two kinds: a) the deposition of solids and b) the recession of the edge of the water. The term alluvion is sometimes used for the first kind and or the material deposited (also called alluvium); the second kind is called reliction or dereliction. Some authorities take alluvion to mean only the material deposited, which makes it a synonym for alluvium. Accretion applies only to the accumulation of land. Accumulation of solid matter under water is referred to as batture, as is the result of such accumulation.
 ASCE-ACSM 1993

Accuracy

The degree of conformity or closeness of a measurement to the true value

Edward M Mikhail and Gordon Gracie 1981

Degree of conformity with a standard. Accuracy relates to the quality of a result and is distinguished from precision which relates to the quality of the operation by which the result is obtained

ACSM 1978

(1) The difference (unsigned) between a specified value of a particular quantity and a value that has been accepted as correct for that quantity. When this difference is known and has a sign, it may be called a correction or an error, depending on the viewpoint of the user. When the difference is known only very approximately, it is usually referred to merely as high accuracy if small and low accuracy if large, without stating numerical values. (2) A measure of the closeness of a set of values, measured or calculated, to the true value. Also called outer accuracy or external accuracy by some European writers. Accuracy is sharply distinguished, in English, from precision, which is a measure of the closeness of the measurements to each other. So a very precise set of measurements can be much less accurate than a different set which is more accurate but less precise.

ASCE-ACSM 1993

Closeness of results of observations, computations, or estimation of spatial features to their true value of position. Compare with Precision. 1) Absolute accuracy is the differential between the actual real world location of a point on the surface of the earth and its mathematically assigned geographic coordinate. If a specification calls for the precision to be within one foot, its assigned coordinate value must be within one foot of its actual geographic location as mathematically determined according to the project's map projection. 2) Relative Accuracy" is the displacement of the actual position of a point compared to its "precise" location.

URISA 2000

Degree of conformity with a standard, or accepted value. Accuracy relates to the quality of a result, and is distinguished from precision which relates to the quality of the operation by which the result is obtained. BLM 1980

Nearness to the truth

Brown, Curtis M 1995

Closeness of results of observations, computations, or estimation of spatial features to their true value of position.

Kansas Association of Mappers 1997

Acequia

A ditch, channel or canal through which water, diverted from its natural course, is conducted for use in irrigation or other purposes. Public ditches.

BLM 1980

Acquiescence

Implied consent to a transaction, to the accrual of a right, or to any act by one's silence or without express assent

Harbin, Andrew L. 1998

Passive compliance or satisfaction, acquiescence in a fence is not avowed consent not is it open discontent

Brown, Curtis M 1995

Some act of concurrence by the adjoining owners bearing on the practical location of their common boundary where the definite or more accurate position of the line or lines has not or cannot be defined by survey. Acquiescence may be the tacit consent of one owner by not interposing a formal objection to what might be an encroachment by another, all subject to judicial review as to the legal effect.

BLM 1980

Acquiescence and Latches

These are cognate but not equivalent terms. The former is a submission to or resting satisfied with an existing state of things, which latches implies a neglect to do that which the party ought to do for his own benefit or protection. Hence latches may be evidence of acquiescence. Latches imports a merely passive assent, while acquisition implies active assent

Black, Henry Campbell 1991

Acquired Lands

Federal lands obtained by purchase, condemnation, exchange, or gift under laws other than public land laws. Legally defined as: "...land obtained by the United States through purchase or transfer from a State or private individual and normally dedicated to a specific use." McKenna v. Wallis, 200 F. Supp. 468 (1961). See also Bobby Lee Moore, et al, 72 I.D. 505 (1965).

BLM 1980

Acquired Lands Survey

Federal lands acquired by purchase, condemnation, exchange, or gift under laws other than public land laws. May also be called reacquired lands. The survey of acquired or reacquired land may be subject to state and other local laws.

BLM 1980

Acre

Ten square chains - 43560 square feet.

Brown,Curtis M 1995

Acre Right

The share of a citizen of a New England town in the common land. The value of the acre right was a fixed quantity in each town but varied from town to town. A 10-acre lot or acre right in a certain town was equivalent to 113 acres of upland and 12 acres of meadow, and a certain exact proportion was maintained between the acre right and saleable lands.

ASCE-ACSM 1993

Early New England term, the share of a citizen of a town in the common lands. It varied from town to town.

Brown,Curtis M 1995

Actor

Actors represent anything external that interacts with the system in some way. An actor may be a person or another computer system or program event

Hands on Technology Transfer, Inc 1999

Ad Filum Aquae

To the central line, or middle, of the stream. Literally, to the thread of the water.

ASCE-ACSM 1993

ADA Requirements

Americans with Disabilities Act requirements. The Americans with Disabilities Act gives civil rights protections to individuals with disabilities similar to those provided to individuals on the basis of race, color, sex, national origin, age, and religion. It guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications. ADA does not apply to the Federal Government. However, Section 508 of the Rehabilitation Act does apply to federal employees and the public; it specifically addresses employment opportunities in the field of information technology for those with disabilities.

NILS Development Teams 2001

Address Baselines

beginning streets (or other readily identifiable physical features) which represent the starting or beginning points for the address or house number intervals. Depending on the orientation of the thoroughfare.

URISA 2000

Address Grids

geographic areas within which certain address rules apply. For enforcement purposes the grids should be easily identified on a detailed base map. Note that the grid boundaries may or may not be synonymous with the political jurisdiction boundaries. Unannexed areas located adjacent to built up areas may use the addressing rules of the adjoining municipality. In reality some address grids may appear to be "interleaved" with no clear cut boundary line between adjoining grids.

URISA 2000

Address Matching

A mechanism for relating two files using address as the relate item. Geographic coordinates and attributes can be transferred from one address to the other. For example, a data file containing student addresses can be matched to a street coverage that contains addresses creating a point coverage of where the students live.

Kansas Association of Mappers 1997

Process that compares a table of addresses to the address attributes of a theme to convert textual addresses to locations on a map. Street name and address values are compared to DBMS records to find the street segment with a matching name and address range. The address is then located at a prorata distance from the street segments start-point proportional to the addresses value relative to the street's address range value and on the appropriate side of the street (even addresses always on the right, etc.).

URISA 2000

Adjacent

Lying near or close to; sometimes contiguous; neighboring. The term "adjacent" implies that the two objects or parcels of land are not widely separated, though they may not actually touch, while "adjoining" implies that they are so joined or united to each other that no third object or parcel of land intervenes.

New Mexico Assessors 2001

(1) Lying near or close to. (2) Contiguous with; touching. Adjacent, as used in land surveying, has the first meaning and implies that the two objects or parcels of land are not widely separated, although they may not actually touch, while adjoining has the second meaning and implies that no third object or piece of land lies between them.

ASCE-ACSM 1993

To be near, close or contiguous, in the neighborhood or vicinity of but not necessarily touching or adjoining or continuous to are common meanings to adjacent. More often used to mean adjoiner and if this is the case the term adjoiner is preferred.

Brown, Curtis M 1995

Adjoiner

Adjoin means to be in contact with hence the adjoiner is the land in contact with the instant property. When speaking it is often used to mean the written deed of the adjoiner.

Brown, Curtis M 1995

Adjoining

Touching or contiguous, as distinguished from lying near to or adjacent. To be in contact with; to abut upon.

New Mexico Assessors 2001

Touching, as distinguished from being merely close to or adjacent. adjoining and abutting are at present often used as if they were synonymous. However, it is recommended that the old distinction be retained where possible. Two parcels adjoin if they have a common side; they abut if they have a common end. (2) Close to. This usage is improper but, fortunately, rare.

ASCE-ACSM 1993

The word adjoining in a description of a premise conveyed means next to or in contact with and excludes the idea of intervening space, coincident with.

Brown, Curtis M 1995

Adjoining Owners

Those persons who own land touching the subject land and who is as a result have right to notice of proceedings concerning subject real estate as for example in zoning and licensing matters

Black, Henry Campbell 1991

Adjudication

The legal and demonstrative processing of casework to assure full compliance with the public land laws and regulations and to determine rights.

ASCE-ACSM 1993

Adjusted Point

A point whose coordinates are the result of an adjusted measurement network.

NILS Development Teams 2001

Adjustment

Mathematical procedures for distributing the errors and imprecision contained in a survey network among all the measurements contained in that network. The corrected measurements are then consistent throughout the network, that is any unknowns may be determined no matter which corrected observations are used to calculate them.

NILS Development Teams 2001

Adjustment Limits

Values that indicate when sufficient numbers of least squares iterations have been reached. This prevents endless looping of iterations. There are two types of limits, residual tolerance and iteration limit.

NILS Development Teams 2001

Administrative Area

1. An area of land managed for specific purposes. Examples, USFS National Forest, BLM District, Land Planning Zone 2. An organizational unit. The unit has jurisdictional responsibility for all activities in a geographic area.

NILS Development Teams 2001

Administrative Survey

This is a series of measurements and observations that are done for the purpose of describing the limits or conditions of a public decision. Administrative Surveys are gathered for informational purposes and are not intended to provide information on the extent of legal rights and interests.

NILS Development Teams 2001

Adverse Possession

A method of acquisition of title to real property by possession for a statutory period under certain conditions. It has been described as a statutory method of acquiring title to land by limitation. In order to establish title in this manner there must be proof of non-permissive use which is actual, open, notorious, exclusive and adverse for the statutorily established period. State statutes differ with respect to the required length of time. There may be different period of times within a state depending on the color of title and whether or not taxes have been paid.

Black, Henry Campbell 1991

A method of acquisition of title by possession for a statutory period under certain conditions.

Brown, Curtis M 1995

Aerotriangulation

The determination of horizontal and/or vertical coordinates of points on the ground, from measurements of angles, distances, or coordinates of points on overlapping aerial photographs, and from already known coordinates of points on the ground.

ASCE-ACSM 1993

Affidavit

A statement or declaration reduced to writing and sworn to or affirmed to before some officer who has authority to administer an oath or affirmation.

ASCE-ACSM 1993

An affidavit is a statement made under oath in the presence of a notary public or other authorized person.

Harbin, Andrew L. 1998

A sworn statement made before a notary public or other authorized person.

Brown, Curtis M 1995

Affirmative Easement

An easement which gives to the owner the dominant tenement the right to use the servient tenement, or to do some act thereon which would otherwise be unlawful.

Black, Henry Campbell 1991

Agonic Line

Line along which magnetic declination is zero.

Wisconsin State Cartographers Office 2000

Agreement

A concurrence, between owners of adjoining lands, on the location of their common boundaries, defined in the exercise of good judgment by the parties to the stipulation as needed for interpretation by disinterested persons, including one qualified in land surveying, and as ordinarily required in a deed, subject to judicial opinion in the event of ambiguity or controversy.

ASCE-ACSM 1993

Agreement Deed

A written instrument executed by two or more parties in which the parties agree to do or not do certain things pertaining to the transfer of land or adjustment of land boundaries.

Brown, Curtis M 1969

Agri Limitati

Lands whose boundaries are strictly limited by the lines of government surveys.

Black, Henry Campbell 1991

Air Rights

The rights granted by a fee simple, lease agreement, or other conveyance of an estate in real property to build upon, occupy, or use, in the manner and degree permitted, all or any portion of space above the ground or any other stated elevation within vertical planes (through the boundaries of the property).

ASCE-ACSM 1993

Alba Firma

In old English law white rent, payable in silver or white money as distinguished from that which was anciently paid in corn or provisions, called black mail or black rent.

Black, Henry Campbell 1991

Alidade

That part of a surveying instrument which consists of a sighting device, with index, and accessories for reading or recording data. The alidade of a theodolite or surveyor's transit is the upper part of the instrument, comprising the telescope, the microscopes or verniers, the vertical circle, and accessories, all mounted on what is called the upper motion of the instrument.

ASCE-ACSM 1993

Alienation

The transfer of property and possession of land from one person to another.

Brown, Curtis M 1995

A legal term applied to the process of transfer of title, or a legal conveyance of property to another. In common BLM usage, alienated lands are lands that have been patented.

BLM 1980

In real property law the transfer of property and possession of lands tenements or other things from one person to another. The term is particularly applies to absolute conveyances of real property.

Black, Henry Campbell 1991

Aliquot

In mathematics a number that divided a larger number into parts without a remainder, 2 and 4 are aliquot parts of 8. In sectionalized land descriptions it is a fraction of the whole such as a 1/4 section.

Brown, Curtis M 1995

Dividing without a remainder; submultiple. The word usually appears as aliquot part, i.e., a number which is a submultiple of another.

ASCE-ACSM 1993

Contained an exact number of time in another; a part of a measurement that divides the measurement without a remainder.

New Mexico Assessors 2001

Aliquot Part

“An aliquot part is a {legal} subdivision of a section and results from {an equal division of halving and fourths}. For example, the division of a 640 acres section into 4 160 acre quarter-sections or sixteen 40 acre ‘forties.’ A 16-position entry is used to enter and store actual and nominal aliquot part Public Land Survey {System} (PLSS) data.

BLM 1995

Aliquot Part

Legal subdivision, except fractional lots. A division of a section into halves or fourths ad infinitum.

New Mexico Assessors 2001

Aliquot Part Corner

A corner that establishes the limits of a division of a PLSS Section below the quarter division, such as a sixteenth corner or a government lot corner.

FGDC - Subcommittee on Cadastral Data 1999

Alluvion

(1) Formation of land, by imperceptible degrees, on the banks of a body of water, either by accumulation of material or by recession of the water. (2) Formation of land from the bed of a river or body of water by the gradual, natural accumulation of matter on the bed or by the gradual, natural recession of the water. Also called accretion. It is distinguished from batture by the latter’s occurring beneath the water’s surface and not forming land. (3) The land formed by the gradual, natural accumulation of matter on the bed of a river or by the gradual, natural recession of the water. (4) The material that is deposited along the shore of a river or the sea by gradual and imperceptible action of the water.

ASCE-ACSM 1993

Where, from natural causes land forms by imperceptible degrees up the bank of a body of water, navigable or not, either by accumulation of material or by the recession of water, such land is called alluvium, belongs to the owner of the bank subject to any existing right of way over the bank. The process of land formation is called alluvion or accretion.

Brown,Curtis M 1995

Alluvium

The process of land formation is called alluvion and the land itself is called alluvium.

Brown,Curtis M 1995

The solid material (sand, silt, gravel, or other material) deposited by running water. It may accumulate to form land (the process, and sometimes the result, being referred to as alluvion)or it may remain below the surface of the water to raise the level of the bed (the result being referred to as batture).

ASCE-ACSM 1993

Along

Along a line means on and in direction of the line. It implies motion. Along the road means along the center line or thread of a road unless qualified such as along the east side of the road.

Brown,Curtis M 1995

Altitude

(1) The distance, along some suitable line, from a surface of reference to a point above that surface. The surface may be the physical surface of the earth, a surface of known, constant atmospheric pressure, etc. (2) The distance, along some suitable line, between two surfaces of constant atmospheric pressure, one of these surfaces being taken as the reference surface.

ASCE-ACSM 1993

Ambiguity

An ambiguity is a duplicity, indistinctness or uncertainty of meaning of an expression used in a written instrument. There are two types of ambiguity, latent and patent.

Buckner, R.B. 1991

Not clear in meaning.

Brown,Curtis M 1995

Ambitus

in roman law a path worn by going around, a space of at least 2 1/2 feet in width between neighboring houses.

Brown,Curtis M 1995

Amended Monument

There are two primary applications of amended monuments stated in the BLM Manual of Instruction. In general a monument whose position no longer marks the true position for the corner. The monument is marked A.M. “If it is known that a mineral survey, homestead entry, small holding claim, right of way, reservoir, or other survey has been connected with a corner of an exterior subject to rectification, the fact

is stated in the special instruction. In such a case the marks A.M. (signifying amended monument) are added to the original corner monument and the old corner is connected by course and distance to the new.” (BLM 1973, paragraph 3-36.) “A recovered closing corner not actually located on the line that was closed upon will determine the direction of the closing line, but not its legal terminus. The correct position is at the true point of intersection of the two lines. The new monument in those cases where it is required will always be placed at the true point of intersection. An off-line monument in those cases where a new monument is required will be marked A.M. (for amended monument) and will be connected by course and distance.” (BLM 1973, paragraphs 5-41 and 8-16(6).)

FGDC - Subcommittee on Cadastral Data 1999

Ancient Deed

A deed 30 or 20 years old and shown to come from a proper custody and having nothing suspicious about it.

Black, Henry Campbell 1991

Angle

The figure formed by two lines extending from the same point in degrees. Angles are either 1, obtuse, where the degree is greater than 90; 2, right, where the degree is exactly 90 and; 3, acute where the degree is less than 90.

New Mexico Assessors 2001

Angle Point

A point in a survey where the alignment or boundary deflects from a straight line.

New Mexico Assessors 2001

(1) A monument marking a point, on an irregular boundary line, reservation line, boundary of a private claim, or a re-established, non riparian meander line, at which a change in azimuth occurs. (2) A stake driven into the ground at a point on a traverse, to indicate a change in direction of the traverse at that point. (3) A point, in a survey, at which the alignment or boundary deflects from its previous course. (4) A marker placed to indicate a point at which there is a change in the direction of a surveyed line.

ASCE-ACSM 1993

A point of survey where the alignment or boundary deflects from a straight line. Any break in bearing on a survey can be considered an angle point. A corner set by a private survey to establish the limits of a certified survey lot, a land subdivision lot, or other parcel survey is generally an angle point.

FGDC - Subcommittee on Cadastral Data 1999

Annotation

Text or label points plotted graphically on a map or drawing. Text labels for naming such map features as streets and places; unique identification numbers assigned to individual map features including parcels, utility nodes and links; dimensioning; posted notes and instructions; descriptive text used to label area features such as soil types, zoning categories. Annotation is typically primitive map features and is not intelligently associated to the map features and/or possible linked DBMS records.

Kansas Association of Mappers 1997

Text or labels plotted graphically on a map or drawing such street and place names or dimensions.

URISA 2000

Anomaly

Anything irregular or abnormal.

NILS Development Teams 2001

Anomaly Correction

Process to edit and correct anything irregular or abnormal (blunder, error) in measurement data.

NILS Development Teams 2001

Anomaly Detection

Process to identify anything irregular or abnormal (blunder, error) in measurement data.

NILS Development Teams 2001

Apogean Tides

Monthly tides occurring when the moon is furthest from the earth.

Brown, Curtis M 1995

Appellant

The party which takes an appeal from one court to another

Harbin, Andrew L. 1998

Appraisal

A valuation or an estimation of value of property by disinterested persons of suitable qualifications.

Black, Henry Campbell 1991

(1) An estimate and opinion of value. (2) Usually, a written statement of the market value or the value as defined by the appraisal, of an adequately described parcel of property as of a specific date. (3) A conclusion that results from an analysis of facts.

ASCE-ACSM 1993

Approved Clear List

An approved clear list or certification is used to convey legal title to lands under certain grants made by Congress. An approved clear list conveys a fee-simple title to public lands identified in a selection list made by a State and approved by the Bureau of Land Management.

BLM 1980

Approved or Accepted

An approved or accepted survey or resurvey has the field notes approved and the plat accepted by the BLM official who has been delegated the authority for such action. Field notes and plats become official records when they are filed in an appropriate land office.

BLM 1980

Appurtenance

A word employed in deeds, leases, and so on for the purpose of including any easements or other rights used or enjoyed with the real property, which are considered to be so much a part of the property that they automatically pass to the grantee under the deed conveying the real property.

Brown, Curtis M 1995

Appurtenance

A right, privilege, or improvement belonging to and passing with a piece of property when it is conveyed.

Harbin, Andrew L. 1998

Appurtenant Easement

An appurtenant easement attaches to the land, benefiting the dominant estate. If the land ceases to be used for the purpose intended, or if it is misused, the easement terminates.

BLM 1980

An easement appurtenant is one that was created to benefit other land owned by the holder of the easement.

Brown, Curtis M 1995

Arpent

(1) An old French unit of area. The size of the arpent depends on its origin and on local custom. The value 0.8507 acres has been used for surveys in Arkansas and Missouri. For surveys in Louisiana, Mississippi, Alabama, and northwestern Florida, when no alternative definition for the arpent has been known, the value 0.84725 acres has been used. The arpent was used, in the U.S.A, in surveys of land granted by the French crown. (2) An old French unit of distance, taken as the length of a side of a square region one arpent in area. Its values in other units, corresponding to the values given for area, are: 1 arpent (0.8507 acres)

=192.500 feet or 58.674 m 1 arpent (0.84725 acres) = 191.995 feet or 58.5198 m. In Canada, the arpent is exactly 180 French feet, which is about 191.85 English feet.

ASCE-ACSM 1993

A French measure of land mentioned in the Doomesday Book. One hundred perches of 18 feet or about one acre.

Brown, Curtis M 1995

Arroyo

A deep gully cut by an intermittent stream.

ASCE-ACSM 1993

Artificial Accretion

Additions to a riparian owner's soil by the imperceptible process of accretion which was induced by man's activities. See Accretion.

BLM 1980

ASCII

American Standard Code for Information Interchange. A set of codes for representing alphanumeric information. The ASCII format provides computer systems with a common language for exchanging information. Although most GIS software systems make use of proprietary binary codes, almost all systems have import-export capabilities for translating between ASCII and binary formats.

Kansas Association of Mappers 1997

Acronym for the "American Standard Code for Information Interchange", a standard way to represent text. ASCII text contains no formatting (fonts, underlines or special characters), so that it can be read by all computers.

URISA 2000

Assessor Plat

An Assessor Plat is a survey and description of one or more areas of land owned by two or more persons in severalty that is ordered to be done by a governing body with property taxation authority for the purpose of making sufficient and accurate determination of assessment, taxation, or tax title. The rules for Assessor Plats are defined by State law.

FGDC - Subcommittee on Cadastral Data 1999

Assessors Maps

Maps made for the purpose of assessing land for property taxation purposes, maps may not accurately indicate conveyance rights - see Wisconsin Assessor Plats.

Brown, Curtis M 1995

Assign

In law, transfer or make over to another; especially, transfer to, and vest in, certain persons, called assignees, for the benefit of creditors.

ASCE-ACSM 1993

At law, to transfer or make over to others, especially for the benefits of creditors.

Brown, Curtis M 1995

Assignment of Land Contract

An assignment is a transfer or making over to another of the whole of any property, real or personal, in possession or in action, or of any estate or right therein. An Assignment of Land Contract transfers an existing Land Contract to another party.

FGDC - Subcommittee on Cadastral Data 1999

Astronomic Azimuth

The clockwise angle from astronomic north or south as determined by a star observation.

Brown, Curtis M 1995

The angle, measured in a horizontal plane, from the vertical plane through the celestial pole to the vertical plane through the observed object. Also called an astronomical azimuth, true azimuth and zenith angle.

ASCE-ACSM 1993

Astronomic Bearing

A bearing based on north or south as determined by a star observation

Brown, Curtis M 1995

Astronomic Declination

The angular distance of a celestial body north or south of the celestial equator. Astronomic declination on the celestial sphere corresponds with latitude on the earth. It is noted as positive (+) when north and negative (-) when south of the celestial equator.

BLM 1980

Augmenting Easement

An easement lying outside the parcel being conveyed but of benefit to the parcel.

Brown, Curtis M 1995

Authentication or Acknowledgement

The process of establishing the fact that each signature on an instrument is that of the person(s) whose it is supposed to be. In most cases, the signatures on documents must be authenticated or acknowledged before the Register may

accept them. An example is the requirements to be met before a final plat may file. (S. 236.21 (2)) How authentication or acknowledgement may take place is set out in ss. 706.06 and 706.07. Because Registers of Deeds are empowered by law to acknowledge documents, a working knowledge of these sections is important.

Wisconsin Register of Deeds Association 1995

Auxiliary Meander Corner

A corner established at a suitable point on the meander line of a lake lying entirely within a quarter section or on a meander line of an island, falling entirely within a section which is found too small to subdivide. A line is run connecting the monument to a regular corner on the section's boundary line.

NOAA 1986

Auxiliary Meander Corner

A corner established at a suitable point on the meander line of a lake lying entirely within a quarter-section or on the meander line of an island falling entirely within a section and which is found to be too small to subdivide. A line is run connecting the auxiliary meander corner to a regular corner on the section boundary. (BLM 1973, paragraphs 121 and 122.) Also established where lines other than regular subdivision of section lines intersect a meander line. (BLM 1973, sample plat).

FGDC - Subcommittee on Cadastral Data 1999

A corner established at a suitable point on the meander line of a lake lying entirely within a quarter-section or on the meander line of an island falling entirely within a section and which is found to be too small to subdivide. A line is run connecting the auxiliary meander corner to a regular corner on the section boundary (BLM 1973, paragraphs 121 and 122). Also established where lines other than regular subdivision of section lines intersect a meander line (BLM 1973, sample plat).

FGDC - Subcommittee on Cadastral Data 1999

Avulsion

(1) The sudden removal of land from the estate of one person to another. (2) The breaking of a stream through its banks in a sudden and unexpected manner and in such a way as to form another channel. The term is of legal significance when the avulsion results in cutting off a large amount of land from one owner and adding it to another's land. Also called revulsion. (3) The rapid erosion of a shore by waves during a storm. Some courts assign only meaning (1) to the term. (4) The loss of lands bordering on the seashore by sudden or violent action of the elements, perceptible while in progress; a sudden and rapid change in the course and

channel of a boundary river. None of the above results in a change in the boundary.

ASCE-ACSM 1993

The sudden and perceptible separation of land by violent action of water. A stream suddenly adopting a new channel and dividing a parcel into two parcels. Title usually follows to the old channel however the statute of limitations may specify how soon a person must reclaim the portion cut off. In California it is one year after the necessity to act.

Brown,Curtis M 1995

Azimuth

The way, the direction. In surveying azimuth is the direction measured clockwise from a given meridian. The army uses north as the meridian; the geodetic systems uses south. If azimuths are used in a description the meridian must be defined.

Brown,Curtis M 1995

The directional bearing on a 360-degree circle which is measured clockwise from north.

Wisconsin State Cartographers Office 2000

The angle measured on the horizon between the meridian and the plane of the vertical circle through a celestial body or other objects. Most government agencies reckon azimuth clockwise from south, 0 degree to 360 degrees.

New Mexico Assessors 2001

A horizontal angle reckoned clockwise from the meridian. In the basic control surveys of the United States of America (USA) and in those of many other countries, azimuths have been reckoned clockwise from south. In military control surveys of most countries, including the USA, azimuths are reckoned clockwise from north. Beginning in 1985, azimuths for basic control surveys in the USA are measured clockwise from north.

ASCE-ACSM 1993

Back Azimuth

The azimuth of a geodetic line at the end opposite the reference end. It differs from the forward azimuth (at the reference end) by 180° plus the amount of the convergence of meridians between the two points. See Azimuth and Geodetic Azimuth.

BLM 1980

Back Bearing

The bearing at the opposite end of a line from the observer as measured from the true meridian at the opposite end of the line. The back bearing on all lines (other than North-South lines) are different from the bearing at the observer's station. They differ by the amount of convergence of the meridians between the two points.

BLM 1980

Backlands

Lands back from a river, lake or highway. Indefinite in precise location.

Brown,Curtis M 1995

A term out no very definite import but generally signifying lands lying back from (not contiguous to) a highway or a water course.

BLM 1980

Backshore

That zone of the shore or beach lying between the foreshore and the coastline and acted upon by waves only during severe storms, especially when combined with exceptionally high water.

BLM 1980

(1) That zone of the land lying between mean (ordinary) high water and the place, landward, where there is a marked change in material or physiographic form, or to the line where permanent vegetation begins. (2) That part of a beach which is usually dry, being reached only by the highest tides and waves.

ASCE-ACSM 1993

Backsight

1) A sight on a previously established survey point, other than a closing or check point. 2) In leveling, a reading on a rod held on a point with a previously determined elevation to determine the height of the instrument (HI).

BLM 1980

Balancing a Survey

Distributing corrections through a traverse to eliminate the errors of closure according to some approved method so that the resulting survey figure will be geometrically and mathematically consistent. The removal of errors by the method of least squares is termed an adjustment.

BLM 1980

Baldio

Spanish, waste lands unappropriated public domain, not set apart for municipalities.

Brown,Curtis M 1995

Bank

The continuous margin along a river or stream where all upland vegetation ceases.

BLM 1980

Bankhead-Jones Lands

Under Title III of the Bankhead-Jones Farm Tenant Act, of July 22, 1937, the Department of Agriculture was authorized to purchase submarginal farm lands in the Great Plains region for purposes of reclamation, conservation, etc. Approximately 2 million acres were acquired and are termed "Bankhead-Jones Lands". These lands are now under the administration of the Bureau of Land Management, are in the class of Federal lands called "acquired lands" and are not subject to entry or disposal under the general public land laws.

BLM 1980

Bar

A bank of sand gravel or other material in water, usually forming an obstruction to navigation and usually below the average high water elevation.

Brown, Curtis M 1995

Bargain and Sale

In conveyance, the transferring of property from one to another, upon valuable consideration, by way of sale. A "bargain and sale" deed usually means one which carries no warranty.

BLM 1980

Bark Scribe

To bark scribe a tree monument or bearing tree is to lightly cut the appropriate marks into the bark of the tree without blazing. In the case of certain smooth and thin barked trees, marks thus made will last as long as the tree remains sound.

New Mexico Assessors 2001

To bark scribe a tree monument or bearing tree is to lightly cut the appropriate marks into the bark of the tree without blazing. In the case of certain smooth and thin barked trees, marks thus made will last as long as the tree remains sound.

BLM 1980

Barleycorn

one third of an inch.

Brown, Curtis M 1995

Barometer

An instrument for measuring atmospheric pressure.

BLM 1980

Barrier Island

A narrow, sandy island exposed to the open ocean on one side and separated on the other side from the mainland by a narrow, shallow lagoon or embayment. There is a prominent chain of barrier islands bordering the mainland along the east coast of the United States, from Virginia on southward.

ASCE-ACSM 1993

Base Lands

In a lieu selection or exchange, the lands to which the applicant relinquishes his rights as a basis for his selection. See Lieu Selection.

BLM 1980

Base Line

A line which is extended east and west on a parallel of latitude from an initial point and from which are initiated other lines for the Cadastral Survey of the public lands within the area covered by the principal meridian that runs through the same initial point.

New Mexico Assessors 2001

Base Map

A map containing the background upon which geographic data is overlaid and analyzed. Basic representation of a region of the earth as it would appear if viewed from above. Portrays basic reference information onto which other information of a specialized nature is placed. Usually shows the location and extent of natural earth surface features and permanent man-made objects. Contains basic digital survey control and topographic elevation reference framework for integrating all of the other map features of a particular area.

Kansas Association of Mappers 1997

A map containing geographical reference information on which other data can be plotted for comparison and geographic correlation. The reference information will vary according to the map's purpose, e.g., an urban base map would usually contain at least streets, streams and other major features while a wilderness area map may contain streams, ridges, trails, and natural visual references like mountain peaks.

URISA 2000

Base Plat

A drawing containing only those details essential to the identification of the legal subdivisions shown on it. Under the manuals of surveying instruction preceding that of 1930, the base plat also contained all cultural and topographic features thought to be desirable. The 1930 and 1947 Manuals of Surveying Instructions called for the use of transparent color overlays to show these features when required.

Overprints are not needed where such features may be readily shown on the base drawing without risk of obscuring any essential cadastral data. Color overlays have been used with base plats of areas surveyed by photogrammetric methods.

BLM 1980

Baseline

“The base line is extended east and west from the initial point on a true parallel of latitude.” (BLM 1973, paragraph 3-10.)

BLM 1973

A line fixed by sovereigns along their coasts which is fundamental toward determining the seaward extent of the boundaries.

BLM 1980

Bathymetric Map

a map portraying water body depths. Elevation is usually portrayed with contour lines. A color scheme of dark blue for deep and light blue for shallow is also commonly included.

Wisconsin State Cartographers Office 2000

Batture

A marine term used to denote a bottom of sand, stone or rock mixed together and rising towards the surface of the water; as a technical word and also in common parlance an elevation of a bed of a river, under the surface of the water. The term is, however, sometimes used to denote the same elevation of the bank, when it has risen above the surface of the water or is as high as the land on the outside of the bank.

Black, Henry Campbell 1991

A term used to denote a bed of sand, stone or rock rising toward the surface of a body of water. As used in Louisiana, it is sometimes applied to portions of the Mississippi River that are exposed at low water and covered at high water.

Brown, Curtis M 1995

(1) The gradual raising of the bed of a river or body of water by the accumulation of solid matter such as silt, soil, or gravel.
(2) That portion of the bed of a river or body of water which has been raised by the gradual accumulation of solid matter. When accumulated matter has reached the point where it extends above the surface of the water and is therefore no longer part of the bed, it is still sometimes referred to as batture. However, the terms alluvion (for the process) and alluvium (for the land) are more specific and appear to be preferred.

ASCE-ACSM 1993

Bayou

A species of creek or stream common in Louisiana and Texas. An outlet from a swamp, pond or lagoon to a river or the sea.

Black, Henry Campbell 1991

Channel through swamp or marsh abandoned channels of the parent stream a secondary channel for flood water, used in the South.

Brown, Curtis M 1995

Beach

Used in conjunction with boundary lines, the word beach may mean the sea side or the land side of the shore. The meaning intended in a deed depends on other words unused in the deed and on surrounding circumstances.

Brown, Curtis M 1995

(1) The zone of unconsolidated material which extends landward from the low water line to the place where there is a marked change in material or topography, or to the line of permanent vegetation (usually the effective limit of storm waves). (2) The loose material which is in more or less active motion in the immediate vicinity of the shoreline. This meaning is rare. (3) The zone extending from the upper and landward limit of the effective action of waves to low water level.

ASCE-ACSM 1993

Beach Scarp

An almost vertical slope along a beach caused by wave erosion. The height of a scarp may vary from a few centimeters to a meter or more, depending on the kind of wave action and beach material.

NOAA 1986

Bearing

The horizontal angle which a line makes with the meridian of reference adjacent to the quadrant in which the line lies. Bearings are classified according to the meridian of reference as: astronomic, geodetic, magnetic, grid, etc. When no reference is specified on a plat or in a document, astronomic meridian is presumed. A bearing is identified by naming the end of the meridian from which it is reckoned, either north or south and the direction of that reckoning, either east or west. Thus, a line in the northeast quadrant making an angle of 50 degrees from the reference meridian will have a bearing of N. 50 degrees E.

New Mexico Assessors 2001

(1) The horizontal angle between a line from an initial point (e.g., an observer) to a given point, and a line from the initial point in a specified direction ? as, for example, north. Also called bearing angle. (2) The horizontal angle, measured clockwise from a given direction at a point to a line from that point to a second point.

ASCE-ACSM 1993

A system for designating the directions of lines by means of angle and quadrant letters. The bearing angle of a line is the acute horizontal angle between a reference meridian and the line.

Wisconsin State Cartographers Office 2000

Bearing Tree

A marked tree used as a corner accessory; its distance and direction from the corner being recorded. Bearing trees are identified by prescribed marks cut into their trunks; the species and sizes of the trees are also recorded.

New Mexico Assessors 2001

Beat

In some of the southern states of the U.S.A., (such as Alabama, Mississippi and South Carolina), the principal legal subdivision of a county, and corresponding to towns or townships in other states or a voting precinct.

ASCE-ACSM 1993

Bemetist

A surveyor who measures distances by pacing them off.

ASCE-ACSM 1993

Bench Mark

A relatively permanent, material object, natural or artificial, bearing a marked point whose elevation above or below an adopted surface (datum) is known. Sometimes written benchmark. Also called a vertical control point.

ASCE-ACSM 1993

A relatively permanent material object, natural or artificial, bearing a marked point of known elevation above or below an adopted datum.

New Mexico Assessors 2001

A surveying term for a control point whose height relative to a datum is known.

Wisconsin State Cartographers Office 2000

Blaze

A mark made upon a tree trunk at about breast height by cutting out a piece of bark, leaving a flat scar upon the tree's surface.

ASCE-ACSM 1993

Blazed Line

A sufficient number of trees differing from line trees in that they stand within 50 links of and on either side of the line, rather than being intersected by it, are blazed on two sides quartering toward the line. This is done to make the survey line more conspicuous and readily traced in either direction. The blazes are made opposite each other coinciding in direction with the line where the trees stand very near it. They are made closer to each other, toward the line, the farther they are from the line. R.S. sec. 2395; 43 U.S.C. 751 is the law authorizing the marking of trees along surveyed lines, and its requirements are as positive in this matter as are those requiring the erection of monuments.

BLM 1980

BLM Manual Edition

This attribute contains the year of the BLM Manual of Survey Instructions and it's supplements under which a BLM cadastral survey was performed. The allowable values are: 1855 (reprinted as the Manual of 1871), 1881, 1890, 1894, 1902, 1930, 1947, and 1973. (BLM 1973, Manual of Survey Instructions, paragraph 1-1).

BLM 1995

Block

A subdivision of a town site.

BLM 1980

Blunder

A mistake not an error.

Brown, Curtis M 1995

A mistake, such as recording the wrong value or measuring to the wrong feature. See error.

NILS Development Teams 2001

A mistake. Although a small blunder may remain undetected in a series of observations and have effect of an error in determining the result. Examples of blunders are (1) reading a horizontal circle incorrectly by even a degree (2) neglecting to record a tape length in a measured traverse; and (3) reversing the numerals in recording an observation.

ACSM 1978

Mistake - a mistake is not an error, but it is a blunder on the part of an observer.

Francis H Moffitt and Harry Bouchard 1975

Gross errors are the results of blunders or mistakes on the part of the observer.

Edward M Mikhail and Gordon Gracie 1981

Board of Land Appeals

Under the direction of a Board Chairman, the board exercises jurisdiction over cases involving appeals from decisions rendered by departmental officials relating to the use and disposition of public lands and their resources and the use and disposition of mineral resources in certain acquired lands and in the submerged lands of the Outer Continental Shelf. Persons adversely affected by a decision of a BLM officer or examiner have the right to appeal to the board. The Board is in the Office of Hearings and Appeals, the Office of the Secretary of the Department of the Interior, as provided at 35 F.R. 10010, June 18, 1970-43 C.F.R. 1842.2 (Now 43 C.F.R. part 4). Decisions of the Board on such appeals shall be final for the Department.

BLM 1980

Bog

A shallow, low-lying, virtually undrained body of water, where partially decayed vegetation accumulates on the bottom and on the surface to form a mat. Mosses, sedges, grasslike plants and small shrubs eventually take root in the surface mat forming a "boggy" or spongy form of ground. In an advanced stage the water area becomes completely filled and may become what is known as a "peat bog".

BLM 1980

Bona Fide

In or with good faith; honestly, openly and sincerely. Without deceit or fraud. Actual and genuine.

BLM 1980

Boundary

Indicates a border or limit. Typically designates the extents of contiguous areas such as school, water, sewer and flood control districts, community planning areas, zoning designations, soil conditions, geologic formations, parcels and easements.

Kansas Association of Mappers 1997

A line along which two areas meet. A boundary line between privately owned parcels of land is usually termed a property line. If a boundary is a line of the United States Public Land Surveys, it is given a particular designation, such as section line or township line.

New Mexico Assessors 2001

A boundary (also land boundary) is a line of demarcation between adjoining land parcels as determined by legal descriptions. Boundaries can be marked by monuments, fences, hedges and so on, or not at all.

NILS Development Teams 2001

A land boundary is usually the line of demarcation between adjoining land parcels as determined by legal descriptions. Land boundaries can be marked by monuments, fences, hedges, etc.

Brown, Curtis M 1969

Boundary

A land boundary is a line of demarcation between adjoining parcels of land. The parcels of land may be of the same or of different ownership, but distinguished at some time in the history of their descent by separate legal descriptions. A land boundary may be marked on the ground by material monuments placed primarily for the purpose by fences, hedges, ditches, roads, and other service structures along the line or defined astronomically described points and lines; by coordinates on a survey system whose position on the ground is witnessed by material monuments which are established without reference to the boundary line and by various other methods.

ACSM 1978

Every separation, natural or artificial, which marks the confines or line of division of two contiguous properties.

Wisconsin Register of Deeds Association 1995

Boundary Survey

A survey made to establish or to re-establish a boundary line on the ground or to obtain data for constructing a map or plat showing a boundary line. The term boundary survey is usually restricted to surveys of boundary lines between political territories.

ACSM 1978

Bounding Line

A line used to determine the limits of a calculation; A line that terminates an offset line.

NILS Development Teams 2001

Bounds

The external or limiting lines of any object or space. For example, in to set bounds, as of a property.

ASCE-ACSM 1993

A bounds description is often placed in the category of metes and bounds. It contains only citations of boundaries with no measurements.

Buckner, R.B. 1991

Bounty Lands

Portions of the public domain given or donated as a bounty for services rendered, chiefly for military service. See 43 U.S.C.A., sec. 791.

BLM 1980

Bowditch's Method

The adjustment of a traverse by calculating corrections to measured distances and directions, using the assumption that the end of a line in the traverse is likely to be located with the same precision in the direction along the line as in the direction at right angles to it, and that the angular error is therefore inversely proportional to the square root of the distance. Bowditch's method is practically equivalent to the application of the compass rule.

ASCE-ACSM 1993

Breaker Zone

The region extending from the farthest line, on shore, to which the water reaches except under extreme conditions, to the line marking the outer boundary at which breakers form. Also called the surf zone and littoral zone.

ASCE-ACSM 1993

Broken Boundary

1) A boundary of the rectangular system which is a series of line segments representing a boundary which is not a straight line. 2) A boundary consisting of straight line segments which is not part of the rectangular system.

BLM 1980

Broken Boundary Adjustment

A general term which indicates a distribution of a closing error. Included are: (1) A mathematical adjustment applied to record meander courses which have since become non-riparian; is identical to the compass rule. (2) A mathematical adjustment applied to the record courses of a grant or reservation boundary; it is a rotation and scale change that will retain the original angles and change the lengths of each line segment proportionately according to the record.

BLM 1980

Browser

A Browser has the limited functionality of viewing research results and navigating to Provider URLs. A Browser can opt to become a Subscriber by requesting a Subscriber Account. A Browser may retrieve data that is downloadable from provider storage locations to local disk.

NILS Development Teams 2001

Bureau Motion

A land action initiated by the Bureau of Land Management or another federal entity.

NILS Development Teams 2001

Bureau of Land Management

An agency of the Department of the Interior, it was created July 16, 1946, pursuant to Presidential Reorganization Plan

No. 3 of 1946, which consolidated the functions and activities of the General Land Office and the Grazing Service.

BLM 1980

The agency of the U.S. Department of the Interior created by Executive Order effective 16 July 1946 and superseding the General Land Office in administering the general land laws, with supervision of the subdivisional survey, and disposal of title to the public lands of the United States, and of the leasing, grants of right-of-way, and other surficial uses thereof, including all rights incident to the extraction of minerals; coal, phosphates, potash, oil, and gas on the public lands; withdrawals for irrigation, dams, and reservoirs, and for grazing and settlement rights of every description.

ASCE-ACSM 1993

Burial Site

Documents which locate human burial mounds and plots not included in a cemetery plat.

Wisconsin Register of Deeds Association 1995

Cadaster

Official map records pertaining to location, quantity, value and ownership of land parcels within a government jurisdiction. A record of interest in land encompassing both the nature and extents of interests. Cadastral information often includes other descriptive information about land parcels.

Kansas Association of Mappers 1997

(1) An official register of the location, quantity, value and ownership of real estate, compiled to serve as a basis for taxation. (2) An official register of real estate, with details of boundaries, area, value, ownership, and other rights associated with the real estate. (3) An official register of the quantity, value, and ownership of parcels of land (real estate) within the legal jurisdiction and administrative boundaries of a governmental unit. Also spelled cadastre.

ASCE-ACSM 1993

Cadastral Electronic Field

Cadastral Electronic Field Book software. This custom software was developed through cooperation between the University of Maine and the Bureau of Land Management to collect and analyze survey field data and documentation of evidence. The latest version of CEFB is released to the public domain.

NILS Development Teams 2001

Cadastral Measurement

Cadastral Measurement Management software. This custom software was developed through cooperation between the University of Maine and the Bureau of Land Management to collect and analyze survey field data. The latest version of CMM is released to the public domain.

NILS Development Teams 2001

Cadastral Survey

A survey which creates, marks, defines, retraces or reestablishes the boundaries and subdivisions of the public lands of the United States.

BLM 1980

A survey which creates, marks, defines, retraces or reestablishes the boundaries and subdivisions of the public lands of the United States.

New Mexico Assessors 2001

Cadastral Survey Approval

Prior to becoming an official cadastral survey the field notes must be approved and the plat, field notes and survey must be accepted on behalf of the Director of the Bureau of Land Management by the officer to whom he has delegated this responsibility.

BLM 1980

Cadastral Survey Authority

The authority derived from the statutory directive (43 U.S.C. 2) that "The Secretary of the Interior or such of officer as he may designate shall perform all executive duties appertaining to the surveying...of the public lands." Other statutory declarations affecting the cadastral survey program are: 25 U.S.C.29 and 30; 43 U.S.C. 52-60,751-775 and 1364.

BLM 1980

Call

(1) A clause, phrase, or statement, in a description of property, which identifies a particular characteristic of the boundary of the property. For example, a call for a monument identifies a monument on the boundary; a call for a survey identifies an earlier survey of the property; etc.
(2) A reference to, or a statement of, an object, course, distance, or other matter of description in a survey or grant requiring or calling for a corresponding object, or other matter of description, on the land.

ASCE-ACSM 1993

A reference to, or statement of, an object, course, distance or other matter of description in a survey or grant requiring or

calling for a corresponding object, or other matter of description, on the land.

BLM 1980

A reference to, or statement of an object, course, distance or other matter of description in a survey or grant requiring or calling for a corresponding object, or other matter of description, on the land.

New Mexico Assessors 2001

Cancellation

The annulment of a formerly accepted survey. This action may be taken only by the Director of the BLM or an appointed representative, usually the chief of the branch or division of cadastral surveys. This action applies to public lands and requires ample justification such as showing gross irregularities. This action applies only to public lands and has no bearing on the identification of the alienated subdivisions described in terms of the prior survey.

BLM 1980

Cancellation Lands

An abrogation of a right in the public lands because of noncompliance with the public land laws or because of expiration of time limits.

BLM 1980

Carey Acts

The acts of August 18, 1894 (28 State 372), and March 15, 1910 (36 Stat.237,43 U.S.C. see. 643), which provide for grants of desert lands to States for disposition to bona fide settlers.

BLM 1980

Cartography

The art, science and technology of expressing graphically, by maps, charts, three dimensional models and globes, the known physical features of the earth or any heavenly body at any scale. In particular, cartography is concerned with all phases of mapfinishing, including the designing of format and symbolization; drafting, editing and proofing a map content; and specifying requirements for reproduction.

New Mexico Assessors 2001

The art and science of expressing graphically the natural and social features of the earth.

Wisconsin State Cartographers Office 2000

Science and art of making maps and charts. More broadly, the term includes all the steps necessary to produce a map: planning, aerial photography, drafting, editing, color separation, and multicolored printing. With regard to

computerized spatial databases, a cartospacial feature is a point, line, arc string, chain, polygon, symbol, text or other form of spatial entity. Functionality of cartographic information systems is limited to encoding, displaying and measuring cartospacial features.

Kansas Association of Mappers 1997

Case Law

Law derived from cases, as opposed to law based on statutes or other sources of law.

ASCE-ACSM 1993

Cash Entry

An entry that covered public lands for which the entryman paid cash or its equivalent.

BLM 1980

Catalog

A listing of data by category type (data, activity event, communication event, etc.) that may contain any or all of the following: Metadata (description), current-to date, location/path to local storage, access restrictions, spatial reference, spatial ex.

NILS Development Teams 2001

Ceded Indian Lands

Public lands, Indian tribal title to which was relinquished to the United States by the Indians on condition that part or all of the proceeds from their sale or other disposition would be covered in the Treasury in trust for the Indians.

BLM 1980

Cemetery

A Cemetery divides the land into lots and rights-of-way. The rules for Cemetery Plat, which describe the extent of lots and rights-of-way, are controlled by State law.

FGDC - Subcommittee on Cadastral Data 1999

Center Quarter-Section

A special case of a quarter-corner. "To subdivide a section into quarter sections, run straight lines from established quarter-section corners to the opposite quarter-section corners. The point of intersection of the lines thus run will be the corner common to several quarter sections, or the legal center of section." (BLM 1973, paragraph 3-87). The above definition is sometimes termed the "federal center quarter-section corner" and applies to BLM cadastral surveys. In some states alternate methods of section subdivision may be used and a non-federal method center quarter-section corner determined. In some cases, such as completion surveys, it is possible for one section to appear to have more than one center quarter-section corner.

FGDC - Subcommittee on Cadastral Data 1999

Centerline

The line connecting opposite corresponding quarter corners or opposite subdivision-of-section corners or their theoretical positions. Applied to a street, right-of-way or any strip of land of uniform width "centerline" defines the line midway between the side lines of said strip.

New Mexico Assessors 2001

The line connecting opposite corresponding quarter corners or opposite subdivision-of-section corners or their theoretical positions. Applied to a street, right of way or any other strip of land of uniform width "centerline" defines the line midway between the side lines of said strip.

BLM 1980

Central Angle

The angle in degrees between the radii of a circular curve. The central angle is equal to the delta of a circular curve.

New Mexico Assessors 2001

1) The angle at the center of radius of a circular arc included between the radii which pass through the beginning P.C. (point of curvature) and the ending P.T. (point of tangency) of the arc. This angle is equal in magnitude to the change in direction of the tangents of the arc which pass through the P.C. and P.T. In alignment surveys it is commonly called the delta angle. 2) The angle, in curve systems, containing compound curves or spiral and circular curves, between the beginning and ending radius, or the beginning and ending tangents. For spirals the central angle is called theta.

ACSM 1978

Centroid

That point, in a geometric figure, whose coordinates are the average values of the coordinates of the points of the figure.

ASCE-ACSM 1993

In Geographic Information System (GIS), the center of gravity of an entity, often used to reference polygons.

New Mexico Assessors 2001

Certificate of Approval

A written statement certifying that the field notes of a cadastral survey have been critically examined and found correct, and are thereby approved. It is a statement that follows, and is a part of the same document as, a "certificate of survey". It is dated and signed by the Chief, Division of Cadastral Survey.

BLM 1980

Certificate of Survey

A document containing a statement dated and signed by a cadastral surveyor to the effect that a survey has been executed in strict conformity with the special instructions, the Manual of Instructions, and in the specific manner described in the field notes with which it is filed.

BLM 1980

Certificate of Title

(1) A document, usually given to the buyer of a home with the deed, stating that the title to the property is clear. It is usually prepared by an attorney or qualified person who has examined the abstract of title for the property. It is only an opinion that title is good and is not to be confused with title insurance. (2) A certificate issued to show title registered on lands covered by Torrens title.

ASCE-ACSM 1993

Certificate of Transcript

A statement dated and signed by the Chief, Division of Cadastral Surveys as to the accuracy of the transcript of the original field notes of a particular survey. The certificate is a part of the same document as the “certificate of survey” and the “certificate of approval.”

BLM 1980

Certified Survey

A survey of land carried out by a professional surveyor who certifies that it meets all statutory and professional technical standards for land surveys.

Wisconsin Register of Deeds Association 1995

Certiorari

To be informed of. A writ of common law origin issued by a superior to an interior court requiring the latter to produce a certificate of record of a particular case tried therein. The writ is issued in order that the court issuing the writ may inspect the proceedings and determine whether there have been any irregularities. It is most often used in the US Supreme Court

Black, Henry Campbell 1991

A written instruction issued by a higher court to a lower court requiring the records of a trial to be submitted for review or inquiry. If such higher court finds no reason to re-examine the records based on arguments submitted by attorneys, the ruling of the court is “Certiorari denied.”

BLM 1980

Chain

The unit of length prescribed by law for the survey of the public lands of the United States. The chain is equivalent to 66 feet or 4 rods, poles or perches. 10 square chains equal one acre.

New Mexico Assessors 2001

The unit of length prescribed by law for the survey of the public lands of the United States. The chain is equivalent to 66 feet or 4 rods, poles or perches. 10 square chains equals one acre.

BLM 1980

(1) The unit of length prescribed by law for the survey of the public lands of the United States of America and equal to 66 feet or 100 links. One acre equals 10 square chains. The chain derives its name from the Gunter’s chain, which was widely used in early surveys and had the form of a series of links connected together by rings. (2) A Gunter’s chain or similar measuring device.

ASCE-ACSM 1993

Chain of Title

The change in ownership of a piece of property in sequences. Any defective conveyance of title in the chain adversely affects the title from that point on.

Harbin, Andrew L. 1998

A term applied metaphorically to the series of conveyances, or other forms of alienation, affecting a particular parcel of land, arranged consecutively from the Government or original source of title down to the present holder, each of the instruments included being termed a “link.”

BLM 1980

Channel

1) A natural or artificial waterway of perceptible extent which either periodically or continuously contains moving water, or which forms a connecting link between two bodies of water; 2) The part of a body of water deep enough to be used for navigation through an area otherwise too shallow for navigation; 3) A large strait, as the English Channel; 4) the deepest portion of a stream, bay, or strait through which the main volume or current of water flows.

BLM 1980

Chart Datum

(1) The tidal datum to which depths (soundings) in a hydrographic survey or on a chart are referred. I.e., a tidal datum used as a referent for depths only. It is usually taken to correspond to low water, and its distance below mean sea level is represented by the symbol Zo. According to the

National Tidal Datum Convention of 1980, all tidal datums of the U.S.A. should refer to mean lower low water. (2) The permanently established surfaced from which soundings or tidal heights are measured (usually low water).

ASCE-ACSM 1993

Circular Curve

A curve of constant radius.

NILS Development Teams 2001

Claim Jumping

Illegally taking possession of a mining claim previously staked by and in legal possession of another. Prior to the passage of statutory laws mining claims, claim jumping sometimes took the simple form of staking governing over another person's claim and then holding it by force.

BLM 1980

Claimant

An individual, corporation, association, State or local government, etc., asserting title to, or rights in, public lands.

BLM 1980

Classification

Designation of public lands as being valuable or suitable for specific purposes, uses, or resources.

BLM 1980

Classification Withdrawal

A withdrawal of public lands which is made pending examination of the lands to determine their suitability for certain purposes and for classification for those purposes.

BLM 1980

Clear List

A selected list of public lands which has been prepared for approval by the Secretary of the Interior or the Director of the Bureau of Land Management also, an official statement from an interested Federal agency or official which indicates that no apparent objection exists to a proposed action with respect to public lands.

BLM 1980

Closed Land States

The public land States in which records have been turned over to the State except for the State of Washington wherein the records are kept in Portland, Oregon, viz., Alabama, Arkansas, Florida, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, and Wisconsin.

BLM 1980

Closed Traverse

A traverse which starts and ends upon the same station or upon stations of known position.

BLM 1980

Closing Corner

A corner at the intersection of a surveyed boundary with a previously established boundary line. In surveying the public lands of the USA, when the line connecting the last section corner and the corner to be reached on an established township boundary departs from the astronomic meridian by more than the allowable amount, the line being surveyed is extended in a cardinal direction to an intersection with the township boundary, where a closing corner is established and a connection made to the previously established corner. A closing corner is established at the intersection of a line being surveyed with a previously established township boundary to avoid excessive deviation from a cardinal direction which might be required to connect with the intended corner on that boundary. A closing corner is also established at the intersection of a township, range, or section line with the boundary of a previously surveyed and segregated tract of land such as a private land claim, mineral claim, etc.

ASCE-ACSM 1993

“Closing corners are intended to be established where a closing line intersects a boundary already fixed in position. While the closing corner thereafter controls the direction of the closing line, a failure to place it at the true intersection does not alter the position of the line closed upon...” (BLM 1973, paragraph 3-73). A closing corner of sections is established where a survey intersects a previously fixed boundary at a point between corners.

BLM 1980

A corner at the intersection of a surveyed boundary with a previously established boundary line. If during the survey of the public lands of the United States, the line connecting the last section corner and the objective corner on an established township boundary departs from the astronomic meridian by more than the allowable deviation, the line being surveyed is extended in a cardinal direction to an intersection with the township boundary, where a closing corner is established and a connection is made to the previously established corner. Closing corners are established to avoid excessive deviation from a cardinal direction which might be required to connect with the object corner on that boundary.

NOAA 1986

Closing Corner of Sections

“Closing corners are intended to be established where a closing line intersects a boundary already fixed in position. While the closing corner thereafter controls the direction of the closing line, a failure to place it at the true intersection does not alter the position of the line closed upon...” (BLM 1973, paragraph 3-73). A closing corner of sections is established where a survey intersects a previously fixed boundary at a point between corners.

FGDC - Subcommittee on Cadastral Data 1999

Closing Corner of Subdivision

“Closing corners are intended to be established where a closing line intersects a boundary already fixed in position. While the closing corner thereafter controls the direction of the closing line, a failure to place it at the true intersection does not alter the position of the line closed upon...” (BLM 1973, paragraph 3-73). A closing corner of subdivision of section is established where a rectangular survey section subdivision line, Indian Reservation boundary, or State boundary intersects a previously fixed boundary at a point between corners.

FGDC - Subcommittee on Cadastral Data 1999

“Closing corners are intended to be established where a closing line intersects a boundary already fixed in position. While the closing corner thereafter controls the direction of the closing line, a failure to place it at the true intersection does not alter the position of the line closed upon...” (BLM 1973, paragraph 3-73). A closing corner of subdivision of section is established where a rectangular survey section subdivision line, Indian Reservation boundary, or State boundary intersects a previously fixed boundary at a point between corners.

BLM 1980

Closing Corner of Townships

“Closing corners are intended to be established where a closing line intersects a boundary already fixed in position. While the closing corner thereafter controls the direction of the closing line, a failure to place it at the true intersection does not alter the position of the line closed upon...” (BLM 1973, paragraph 3-73). A closing corner of Townships is established where a survey intersects a previously fixed boundary at a point between corners on the township boundary.

FGDC - Subcommittee on Cadastral Data 1999

“Closing corners are intended to be established where a closing line intersects a boundary already fixed in position. While the closing corner thereafter controls the direction of the closing line, a failure to place it at the true intersection

does not alter the position of the line closed upon...” (BLM 1973, paragraph 3-73). A closing corner of Townships is established where a survey intersects a previously fixed boundary at a point between corners on the township boundary.

BLM 1980

Cloud on Title

(1) An outstanding claim or encumbrance which, if valid, will affect or impair the owner’s title. (2) A judgment; a dower interest.

ASCE-ACSM 1993

An outstanding claim or encumbrance which, if valid, would affect or impair the title of the owner of a particular estate. A mortgage judgment or tax levy may in some cases constitute a cloud on title.

BLM 1980

Coast

The zone of land of indefinite width (perhaps 1 to 3 miles) that extends inland from the shore to the first major change in terrain features.

BLM 1980

Coastline

Technically, the line that forms the boundary between the coast and the shore and marks the seaward limit of the permanently exposed coast. The U.S.C.&G.S. know N.O.S.) uses the words “coastline” and “shoreline” as synonymous and defines these as being the mean high water line. In the Submerged Lands Act, 43 U.S.C. 1301 (c): “The term “coast line” means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters”. When using the term “coastline” the user should specify what line is intended.

BLM 1980

Codicil

A supplement or an addition to a will.

BLM 1980

A supplement or addition to a will; it may explain, modify, add to, subtract from, qualify, alter, restrain, or revoke provisions of an existing will. Such does not purport to dispose of entire estate or to contain the entire will of the testator, not does it ordinarily, expressly or by necessary implication revoke in toto a prior will.

Black, Henry Campbell 1991

COGO

Abbreviation of the term COordinate GeOMetry. A GIS-oriented set of functions for surveyors to enter survey data, to calculate precise locations and boundaries, to define curves, etc. May be used for managing land records, mapping parcels, assessing property, reviewing development, and creating cadastral and engineering base maps.

NILS Development Teams 2001

Coordinate geometry. A method of data input and analysis similar in principle to metes-and-bounds surveying. Input begins at a point, moves at a given angle or in a certain direction for a set distance, and continues in the same fashion until a geographic feature is completely outlined.

Kansas Association of Mappers 1997

Acronym for Coordinate Geometry, COGO is a computer program within a CAD system or GIS that can process data such as bearings, distances and angles to generate precise spatial representation of land features and survey control networks.

URISA 2000

COGO Procedures

A unique set of Coordinate Geometry (COGO) computations used to calculate coordinate positions. Example position calculation methods: In-field coordinate geometry (e.g., bearing/bearing intersection) and layout by angle and distance.

NILS Development Teams 2001

Collateral Evidence

By the side, at the side, attached upon the side, Not lineal, but parallel or diverging line. Additional or auxiliary; supplementary.

Black, Henry Campbell 1991

Such things as acts and testimony of interested landowners, competent surveyors, other qualified local authorities or some acceptable record evidence that may be used along with other evidence in identifying the true original position of a corner.

Brown, Curtis M 1969

Additional or auxiliary evidence. Accompanying or acting as secondary evidence. Evidence which supports or reinforces evidence already in hand.

BLM 1980

Color of Title

A person is said to have color of title if a claim to a parcel of real property is based upon some written instrument, although a defective one. The title appears good but in reality is not.

ASCE-ACSM 1993

If a claim to a piece of real property is based upon some written instrument, although a defective one, the person is said to have "color of title." A claim which has as its basis that which the law considers prima facie a good title, but which, by reason of some defect not appearing on its face, is not in fact a title. Federal withdrawn land is not subject to the Color-of-Title Act.

BLM 1980

Color of Title Act

The Act of December 22, 1928 (43 U.S.C., see. 1068), as amended. Under the terms of and provisions of this act, a patent may be issued for a parcel of not more than 160 acres of public lands. The land must have been possessed in good faith by a claimant.

BLM 1980

Compass Rule

1) A mathematical solution for restoring or determining the position of angle points of record courses by applying a correction to each record course based proportionately upon the length of the course. 2) The method generally used to mathematically close (balance) a figure in order to determine area.

BLM 1980

Computation

A set of processing methods or algorithms applied to achieve a desired solution. COGO procedures use computations.

NILS Development Teams 2001

Computation Device

The computing hardware system and processing software for deriving observations and measurements from readings. May be used with a data collection device on the same computing hardware system.

NILS Development Teams 2001

Computation Method

Type of mathematical process required to create a specified feature or result.

NILS Development Teams 2001

Condemnation

In real property law, the process by which property of a private owner is taken for public use, without his consent, but upon the award of payment of just compensation. It has the nature of a forced sale and the condemner has the position toward the owner.

BLM 1980

Process of taking private property for public use through the power of eminent domain. Just compensation must be paid to the owner for such taking (see 5th Amendment to the US Constitution)

Black, Henry Campbell 1991

Condominium

A Condominium Plat is a map and description of rights to land or space that are defined by State law and contain allocated interests, common elements, and independent use units. The laws governing the creation, survey, and definition of condominiums are defined by State law.

FGDC - Subcommittee on Cadastral Data 1999

(1) A form of ownership less than the whole. (2) The fee ownership of separate portions of multi-storied buildings by statute which provides the mechanism and facilities for formal filing and recordation of a divided interest in real property, where the division is vertical as well as horizontal. (3) A building held in condominium.

ASCE-ACSM 1993

Separate System of ownership of individual units in multiple unit building. A single real property parcel with all the unit owners having a right in common to use the common elements with separate ownership confined to the individual units which are serially designated. The condominium concept was not rooted in English common law and most condominiums in the US are formed in accordance with specific state enabling statutes. A condominium is an estate in real property consisting of an undivided interest in common in a portion of the parcel of real property together with separate interest in a space in a residential, industrial, or commercial building on such real property such as an apartment office or store. A condominium may include in addition a separate interest in other portions of such real estate.

Black, Henry Campbell 1991

Condominium Agreement

An agreement regarding individual ownership units, generally in a multifamily structure, based on a legal description of the airspace the unit actually occupies, plus

an undivided interest in the ownership of the common elements.

Wisconsin Register of Deeds Association 1995

Condominium Deed

A deed by which one person conveys to another absolute individual ownership units, generally in a multifamily structure, based on a legal description of the airspace the unit actually occupies, plus an undivided interest in the ownership of the common elements, which are owned jointly with other condominium unit owners.

Wisconsin Register of Deeds Association 1995

Condominium Plat

A map of a single real property parcel in which individual ownership units (based on a legal description of the airspace the unit actually occupies and showing the location and boundaries of individual units including easements, etc.), as well as common areas of the building and ground jointly owned by the individual owners as common elements.

Wisconsin Register of Deeds Association 1995

Conflict

1) The overlap of the exterior lines of a claim onto a prior survey or other senior claim. 2) A variance or disagreement between what is written in the field notes and what is represented on the plat. 3) An apparent disagreement or ambiguity between various parts of the field notes. 4) A different representation on one plat compared to hand drafted copies thereof or compared to plats of adjacent surveys. 5) Any factor in the land status which serves as a bar to approval of an application, particularly an application or entry for similar rights on the same land.

BLM 1980

Confluence

Literally, flowing together. The joining of two or more streams of water. Considering two major streams, the precise point of confluence is where the flow direction of water along the thread of the smaller stream reasonably parallels and joins the flow in.

BLM 1980

Connecting Line

1) A survey line connecting one survey to another. Generally used on the older plats and in mineral surveys. 2) A line calculated from beginning to end of a traverse.

BLM 1980

Constant Correction

A systematic error correction made to a distance.

NILS Development Teams 2001

Construction Survey

The survey measurements made while construction is in progress to control elevation, horizontal position, and dimensions and configuration; to determine adequacy of completion; and, to obtain essential dimensions for computing construction pay quantities.

ACSM 1978

Conterminous

Having a boundary in common. Also called coterminous. The term is particularly useful when referring to that part of the United States of America before the admission of Alaska and Hawaii to statehood. For example, the northernmost point in the conterminous United States is in Minnesota near the Lake of the Woods.

ASCE-ACSM 1993

Contest

To make defense to an adverse claim in a court of law; to oppose, resist, or dispute the case made by a plaintiff. To strive to win or hold; to controvert, litigate, challenge; to defend, as a suit or other proceeding.

BLM 1980

Contiguous Land

Generally speaking, two parcels of land having a common boundary line.

New Mexico Assessors 2001

Generally speaking, two parcels of land having a common boundary line.

BLM 1980

Continental Shelf

The part of a continental mass extending from the shore outward beneath the shallow seas to the continental talus where the bottom slopes down rapidly to the ocean depths.

BLM 1980

Continuously Operating

(CORS) continuously operating reference stations provide Global Positioning System (GPS) carrier phase and code range measurements in support of 3-dimensional positioning activities throughout the United States and its territories.

Wisconsin State Cartographers Office 2000

Contour

An imaginary line on the ground all points of which are at the same elevation above or below a specified datum surface.

BLM 1980

An imaginary line on the ground all points of which are at the same elevation above or below a specified datum surface.

New Mexico Assessors 2001

An imaginary line on the ground, all points of which are at the same elevation above or below a specified surface of reference. The definition is illustrated by the shore line of an imaginary body of water whose surface is at the elevation represented by the contour. A contour forming a closed loop round lower ground is called a depression contour. Contour should not be confused with contour line; the latter is the term for a line drawn on a map.

ASCE-ACSM 1993

Contour Interval

(1) The difference of elevation represented by adjacent contour lines. (2) The difference of elevation between two adjacent contours.

ASCE-ACSM 1993

The interval between contour lines as shown on any topographic map or digital file captured from a topographic map. Commonly expressed as feet or meters.

BLM 1995

Contour Mapping

Display of contour lines, each of which represents a constant value, typically elevation, throughout its length. Also called an Isoline map, it displays linear features that connect all points having the same numeric value (i.e. elevation, rainfall, noise, concentration level).

URISA 2000

Contract

A binding legal relationship obligating the seller to furnish personal property or nonpersonal services (including construction) and the buyer to pay for them. Contracts include all types of commitments obligating the Government to an expenditure of funds, and are usually in writing.

BLM 1980

Contract System

The contracting of the public land surveys. Between 1796 and 1910 the public land surveys were executed by deputy surveyors who had entered into contracts with the Surveyors General for the performance of the field work and preparation of the field notes of the surveys

BLM 1980

Control

A system of monumented stations having known, precise positions established by geodetic methods.

BLM 1980

Exact positions of often-surveyed geographic features used to register map sheets and transform coordinates.

Kansas Association of Mappers 1997

(1) Anything which is assumed to be correct and to which other similar things are compared or on which such other things are made to depend. (2) The set of previously fixed points (the framework) used to establish the position, scale, and orientation of the detail in a map.

ASCE-ACSM 1993

1) Graphically defined lattice work of precise control points (monuments) and traverse alignments reconciled to those monuments, serving as a framework for referencing the position of all map features in the spatial database, thereby assuring appropriate precision standards. 2) Points with a given horizontal position and surface elevation. 3) Used to determine unknown horizontal positions and elevations of locations elsewhere in the active portion of the spatial database.

URISA 2000

In general, coordinated and correlated position data forming a framework to which detail surveys are adjusted. Basic control may be either horizontal or vertical; it is usually executed with greater precision and accuracy than is required for dependent surveys. Also, the point or points permanent in character within a network of basic control, for which the coordinates and/or elevation to a specific accuracy are known and which are used as origin and closure for making a control survey or for making an engineering, cadastral, or other survey.

ACSM 1978

Control Data Spreadsheet

A user interface for viewing and editing control data.

NILS Development Teams 2001

Controverted

Disputed; denied; opposed or contested.

BLM 1980

Convey

The act of deeding or transferring title to another.

BLM 1980

(1) Pass or transmit the title to property from one to another.
(2) Transfer property or the title to property by deed or instrument under seal. The term applies properly to the disposition of real property, not of personal property. To convey real estate, by an appropriate instrument, is to transfer the legal title to it from the present owner to another.

ASCE-ACSM 1993

Conveyance

In real property law, a transfer of legal title to land. An instrument, such as a deed, by which interest in real property is created or by which title to real property is transferred from grantor to grantee.

BLM 1980

A transfer of legal title to land or rights. An instrument, such as a deed, patent, tentative approval or interim conveyance, by which interest in mineral and/or real property is transferred from grantor to grantee.

NILS Development Teams 2001

A written instrument which evidences a transaction in which any interest in land is created, alienated, mortgaged, assigned or "otherwise affected in law or in equity". (s.706.01 (1)). What Must be Recorded by the Register of Deeds. Every conveyance and other instrument which affects title to land in the county of the particular Register of Deeds. However, certain recording prerequisites do exist under the law. s. 706.05 (6). It states: "Except as may otherwise be expressly provided, no instrument shall be denied acceptance for record because of the absence of venue, seals, witnesses or other matters of form". This establishes that the only basis for refusing a document would be direct provisions of the statutes.

Wisconsin Register of Deeds Association 1995

A written instrument which passes an interest in real property from one person to another. It may be a deed, mortgage or lease, but not a will.

ASCE-ACSM 1993

Coordinate System

A reference device used to determine distance and direction in relative terms with respect to their location. The geographical coordinate system uses latitude and longitude to locate points on the earth; most other coordinate systems use regularly spaced grids which are placed on artificially derived planes.

Wisconsin State Cartographers Office 2000

Coos Bay Wagon Road Lands

Public lands in western Oregon which were granted to the State of Oregon to aid in the construction of the Coos Bay Military Wagon Road, but which were later forfeited and returned to the Federal Government by reconveyance.

BLM 1980

Corner

(1) A point, on a boundary of land, at which two or more boundary lines meet. It is not the same as a monument, which is the physical evidence of the corner's location on the ground. (2) A point on the earth, its location determined by surveying, marking an extremity of a boundary of a subdivision of the public lands, usually at the intersection of two or more surveyed lines.

ASCE-ACSM 1993

A point on the surface of the earth, determined by the surveying process, which defines an extremity on a boundary of the public lands.

BLM 1980

Corner Accessory

A physical object close to a corner and which is referred to in describing the location of the corner. Examples are bearing trees, mounds, pits, ledges, rocks and other natural features to which distances or directions, or both, from the corner or monument are known. Corner accessories are considered part of the monument of the corner. As a witness to the corner, it carries the same weight, legally, when the latter is found to be missing or destroyed.

ASCE-ACSM 1993

Nearby physical objects to which corners are referenced for their future identification or restoration. Accessories include bearing trees, mounds, pits, ledges, rocks and other natural features to which distances or directions (or both) from the corner or monument are known. Such accessories are actually a part of the monumentation.

BLM 1980

Corner Contiguity

The characteristic of having a corner but not a boundary line in common.

NOAA 1986

When parcels of land or mining claims have angle points (corners) in common-though they do not share a common boundary line-they are said to have "corner contiguity."

BLM 1980

Corner of Maximum Control

A section corner of maximum control fixes the position of, or controls, the position of four sections; likewise, a township corner of maximum control, controls four townships. A quarter section corner of maximum control, controls the subdivision of two sections.

BLM 1980

Corner of Minimum Control

A section corner of minimum control fixes the position of, or controls, less than four sections; likewise, a township corner of minimum control, controls less than four townships. A quarter section corner of minimum control fixes the subdivisions of one section only.

BLM 1980

Corporeal Property

Property which may be seen and touched, as distinguished from incorporeal property which exists only in contemplation. A house is corporeal, but annual rent which may be payable for its occupation by another is incorporeal.

BLM 1980

Corrective Resurvey

A resurvey made to correct erroneous omission of original corner evidence discovered after a survey has been approved.

BLM 1980

Correlate Equation

An equation derived from observation and condition equations in which undetermined multipliers are used and expression the condition that the sum of the squares of the residuals (or corrections) resulting from the application of these multipliers to the resulting equations shall be a minimum.

NOAA 1986

Corroborating Evidence

Evidence supplementary to that already given and tending to strengthen or confirm it. Additional evidence of a different character to the same point.

BLM 1980

Coulee

(1) A small stream, often intermittent, or the bed of such a stream when dry. (2) The valley, gulch or wash of an intermittent stream, often of considerable extent. (3) A small valley or a low-lying region.

ASCE-ACSM 1993

County

A county is a local unit of government, usually the seat of a deed registry or its equivalent. "Counties are considered to be the 'first order subdivisions' of each state regardless of their local designation."

Federal Information Processing Standards

Court of Equity

Courts which administer justice according to the system of equity, and according to the rules, principles and procedures of chancery; as distinguished from a court having the jurisdiction, rules, principles and practice of the common law. The terms "chancery" and "equity" and "court of chancery" and "court of equity" are used as synonymous in the United States, probably because the jurisdiction exercised by courts of equity is similar to that of the English chancery courts. In some States, courts called chancery courts possess general equity powers.

BLM 1980

Courthouse Site Reserve

A reservation of public lands in Alaska in territorial days for use as a Territorial Courthouse site.

BLM 1980

Covenant

When used in deeds, restrictions imposed on the grantee as to the use of the land conveyed

Harbin, Andrew L. 1998

A promise, incorporated in a trust indenture or other formal instrument, to perform certain acts or to refrain from performing certain acts.

ASCE-ACSM 1993

Crossing Closing Corner

A term used to describe a corner set where a township or section line intersects (crosses) the line of a surveyed mineral claim, forest homestead claim, small holding claim or the like. "A closing corner monument is not set at intersection with the line of a surveyed mineral claim, forest homestead claim, small holding claim or the like, unless required to provide an interval of monumentation of one half mile or less. In instances crossing closing corners may be needed for operational or litigation purposes, in which event they should be provided for in the special instructions." (BLM 1973, paragraph 3-71.)

BLM 1980

A term used to describe a corner set where a township or section line intersects (crosses) the line of a surveyed mineral claim, forest homestead claim, small holding claim or the

like. "A closing corner monument is not set at intersection with the line of a surveyed mineral claim, forest homestead claim, small holding claim or the like, unless required to provide an interval of monumentation of one half mile or less. In instances crossing closing corners may be needed for operational or litigation purposes, in which event they should be provided for in the special instructions." (BLM 1973, paragraph 3-71.)

FGDC - Subcommittee on Cadastral Data 1999

Crown Lands

(1) In general, land belonging to the reigning sovereign. (2) Those regions, especially within the original colonial states and also within all public land states and territories, wherein title granted by a foreign government was passed before the acquisition of sovereignty by the USA.

ASCE-ACSM 1993

Culmination

(1) The location of a heavenly body at the instant it crosses an observer's meridian above or below his horizon. (2) For a heavenly body which is continually above the horizon, the location of lowest apparent angular elevation. Culmination occurs when the body transits the local meridian: upper culmination at the branch of the meridian above the celestial pole; lower culmination at the branch below the celestial pole. As an observer approaches a pole of the earth, culmination of the fixed stars becomes less noticeable, disappearing when the pole is reached. Culmination of bodies within the Solar System may, under some conditions, be obscured by changes in declination.

ASCE-ACSM 1993

Curtesy

(1) The right which a husband has in his wife's estate at her death. (2) The estate to which, by common law, a man is entitled, on the death of his wife, in the lands or tenements of which she is seized in possession in fee-simple or in tail during her coverture, provided they have had lawful issue born alive which might be capable of inheriting the estate. It is a freehold estate for the term of his natural life.

ASCE-ACSM 1993

The right which a husband has in his wife's estate at her death. The state to which by common law a man is entitled, on the death of his wife, in the lands or tenements of which she is seized in possession in fee simple or in tail during her coverture, provided they have had lawful issue born alive which might be capable of inheriting the estate. It is a freehold estate for the term of his natural life.

BLM 1980

Curve Length

Curve length is the nominal distance around a curve. It equals the difference between the stationing of the T.C. (Tangent to Curve) or B.C. (Beginning of Curve) or P.C. (Point of Curvature) and the C.T. (Curve to Tangent) or E.C. (End of Curve) or P.T. (Point of Tangency). Also known as the arc distance of the curve.

Gibson and Meyer 1980

Data Collection Device

An instrument for digital storage of readings and information about those readings. Information may be input manually or digitally.

NILS Development Teams 2001

Data Discrepancy

Datasets of the same category in the same spatial extent whose positions (coordinates) and/or attributes do not match.

NILS Development Teams 2001

Data Set

A collection of data, such as an array or table of data items, a file, a program, or any other organized unit of data.

NILS Development Teams 2001

Datum

In ordinary survey usage, a defined reference for survey measurements. Two principal types of datum are used - horizontal and vertical.

New Mexico Assessors 2001

A set of parameters and control points used to accurately define the three-dimensional shape of the Earth (e.g., as a spheroid). The datum is the basis for a planar coordinate system. For example, the North American Datum for 1983 (NAD83) is the datum for map projections and coordinates within the United States and throughout North America.

Kansas Association of Mappers 1997

A datum is “any numerical or geometrical quantity or set of quantities which may serve as a reference or base for other quantities” (ACSM, 1978, page 49). In measurement science datum consists of a reference spheroid and a set of equations or relations to develop a coordinate system. Local or assumed datums are usually tangent plane based and defined with respect to one of the formalized datums.

BLM 1980

In surveying, a point, line or surface used as a reference.

URISA 2000

A datum is “any numerical or geometrical quantity or set of quantities which may serve as a reference or base for other quantities”

ACSM 1978

De Minimis Non Curtax Lex

The law does not care for, or take notice of, very small or trifling matters; the law does not concern itself about trifles. A surveyor’s return of 29 inches length for a location monument should be considered a trifling difference.

BLM 1980

Declination

The variations given in degrees on maps generally applied to the angles between true, magnetic or grid north.

New Mexico Assessors 2001

Dedication

A dedication of land is a donation of land. Such donations can be made to the government, charitable bodies, or utility companies. Dedications are made when new subdivisions are created, the lands for public streets and possibly parks and schools being dedicated by the developer.

Buckner, R.B. 1991

Giving of land or the rights in land to the public. It must be given voluntarily and be either expressed or implied. It may be written or unwritten but there must be acceptance of a dedication. Consideration is not necessary. An appropriation of land to some public use made by the owner and accepted for such use by or on behalf of the public.

Harbin, Andrew L. 1998

The act of dedicating something. The dedication may be either express or implied. It is express when there is an express manifestation, on the part of the owner, of his purpose to devote the land to a particular, public use such as e.g., the streets in platted subdivisions. It is implied when the owner’s acts and conduct manifest an intention to devote the land to public use. To make the dedication complete, there must not only be an intention on the part of the owner to set apart the land for the benefit of the public, but there must be an acceptance by the public.

ASCE-ACSM 1993

Deed

A legal instrument which, when executed and delivered, conveys an estate in real property or an interest therein.

ASCE-ACSM 1993

A conveyance of realty; a writing signed by grantor, whereby title to realty is transferred from one to another. A written instrument, signed, and delivered, by which one person conveys land, tenements, or hereditament to another.

Wisconsin Register of Deeds Association 1995

A document which transfers title to real property. In those instances where a complicated metes and bounds description is the only description available, a deed may be used to transfer fee-simple interest in public lands. A patent would be issued under normal conditions where a cadastral survey plat shows a description by legal subdivisions.

BLM 1980

Deed Description

A measurement as defined in a deed legal description.

NILS Development Teams 2001

Deed in Trust

A deed which establishes a trust. Also called a trust deed. It generally is a legal instrument which conveys legal title to property to a trustee and states his authority and the conditions binding upon him in dealing with the property held in trust. Trust deeds are frequently used to secure lenders against loss. In this respect, they are similar to mortgages. Also called a trust deed. Do not confuse deed in trust with deed of trust (q.v.).

ASCE-ACSM 1993

A deed in which title to property is transferred to a third party as trustee to be security for an obligation owed by the trustor (borrower) to the beneficiary (lender). Also called a trust deed, but not to be confused with deed in trust.

ASCE-ACSM 1993

Defining Measurement

A measurement in a conveyance instrument that defines an area of land.

NILS Development Teams 2001

Deflection Angle

The horizontal angle measured from the prolongation of the proceeding line to the following line.

Brown, Curtis M 1995

A horizontal angle measured from the prolongation of the preceding line, right or left to the following line. Only directed polygons, such as traverses, have deflection angles.

ASCE-ACSM 1993

The angular difference from a straight line at an angle point in a traverse.

BLM 1980

Degaussing

Reducing or removing the magnetization of a body.

NOAA 1986

Degree of Curve

The degree of curve defines the radius of a highway or railroad circular curve. There are two definitions: 1) (chord) The angle subtended at the center of a circle by a chord of 100 feet. 2) (arc) The angle subtended at the center of a circle by an arc of 100 feet. Definition 1) was used in railroad and early highway design. Definition 2) is used in present day engineering of highway design.

ACSM 1978

Delineate

As applied to mapping, it is the act of representing, portraying or describing graphically features to be shown on a map.

New Mexico Assessors 2001

Demise

(1) Convey or create an estate for years or life. (2) Lease. This is the usual and operative word in leases: have a granted, demised, and to farm let, and by these presents do grant, demise and to farm let.

ASCE-ACSM 1993

Demurrer

In legal pleading, the formal mode of disputing the sufficiency of the pleading of the other side

Harbin, Andrew L. 1998

An answer to a legal action that assumes the truth of the matter alleged by the opposite party. It then sets up the defense that the complaint is insufficient in law to sustain his claim or that there is some other defect constituting a legal reason why the opposing party should not be allowed to proceed further.

BLM 1980

Dependent Resurvey

A retracement and reestablishment of the lines of the original survey in their true original positions according to the best available evidence of the positions of the original corners

BLM 1973

<p>A retracement and reestablishment of the lines of the original survey in their true original positions according to the best available evidence of the positions of the original corners (BLM, 1973, paragraph 6-4).</p>	<p>Dicta Opinions of a judge which are beside the point of a case at issue before the court. BLM 1980</p>
<p>BLM 1980</p> <p>A dependent resurvey employs the evidence of the corners as marked in the original survey. Thus in essence a dependent resurvey is a retracement survey. Buckner, R.B. 1991</p>	<p>Dictum A remark by the way. Generally, the word “dictum” is used as an abbreviated form of “Obiter dictum.” BLM 1980</p>
<p>Deposition The testimony of a witness taken under oath and reduced to writing, authenticated, and intended to be used upon the trial of an action in court. A written declaration under oath, made upon notice to the adverse part for the purpose on enabling him to attend and cross-examine; or upon written interrogatories. It is the giving of notice to the adverse party which especially distinguishes a deposition from an affidavit. BLM 1980</p>	<p>Digital Elevation Model A mathematical model that provides the data necessary to display elevation. The visual display itself. URISA 2000</p>
<p>Deputy Surveyor A surveyor who entered into a contract to survey a portion of the public lands under the system in existence prior to 1910 was commissioned by the Surveyor General as his deputy. BLM 1980</p>	<p>A digital representation of a continuous variable over a two-dimensional surface by a regular array of z values referenced to a common datum. Digital elevation models are typically used to represent terrain relief. The format of the USGS digital elevation data sets. Kansas Association of Mappers 1997</p>
<p>Dereliction (1) The gradual, natural and more or less permanent recession of water from land so as to change the boundary between land and water. Also called reliction. This is a legal term and has only incidental relation to the physical processes involved. Two varieties of dereliction are usually recognized -the recession of the waters of a lake or sea or other body of water, and the imperceptible recession of the water of a stream from one side and consequently its gradual encroachment on the other. (2) A recession of water from the sea or other body of water, leaving the land dry. ASCE-ACSM 1993</p>	<p>A digital file usually containing elevations regularly spaced at surface coordinates over an area. Specialized computer software can interpret this data and create a 3-dimensional rendering of the surface, or analyze the terrain in various ways. Wisconsin State Cartographers Office 2000</p>
<p>Desert Land Entry An entry of irrigable arid agricultural public lands, under the terms of the Act of March 3, 1877, as amended, for the purpose of reclamation, irrigation and cultivation in part. BLM 1980</p>	<p>Digital Line Graph Digital Line Graph. A form of digital map developed by the United States Geological Survey. DLGs supply users with the digital version of information printed on USGS topographical quadrangle maps. Kansas Association of Mappers 1997</p>
<p>Devise Transfer real property by will or last testament. ASCE-ACSM 1993</p>	<p>A vector file containing points, lines, and/or areas that represent roads, water bodies, topographic contour lines, public lands, and railroads. Each data layer comes in a separate file. The DLG format was created by the USGS. Wisconsin State Cartographers Office 2000</p>
	<p>Digital Orthophoto An aerial photograph in which the displacement of images have been removed and may also form the base map for many GIS programs. Kansas Association of Mappers 1997</p>
	<p>An image derived by geometrically correcting a scanned aerial photograph so that it is positionally accurate like a planimetric map. Wisconsin State Cartographers Office 2000</p>

Digital Terrain Model

(DTM)- A term that describes a variety of digital formats for displaying or analyzing elevation information. A DEM is one of these formats.

Wisconsin State Cartographers Office 2000

(DTM) A method of transferring elevation data into a contoured surface or a three-dimensional display.

Kansas Association of Mappers 1997

A mathematical representation of terrain relief that can be visualized on a computer screen or other output device.

URISA 2000

Digitizing

The process of converting source materials, prepared manually, into the digital codes stored and processed by computers. Digitizing involves tracing map features into a computer using a digitizing tablet, graphics tablet, mouse or keyboard cursor.

Kansas Association of Mappers 1997

The process of converting information shown on "paper" maps into digital form for computer processing either by scanning or by manually capturing point and line features using specialized computer hardware.

Wisconsin State Cartographers Office 2000

Direct Observation

A measure of the quantity whose value is desired. Example: A single measure of a horizontal angle.

ACSM 1978

Direct System

The Interior Department Appropriation Act of 1911 (June 25, 1910, 36 Stat. 703, 740), provided, under "Surveying the Public Lands": "The surveys and resurveys to be made by such competent surveyors as the Secretary of the Interior may select,..." This provision ended the practice of letting contracts for the surveys of the public lands, and required the "direct" hiring of a permanent corps of cadastral surveyors.

BLM 1980

Direction

"Direction is the angle between a line and an arbitrary chosen reference line. When the reference line is north or south and the angle is designated east or west, the direction is called the bearing. When the reference line is north or south the direction is called azimuth."

ACSM 1978

Direction of Concavity

The direction of concavity as defined by the compass points for each 22 1/2 degree increment. For example, SSW means concave to the south by southwest. This direction is generally perpendicular to the long chord.

BLM 1995

Diurnal Tides

Tides that occur with one high tide and one low tide per day. Gulf of Mexico

Harbin, Andrew L. 1998

Document

May be a textual report, spreadsheet, picture, or spatial database stored as a file in the computer. Typically, a document is a file containing ASCII text. It is a file created within an application, for example, a letter created in a word processor or a graph created in a spreadsheet or graphics program.

Kansas Association of Mappers 1997

1) An instrument on which is recorded, by means of letters, figures, marks or symbols, information which may be relied upon as the basis, proof or support of something. A deed, agreement, title paper, letter or other written instrument used to prove a fact. 2) To furnish written evidence. To provide with factual or substantial support for statements made or a hypothesis proposed; especially, to equip with exact references to authoritative supporting information.

BLM 1980

Domesday Book

The ancient record of the Grand, or Great Inquest or Survey of the lands of England (1085-86) by order of William the Conqueror. So called as of final authority. Also called Domesday and Doomsday Book. It consists of two volumes; a quarto, sometimes called the Little Domesday dealing only with Essex, Norfolk and Suffolk, and a large folio, the first to be published and sometimes called the Great Domesday, dealing with the rest of England. The Domesday Book gives a census-like description of the realm, with the names of the proprietors, the nature, extent, value, liabilities, etc., of their properties.

ASCE-ACSM 1993

A record of a survey of English lands made by order of William the Conqueror. It was begun in 1081 and finished in 1086. It is a description of the land, with the names of the owners, and the nature and extent of their holdings. It was, in effect, a cadastral survey.

BLM 1980

Dominant Estate

An estate, the owners of which are entitled to an easement on another's property or so a servitude.

ASCE-ACSM 1993

Dominium

In the civil and old English law: (1) Ownership. (2) Property in the larger sense, including both the right of property and the right of possession or use. (3) The mere right of property, as distinguished from the possession or usufruct. (4) The right which a lord had in the fee of his tenant. In this sense, the word is very clearly distinguished by Bracton from dominicum.

ASCE-ACSM 1993

Donation Land Claim

The land, 320 or 640 acres that was allocated to an Oregon settler under the Donation Act September 27, 1850.

FGDC - Subcommittee on Cadastral Data 1999

The land, 320 or 640 acres, that was allocated to an Oregon settler under the Donation Act of September 27, 1850.

BLM 1980

Donation Lands

Lands granted from the public domain to an individual or, as in the case of lands donated or granted to railroads as an incentive for construction, to corporations.

BLM 1980

(1) Lands granted from the public domain to an individual as a bounty, gift or donation. Particularly, in early history of Pennsylvania, lands thus granted to soldiers of the Revolutionary War. (2) Lands granted from the public domain to a corporation. E.g., lands so granted to railroad companies as incentives to the construction of railroads.

ASCE-ACSM 1993

Dower

That portion of, or interest in, the real estate of a deceased husband which the law gives to his widow for life. The extent varies with statutory provisions.

ASCE-ACSM 1993

Easement

An interest or right in land owned by another that entitles its holder to a specific limited use such as laying a sewer, crossing over property or putting up power lines.

BLM 1980

A document describing the nonpossessing interest held by one person in the land of another whereby the first person

is accorded partial use of such land for a specific purpose. An example is described below.

Wisconsin Register of Deeds Association 1995

An interest or right in land owned by another that entitles its holder to a specific limited use; such as laying a sewer, crossing over property or putting up power lines.

New Mexico Assessors 2001

An easement is a right to use someone else's land for a specific purpose. Easements are often granted across someone's property for ingress and egress. Easements are usually created by express conveyance such as by a deed but they can also be created by implication, by prescription, by estoppel and by necessity.

Buckner, R.B. 1991

The right, privilege, or liberty given to a person or group to use land belonging to another for a specific and definite purpose. A common easement is that giving a company the right to bring electrical transmission lines across private property. Another is the legal establishment of a public trail across private property. It is approximately equivalent to servitude (Canada), but the latter term includes restrictive covenants and profit a prendre.

ASCE-ACSM 1993

Easement Abandonment

To establish abandonment of an easement created by deed, there must be some conduct on the part of the owner of the servitude estate adverse to and inconsistent with the existence of the easement and continuing for a statutory period or nonuser must be accompanied by unequivocal and decisive acts clearly indicating an intent on the part of the owner of easement to abandon use of it.

Black, Henry Campbell 1991

Egress

A right to go upon the land of another.

BLM 1980

The right or permission to go out from a place; right of exit

Harbin, Andrew L. 1998

Electronic or Other Control

A point which is not coincident with a legal corner but is used for coordinate computation or survey measurement control. Points in National Geodetic Reference System and BLM established control may be examples. (BLM 1973, paragraphs 2-11 and 4-19.)

BLM 1995

Elevation

“The vertical distance from a datum, generally mean sea level, to a point or object on the earth’s surface. The terms ‘elevation’ and ‘altitude’ are sometimes used synonymously, but in modern surveying practice the term ‘elevation’ is preferred to indicate heights on the earth’s surface, whereas ‘altitude’ is used to indicate the heights of points in space ...”

ACSM 1978

The distance of a point above a specified surface of constant gravity potential, measured along the direction of gravity between the point and the surface. The surface is understood to be the geoid unless some other surface is specified, and the elevation is then the orthometric elevation. Although mean sea level was long specified, that surface is not at constant gravity potential. It lies above or below the geoid by as much as a meter in some places but its exact shape is not known. When mean sea level is specified, the term should be understood to mean either the geoid or a surface of constant gravity potential, passing through a specific point at mean sea level and of limited extent about that point. The terms altitude and height are often used uncritically as synonyms for elevation. However altitude more precisely means distance above the Earth’s physical surface or above a surface of known and constant atmospheric pressure. Height is commonly used to mean distance vertically between two points on an object (e.g., the base and top of a mountain or two marks on a leveling rod) or in geodesy, the perpendicular distance from a specified, geometric surface such as a reference ellipsoid or reference plane.

ASCE-ACSM 1993

“The vertical distance from a datum, generally mean sea level, to a point or object on the earth’s surface. The terms ‘elevation’ and ‘altitude’ are sometimes used synonymously, but in modern surveying practice the term ‘elevation’ is preferred to indicate heights on the earth’s surface, whereas ‘altitude’ is used to indicate the heights of points in space ...” (ACSM, 1978, page 59) Elevation may be above or below (+/-) the vertical datum.

BLM 1980

Ellicott’s Line

The meridian northward from the point of beginning of the first United States cadastral survey - a point established on August 20, 1785 on the north bank of the Ohio River - was named for Andrew Ellicott, and is known as Ellicott’s Line. It is also the Ohio-Pennsylvania boundary line. - Andrew Ellicott was appointed by President George Washington to work with Spanish surveyors in running and marking the boundary between Mississippi Territory and Spanish Florida

as determined by the treaty dated Oct. 27, 1795. This boundary along the 31st parallel of north latitude is called Ellicott’s Line of Demarcation.

BLM 1980

Ellipsoidal Height

The distance from the ellipsoid to a point measured along a line normal to the ellipsoid.

NILS Development Teams 2001

Elongated Section

A section which exceeds 85 chains in either length or width as originally surveyed and platted.

BLM 1980

Eminent Domain

The right of governmental agencies to take private property for public use.

BLM 1980

(1) The power of a sovereign government, or some person or group authorized by that government to appropriate part or all of the property within a State or the extent of authority of that government. Allied concepts of geodetic importance are easement and accessibility, e.g., the right of a surveyor to enter private property in doing a governmental survey. (2) The right by which a sovereign government, or some person or agent acting in its name and under its authority, may acquire private property for public or quasi-public use upon payment of reasonable compensation and without consent of the owner. (3) The right or power of a government to take private property for public use on making just compensation therefore.

ASCE-ACSM 1993

This is the right of the sovereign to take land for a public use. Federal and state governments, as well as utility companies and some other public agencies have the power to take property under these procedures. The declaration that the land is needed for public use is called condemnation. After this declaration the land owners whose land is to be taken are allowed due process of law, meaning they can protect their interests in court. Owners must be given just compensation, based on appraisals and market value, the exact amount usually being decided by a jury.

Buckner, R.B. 1991

Enabling Act

In reference to admission of new States into the Union, it is an act passed by Congress empowering the people of a territory to frame a constitution and lay down certain requirements that must be met prerequisite to statehood.

BLM 1980

Encroachment

An obstruction which intrudes upon the land of another. The gradual, stealthy, illegal acquisition of property.
Harbin, Andrew L. 1998

An unlawful and adverse intrusion within the boundary of a property, such as cultivation of the soil, enclosure by fence, the construction of an improvement, extension of a tunnel, underground operation or comparable act.
BLM 1980

Encumbrance

Any right to or interest in land which makes it subject to a charge or liability. Encumbrances include mortgages, judgment liens, attachments, leases, deed restrictions, unpaid taxes, inchoate rights of dower and so forth.
BLM 1980

Any right to, or interest in, land which may subsist the fee by another to the diminution of its value, but consistent with the passing of the fee by conveyance. A claim, lien, charge, or liability attached to and binding real property; for example a mortgage, judgment lien, mechanics' lien, lease, security interest, easement or right of way. If the liability relates to a particular asset, the asset is encumbered.
Black, Henry Campbell 1991

Engineering Survey

A survey executed for the purpose of obtaining information that is essential for planning an engineering project or development, and estimating its cost. The information obtained may, in part, be recorded in the form of an engineering map or plat.
ACSM 1978

Entry

An application to acquire title to public lands.
BLM 1980

Entry Unperfected

An original entry which has been allowed, but under which the entryman has not met all the requirements of the law and/or regulations to permit him to make final entry for patent to the land.
BLM 1980

Entryman

One who makes an entry of land under the public land laws of the United States.
BLM 1980

Ephemeris

Any tabular statement of the assigned places of a celestial body for regular intervals. The current Ephemeris of the Sun, Polaris and Other Selected Stars with Companion Data and Tables, which has been published annually in advance since 1910 as a supplement to the various Manuals of Surveying Instructions, is available through the U.S. Government Printing Office in Washington, D.C.”
BLM 1980

A tabulation of the locations and related data for a celestial body for given epochs (dates) at uniform intervals of time. In particular, a publication containing such data for a number of celestial bodies.
ASCE-ACSM 1993

Epoch

A particular instant of time from which an event or a series of events is calculated; a starting point in time, to which events are referred. In particular, a date and instant corresponding to the position of a coordinate system, all subsequent positions being referred to the position at that epoch. In this sense, it is equivalent to date.
ASCE-ACSM 1993

Equation of Time

(1) The difference in hour angle between mean solar time and apparent solar time. An equivalent definition is the difference between the hour angle of the true Sun and the hour angle of the mean Sun. As the equation of time may be expressed as a correction to either apparent solar time or to mean solar time, its sign must be observed carefully. (2) The difference between mean and apparent time. From the beginning of the year until near the middle of April, mean time is ahead of apparent time, the difference reaching a maximum of about 15 minutes near the middle of February. From the middle of April to the middle of June, mean time is behind apparent time but the difference is less than 5 minutes. From the middle of June to the first part of September, mean time is again ahead of apparent time, with a greatest difference less than 7 minutes. From the first part of September until the latter part of December, mean time is again behind apparent time, the difference reaching a maximum of nearly 17 minutes in the early part of November. The analemma is a graphical display of the equation of time.
ASCE-ACSM 1993

Equitable

1) Just; conformable to the principles of right and justice. Just, fair and right in consideration of the facts and circumstances of an individual case. 2) Existing, available or sustainable only in equity or by the rules and principles of equity.

BLM 1980

Equity

A system of law originating in the English chancery and comprising a settled and formal body of legal and procedural rules and doctrines that supplement, aid or override common and statute law. Rules of equity are designed to protect rights and enforce duties as created and defined by law. In another legal meaning, "equity" is the remaining interest belonging to one who has pledged or mortgaged his property, or the surplus of value which may remain after the property has been sold to satisfy liens. The amount of value of a property above the total liens or charges.

BLM 1980

Erosion

(1) In riparian law, the gradual and imperceptible washing away of land by a stream or body of water such as a lake or sea. (BLM) The results of erosion of a stream may be distinguished from those of avulsion by the absence of identifiable upland between former channels and new channels. (2) The wearing away of land or structures by running water, glaciers, wind, or waves. Weathering, although sometimes considered a form of erosion, is a distinctly different process; it does not imply that material is removed.

ASCE-ACSM 1993

The process by which the surface of the earth is worn away by the action of waters, glaciers, wind or waves. The changing of the uplands.

Harbin, Andrew L. 1998

Error

The difference between an observed or computed value of a quantity and the ideal or true value of that quantity. Because the ideal or true value of a quantity, with few exceptions, cannot be known with exactness, the term error is applied to a difference between an observed or computed value of a quantity and some standard or accepted value used in lieu of the ideal or true value.

ACSM 1978

Errors have been traditionally classified into three types: (1) gross errors, (2) systematic errors, and (3) random errors.

Edward M Mikhail and Gordon Gracie 1981

6. Since the true value of a measured quantity can never be determined, errors are likewise indeterminate and, hence, they are strictly theoretical quantities.

Wolf, Paul R 1974

An error is the difference between the true value of a quantity and the measured value of the same quantity.

NILS Development Teams 2001

An error is the difference between the true value of a quantity and the measured value of the same quantity. Errors result from instrumental imperfections, personal limitations, and natural conditions affecting the measurement.

Francis H Moffitt and Harry Bouchard 1975

The difference between a measured value and the true value. A smaller magnitude; not a mistake or blunder.

Brown, Curtis M 1969

Error Budget

A catalog or listing of the natures and magnitudes of the errors that affect the results of a project. The term is also used when the project is hypothetical as in the planning of an experiment.

NOAA 1986

Error Comparison Value

A worst-case closure for each polygon is computed by accumulating an error based on the error estimates for the bearings and distances, then dividing the misclosing polar distance by the accumulated polar distance.

NILS Development Teams 2001

Error Ellipse

An ellipse surrounding an adjusted coordinate describing the likelihood of the true value to be close to the adjusted value. In SM and MM extensions, the 95% level is chosen as most helpful. An error ellipse based on 95% is saying that the true value, if known, is expected to occur within the error ellipse 95% of the time.

NILS Development Teams 2001

Error Estimate

A numeric value expressing the reliability of each piece of data in the pre-adjusted survey network. This value expresses the amount of adjustment that would be expected to occur during the least square adjustment, and is used as a weighting to control the adjustment of better data. This value is usually applied consistently to distances, bearings and control coordinate values within each survey. The pre-adjustment estimates are based on date, equipment and surveyor. The

refinements to these estimates are based the reports from the least square adjustment/analysis.

NILS Development Teams 2001

A measure of land of sixteen square varas, or yards. (Spanish law).

ASCE-ACSM 1993

Error of Closure

The amount by which a value of a quantity obtained by surveying operations fails to agree with a fixed or theoretical value of the same quantity.

BLM 1980

Estate

The interest which anyone has in lands or in any other property. "Estate" is used in conveyances in connection with the words "right," "title" and "interest." It is, in a great degree, synonymous with all of them.

BLM 1980

Escheat

Reversion of property to the state when there is no one competent or available to inherit.

ASCE-ACSM 1993

The degree, quantity, nature and extent of interest which anyone has in lands or in any other property. Surface – All rights in the surface of the land except the oil, gas and other mineral or subsurface rights which a party owns, including the right to transfer and dispose of the surface of that land. The surface estate is severed from the mineral estate in a conveyance when the grantor excepts or reserves all or part of the minerals from the land being conveyed. Sub-Surface – As opposed to surface estate. Includes more rights than mineral estate. Term originated by Congress in ANCSA, and is continually being defined by the courts, ruling that sand and gravel are included in the subsurface rights.

NILS Development Teams 2001

In English feudal law, the reversion of lands to the lord of the fee in consequence of a want of an individual competent to inherit. In modern law, the State is deemed to occupy the place and hold the rights of the feudal lord. Real property may be claimed by the State where there is no will and/or no competent inheritors can be found. Also termed "escheated property" or "escheatage."

BLM 1980

Escrow

(1) A deed delivered to a disinterested person to be delivered to the grantee upon the fulfillment or performance of some act or condition. (2) Money or something of value deposited with a disinterested person, to be released upon fulfillment of performance of some act or condition, or to be returned to the depositor if these conditions are not met.

ASCE-ACSM 1993

The degree, quantity, nature, and extent of interest which a person has in real and personal property. An estate in lands, tenements, and hereditaments signifies such interest as the tenant has therein.

Black, Henry Campbell 1991

A writing, deed, money, stock, or other property delivered by the grantor, promiser or obligator into the hands of a third person to be held by the latter until the happening of a contingency or performance of a condition and then by him delivered to the grantee, promisee, or obligee.

Black, Henry Campbell 1991

(1) A person's right or interest in property and its use i.e., the entire property of a person. (2) The property and debts of a deceased or bankrupt person.

ASCE-ACSM 1993

The state or condition of a deed which is conditionally held by a third person, or the possession and retention of a deed by a third person pending performance of a condition. While in the possession of the third person, and subject to condition, it is called an "escrow."

BLM 1980

Estoppel

The situation or doctrine whereby one is concluded and forbidden by law to speak against his own act or deed. The situation can arise in disputes over a boundary if one of the parties tries to make a claim rendered suspect or invalid by his own actions or record.

ASCE-ACSM 1993

Estadal

In Spanish America a measure of land of sixteen square varas or yards.

Black, Henry Campbell 1991

A bar or impediment which precludes allegation or denial of a certain fact or state of facts in consequence of a final adjudication. The principle that you can not take something back that would cause damage to someone who relied on the original acts.

Harbin, Andrew L. 1998

The stopping of a person from asserting a claim by reason of his own previous representations which refute his new claim. The new claim may in fact be true, however, he may be prevented from exerting that claim by “estoppel.”

BLM 1980

Estoppel by Acquiescence

Acquiescence is a species of estoppel. An estoppel arises where the party aware of his rights sees other parties acting upon the mistaken notion of his rights. Injury accruing from one’s acquiesces in another’s action to his prejudice creates estoppel. Passive conduct on the part of own who has knowledge of the facts may be the basis of estoppel.

Black, Henry Campbell 1991

Estuary

(1) An embayment of the coast in which fresh water entering at its head mixes with the relatively saline water of the ocean. (2) The lower reaches and mouth of a river emptying directly into the sea where tidal mixing takes place. Also called a river estuary.

ASCE-ACSM 1993

et al

An abbreviation for et alii, “and others,” or et alius, “and another.”

BLM 1980

et con

An abbreviation meaning “and husband.”

BLM 1980

et seq

An abbreviation for et sequentes or et sequentia, “and the following.” A reference to “p.3 et seq” means “page number 3 and the following pages” It is also abbreviated “et sqq,” in some works, when the reference is to more than one following page.

BLM 1980

et ux

n abbreviation for et uxor, “and his wife.”

BLM 1980

etc

The common abbreviation for “et cetera.” And others; and other things; and others of like character; and others of like kind; and the rest; and so on; and so forth.

BLM 1980

Eustasy

Those changes of oceanic mean sea level which are peculiar to the oceans, as opposed to those changes which result from changes in crustal elevation.

ASCE-ACSM 1993

Eviction

(1) The act or process of evicting, or state of being evicted. (2) In particular, the recovery of lands, tenements, etc., from another’s possession by due course of law or dispossession in virtue of a permanent title. (3) Also, dispossession of a tenant by his landlord.

ASCE-ACSM 1993

Evidence

Testimony, physical objects, marks, traces of former objects or relationship between any of these which may furnish proof or part of a proof of a corner location or line location.

BLM 1980

Evidence Aliunde

Evidence from outside or from another source.

Harbin, Andrew L. 1998

Evidencing of Title

The submission of proof of title to a tract of land as shown by an abstract of the recorded patent and deeds of transfer, inheritance, court decree, or other means of establishing the title.

BLM 1980

The submission of proof of title to a tract of land, or subdivision, as shown by an abstract of the recorded patent and deeds of transfer, inheritance, court decree or other means of establishing the title by such evidence as may be approved by competent judicial opinions, including court decrees in the event of controversy.

ASCE-ACSM 1993

ex officio

From office; powers exercised by an official not specifically conferred on him but necessarily implied in his office.

BLM 1980

ex rel

Ex Relatione; Upon relation or information. Legal proceedings which are instituted by the Attorney General (or other proper person) in the name and behalf of the State, but on the information and at the instigation of an individual who has a private interest in the matter, are said to be taken “on the relation” (ex relatione) of such person, who is called

the “relator.” Such cause is usually entitled thus: “State ex rel. Doe v. Roe.”

BLM 1980

Exception

In deeds or conveyances, a clause used by the grantor to retain some part of the former estate by excluding it from the deed or grant. “Except” means “not including.”

BLM 1980

Exchange Survey

A cadastral survey of lands to be exchanged. An exchange is a transaction whereby the U.S. Government receives land in exchange for other land and or timber. State exchanges, Private exchanges and Taylor Act exchanges (section 8 of the Taylor Grazing Act, June 28, 1934) are included. See also public law 94-579, section 206.

BLM 1980

Existent Corner

A corner whose position can be identified by verifying the evidence of the monument, or its accessories, by reference to the description that is contained in the field notes, or where the point can be located by an acceptable supplemental survey record, some physical evidence or testimony.

BLM 1980

Extension Survey

Executed to add to an existing survey. An “extension survey” does not, however, complete a survey of boundaries of townships or sections or the subdivision of a township or a section, it only adds to an existing partial survey.

BLM 1980

Extinguishment

(1) The act of rendering legally nonexistent. (2) The act of destroying or rendering void; nullifying. (3) The act of avoiding, as by payment, setoff, limitation of actions, merger of an interest in a greater one etc. Extinguishment, the act of extinguishing, is distinguished from the mere transfer, passing, or suspension of a right or obligation.

ASCE-ACSM 1993

To render legally nonexistent; to destroy or render void; to nullify; to void, as by payment, treaty, setoff, or limitation of actions, merger of an interest in a greater one, etc. Extinguishment is distinguished from the mere transfer, passing, or suspension of a right or obligation.

BLM 1980

Extralateral Rights

In mining, the right to mine ore downward along a lode or vein beyond the side lines of a mining location (claim). The right is limited to claims which contain the apex of the vein at or very near the surface, which are oriented with the lode line substantially along the vein and which have the end lines substantially parallel. The right does not extend beyond planes passing vertically through the end lines. Extra lateral rights of claims filed before May 10, 1872, were determined according to the previous law of 1866 and by miner’s local rules and they were not dependent upon parallel end lines. Various States have modified the Federal requirements.

BLM 1980

Extrinsic Evidence

Evidence not contained in the deed but offered to clear up an ambiguity found to exist when applying the description to the ground.

Harbin, Andrew L. 1998

Facility Management

In conjunction with Automated Mapping, the record keeping of information concerning spatially distributed assets or facilities. Typically used for asset accountability and maintenance management operations. There is no spatial component. If a spatial component is added so that records in a Facility Management system are linked to features in an Automated Mapping System, the combination is referred to as an AM/FM system.

Kansas Association of Mappers 1997

Falling

The distance by which a random line falls to the right or left of a corner on which the true line is to close. Usually the direction of falling is expressed as cardinal.

BLM 1980

Farm Lot

A Farm Lot is an elongated lot that occurs outside the Public Land Survey System on lands that were occupied prior to survey. These lots are generally elongated and generally run perpendicular to a body of water, such as a river.

FGDC - Subcommittee on Cadastral Data 1999

Farm Unit Survey

Bureau of Reclamation survey, done under BLM authority and accepted by the BLM. A survey done to delineate irrigable farm lands within Bureau of Reclamation project areas. “Wherever it may be necessary, for the purpose of accurate description, to further subdivide lands to be irrigated under the provisions of said reclamation law, the Secretary of the Interior may cause subdivision surveys to

be made by the officers of the Bureau of Reclamation.” Title 43, CFR 434.

BLM 1980

Bureau of Reclamation survey, done under BLM authority and accepted by the BLM. A survey done to delineate irrigable farm lands within Bureau of Reclamation project areas. “Wherever it may be necessary, for the purpose of accurate description, to further subdivide lands to be irrigated under the provisions of said reclamation law, the Secretary of the Interior may cause subdivision surveys to be made by the officers of the Bureau of Reclamation.” Title 43, CFR 434.

BLM 1995

Feature

A cadastral land records object that has a field of type geometry. Features are stored in feature classes.

NILS Development Teams 2001

Natural and man-made entities represented on a map.

URISA 2000

Natural and man-made geographic features represented by points/symbols, lines, and areas on a map. Object in a geographic or spatial database with a distinct set of characteristics. A defined aspect of the earth’s surface that is not further subdivided. For example, a road segment, manhole, building, or area designated having the same soil type.

Kansas Association of Mappers 1997

Feature Class

The conceptual representation of a geographic feature. When referring to geographic features, feature classes include point, line, area, and surface.

NILS Development Teams 2001

Feature Locking

Method for preventing a second user from editing a feature while the original user is performing an edit. Locking prevents writing on a feature by others while a feature or record is currently “checked out” for modification. When a transaction is started, the selected feature, and in some cases the linked attribute record, is designated as locked in such a manner that no other user can write on the feature until it is released (the lock designation is removed).

Kansas Association of Mappers 1997

Fee

The true meaning of the word “fee” is the same as that of “feud” or “fief,” and in its original sense it is distinguished from “allodium,” which is defined as a man’s own land, possessed in his own right, without owing any rent or service to any superior. In modern English tenures, “fee” means an estate of inheritance clear of any condition, limitation, or restriction to particular heirs, but descendible to the heirs in general, male or female, lineal or collateral. In American law, the terms “fee,” “fee simple” and “fee simple absolute” are equivalent.

BLM 1980

Fee Determinable

(1) An estate which may rely on the happening of a merely possible event. (2) An estate created with special limitations which delimit the duration of estate in land. Also called a base fee or qualified fee.

ASCE-ACSM 1993

A road built on land purchased specifically for that purpose.

ASCE-ACSM 1993

Fee Simple

The estate which a man has where lands are owned by him and his heirs absolutely, with unconditional power of disposition during his life, and descending to his heirs and legal representatives upon his death intestate. Fee simple title to public lands is conveyed by a patent, approved clear list, deed or grant without condition.

BLM 1980

(1) An absolute fee (sense 2); a fee without limitations to any particular class or heirs or restrictions, but subject to the limitations of eminent domain, escheat, police power and taxation. (2) An inheritable estate.

ASCE-ACSM 1993

Fee Simple Ownership

Absolute. A fee simple absolute is an estate limited absolutely to a man or woman and his or her heirs and assigns forever without limitation or condition.

FGDC - Subcommittee on Cadastral Data 1999

Fee Tail

An estate or inheritance limited to some particular class of person to whom it is granted. Estates in fee tail have been abolished in most States, converting them to fee-simple estates.

ASCE-ACSM 1993

An estate limited to one class of heirs.	lands have been created by gross error or fraud in the original survey.
BLM	BLM
1980	1980
Field Notes	
The official written record of the survey, certified by the field surveyor and approved by proper authority. Originally, Field Notes were prepared by hand, but they are now typewritten.	
BLM	1980
The official written record of the survey, certified by the field surveyor and approved by proper authority.	
New Mexico Assessors	2001
Field Survey	
A category of surveys. Measurement of features for locating the position, or layout, of physical objects or theoretical position. For example, a property corner is theoretical, but a property corner monument is a physical object.	
NILS Development Teams	2001
Field Tablets	
Notebooks in which the initial information is recorded in the field, and from which the Field Notes are transcribed.	
BLM	1980
Filing	
Physically to keep an original instrument in the Register's office.	
Wisconsin Register of Deeds Association	1995
Fillet	
An arc constructed between and tangent to two converging lines.	
Kansas Association of Mappers	1997
Five Percent Rule	
New area amounts are not usually shown on plats of dependent resurveys. They are shown if the area of a vacant subdivision as determined by the dependent resurvey differs from the former area as returned on the original approved plat by more than two acres per normal legal subdivision, or 5%.	
BLM	1980
Fixed Boundary	
An unchangeable boundary created by operation of law. Examples are: 1) A standard parallel or other control line becomes a fixed boundary on return of areas in adjacent quarter sections. 2) A median line of a non-navigable stream becomes a fixed boundary after an avulsive change. 3) Meander lines can become fixed boundaries when omitted	
Flood Plain	
(1) Land, along the course of a stream, which is subject to inundation during periods when the water's height exceeds the normal for being full to the banks. (2) Land which is parallel to the stream with approximately level ground, gentle longitudinal slope corresponding to the gradient of the stream, and very flat backslope. (3) Natural terrain frequently consisting of low lying, timbered land interspersed with swamp, marsh, small lakes, ponds and bayous.	
ASCE-ACSM	1993
Flood Tide	
(1) That portion of the oceanic tide occurring between low water and the following high water. Also called a rising tide. (2) The landward current caused by that portion of the tide occurring between low water and the following high water.	
ASCE-ACSM	1993
Florida Purchase	
The second addition of territory originally claimed by a European power to the territory of the United States. It was ceded by Spain in 1819 under a treaty which settled conflicts with Spain in West Florida and defined the boundary between the United States and the Spanish possessions in the Southwest.	
BLM	1980
Flowage	
The natural flow or movement of water from an upper estate to a lower estate. This is a servitude which the owner of the lower estate must bear even though the flowage be not in a natural water course with well defined banks.	
ASCE-ACSM	1993
Flowage Line	
A contour or line around a reservoir, pond, lake, or along a stream, corresponding to some definite water-level (highest, mean, low, spillway, crest, etc.). The term is usually used in connection with the acquisition of rights to flood lands for storing water.	
ASCE-ACSM	1993
Foot	
A unit of length, in the American system of units, now defined as (1) exactly 1/3 of 36/39.37 of the International Prototype Metre, or 1/3 of a yard. The legal and practical definitions of the foot are not necessarily the same. Until 1893, both the American foot and the British foot (also called	

the English foot) were defined as (2) 1/3 of the length of the British imperial (standard) yard (a brass bar in London, or copies thereof). The American foot, by a law passed by Congress on 28 July 1866, and by the Mendenhall Order of 1893 (U.S. Department of the Treasury, 5 April 1893), was established as the length specified in definition (1). This foot continues in use up to the present, at least for surveying in the U.S.A. On 1 July 1959, by agreement between the U.S. National Bureau of Standards and the corresponding organizations of some other countries, the international yard was defined to be exactly 0.9144 meter long. The foot, by this new definition, is then 0.3048 meter long. It is, however, for scientific use only and does not legally replace the foot of 1893. The foot used in the triangulation of Britain was defined as (3) 1/10 of the length of the 10 foot bar O1 of the Ordnance Survey. One foot of O1 is 0.304 800 756 International meters. The Indian foot used by the U.S.A. and the United Kingdom for computing triangulation of India and neighboring countries is 0.304 798 41 meters long; the foot used at present by the Survey of India is 0.304 799 6 meters long. The legal value, adopted in 1956, of the Indian foot is 0.3048 meters, exactly.

ASCE-ACSM 1993

Foreshore

(Shalowitz) According to riparian law, the strip of land between the high and low water marks that is alternately covered and uncovered by the flow of the tide. 2) (T.R. No.4) The part of the shore, lying between the crest of the seaward berm (or upper limit of wave action at high tide) and the ordinary low water mark, that is ordinarily traversed by the up rush and backrush of the waves as the tides rise and fall.

BLM 1980

Found Corner

An existent corner of the public land surveys which has been recovered by field investigation.

BLM 1980

A term adopted by the U.S. Geological Survey for an existent corner of the Public Lands Surveys which has been recovered by field investigation. New Mexico Assessors 2001(1) A corner (a) of which the original or restored monument or mark is recovered, or (b) the location of which was definitely established by one or more witness corners or reference monuments. (2) An existent corner of the public lands surveys which has been recovered by investigation in the field.

ASCE-ACSM 1993

Fractional Section

A section, which in its original form, contained one or more subdivisions of less than forty (40) acres due to irregular exterior boundaries, or due to the encroachment of a meandered body of water or other land which could not be properly surveyed or disposed of as an aliquot part of that section.

New Mexico Assessors 2001

A section, which in its original form, contained one or more subdivisions of less than forty (40) acres due to irregular exterior boundaries, or due to the encroachment of a meandered body of water or other land which could not properly be surveyed or disposed of as an aliquot part of that section.

BLM 1980

Fractional Township

A township containing less than 36 normal sections, usually because of invasion by a segregated body of water, or by other land which cannot properly be surveyed as part of that township or by closing the public-land surveys on State boundaries or other limiting lines. Half ranges and half townships are fractional townships by definition.

BLM 1980

A township containing less than 36 sections, usually because of invasion by a segregated body of water by other land which cannot be properly surveyed as part of that township such as a land grant. Half ranges and half townships are fractional townships by definition.

New Mexico Assessors 2001

Fragmentary Surveys

Surveys required to identify parts of townships and sections not completed in original surveys. This may include partially surveyed sections, omitted public land islands and other lands of substantial value and extent that for various reasons were not included in the original surveys. Surveys of this type frequently require consideration of the question of title prior to the extension of the former surveys.

BLM 1980

Free and Clear

The title to property is said to be “free and clear” when it is not encumbered by any lien; but it is said that agreement to convey land “free and clear” is satisfied by a conveyance passing a title.

BLM 1980

French Long Lot

A French Long Lot is an elongated lot that occurs outside the Public Land Survey System on lands that were occupied prior to survey and established by the French explorers and traders. These lots are generally elongated and generally run perpendicular to a body of water, such as a river.

FGDC - Subcommittee on Cadastral Data 1999

Fronting

Usually signifies abutting, adjoining, or bordering on, depending on the context. Land abutting on a highway, river, seashore or the like. The land extending along a road, street, river, canal or ocean. The term, as used in statutes relating to assessments for improvements, indicates that there is no intervening land.

BLM 1980

Furlong

A length of 1/4 mile or 220 yards.

ASCE-ACSM 1993

Gadson Purchase

A purchase from Mexico in 1853 to settle a question as to the limits of the Mexican Cession of 1848. James Gadsden, a South Carolina railroad promoter negotiated for the acquisition of 19 million acres of additional land and the settlement of the claims. The territory acquired lies in the States of Arizona and New Mexico.

BLM 1980

General Land Office

The agency which was formerly responsible for the execution of the public land laws relating to cadastral surveys, land disposals, and to various other activities with respect to the administration and management of the public lands. It was established as a unit of the Treasury Department in 1812, and so remained until 1849, when it became a part of the newly created Department of the Interior. It was abolished in 1946 when its functions were combined with those of the Grazing Service to become the Bureau of Land Management.

BLM 1980

General Tenancy

A tenancy which is not fixed and made certain in point of duration by the agreement of the parties.

FGDC - Subcommittee on Cadastral Data 1999

Geocoding

The process of assigning a geographic code to a record, event or occurrence. Geocoding might be accomplished manually by a map look-up or by address processing software which

equates a exact address with an address range related to a geographic code such as a Zip Code, Census Tract, Traffic Zone or municipal jurisdiction.

URISA 2000

Geodesic

The shortest line connecting two given points on the surface of an ellipsoid.

BLM 1980

Geodesic Circle

A curve, on a given surface, all of whose points are at the same distance, measured along a geodesic, from a central point. Also called a geodetic circle. On the plane and on the sphere, the curve is a circle. On a rotational ellipsoid, the curve is in general not a circle.

ASCE-ACSM 1993

Geodesy

The science which treats mathematically the shape and size of the earth also, the branch of surveying in which measurements are made for determining the shape of the earth including precise horizontal and vertical positions on its surface. One branch of geodesy includes gravity forces.

BLM 1980

Science or art of measuring the shape and size of the earth's surface, or large parts of it, as distinguished from surveying which deals only with limited tracts of the earth.

Kansas Association of Mappers 1997

The geologic science of measuring the size and shape of the earth.

URISA 2000

Geodetic Azimuth

The clockwise angle from geodetic south (may differ from astronomic south by a maximum of about one degree and usually not more than a few seconds due to the deflection of gravity. The Lambert Mercator grid systems use geodetic bearings or azimuths not astronomic.

Brown,Curtis M 1995

The horizontal angle at station A measured from a north-south plane (perpendicular to the reference ellipsoid) clockwise to an ellipsoidal normal section passing through station B. Geodetic azimuth is determined by applying a correction to astronomic azimuth or by computations on the reference ellipsoid. The azimuth from A toward B is the forward azimuth while the azimuth from B toward A is the back azimuth of station B.

BLM 1980

The angle, at a point A on a surface, between the tangent to the meridian at A and the tangent to the geodesic from A to the point B whose geodetic azimuth is wanted. The angle is measured from the direction of north clockwise. (Until 1985, the U.S. National Geodetic Survey (NGS) and some other organizations measured the angle from the direction of south clockwise.) The angle is called the forward azimuth for the line AB.

ASCE-ACSM 1993

Geodetic Control

A system of monumented stations having known, precise positions established by geodetic methods.

BLM 1980

A network of carefully measured points that can be used as a reference for other surveys or to establish or measure accuracy in map making. Horizontal control and vertical control networks are typically separate because the former is based on an ellipsoid model of the earth, while the latter is based on a geoid model.

Wisconsin State Cartographers Office 2000

Geodetic Datum

A reference for geodetic survey measurements consisting of fixed latitude, longitude and azimuth values associated with a defined station as well as two constants for an ellipsoid of reference.

BLM 1980

Datum, geodetic (1) A set of constants specifying the coordinate system used for geodetic control, i.e., for calculating coordinates of points on the Earth. At least 6 constants are needed: three to specify where, in the Earth, the origin of the coordinate system is located, and three more to specify the orientation of that coordinate system with respect to the Earth. If the axes of the coordinate system are the axes of a particular ellipsoid, then two (if the ellipsoid has rotational symmetry) or three more constants are needed to specify the ellipsoid's dimensions. (An additional constant, called a scale factor is sometimes mistakenly included in the geodetic datum. This scale factor is actually the ratio between the units of length used in different geodetic networks, has no connection with the datum, and is irrelevant in specifying a datum.) The term datum is often used as a synonym for geodetic datum.

ASCE-ACSM 1993

Geodetic Latitude

1) The angle between the plane of the equator of the reference ellipsoid and the normal to the ellipsoid surface. 2) The latitude of a point determined by geodetic methods.

BLM 1980

Geodetic Levelling

Spirit leveling of a high order of accuracy, generally extended over large areas, with application of orthometric corrections, to furnish accurate vertical control for surveying and mapping operations.

BLM 1980

Geodetic Longitude

1) The dihedral angle between an arbitrary meridian and the meridian of an ellipsoidal normal. 2) A longitude determined by geodetic methods.

BLM 1980

Geographers Line

The first line surveyed under the rectangular system. This line, which extends the width of the Seven Ranges (42 miles), is named for Thomas Hutchins, the Geographer of the United States. Under the Ordinance of May 20, 1785, the geographer was to "personally attend to the running of" a line westward from the "Point of Beginning."

BLM 1980

Geographic Coordinate Data The Bureau of Land Management's (BLM) Geographic Coordinate Data Base (GCDB) is a collection of geographic information representing the Public Land Survey System (PLSS) of the United States. The GCDB grid is computed from BLM survey records (official plats and field notes), local survey records, and geodetic control information.

NILS Development Teams 2001

Geographic Information A geographic information system (GIS) consists of computer software, hardware, and peripherals that transform geographically referenced spatial data into information on the locations, spatial interactions, and geographic relationships of the fixed and dynamic entities that occupy space in the natural and built environments. Barry Wellar, "GIS Fundamentals," in Profiting From a Geographic Information System, GIS World, Inc., Fort Collins, CO, 1993 as quoted in Introduction to GIS, URISA 2000.

URISA 2000

A analysis and problem solving tool for asking and answering questions relating to spatial phenomenon. Its

function is facilitated by computer hardware, GIS software, and the technical expertise of the people involved.

Wisconsin State Cartographers Office 2000

Geographic Information Special-purpose digital databases in which a common spatial coordinate system is the primary means of reference. GIS contain subsystems for: 1) data input; 2) data storage, retrieval, and representation; 3) data management, transformation, and analysis; and 4) data reporting and product generation. It is useful to view GIS as a process rather than a thing. A GIS supports data collection, analysis, and decision making and is far more than a software or hardware product.

Kansas Association of Mappers 1997

Geographic Measurement Geographic Measurement Management software. This custom software was developed through cooperation between the University of Maine and the Bureau of Land Management to collect and maintain the Geographic Coordinate Data Base (GCDB).

NILS Development Teams 2001

Geoid

The figure of the earth considered as a sea level surface extended continuously through the continents. It is a theoretically continuous surface that is perpendicular at every point to the direction of gravity (the plumbline). It is the surface of reference for astronomic observations and for geodetic leveling.

BLM 1980

A surface of constant gravitational force.

Wisconsin State Cartographers Office 2000

Geoidal Undulation Correction

Correction term computed at a benchmark station and applied to the model computed orthometric height at the vicinity of the benchmark.

NILS Development Teams 2001

Global Positioning System

Developed for the military for navigation and surveying, the GPS relies on satellites (and ground stations) for precise determination of location. Although GPS can be used to determine location very precisely (within centimeters given the correct controls and proper use), it does not solve all the problems of locational determination of GIS databases.

Kansas Association of Mappers 1997

A group of 24 satellites maintained by the US Department of Defense which broadcasts signals that allow receivers to determine their position.

Wisconsin State Cartographers Office 2000

A space-based radio-navigation system, consisting of 24 satellites and ground support that is owned and operated by the US Department of Defense. The system provides users with accurate information about their position and velocity, the time, anywhere in the world as well as weather conditions. GPS started in 1973. It has revolutionized the surveying profession and made small, inexpensive navigational devices possible.

URISA 2000

Good Faith

An honest intention to abstain from taking advantage of another.

Harbin, Andrew L. 1998

Gore

1) A hiatus. 2) (USGS) An irregularly shaped tract of land, generally triangular, left between two adjoining surveyed tracts, because of inaccuracies in the boundary surveys or as a remnant of a systematic survey.

BLM 1980

Governing Boundaries

Usually the south and east boundaries of a township, but may be termed the satisfactorily surveyed lines on which subdivisions are to be based. In rare and extreme cases, therefore, an irregular township may be without a single governing boundary.

BLM 1980

Governing Section Line

A township subdivision line ran as the controlling boundary to rectify a defective township exterior. The line is surveyed on a bearing calculated to intersect the controlling corner on the opposite boundary. The last mile is run random and true. Completion of the subdivision of a township is based upon this boundary.

BLM 1980

Government Lot

A government lot is a subdivision of a section which is not designated as an aliquot part of a section, but which is denoted by a number, for example lot 2. A government lot may be regular or irregular in shape and its acreage varies from that of regular section subdivisions. In some cases government lots may have letter designations.

BLM 1980

Gradient

Rate of rise or fall, as “5% gradient,” meaning a 5-foot vertical rise in a 100-foot horizontal distance (also recorded as 0.05).

BLM 1980

Gradient Boundary

A boundary determined by the position of flowing water along a bank. First announced in *Oklahoma vs. Texas* by the U.S. Supreme Court (265 US 493), as follows: “The boundary line is a gradient of flowing water in the river. It is located midway between the lower level of the flowing water that just reaches the cut-bank, and the higher level of it that just does not overtop the cut-bank. The physical top of the cut-bank, being very uneven in profile, cannot be a datum for locating the boundary line but a gradient along the bank must be used for that purpose. The highest point on the gradient must not be higher than the lowest acceptable point on the bank in that vicinity.”

BLM 1980

Grant Boundary Adjustment

A mathematical distribution of the closing error which consists of a uniform rotation and scale change of the record courses to conform to the retracement value between the controlling corners.

BLM 1980

Grant in Place

A grant in connection with which the Congress specifically states, or implies, the legal description of the public lands which are granted.

BLM 1980

Grant of Land

Lands, title to which has been confirmed or conferred to the United States for a particular reason or purpose.

BLM 1980

Lands, title to which has been confirmed or conferred to the United States for a particular reason or purpose.

New Mexico Assessors 2001

Grants of Land are areas of land to which title has been confirmed or conferred to any person or organization by the U.S. for a particular reason or purpose.

FGDC - Subcommittee on Cadastral Data 1999

Grantee

A person, firm or corporation to whom land, easements or other habiliments thereof are conveyed or granted.

BLM 1980

The person to whom a grant is made. The purchaser or recipient on a deed.

Harbin, Andrew L. 1998

Grantor

A person, firm or corporation granting or conveying land, easements or other habiliments thereof.

BLM 1980

The person by whom the grant is made. The seller on a deed

Harbin, Andrew L. 1998

Gravity Anomaly

The difference between the observed gravity value reduced to sea level, and the theoretical gravity obtained from the gravity formula. Maps of gravity anomaly over an area may reveal geologic patterns.

Wisconsin State Cartographers Office 2000

Grazing Service

The agency formerly responsible for the administration of grazing on public lands which had been designated as grazing district lands. Organized in the Department of the Interior after the passage, in 1934, of the Taylor Grazing Act, it was abolished in 1946 when its functions were consolidated with those of the General Land Office and transferred to the newly created Bureau of Land Management.

BLM 1980

Great Circle

The circle in which any plane which passes through the center of a sphere intersects the sphere. The shortest distance between any two points on a sphere is along the arc of a great circle connecting the two points. Great circles having particular designations on the celestial sphere are the equator, the ecliptic, meridians, hour circles, prime verticals and horizons. The shortest distance between two points on a rotational ellipsoid is a geodesic, but this is not a plane curve unless the points lie on a plane through the rotational axis or on a plane perpendicular to that axis and through the center of the ellipsoid.

ASCE-ACSM 1993

Greenwich Meridian

The Prime Meridian. The meridian which passes through the original site of the Royal Observatory at Greenwich, England was adopted in 1884 by a conference of nations as the initial or zero of longitudes. From it other longitudes are reckoned east and west.

BLM 1980

Grid Azimuth

The angle in the plane of projection between a straight line and the central meridian (y-axis) of a plane-rectangular coordinate system. Although essentially a map quantity, a grid azimuth may, by mathematical processes, be transformed into a geodetic azimuth.

BLM 1980

Grid Bearing

If the Lambert or Mercator grid is meant, it is based on geodetic north as determined at the central meridian. All grid norths within the same zone are parallel to one another. Grid North is not necessarily on an astronomic basis at the central meridian.

Brown, Curtis M 1995

Grid Length

The distance between two points as obtained by inverse computation from the plane rectangular coordinates of the points. In the state coordinate systems, a grid length differs from a geodetic length by the amount of a correction based on the scale factor for the given line.

BLM 1980

Groin

A shore protective structure, narrow in width, usually built perpendicular to the shore for purposes of trapping littoral drift, or to protect the shore from erosion. Sometimes incorrectly called a dike.

BLM 1980

Grooves

Elongated depressions scored into the face of a stone monument where the faces of the stone are turned to the cardinal.

BLM 1980

Guarantee of Title

A certification which insures that the title exists in fact as described. Often issued by title-guarantee companies or by the state, as in the case of a Land Court certificate.

BLM 1980

Guide Meridian

An auxiliary governing line projected north along an astronomical meridian, from points established on the base line or a standard parallel, usually at intervals of 24 miles east or west of the principal meridian, on which township, section, and quarter-section corners are established.

New Mexico Assessors 2001

Guide meridians are extended north from the base line or standard parallels at intervals of 24 miles east and west from the principal meridian, in the manner prescribed for running the principal meridian and terminate at the point of their intersection with the standard parallels. (BLM 1973, paragraph 3-14.)

BLM 1980

Guide meridians are extended north from the base line or standard parallels at intervals of 24 miles east and west from the principal meridian, in the manner prescribed for running the principal meridian and terminate at the point of their intersection with the standard parallels. (BLM 1973, paragraph 3-14.)

BLM 1973

Hack

A horizontal notch cut well into a tree at about breast height. In a cadastral survey, two hacks are cut to distinguish them from other, accidental marks. A vertical section of the finished hack marks resembles a double-V extending across a tree from two to six inches, depending on the diameter of the tree. The "blaze" and "hack" marks are equally permanent, but so different in character that one mark should never be mistaken for the other. Hacks are sometimes called "notches" or, in older surveys, "chaps."

BLM 1980

Half Mile Posts

In early survey practice, in parts of Alabama and Florida, so called "half-mile posts" were established. In some cases the "half-mile post" was not at mid-point on the section line. In other cases the "half-mile post" was in true position for the quarter-section corner. In still other instances the "half-mile post" was not on true line nor at mid-point on the line. Each set of field notes regarding "half-mile posts" requires individual consideration, as the survey practices were not uniform even within the same surveying district.

BLM 1980

Half Range Numbers

In the instances where the distance between the regular position for township boundaries is so great that the application of normal rules would result in sections elongated in excess of 120 chains, half-range (or half-township) numbers may be created. Also used for identifying areas left unsurveyed by hiatus.

BLM 1980

Half Section

Any two quarter sections within a section which have a common boundary; usually identified as the north half, south half, east half, or west half of a particular section.

BLM 1980

Half Township Numbers

In the rare cases where the distance between the regular position for township boundaries is so great that the application of normal rules would result in sections elongated in excess of 120 chains, half township (or half-range) numbers may be created. Also used for identifying areas—left unsurveyed by hiatus.

BLM 1980

Harmoniously Related

Conditions existing during the corner restoration process when a corner point under consideration reasonably conforms in position to that indicated by evidence at other corners of the survey, considering both the record and the survey conditions.

BLM 1980

Hawaii Annexation

The Republic of Hawaii was formally annexed to the United States by the voluntary action of its citizens and a joint resolution of Congress approved July 7, 1898. The transfer of sovereignty took place August 12, 1898. Since Hawaii had been an independent nation, it was not a public-land state.

BLM 1980

Heavy Bearing

A survey slang term for a bearing which departs markedly from cardinal. A bearing of 2 or more degrees from cardinal may be considered a “heavy” bearing. “Strong bearing” is used synonymously.

BLM 1980

Hectare

A metric unit of area equal to 100 arcs or 2.471 acres.

BLM 1980

Hiatus

An area between two surveys, the record of which describes them as having one or more common boundary lines with no omission.

Buckner, R.B. 1991

An area between two surveys of record described as having one or more common boundary lines with no omission.

Harbin, Andrew L. 1998

Hide

An obsolete English unit of area common in the Domesday Book and old English charters. Its size varied with the nature of the land and the period of use. The normal hide in the Domesday Book is 120 acres.

NOAA 1986

High Accuracy Reference (HARN) is a type of GPS measured and adjusted horizontal geodetic control network of highly reliable positional coordinates that serve as control for other surveys. Points are measured by receiving GPS satellite broadcasts. The Wisconsin HARN was originally called the WHPGN.

Wisconsin State Cartographers Office 2000

High Water

1) The maximum height or stage reached by rising water. 2) (NOS) The maximum height reached by a rising tide. The height may be due solely to the periodic tidal forces or it may have superimposed on it the effects of prevailing meteorological conditions.

BLM 1980

High Water Mark

1) The line which the water impresses on the soil by covering it for sufficient periods to deprive it of upland vegetation. 2) (NOS) A line or mark left upon tide flats, beach, or alongshore objects indicating the elevation of the intrusion of high water. The mark may be a line of oil or scum on alongshore objects, or a more or less continuous deposit of fine shell or debris on the foreshore or berm. This mark is physical evidence of the general height reached by wave run-up at recent high waters. It should not be confused with the mean high water line or mean higher high water line. The intersection of the land with the water surface at an elevation of high water.

BLM 1980

Hinterland

The zone containing the flanks of the beach and the region inland from the coastline to a distance of five (5) miles. The region laying behind the coastal zone.

NOAA 1986

Holiday

In hydrographic surveying an unintentionally unsurveyed part of a region what was to have been completely surveyed. A holiday is particularly likely to occur at the junction between two hydrographic surveys. It is similar to a gore and hiatus in land surveying.

NOAA 1986

Holographic Will

A will in the handwriting of the deceased.
Harbin, Andrew L. 1998

Home Site Entry

The terms of the Act of May 14, 1898, provided for cash entry of 5 acres or less of public lands in Alaska used for residence purposes.
BLM 1980

Homestead Entry Survey

An entry under the United States land laws for the purpose of acquiring title to a portion of the public domain under the homestead laws. Consisting of an affidavit of the claimant's right to enter, a formal application for the land and payment of the money required.
New Mexico Assessors 2001

An entry under the United States land laws for the purpose of acquiring title to a portion of the public domain under the homestead laws, consisting of an affidavit of the claimant's right to enter, a formal application for the land, and payment of the money required.
BLM 1980

A Homestead Entry is an entry under the U.S. land laws for the purpose of acquiring title to a portion of the public domain under the Homestead Laws. A Homestead Entry Survey is a metes and bounds survey entered under the Act of June 11, 1906 as amended.

FGDC - Subcommittee on Cadastral Data 1999

Homestead Settlement Alaska

Settlement, for homestead purposes, of unsurveyed or surveyed public land in Alaska according to the provisions of the Act of May 14, 1898 (30 Stat. 409; 48 U.S.C. 371; 43 C.F.R. Subpart 2567 et seq.), as amended, which extended the homestead laws to Alaska. All homestead claims in Alaska must be perfected in accordance with the 3-year homestead law of June 6, 1912 (37 Stat. 123; 43 U.S.C. 164, 169, 218).
BLM 1980

Horizontal Curve A curve defined on an XY plane. Examples are Circular, Spiral, Offset to Spiral, and Median Line curve.
NILS Development Teams 2001

Hydrographic Divide

Ridge or elevated land area which separates the direction of flow of streams and rivers. The division of the watersheds.
BLM 1980

Hypsography

Map data that describes the exact shape of the earth's surface, usually in the form of contour lines, digital elevation models, or color shadings.

Kansas Association of Mappers 1997

The description of elevations or heights of land surfaces with reference to a specified surface (usually the geoid). The topography (relief) of a region referred to a specific datum.
NOAA 1986

Implied Easement

The privilege, by operation of law, to use the land of another for a particular purpose that arises in connection with a conveyance when it was obvious that continued use before the conveyance was meant to be permanent and reasonably necessary for beneficial enjoyment of the land conveyed or retained.

ASCE-ACSM 1993

In Praesenti

At the present time. The Swamp Lands Act of 1850 is an example of a grant taking effect in praesenti, that is, on the date of the passage of the act.

BLM 1980

Inchoate

Imperfect; partial; unfinished. Begun but not completed; as a contract not signed by all the parties or a wife's interest in the lands of her husband during his life, which may become a right of dower upon his death.

BLM 1980

Inchoate Title

The beginning of a title or one not yet perfected into a legal title. When only a portion of the requirements for title has been completed, the title is "inchoate."

BLM 1980

Incorporeal Property

That which cannot be seen or touched. Property, such as a right, which exists only in contemplation, as distinguished from corporeal property which has a material existence and which may be seen and touched.

BLM 1980

Indemnity Lands

Alternate lands granted to states under the public land laws when granted lands were unavailable.

BLM 1980

Indemnity Limits

In railroad and wagon road grants, the strips of land lying within a specified distance on each side of, and adjacent to, the primary limits, within which the grantee could make lieu selections for lands lost to the grantee in the primary limits; also, the outside boundaries of these strips.

BLM 1980

Indenture

In conveyance, formal written instrument made between two or more persons; the name is derived from the ancient practice of indenting or cutting the deed in a waving or saw-tooth line. In this way a part could be proved genuine by the way in which it fit into the angles cut into the other part.

BLM 1980

Independent Resurvey

An independent resurvey is an establishment of new section lines, and often new township lines, independent of and without reference to the corners of the original survey. In an independent resurvey it is necessary to preserve the boundaries of those lands patented by legal subdivisions of sections of the original survey which are not identical with the corresponding legal subdivisions of the section of the independent resurvey.

BLM 1973

An independent resurvey is authorized by the government in situations where the evidence of the original corners is so obliterated in a township that it seems better to remark them by new surveys than to attempt to do a retracement. BLM employees conduct independent resurveys.

Buckner, R.B. 1991

An independent resurvey is an establishment of new section lines, and often new township lines, independent of and without reference to the corners of the original survey. In an independent resurvey it is necessary to preserve the boundaries of those lands patented by legal subdivisions of sections of the original survey which are not identical with the corresponding legal subdivisions of the section of the independent resurvey (BLM, 1973, paragraph 6-5).

BLM 1980

An official rerunning and remarking intended to supersede the records of the original survey and establish new section lines and subdivisions on public lands only. Any patented lands involved must be identified and segregated according to the original survey. Only remaining areas of the public lands may be resurveyed without regard to the original survey.

New Mexico Assessors 2001

Indexing

To provide a system for locating all recorded and filed documents by where they can be found in books and files.

Wisconsin Register of Deeds Association 1995

Logically ordering information components by the values present in a key field. An identifier used to access stored information. DBMS table ID field of other data feature used to expedite locating a specific record (text, images, spatial) within a database.

Kansas Association of Mappers 1997

Indian Allotment

An allocation of a parcel of public lands or Indian Reservation lands to an Indian for his or her individual use. Applies to the lower forty-eight states. Many Indian Allotments were surveyed, but there is no written record.

FGDC - Subcommittee on Cadastral Data 1999

An allocation of a parcel of public lands or Indian reservation lands to an Indian for his individual use; also, the lands so allocated.

BLM 1980

Indian Claims Commission

The act of Aug. 13, 1946, under which Indian claims to land based upon fair and honorable dealings that are not recognized by any existing rule of law or equity may be submitted to the Commission with right of judicial review by the United States Court of Claims.

BLM 1980

Indian Trust Patent

An Indian patent which is issued with the condition that title to the land remains for a specified period of time in the United States in trust for the patentee.

BLM 1980

Indicated Corner

A corner of the public land surveys whose location can not be verified by the criteria necessary to class it as a found or existent corner, but which is accepted locally as the correct corner and whose location is perpetuated by such marks as intersections of fence lines, piles of rock, or stakes or pipes driven into the ground which have been recovered by investigation in the field.

ASCE-ACSM 1993

A term adopted by the USGS to designate a corner of the public land surveys whose location cannot be verified by the criteria necessary to class it as a found or existent corner, but which is accepted locally as the correct corner and whose

location is perpetuated by such marks as fence-line intersections, piles of rock, and stakes or pipes driven into the ground, which have been recovered by field investigation.
BLM 1980

Ingress

The right or permission to go upon a place, the right of entrance.
Harbin, Andrew L. 1998

The right to enter a tract of land. In the law of riparian rights, the right of return to his land from navigable water which a riparian owner enjoys.
BLM 1980

Initial Monument

A physical structure which marks the location of an initial point in the rectangular system of surveys.
New Mexico Assessors 2001

A physical structure which marks the location of an initial point in the rectangular system of surveys.
BLM 1980

Initial Point

A point which is established under the rectangular system of surveys and from which is initiated the cadastral survey of the principal meridian and the base line that controls the cadastral survey of the public lands within a given area.
New Mexico Assessors 2001

A point which is established under the rectangular system of surveys and from which is initiated the cadastral survey of the principal meridian and base line that controls the cadastral survey of the public lands within a given area.
BLM 1980

Inshore

The zone of variable width between the shoreface and the seaward limit of the breaker zone.
NOAA 1986

Instrument

An angle measuring device such as a compass, transit or theodolite.
BLM 1980

Interest

As applied to lands, "interest" means any direct or indirect ownership in whole or in part of the lands and resources of the lands. It includes any participation in the earnings there

from, or the right to occupy or use the property or to take any benefits
BLM 1980

International Great Lakes (IGLD) - a vertical reference system developed to standardize elevation measurements around the Great Lakes. The systems was revised in 1985.
Wisconsin State Cartographers Office 2000

Interrogatories

A set or series of questions drawn up in writing for the purpose of being propounded to a party in equity, a garnishee, or a witness whose testimony is taken on deposition. In taking evidence on depositions, the interrogatories are usually prepared and settled by counsel, and reduced to writing prior to the examination.
BLM 1980

Intersection

The point where two lines cross.
NILS Development Teams 2001

Intersection

The topological integration of two spatial data sets that preserves features that fall within the area common to both input data sets.
Kansas Association of Mappers 1997

1) The method of establishing the legal center of a section and the centers of the various quarter sections. 2) The point at which a survey line passes through an object, such as a tree. 3) The point of crossing of two or more survey lines with each other, usually a junior line crossing a senior line. 4) The legal point of closing where a junior line closes on a senior (fixed) line. 5) The confluence of two or more streams of water. 6) The cutting or crossing in any combination of straight lines, curves, or semi tangents to curves. 7) Area where two streets or roads intersect, generally including the space enclosed by the right-of-way lines as extended plus any transition curved boundaries.
BLM 1980

Intersection Point

The point of intersection to mark the intersection of one or more independently surveyed lines.
BLM 1980

The point of intersection to mark the intersection of one or more independently surveyed lines.
FGDC - Subcommittee on Cadastral Data 1999

Intestate

Without making a will.
Harbin, Andrew L. 1998

Without making a will. A person is said to die “intestate” when he dies without leaving a valid will to testify what his wishes were with respect to the disposal of his property after his death. The word is also used to signify the person himself, as “the intestate’s property.”

BLM 1980

Ipsso Facto

By the mere fact itself.
BLM 1980

Ipsso Jure

By the law itself; by the mere operation of the law.
BLM 1980

Irregular

As applied to units of the rectangular system, exceeding the rectangular limits.
BLM 1980

Irregular Boundary

Township or section lines not originally established as straight lines or which a retracement reveals as not having been surveyed as a straight line.
BLM 1980

Irregular Section

A section having two or more adjacent boundaries, as returned on the original survey, that are not within 0 degrees 21' of cardinal or exceed 25 links from 40 chains in measurement.
New Mexico Assessors 2001

A section having two or more adjacent boundaries, as returned on the original survey, that are not within 0° 21' of cardinal or exceed 25 links from 40 chains in measurement.
BLM 1980

Island

A body of land extending above and completely surrounded by water at ordinary high water.
BLM 1980

Isogal

isolines (lines of equal value) that represent gravity.
Wisconsin State Cartographers Office 2000

Isolated Tract

A parcel of vacant public lands, not exceeding 1,520 acres, which is surrounded by appropriated lands.
BLM 1980

Iteration Limit

The maximum number of iterations an adjustment can have before it is assumed that the solution is diverging.
NILS Development Teams 2001

Joinder of Actions

This expression signifies the uniting of two or more demands or rights of action in one action or lawsuit.
BLM 1980

Joint Tenancy

An estate in fee simple, fee tail, for life, for years, or at will arising by the purchase or grant to two or more persons. Joint tenants have one and the same interest, accruing by one and the same time, and held by one and the same undivided possession. The primary incident of joint tenancy is survivorship, by which the entire tenancy on the decease of any joint tenant remains to the survivors, and at length to the last survivor.
FGDC - Subcommittee on Cadastral Data 1999

Judgment

In law an official formal decision given by a court, in another meaning, an obligation (as a debt) created by the decree of the court.
BLM 1980

Junior Corner

A corner which is part of a survey occurring at a date subsequent to a prior (senior) survey.
BLM 1980

Junior Line

Survey lines created at different times have different standings. The “junior” line would be the line created subsequent to an earlier line.
BLM 1980

Junior Rights

Subordinate to the senior rights. The later patent issued usually has the subordinate right in a situation where a later survey is in conflict with an earlier survey. The first patent issued usually has the superior (senior) right and the second patent usually has the subordinate (junior) right, regardless of the dates of the original surveys.
BLM 1980

Junior Survey

A survey made subsequent to an earlier survey.
BLM 1980

Jurisdiction Boundaries

Lines on a map representing the political boundaries of a corporate entity, such as a City, Town, Township, Village, County or Borough. Since addressing is normally a local function, these corporate entities may be actively involving with new address assignments, address posting and street signage.
URISA 2000

Kinkaid Homestead Entry

A homestead entry, not exceeding 320 acres (formerly, 640 acres), initiated under the act of April 28, 1904 (33 Stat. 547, 43 U.S.C. sec. 224), which provides for the homesteading of nonirrigable agricultural lands in parts of Nebraska.
BLM 1980

Know All Men

Used in conveyance. A form of public address, of great antiquity, and with which many written instruments such as bonds, deeds, letters of attorney, etc., still begin.
BLM 1980

Known (correction)

A known correction is always a constant correction by nature and is always assumed to be constant. i.e., magnetic bearing, index corrections, convergence angle (theta), systematic errors, etc.
NILS Development Teams 2001

Laches

(pronounced as door latches) Failure to do something which should be done or to claim or enforce a right at a proper time.
BLM 1980

Land Contract

A contract for the purchase and sale of land upon execution of which title is transferred. Term commonly refers to an installment contract for the sale of land whereby purchaser (vendee) receives the deed from the owner (vendor) upon payment of final installment. The vendor/seller finances the sale for the buyer and retains legal title to the property (deed) as.
Wisconsin Register of Deeds Association 1995

Land Court

A tribunal established for the purpose of administering legislative statutes relating to land boundaries and titles. There are Land Courts in California, Colorado, Georgia, Hawaii, Illinois, Massachusetts, Minnesota, North Carolina, North Dakota, New York, Ohio, Oregon, South Dakota, Texas, Utah, Virginia, and Washington.
BLM 1980

Land Decisions

Decisions of the Department of the Interior relating to the Public Lands. The decisions made prior to June 30, 1932 are published in volumes 1 thru 52 and are referred to as "Land Decisions" and cited as "L.D. 's, thus, 47 L.D. 10."
BLM 1980

Land Disposal

A transaction which leads to the transfer of title to public lands from the Federal Government.
BLM 1980

Land District

The area administered by a particular land office. The act of May 10, 1800, provided for the creation of the first four land districts in "The territory northwest of the Ohio and above the mouth of the Kentucky River," as follows: Land below the Little Miami — Cincinnati, Land east of the Scioto — Chillicothe, Land east of the sixteenth range of townships — Marietta, Other land — Steubenville. As the public land surveys spread, new land districts were created. As the disposition of the public lands progressed and the work in a land district lessened, the land districts were abolished. A provision of the Act of July 31, 1876, abolished the land districts in Ohio, Indiana and Illinois. This was about the same time as the creation of new land districts in Utah, Washington and Wyoming (43 U.S.C.A., sec. 121, Historical Note).
BLM 1980

Land Grant

Grants are lands to which title has been confirmed or conferred to the U.S. for a particular reason or purpose. For example, private land grants are areas of land to which title was conferred by a predecessor government and confirmed by the U.S. Government after the territory in which it is situated was acquired by the U.S.
FGDC - Subcommittee on Cadastral Data 1999

Land Office

A Government office, subordinate to the General Land Office. These offices were established in various parts of the United States for the transaction of local business relating to the survey, location, settlement, pre-emption and sale of the public lands. The brisk and extensive business in these offices gave a new phrase to our language- "a land-office business."

BLM 1980

Land Office Status Plat

The triplicate plat of a survey used to be referred to as the "status plat." It was the companion record, in graphic form, to the tract book. These records together constituted, prior to the beginning of the Records Improvement Program in 1955, the records required in accordance with 43 C.F.R. 1813.1-1. To protect the plats from continual wear and damage and to preserve the information they contain, a system was developed whereby the old status plats are microfilmed before they are retired to a Federal Records Center. Through BLM's Records Improvement Project, new records were developed.

BLM 1980

Land Status Map

The Bureau of Land Management publishes a color coded New Mexico Land Status map that includes Public, State, Indian, Reservation, National Parks and Monuments, Military, Private, National Forest, National Wildlife Refuge, Private Land Grants, etc. It also includes other features such as major highways, county boundaries, townships, etc. Topography is generally not shown owing to the use of so small a scale. The New Mexico State Land Status maps, at present, shows State Surface and Minerals, State Minerals (only) and State Surface (only) plus a number of other types of roads and more detailed features not shown on the BLM maps. The state map is published in the form of Quadrangles drawn at the scale of one inch equals two miles and is published by the State Land Office.

New Mexico Assessors 2001

Land Status Records

Those records maintained by the Bureau of Land Management, showing ownership of the public lands and the availability of the lands for use under the public land laws. The land status records include the Master Title Plat, Supplemental Master Title Plat, Use Plat, Historical Index, Control Document Index, Miscellaneous Document Index, Serial Register, Mineral Location and Contest Index, Tract Books, Plat Books, Patents, Deeds Name Index Card File, and the Working and Reference Records.

BLM 1980

Those records maintained by the Bureau of Land Management, showing ownership of the public lands and the availability of the lands for use under land laws. The land status records include the Master Title Plat, Supplemental Master Title Plat, Use Plat, Historical Index, Control Document Index, Miscellaneous Document Index, Serial Register, Mineral Location and Contest Index, Tract Books, Plat Books, Patents, Deeds Name Index Card File and the Working and Reference Records.

New Mexico Assessors 2001

Land Surveying

The practice of land surveying includes surveying of areas for their correct determination and description and for conveyancing or for the establishment or reestablishment of land boundaries and the plotting of lands and subdivisions thereof.

BLM 1980

The practice of land surveying includes surveying of areas for their correct determination and description and for conveyance, or for the establishment or reestablishment of land boundaries and the plotting of lands and subdivisions, thereof.

New Mexico Assessors 2001

Landmark

1) Any monument or material mark or fixed object used to designate the location of a land boundary on the ground. 2) Any prominent object on land which can be used in determining a location or a direction. 3) A landmark decision; a judicial decision considered a turning point or highpoint of the era.

BLM 1980

Latent Ambiguity

An unclear statement or meaning that is not apparent on the face of the document.

Brown, Curtis M 1995

Latent ambiguity is one that is discovered only when attempts are made to apply the writings to matters outside the document, the content and language employed being seemingly clear and intelligible on the face of the document.

BLM 1980

Lateral Boundaries

Side boundaries; boundaries between adjacent states extending from shore to their seaward boundaries under Public Law 31; boundaries between adjacent nations through the marginal sea and the contiguous zones.

BLM 1980

Latitude

Latitude is generally defined as the “Angular distance measured on a meridian. The length of a degree of latitude varies on account of the flattened figure of the earth, being 68.704 statute miles at the equator and 69.407 at the poles”

There are three basic forms of latitude; astronomic, geocentric and geodetic. Astronomic is the angle between a plumb line and the plane of the celestial equator, i.e. measured on the geoid. Geocentric is the angle between the equatorial plane and a line connecting the center of the earth with a point on its surface. Geodetic is the angle between a normal to the reference spheroid and the geodetic equator.

BLM 1995

1. The distance on the earth’s surface, north or south of the Equator, expressed in either linear or angular measurements.
2. The north-south component of a traverse course.

New Mexico Assessors 2001

The first component of a spherical coordinate system used to record positions on the earth’s surface. Latitude indicates the angular distance north or south of the earth’s equator measured through 90 degrees.

Kansas Association of Mappers 1997

- 1) The distance on the earth’s surface, north or south of the Equator, expressed in either linear or angular measurements.
- 2) The north-south component of a traverse course.

BLM 1980

League

Any of various units of distance from about 2.4 to 4.6 statute miles.

New Mexico Assessors 2001

A unit of distance which has varied in size in different countries and eras, from about 2.4 to 4.6 miles but in English speaking countries is estimated at 3 miles. If the miles are statute miles, the unit is called a land league; if the units are nautical miles, it is called a marine league.

NOAA 1986

A marine measure of distance. In different times and countries it has varied from 2.4 miles to 4.6 miles.

BLM 1980

Lease

1) A contract granting possession or control of real property for a determined period. 2) The act of granting the lease. 3) The act of the lessee in taking the lease.

BLM 1980

Any agreement which gives rise to relationship of landlord and tenant or lessor and lessee. It is a contract for exclusive possession of lands or tenements for determinant period. Leases are often classified according to determinant period.

Wisconsin Register of Deeds Association 1995

Least Square Analysis or A mathematical process that simultaneously combines all measurements in a dataset and adjusts their residuals to derive the optimal value as well as statistics that include the reliability of each derived value. Parametric least square analysis/adjustment - A least square analysis/adjustment that considers the quality of data that varies throughout the data set. A weighted least square adjustment. Iterative parametric least squares analysis/adjustment – A least squares adjustment, based on weight parameters, that will adjust until it meets conditions that causes it to stop.

NILS Development Teams 2001

Legal Description

The narrative and geometric description for a discrete area of land. Descriptions may be related to parcels (many-to-many) and to geometries. Area legal description (AKA Areal Reference) - e.g. geopolitical, PLS, Block-Lot, Mineral Survey, irrigation lots. Nominal; delimited in reference survey system having area taxonomy, nesting, and division rules Perimeter legal description - record boundary, metes and bounds, sequenced set of bearings and distances, strip description, adjoiner description, riparian or aquatic area description, reference calls to natural features {contour, ridgeline, watercourse}. Portion/remainder legal description - area as a quantity {e.g. ‘north sixty acres of Ö ‘the north four-hundred feet of Ö’}, exclusions; other reference calls; ambiguous areas that cannot be mapped relative to any reference. related to parcels (many-to-many) and to geometries.

NILS Development Teams 2001

A written statement recognized by law as to the definite location of a tract of land by reference to a survey recorded map or adjoining property.

BLM 1980

(1) A description, recognized by law, which definitely locates property by reference to governmental surveys, coordinate systems or recorded maps. (2) The same as definition (1) but leaving out the word definitely. (3) A description which is sufficient to locate the property without oral testimony.

ASCE-ACSM 1993

Legal Description Geometry

The 'footprint' of a legal description. A spatial representation of an area that has been legally described within a nested survey-system hierarchy. The 'atomic unit' for building parcels.

NILS Development Teams 2001

Legal Monument

The courts and the general public refer to "monument" as if the term includes such things as reference to an adjoining title, a plat, or physical evidence of a boundary, such as a fence. Occasional reference will be made to natural monuments which would more precisely be classed as topography.

BLM 1980

Legal Subdivision

The subdivision of a township, such as a section, half-section, quarter-section, quarter-quarter or sixteenth-section, or lotting, including the lot, section, township and range numbers and the description of the principal meridian to which referred, all according to the approved township plat.

BLM 1980

Levee

An embankment alongside a river to prevent high water from flooding bordering lands.

BLM 1980

Lien

A claim, encumbrance, or charge on property for payment of some debt, obligation or duty. Qualified right of property which a creditor has in or over specific property of his debtor, as security for the debt or charge or for performance of some act. Right or claim against some interest in property created by law as an incident of contract. Right to enforce charge upon.

Wisconsin Register of Deeds Association 1995

Lieu Lands

Former public lands within specified limits (Indemnity Limits) which were granted instead of (in lieu of) areas intended to be granted but which were already patented or otherwise not available.

BLM 1980

Lieu Selection

An application to acquire title to public lands in exchange for which the applicant relinquishes his rights or title to other lands which he, for some reason, cannot or does not wish to acquire or hold.

BLM 1980

Life Estate

An estate whose duration is limited to the life of the party holding it or the life of some other person. A legal arrangement whereby the beneficiary is entitled to estate for his or her life. Upon the death of the life tenant the property will go to the holder of the remainder interest or to the grantor by reversion.

FGDC - Subcommittee on Cadastral Data 1999

Limited Dependent Resurvey

A dependent resurvey limited to a certain portion of a township.

BLM 1980

Limiting Boundary

The boundary of lands actually surveyed. The term is usually used to describe a particular boundary in special cases. For example: A fictitious or grossly erroneous meander line may be held to be a fixed and "limiting boundary" of the lands actually surveyed; the exterior boundaries of an area to be independently resurveyed may be termed the "limiting boundary" of that project area.

BLM 1980

Line Tree

A tree intersected by a surveyed line, reported in the field notes of the survey, and marked with two hacks or notches cut on each of the sides facing the line. Originally, these trees were called "station trees," and they are sometimes called "sight trees," but since the line intersects them, the term "line tree" is preferred. Trees whose trunks are wholly upon the land of one owner belong exclusively to him. Trees whose trunks stand partly on the land of two or more abutting owners belong to them in common.

BLM 1980

Link

A unit of linear measure, one hundredth of a chain and equivalent to 7.92 inches (0.66 foot).

BLM 1980

Liquidated Damages

An assessment of monetary charges determined in advance by contractual agreement as compensation for some breach of a contract.

BLM 1980

Lis Pendens

A notice of the pendency of an action involving real estate recorded in the registry of deeds. It is a notice that there is a lien or other title limiting action pending against the real estate.

Wisconsin Register of Deeds Association 1995

A notice of the pendency of an action involving real estate recorded in the registry of deeds. It is a notice that there is a lien or other title limiting action pending against the real estate.

FGDC - Subcommittee on Cadastral Data 1999

Littoral

From the Latin “litus.” Of or pertaining to the shore, especially of the sea. A coastal region.

BLM 1980

Belonging to the shore as of seas and lakes. A person who owns land on a body of water that is not in motion such as a pond, lake or gulf or ocean is known as a littoral owner. A littoral owner has rights in the body of water.

Harbin, Andrew L. 1998

Littoral Currents

The nearshore currents primarily due to wave action, e.g. longshore currents and rip currents.

BLM 1980

Littoral Drift

The material moved in the littoral zone under the influence of waves and currents.

BLM 1980

Lobe

The tongue of land within the meander. When the lobe lies between two stream meanders and is connected with the mainland by a narrow passage, the narrow passage is the neck. The cutting action of the river narrows the neck until finally the river breaks through and forms a new channel or a cut off.

BLM 1980

Local Corner

A BLM term for a private sector or non-BLM monument or corner. “... local points of control have all the authority and significance of an identified original corner, once they are accepted.” (BLM Instruction Memorandum 86-31, BLM Policy).

BLM 1980

Location Corner

A term applied to a position determined and marked by the locator (claimant) of a mineral right to distinctly and clearly define the boundaries of a mining claim on the ground. This is not the same as a Location Monument and is not an officially recognized BLM cadastral survey corner.

BLM 1980

A term applied to a position determined and marked by the locator (claimant) of a mineral right to distinctly and clearly define the boundaries of a mining claim on the ground. This is not the same as a Location Monument and is not an officially recognized BLM cadastral survey corner.

FGDC - Subcommittee on Cadastral Data 1999

Location Monument

“When a mineral survey is situated in a district where there are no corners of the public survey and no other monuments within 2 miles, a location monument is established.” (BLM 1973, paragraph 10-32.) “A location monument is most frequently used as a reference for one or more mineral surveys. It may also be used in any situation where no corner of an existing survey is available to provide a satisfactory connection for an isolated special survey. The monument is generally established in a conspicuous position with good visibility from every direction. The corner of a special survey may be designated as a location monument if it meets this qualification.” (BLM 1973, paragraph 4-18). This definition includes U.S. Mineral Monuments and U.S. Location Monuments.

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Location Monument

“When a mineral survey is situated in a district where there are no corners of the public survey and no other monuments within 2 miles, a location monument is established.” (BLM 1973, paragraph 10-32.) “A location monument is most frequently used as a reference for one or more mineral surveys. It may also be used in any situation where no corner of an existing survey is available to provide a satisfactory connection for an isolated special survey. The monument is generally established in a conspicuous position with good visibility from every direction. The corner of a special survey may be designated as a location monument if it meets this qualification.” (BLM 1973, paragraph 4-18). This definition includes U.S. Mineral Monuments and U.S. Location Monuments.

BLM 1980

Location Notice

In mining, a public notice of location of a mining claim. The object of the notice is to inform the public. It must be filed and posted on the ground according to the laws of the state where located. Usually it sets forth the name of the locator, the date, the name of the claim, and a tie to a corner of the public land surveys. The essential requirement of a location notice, however, is that it must so describe and identify the location that it can be found by anyone interested in doing so, and that the boundaries may be readily traced on the ground.

BLM 1980

Location Survey

The establishment on the ground of points and lines which have previously been determined by computation, or by graphical methods, or by description obtained from deeds and maps or other records.

BLM 1980

Lode

Mineralized rock lying within boundaries clearly separating it from the neighboring rock and extending longitudinally in a continuous zone or belt. In mining law, and in popular usage in the Western States, it is synonymous with "ledge" and "vein."

BLM 1980

Lode Claim

A mining claim embracing public lands which contain minerals occurring in a vein or lode.

BLM 1980

Longitude

The second component of a spherical coordinate system used to record east-west positions on the earth's surface, measured in degrees as the arc or position of the earth's equator intersected between the meridian of a given place and the prime meridian, which runs through Greenwich, England.

Kansas Association of Mappers 1997

Longitude is generally defined as "the angle between the plane of a given meridian and an arbitrary initial meridian, generally the meridian of Greenwich" (ACSM, 1978, page 97). As with latitude, longitude can be astronomic, geocentric or geodetic. Geodetic longitude, "the angle between the plane of a geodetic meridian and the plane of an initial meridian" (ACSM, 1978, page 98), is used in this attribute. In the United States geodetic longitudes are numbered from the Meridian of Greenwich, and in the North American Datum 1927, are computed from the meridian of Meades Ranch.

BLM 1995

The distance on the earth's surface, east or west of a defined meridian, usually the meridian of Greenwich (0 Longitude), expressed in either angular measure, such as 90 West Longitude, or in time, such as 6 hours West of Greenwich.

BLM 1980

Lost

A corner whose position cannot be determined, beyond reasonable doubt, either from traces of the original marks or from acceptable evidence or testimony that bears on the

original position, and whose location can be restored only by reference to one or more independent corners.

BLM 1980

Lost Corner

A corner whose position cannot be determined, beyond reasonable doubt either from traces of the original marks or from acceptable evidence or testimony that bears on the original position, and whose location can be restored only by reference to one or more interdependent corners.

New Mexico Assessors 2001

A corner whose location cannot be determined beyond reasonable doubt either from traces of the original marks or from acceptable evidence or testimony that bears upon the original location, and whose location can be restored only by reference to one or more interdependent corners.

ASCE-ACSM 1993

A corner whose position cannot be determined, beyond reasonable doubt, either from traces of the original marks or from acceptable evidence or testimony that bears on the original position, and whose location can be restored only by reference to one or more interdependent corners.

BLM 1980

Lot

A unit of division of a subdivision or other simultaneous conveyance.

FGDC - Subcommittee on Cadastral Data 1999

A subdivision of a section which is not described as an aliquot part of a section, but which is designated by number, e.g., LOT 2. A lot may be regular or irregular in shape and its acreage varies that of regular subdivisions. The term "Government Lot" is commonly used by persons outside the Bureau of Land Management in referring to such a subdivision of a section. "Lot" is also the name given individual parcels of recorded subdivisions of private tracts.

New Mexico Assessors 2001

Louisiana Purchase

The territory purchased from France in 1803. It was the earliest acquisition by the United States of territory claimed by a European power. It resulted in the acquisition of more than 500 million acres of public lands west of the Mississippi River.

BLM 1980

Louisiana Swamp Land Act of

The Act of March 2, 1849 (9 Stat.352), granted to the State of Louisiana all the swamp and overflowed lands within the limits of the State for the purpose of aiding in the reclamation of said lands.

BLM 1980

Low Water

The stage to which a river or other inland body of water recedes, under ordinary conditions, at its lowest stage or elevation. Low-water mark should not be used in reference to tidal waters.

BLM 1980

(1) An approximation to mean low water that has been adopted as a standard tidal datum for a specific region although it may differ slightly from a later determination. (2) The dynamic height for each of the Great Lakes and Lake St. Clair, and the corresponding sloping surfaces of the St. Mary's, St. Clair, Detroit, Niagara, and St. Lawrence Rivers, to which are referred the depths shown on charts and the authorized depths for improvements to navigation. Elevations of these datums are referred to International Great Lakes Datum (1955).

ASCE-ACSM 1993

Lower Low Water

An approximation to mean lower low water adopted as a tidal datum for a limited region and retained for an indefinite period. It is used primarily for civil engineering in rivers and harbors. Columbia River lower low water datum is an example.

ASCE-ACSM 1993

Magnetic Azimuth

The angle, at the point of observation, between the vertical plane through the observed object and the vertical plane in which a freely suspended, symmetrically magnetized needle, influenced by no transient or artificial magnetic disturbance, will come to rest.

ASCE-ACSM 1993

Magnetic Bearing

(1) The direction (in angle east or west from the north branch of the celestial meridian) of magnetic north as determined by the positive pole of a freely suspended magnetic needle which is subject to no transient, artificial disturbance. (2) The angle, at any point, between the direction of astronomic north and the direction of the horizontal component of the Earth's magnetic field. Also called declination of compass. In nautical and aeronautical navigation, the term variation is used instead of declination, and the angle is called variation of the compass or magnetic

variation. Except in navigational usage, magnetic declination is not synonymous with magnetic variation, which refers in other disciplines to regular or irregular change with time of the magnetic declination, dip or intensity.

ASCE-ACSM 1993

A bearing based on magnetic North.

Brown,Curtis M 1995

Magnetic Declination

The angle between magnetic north and geographical north at any place, expressed in degrees east or west.

Wisconsin State Cartographers Office 2000

The bearing on a given date (reckoned east or west from the north branch of the celestial meridian plane) of magnetic north as determined by the positive pole of a freely suspended magnetic needle which is subject to no transient artificial disturbance.

BLM 1980

Magnetic Variation

Regular or erratic change in magnetic declination. Not interchangeable with declination but old field notes use Var. as the declination of the compass.

BLM 1980

Main Channel

As called for as a boundary between Nations or States, the "main channel" of a navigable stream refers to the deepest and most navigable channel as it existed at the time the boundary was surveyed. In the Red River case of Oklahoma vs. Texas in 1923 (260 US 606, 261 US 340, 265 US 493), which involved a non-navigable river, the Supreme Court of the United States declared by unprecedented action that the Texas Oklahoma boundary was to be determined by a medial line between gradient lines on each bank. It was decided that the "...channel extending from one cut-bank to the other, which carries the water in times of a substantial flow.....was the only real channel and therefore the main channel. -So its medial line must be what was designated as the boundary." (Oklahoma vs Texas,258 US 574). If the river had been navigable, the "rule of thalweg" would have applied, but that section of the Red River is, in fact, not navigable.

BLM 1980

Mapping Angle

The correction to be applied to geodetic azimuth before plotting an azimuth on a map projection.

BLM 1980

Marigraph

An instrument for measuring and recording tides.
NOAA 1986

Marsh

An area of low-lying, wet ground subject to frequent or regular flooding or ordinarily covered with water. Marsh vegetation is composed chiefly of reeds, grasses and grass like plants. In Cadastral Survey usage the word "marsh" has usually been used to refer to coastal "salt marshes".
BLM 1980

Marshall's Deed

A document giving ownership rights in property to a buyer at a marshall's sale (i.e. a sale held by a marshall to pay a court judgment against the owner of the property). Deed given at marshall's sale in foreclosure of a mortgage. The giving of said deed begins a statutory redemption period. In some states or locales referred to as a "sheriff's deed."
Wisconsin Register of Deeds Association 1995

Master Title Plat

Land Status maps on record with the Bureau of Land Management known as a "Master Title Plat". The Master Title Plats are drawn at scale 1:1a = 1 mile and show patent land with only the name of original owner given, public domain (BLM), State, Indian, Land Grants and other Federal Lands. Each plat usually covers one township and is a black line print approximately 20" x 25" in size.
New Mexico Assessors 2001

Master Title Plat

A composite of the survey plats of a township on which is shown the ownership and land status.
BLM 1980

The plat on which is shown survey data necessary to identify and describe land in the public domain and on which are indicated those actions which currently limit the use or availability of public lands and resources. A composite of the plats of a township on which is shown the ownership and legal status of the land.
NOAA 1986

Mean Bearing

1) The average (mean) of the forward and the back bearing of a straight line. 2) The average of the bearings of an irregular boundary whose courses are nearly equal in length. 3) The weighted average of the azimuths of an irregular boundary after conversion to an equivalent bearing. 4) The average of the bearings of opposite subdivision lines. 5) The mean of a series of bearings obtained by measurement.
BLM 1980

Mean High Water

1) The elevation of the water at the margin of the area occupied by the water for the greater portion of each average year, as determined by vegetative, on topographic changes. 2) As applied by NOS, the mean of all high waters are a considerable period of time, usually 18.6 or 19 years.
BLM 1980

Mean Low Water

The mean height of all low waters at a point or particular station over a considerable period of time. For tidal waters, the cycle of change covers a period of about 18.6 years, and the mean low water is the mean of all low waters for that period. For any body of water, it is the mean of all low waters over a period of time of such length that increasing its length does not appreciably change the mean.
BLM 1980

Mean Lower Low Water

The average level of the lower of two successive low waters. It is frequently specified as the average during a particular part of the month or year, for example, mean lower low water springs, mean lower low water at spring tide near the solstices, etc.
ASCE-ACSM 1993

Mean Rise

The elevation of the mean high water above the chart datum.
NOAA 1986

Mean Sea Level

The average height of the surface of the sea for all stages of the tide over a 19-year period, usually determined from hourly height readings.
BLM 1980

Mean Tide Level

(Also called half-tide level) A plane midway between mean high water and mean low water. Because of the lack of symmetry of the tidal curve this is not the same as mean sea level.
BLM 1980

Meander Corner

A meander corner is established at every point where a Township line, section line, Land Grant, Homestead Entry Survey, Donation Land Claim or other survey intersects the bank of a navigable stream or other meanderable body of water. (BLM, 1973, paragraph 3-117.)
FGDC - Subcommittee on Cadastral Data 1999

A meander corner is established at every point where a Township line, section line, Land Grant, Homestead Entry Survey, Donation Land Claim or other survey intersects the bank of a navigable stream or other meanderable body of water. (BLM, 1973, paragraph 3-117.)

BLM 1980

Meander Line

The traverse run at the line of mean high water of a permanent natural body of water. In original surveys, meander lines are not run as boundary lines. They are run to generally define the sinuosities of the bank or shore line and for determining the quantity of land in the fractional sections remaining after segregation of the water area.

BLM 1980

Measured Feature

A feature constructed from component elements in a measurement network by applying construction and computation methods. Measured features have topological association to component features and/or measurements. Before a measured feature can be constructed, some underlying survey-based features must exist within a measurement network. The minimal unit required is a survey point. A survey point can become a measured corner. A set of two survey points defined as measured corners can be used to construct a measured line. A survey point, combined with the necessary parameters, can be used to construct a measured curve. Measured lines and curves can be joined at measured corners to define a measured area. Measured areas can be associated through rules of aggregation and division to define a feature fabric (legal description, parcel). Example measured feature types: legal description (section, government lot, city lot, aliquot part, etc.), true line, boundary, representative corner (multiple; porcupine; theoretical), Corner, Parcel, Administrative area, etc. May include physical objects such as buildings and other structures. Example computations: section subdivision, offset line, defining measurement, proportion, intersection (distance-distance). Note: Methods may be geodetic/non-geodetic.

NILS Development Teams 2001

Measurement

Single set of measurement values for a feature. The values may include vertical or zenith angle, horizontal angle, slope distance, back sight and foresight heights, and so on. The act of obtaining a distinct piece of information that helps describe the extent of rights in land.

NILS Development Teams 2001

The reduced and/or mean values of an observation set. The angular difference between readings, the distance, or the azimuth/bearing.

NILS Development Teams 2001

An object that is constructed as a result of computations performed using observations.

NILS Development Teams 2001

Measurements are of two kinds — direct and indirect. A direct measurement is made when the observed quantity is compared with the scale directly. An indirect measurement is made when the observed quantity is determined by several related and dependent observations.

Davis, Richard, Foote, Francis S. and Kelly, Joe W 1966

Measurement must involve observation. No measurement is made until something is observed. Accordingly, the terms measurement and observation are often used synonymously.

Edward M Mikhail and Gordon Gracie 1981

A value that is constructed as a result of computations performed using observations.

NILS Development Teams 2001

Measurement Data

The raw measurement files control points, coordinate files, survey source information, error estimates, and/or survey business rules that are associated with a measurement dataset.

NILS Development Teams 2001

Measurement Dataset

A set of measured features constructed from survey points and other measurement features.

NILS Development Teams 2001

Measurement Management

Mathematical models, functionalities and GIS tools designed specifically for cadastral surveyors. The goal of Measurement Management is a process which enables its users to create a high-quality, control network database for the Public Land Survey System (PLSS), and the non-Rectangular Survey System.

NILS Development Teams 2001

Measuring Device

An instrument for determining the dimensions of a feature (as readings), i.e. total station, theodolite, transit, compass, steel tape, etc.

NILS Development Teams 2001

Medial Line

In surveying, the term refers to a particular line which must be determined by the consideration of various factors, or the weighing of evidence, as well as the use of measurement and/or calculation. An example would be the determination of the center of the main channel of a river as distinguished from the measurement or calculation of a line midway between its banks. Occasionally used as though synonymous with “median line”.

BLM 1980

Median

Noting or pertaining to a plane dividing something into two equal parts, especially one dividing a thing into left and right halves. In geometry, a straight line from the vertex of a triangle to midpoint on the opposite side.

BLM 1980

Median Line

A line equidistant from opposite banks of a river channel.

NILS Development Teams 2001

The “median line” of a body of water is a line, every point of which is equidistant from the nearest point on opposite banks or other reference lines. The median is a continuous line formed by intersecting straight line or curve segments. “Median line” may also refer to the average of the distances between non-parallel lines.

BLM 1980

Median Line Curve Infrequently called medial line curve. A curve that is formed by a line that is equidistant from opposite banks of a river channel.

NILS Development Teams 2001

Mediation

The act of a third person who comes between two opposing parties in order to persuade them to compromise, adjust or settle their dispute.

BLM 1980

Medium Filum Acquae

The geographic middle of a river supposed to divide it into two equal parts, without considering the channel or channels of the river. Identical with a median line, every point of which is equidistant from the nearest points of the baseline on the opposite shores.

BLM 1980

Memorial

A durable article deposited in the ground at the position of a corner to perpetuate that position should the monument

be removed or destroyed. The memorial is usually deposited at the base of the monument and may consist of durable, such as glass or stoneware, a marked stone, anything charred stake or a quantity of charcoal.

BLM 1980

Meridan

A north-south line from which longitudes (or departures) and azimuths are reckoned.

New Mexico Assessors 2001

Meridional Line

A north-south line or a line along a meridian of longitude.

BLM 1980

Mesne Conveyance

Pronounced “mean”. An intermediate conveyance; one occupying an intermediate position in a chain of title between the first grantee and the present holder.

BLM 1980

Metadata

Information about objects – their source, derivation, construction, changes, and characteristics.

NILS Development Teams 2001

1. Feature Class Metadata includes Lineage (transformations, etc.) and Coordinate Systems and Datums 2. Feature-level Metadata includes Spatial (geospatial) Lineage (parent-child) Source Quality and Accuracy 3. Audit Metadata (transactions, versioning).

NILS Development Teams 2001

Data about data, e.g., source, accuracy, type, projection, date of origination and other general descriptions.

URISA 2000

Metadata represents data about data that describe the lineage, source, quality or other fitness-for-use information.

FGDC - Subcommittee on Cadastral Data 1999

Metes and Bounds

A true metes and bounds description is a perimeter description of a tract of land containing recitations of measurements and boundaries in sequence around a parcel of land from the point of beginning. Bearings and distances are usually given for each line.

Buckner, R.B. 1991

A method of describing a parcel of land by citing the owners of abutting lands and describing the length of each course of a boundary as “along” some apparent line, such as, along

the stream” or “along the road.” In modern usage, a metes and bounds description includes the bearings and distances of each course.

BLM 1980

(1) The designation of a parcel of land by stating the courses and distances around it, or by calling for natural features or recorded monuments. Often the area of the parcel is stated as part of the description. Note that in the opinion of some authorities, the monument need not be a recorded monument for the term metes-and-bounds description to apply. (2) The designation of a parcel of land by giving the courses and distances around it. Also called description by metes and bounds.

ASCE-ACSM 1993

A method of describing a parcel of land by citing the owners of abutting lands and describing the length of each course of a boundary as “along” some apparent line, such as, “along a stream” or “along the road.” In modern usage, a metes and bounds description includes the bearings and distances of each course.

New Mexico Assessors 2001

Mile Corner or Mile Post

“The mile corner of a State, Reservation or other grant boundary does not mark a point of a subdivision; it is a station along the line, however, long usage has given acceptance to the term.” (BLM 1973, paragraph 5-4.)

BLM 1980

“The mile corner of a State, Reservation or other grant boundary does not mark a point of a subdivision; it is a station along the line, however, long usage has given acceptance to the term.” (BLM 1973, paragraph 5-4.)

FGDC - Subcommittee on Cadastral Data 1999

Military Bounty Land Warrant

Authorization to obtain public lands as a reward for military service. It was issued in the form of scrip which could be exchanged for specified amounts of land in designated areas.

BLM 1980

Military Reservation

Federal lands which have been dedicated for military purposes of the Department of the Army.

BLM 1980

Mill Site

Up to 5 acres of public land may be claimed for the purpose of processing minerals. Mill sites are limited to lands that do not contain valuable minerals. Mineral public lands which

are to be used as a mill site for the reduction of ore or in the development of a lode claim.

BLM 1980

Mine Survey

A survey to determine the positions and dimensions of underground passages of a mine; also of the natural and artificial features-surface and underground-relating to the mine. As cadastral surveys, they are made to detect, or determine the extent of, underground trespass.

BLM 1980

Mineral Adverse Claim

A notice of protest filed by a rival claimant against the approval of a mineral application.

BLM 1980

Mineral Classification

Classification of public lands as being valuable for a specified mineral (or minerals); also, the public lands so classified.

BLM 1980

Mineral Segregation Survey

The measurements and corner restorations needed to define the boundaries between a mineral claim and other public lands for administrative purposes. Even though it also defines the boundaries of the mineral claim, in whole or in part, that is merely incidental and does not confer any rights to the mineral claimant.

BLM 1980

Mineral Survey

A cadastral survey of a lode claim, placer claim or millsite with all its notes and plats. This type of survey is executed by a U.S. Mineral Surveyor for the purpose of marking the legal boundaries of mining claims on the public domain. The location and estimated value of mining improvements are returned by the survey but no reference is made to mineral deposits.

BLM 1980

A survey of a lode claim, placer claim, or mill site with all its notes and plats. This type of survey is executed by a U.S. Mineral Surveyor for the purposes of marking the legal boundaries of mining claims on the public domain.

FGDC - Subcommittee on Cadastral Data 1999

Mineral Withdrawl for A withdrawal of public lands which are potentially valuable for leasable minerals. The withdrawal precludes the disposal of the lands except with a mineral reservation clause unless the lands are found, upon

examination or by other competent evidence, not to contain a valuable deposit of minerals.

BLM 1980

“error of closure.” 2) An error of closure in excess of specified limits, as in “out of limits.”

BLM 1980

Mining Act of 1866

The 1866 bill known as H.R. 365 was, most emphatically, a lode mining bill. It became mining law on July 26, 1866, under the astonishing title: “An act granting the Right of Way to Ditch and Canal Owners over the Public Lands, and for other purposes.”

BLM 1980

Monument

A permanent structure used to mark the position of a surveyed point. Common locations for monuments include property or PLSS corners, vertical control points (benchmarks) and horizontal control points (sometimes called triangulation stations).

Wisconsin State Cartographers Office 2000

Mining Claim

A parcel of land, probably containing valuable mineral in the soil or rock and appropriated by an individual according to established rules by the process of “location.” Located by the claimant, not surveyed.

FGDC - Subcommittee on Cadastral Data 1999

A parcel of land probably containing valuable mineral in its soil or rock, and appropriated by an individual, according to established rules, by the process of “location.”

BLM 1980

A physical structure, such as an iron post, marked stone, or tree in place, which marks the location of a corner point established by a Cadastral survey. Objects, to be ranked as monuments, should have certain physical properties such as visibility, durability and stability and they must define location without resorting to measurements. “Monument” and “corner” are not synonymous, although the two terms are often used largely in the same sense.

New Mexico Assessors 2001

Mining Claim Occupancy Act

The Act of October 23, 1962 as amended (76 Stat. 1127; 30 U.S.C. 701-704), authorized the Secretary of the Interior to convey to qualified applicants, under its provisions and requirements, maximum tenure consistent with the public interest in the lands which they occupy. This law expired June 30, 1971.

BLM 1980

A physical structure, such as an iron post, marked stone, or tree in place, which marks the location of a corner point established by a Cadastral Survey. Objects, to be ranked as monuments, should have certain physical properties such as visibility, durability and stability, and they must define location with out resorting to measurements. “Monument” and “corner” are not synonymous, although the two terms are often used largely in the same sense.

BLM 1980

Miscellaneous Control

A mathematical recovery of a lost corner by allowing every known corner within a reasonable radius which was tied to the missing corner to enter into the control, each control corner being given a weight inversely proportional to its distance from the missing corner.

BLM 1980

Miscellaneous Document A list, by State, of those documents which apply to lands not specifically described on which conditions may exist that would restrict disposition or use of the lands.

BLM 1980

More or Less

When used in connection with quantity or distance in a conveyance of land are considered words of safety or precaution, intended to cover some slight or unimportant inaccuracy. The same applies to the use of the word “about.”

BLM 1980

When used in connection with quantity or distance in a conveyance of land are considered words of safety or precaution intended to cover some slight or unimportant inaccuracy. The same applies to the use of the word “about.”

New Mexico Assessors 2001

Misclosure

1) The amount by which a series of survey measurements fail to yield a theoretical or previously determined value for a survey quantity; hence a measure of the accumulated errors and blunders in the work. Also termed “closing error,” “or

Mounds and Pits

A system of witnessing corner stakes in prairie country.

BLM 1980

Move

A correction in position to be applied to a temporary stake so that the resulting point will be located at its proper position. Usually calculated as a distance north or south as well as a distance east or west, the plural is common, i.e.; the moves are 6.5 lks. south and 2.1 lks. east.

BLM 1980

Municipal Reserve

Areas within a townsite which are reserved for the town. Areas within a townsite which are surveyed and set aside for the purposes of the legally incorporated or duly authorized association of the inhabitants of the town.

BLM 1980

Muniment

Documentary Evidence of title.

Harbin, Andrew L. 1998

National Forest

A reservation of a forest or watershed which is administered by the Forest Service, United States Department of Agriculture.

BLM 1980

National Forest Homestead A homestead entry, not exceeding 160 acres, initiated under the Act of June 11, 1906 (34 Stat. 233, 16 U.S.C. sec. 506), which provided for the homesteading within National forests of public lands classified and listed as more valuable for agricultural than for forestry purposes. (Repealed October 23, 1962.)

BLM 1980

National Geodetic Vertical NGVD 29 a geodetic reference for elevations, completed and adjusted in 1929. These elevations were used to define the mean sea level datum. This datum was replaced by NAVD 88.

Wisconsin State Cartographers Office 2000

National Memorial

A reservation embracing memorials of national interest which is administered by the National Park Service, United States Department of the Interior.

BLM 1980

A reservation embracing objects of historic and scientific interest which is administered by the National Park Service, United States Department of the Interior.

BLM 1980

National Park

A reservation embracing recreational areas which is administered by the National Park Service, United States Department of the Interior.

BLM 1980

National Resource Lands

All of the lands administered by the Bureau of Land Management.

BLM 1980

National Spatial Data Coordinated by the Federal Geographic Data Committee (FGDC), the NSDI encompasses policies, standards, and procedures for organizations to cooperatively produce and share geographic data. The 17 federal agencies that make up the FGDC are developing the NSDI in cooperation with organizations from state, local and Tribal governments, the academic community, and the private sector.

URISA 2000

Native Allotment Alaska

Under the terms and provisions of the Act of May 17, 1906, the Secretary of the Interior is authorized to allot not as amended, to exceed 160 acres of vacant, unappropriated and unreserved nonmineral land in Alaska; or, subject to the provisions of the Act of March 8, 1922, of vacant, unappropriated and unreserved public land in Alaska that may be valuable for coal, oil or gas deposits; or, under certain conditions, of National Forest Lands in Alaska, to any Indian, Aleut or Eskimo of full or mixed blood who resides in and is a native of Alaska, and who is the head of a family, or is twenty-one years of age. An allotment will not be made until the lands are surveyed by BLM, and until satisfactory proof of 5 years continuous use and occupancy by the applicant has been approved by the Director of BLM.

BLM 1980

Native Allotment Application

(AK) Under the terms and provisions of the Act of May 17, 1906 as amended the Secretary of Interior is authorized to allot, not to exceed 160 acres, of vacant, unappropriated, and unreserved non-mineral lands in Alaska. An allotment will not be made until the lands are surveyed by the BLM and until proof of 5 years continuous use and occupancy by the applicant has been approved by the Director of the BLM.

FGDC - Subcommittee on Cadastral Data 1999

Native Townsite Alaska

The Act of May 25, 1926, provides for the townsite survey and disposition of public lands set apart or reserved for the benefit of Indian or Eskimo occupants in trustee townsites in Alaska, and for the survey and disposal of the lands occupied as native towns or villages. The Act of Feb. 26, 1948, provides for the issuance of an unrestricted deed to any competent native for a tract of land claimed and occupied by him within any such trustee townsite. Native towns occupied partly by white occupants are to be surveyed under the provisions of both the Act of March 3, 1891, and the Act of May 25, 1926.

BLM 1980

Nautical Chain

A unit of length equal to exactly 15 feet.

ASCE-ACSM 1993

Navigability

The doctrine laid down by the Supreme Court in *The Daniel Ball*, 10 Wall. 557 (1871), to wit: "Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade or travel on water."

BLM 1980

Navigable Waters

Waters which afford a channel for useful commerce or travel. The beds of navigable bodies of water are not public domain and are not subject to survey and disposal by the United States. Under the laws of the United States the navigable waters have always been and shall forever remain common highways. This includes all tidewater streams and other important permanent bodies of water whose natural and normal condition at the date of the admission of a State into the Union was such as to classify the same as navigable water.

BLM 1980

Neap Tides

Tides of decreasing range occurring semimonthly as the result of the moon being in quadrature; that is, when the tidal forces of sun and moon act at right angles to each other on the waters of the earth. Tides during these periods do not rise as high or fall as low as during the rest of the month.

BLM 1980

Non Riparian Broken A colloquial term which refers to the meander lines along a water boundary. The water is the actual

(riparian) boundary and the meander line is the representative (nonriparian) boundary.

BLM 1980

Non Riparian Meander Line

Any meander line which is surveyed as a fixed boundary or is reestablished as a fixed boundary.

BLM 1980

Nonious

A scale featuring concentric circles used in determining angles. It was named for a Portuguese mathematician and geographer, Nunez (1492-1577). Later, the nonius was replaced by the vernier scale (named for Dutch mathematician Peter Werner who, in his writings, used the name "Pierre Vernier"). As late as 1879, in Germany, a vernier was called a nonius.

BLM 1980

Normal Axis

An axis perpendicular to the longitudinal axis and generally in the plane of symmetry of the craft. It is oriented downwards or as defined by the constructor of the craft.

ASCE-ACSM 1993

North American Datum of NAD27 A geodetic reference for horizontal positions, established in 1927 and based on the Clark ellipsoid of 1866.

Wisconsin State Cartographers Office 2000

North American Datum of NAD 83 a geodetic reference for horizontal positions established in 1983 and based on the GRS 80 ellipsoid.

Wisconsin State Cartographers Office 2000

North American Vertical NAVD 88 A geodetic reference for elevations, created by the NGS to replace the NGVD 29. This new datum was published in 1991, and incorporates vertical datums used on the Great Lakes. It is adjusted based on field work prior to 1929 as well as surveys as recent as 1988.

Wisconsin State Cartographers Office 2000

Northwest Ordinance

An ordinance enacted by the Congress of the Confederation to provide for government of the Old Northwest Territory (Territory northwest of the Ohio River), and for the formation and admission of new states. The provisions were reenacted on Aug. 7, 1789 following the adoption of the Constitution.

BLM 1980

Notches

V-shaped indentations cut upon the exposed vertical edges of a stone monument where the vertical edges of the stone have been turned to the cardinal.

BLM 1980

Numbered Corner

A corner of BLM special survey which is assigned a number as part of the cadastral survey. Examples include corners of placer claims, corners of mineral claims, and some land grant corners. These corners are not the same as angle points.

BLM 1980

A corner of BLM special survey which is assigned a number as part of the cadastral survey. Examples include corners of placer claims, corners of mineral claims, and some land grant corners. These corners are not the same as angle points.

FGDC - Subcommittee on Cadastral Data 1999

O and C Lands

Public lands in western Oregon which were granted to the Oregon Central railroad companies (later the Oregon and California Railroad Co.) to aid in the construction of railroads, but which were later forfeited and returned to the Federal Government by Congressional revestment of title. The term "O and C lands" is often used to include Coos Bay Wagon Road Lands, which were reconveyed, not revested, lands.

BLM 1980

Public lands in Western Oregon which were granted to the Oregon Central Railroad companies to aid in the construction of railroads but which were later forfeited and returned to the federal government by congressional revestment of title. An O and C Homestead entry is an entry not exceeding 160 acres on revested Oregon and California Railroad company lands which are agricultural in nature.

FGDC - Subcommittee on Cadastral Data 1999

Obiter Dictum

Also called "dictum." That which is said in passing. Where the court, in rationalizing its position, uses language broader than is needed for disposition of the point at issue. If the court's statement is merely illustrative or background material not required in the determination of the issues presented, it is within the category of obiter dictum. Dictum lacks the force of an adjudication and does not fall within the doctrine of stare decisis.

BLM 1980

Object Oriented Analysis and A set of techniques used in defining and managing software projects. OOAD stresses end-user involvement, concise definition of the system requirements, and continual revisiting of project phases to ensure design completeness.

NILS Development Teams 2001

Obliterated

A corner at whose point there are no remaining traces of the monument, or its accessories, but whose location has been perpetuated, or the point for which may be recovered beyond reasonable doubt, by the acts of testimony of the interested landowners, competent surveyors, or other qualified local authorities, or witnesses or by some other acceptable evidence of record.

BLM 1980

Obliterated Corner

An obliterated corner is one at whose point there are no remaining traces of the monument, or its accessories, but whose location has been perpetuated, or the point for which may be recovered beyond reasonable doubt, by the acts and testimony of the interested landowners, competent surveyors, or other qualified local authorities, or witnesses, or by some acceptable record evidence.

BLM 1980

(1) A corner where there are no remaining traces of the monument or its accessories but whose location has been perpetuated. (2) A corner which may be recovered beyond reasonable doubt, by the testimony of the interested landowners, competent surveyors or other qualified local authorities or witnesses or by some acceptable recorded evidence. (This definition is undesirable because it applies also to corners for which the monuments or other physical evidence still exist.) A location which depends upon the use of collateral evidence for verification can be accepted only insofar as it is supported, generally through proper relation to known corners and agreement with the field notes on distances to natural objects, stream crossings, line trees and offline blazes, etc., or unquestionable testimony.

ASCE-ACSM 1993

Observation

The act of obtaining a distinct piece of information that helps describe the dimensions or spatial relationships between points on physical features.

NILS Development Teams 2001

Single set of measurement values for a feature. The values may include vertical or zenith angle, horizontal angle, slope distance, back sight and foresight heights, and so on. The

act of obtaining a distinct piece of information that helps describe the dimensions or spatial relationships between points on physical features.

NILS Development Teams 2001

Act of recognizing and noting some fact or occurrence, especially in nature. Often involves the measurement of some magnitude with suitable instruments.

ACSM 1978

Observation Set

A set of one or more readings from a measuring device (may be multiple observations for the same feature). Also called "a set of observations".

NILS Development Teams 2001

Observed value

A value of the quantity that is obtained by instrumental measurement of the quantity. The term observed value is often applied to the value of a quantity derived from instrumental measurement after corrections have been applied for systematic errors, but before accidental errors have been taken out by some method of adjustment.

ACSM 1978

Occupy

1) To set a surveying instrument over a point for the purpose of making observations. 2) To take or enter upon possession of land.

BLM 1980

Official Cadastral Survey

The public lands are deemed to be surveyed when the survey has been accepted and the plat thereof has been filed in the appropriate land office by direction of the Bureau of Land Management. No subdivisions of the public lands may be conveyed or in any way disposed of until so identified.

BLM 1980

Official Returns

The Field Notes and Plats of an official cadastral survey accepted and approved by the proper authority.

BLM 1980

Official Survey

A public land survey which has the field notes approved, the plat accepted, and has been filed in the proper BLM land office after publication in the Federal Register, if necessary.

BLM 1980

Offset

1) Moving over to a parallel line in order to avoid an obstacle.
2) A process in the running of a parallel of latitude by means of a straight line with measured (offset) distances to the curve.

BLM 1980

Offset Line

A supplementary line, close to and roughly parallel with a main line, to which it is referred by measured offsets. Where the line for which data are desired is in such position that it is difficult to measure over it, the required data is obtained by running an offset line in a convenient location and measuring offsets from it to salient points on the other line.

ACSM 1978

Offset to a Spiral Curve

A curve that is parallel to a spiral curve. These curves are used to define right-of-way boundaries. They do not have the mathematical properties of a spiral curve.

NILS Development Teams 2001

Omitted Land Survey

"The survey of lands exposed by changes in water level or accreted subsequent to survey are not erroneously omitted lands. This title is applied to lands, not shown on the plat of original survey, which were excluded from the survey by some gross discrepancy in the location of the meander line. The unsurveyed land typically lies between the actual bank of a lake, stream, or tide water and the record meander line."

BLM 1973

"The survey of lands exposed by changes in water level or accreted subsequent to survey are not erroneously omitted lands. This title is applied to lands, not shown on the plat of original survey, which were excluded from the survey by some gross discrepancy in the location of the meander line. The unsurveyed land typically lies between the actual bank of a lake, stream, or tide water and the record meander line." (BLM, 1973, paragraph 7-77).

BLM 1980

Omitted Lands

Lands that were in place at the time of survey but are not shown on the original township plat, and which are so situated as to have been excluded from the survey by some gross discrepancy in the location of a meander line as given by the field-note record. This term is not applicable to areas where changes can be traced to erosion, accretion or changes in the water level subsequent to survey.

BLM 1980

Opus Citum Supra

May be abbreviated Op Cit Supra meaning “in the work cited above.” Used to avoid repeating a full citation when referring to a book previously cited. Sometimes Op. Cit.

BLM 1980

Ordinance

A rule established by authority; a permanent rule of action; a law or statute. In its most common meaning, the term is used to designate the enactments of the legislative body of a municipal corporation. It designates local law of a municipal corporation, duly enacted by the proper authorities, prescribing general, uniform and permanent rules of conduct relating to

Wisconsin Register of Deeds Association 1995

Ordinance of May 20, 1785

The first land ordinance, it was entitled “An Ordinance for ascertaining the mode of disposing of lands in the western territory.” It was adopted by the Continental Congress on May 20, 1785. Under its terms the rectangular system of surveys was inaugurated. Six- mile square townships extended north from the Ohio River and were numbered south to north. Ranges were numbered east to west. Sections (called lots) were numbered from 1 to 36 from south to north in each range with number 1 in the southeast corner. Also included was the provision that, in each township, section 16 would be set aside for the maintenance of public schools.

BLM 1980

Ordinary High Water

When used in reference to tidal waters, synonymous with mean high water. When referring to inland streams and lakes it is the same as mean high-water.

BLM 1980

Oregon Territory Cession

Under the terms of the Oregon Compromise, in 1846, the territory now occupied by the States of Idaho, Oregon and Washington and parts of Montana and Wyoming was ceded to the United States by Great Britain. This cession provided the United States with more than 183 million additional acres of public lands.

BLM 1980

Organized Mining District

A section of the country usually designated by name and described or understood as being confined within certain natural boundaries, in which the precious metals for their ores) are found in paying quantities, and which is worked therefore, under rules and regulations prescribed or agreed upon by the miners therein.

BLM 1980

Original Entry

When application to acquire title to public lands and the applicant is permitted to proceed with earning title to the land under the governing laws and regulations.

BLM 1980

Original Survey

An original survey is one made as a part of the original conveyance of a tract of land. It can either be made prior to conveyance or after it as long as reference is made to it in the conveyance.

Buckner, R.B. 1991

A cadastral survey which creates land boundaries and marks them for the first time.

BLM 1980

Orthometric Height

The distance from the geoid to a point measured along a line normal to the geoid.

NILS Development Teams 2001

Out

A measurement term used in some field notes and deeds in the early 1800's, it is the equivalent off chains. Tiffin's 1815 instructions called for the use of “a two pole chain of 50 links,” so when the chainman was “out” of chaining pins he had covered a distance of 5 chains.

BLM 1980

Outboundaries

The township and range lines around the perimeter of a survey area, particularly the controlling lines around the perimeter of an independent resurvey.

BLM 1980

Outer Continental Shelf

That portion of the continental shelf seaward of state boundaries as defined in the Submerged Lands Act (43 U.S.C.A., sec. 1301 et seq.). It is spoken of, generally, as that part of the continental shelf beyond the “three mile limit.” It extends from there to the continental talus, a depth of approximately 100 fathoms.

BLM 1980

Outer Continental Shelf Lands

Also known as Public Law 212. An act passed during the 1st session of the 83rd Congress and signed into law Aug. 7, 1953. It provides for the jurisdiction, control and administration by the United States over the submerged lands seaward of the state's boundaries as defined in the Submerged Lands Act (Public Law 31); that is over the outer continental shelf.

Senate Report 411, regarding this act, made it clear that the outer edge of the shelf is the point where the continental slope leading to the true ocean bottom begins and that this point is generally regarded as the depth of approximately 100 fathoms. At the 1958 Geneva Conference, the Geneva Convention on the Continental Shelf adopted the 100-fathom depth curve as a minimum limit and beyond that if exploitation is feasible.

BLM 1980

Outkeeper

On older style surveyor's compasses, a scale numbered 1 to 16, with a pointer that was turned by a milled knob to keep track of the "Outs"; 8 Outs equal 40 chains; 16 Outs equal 80 chains.

BLM 1980

Overflowed Lands

Lands which are annually or periodically subject to natural flooding during the normal planting, growing or harvesting seasons of a region to such an extent that they are rendered wet and unfit for the cultivation of the staple crops of that region, unless artificially drained or protected.

BLM 1980

Overlap

Lands surveyed in conflict. A common area included in separate surveys. That portion of area which one survey extends over and covers a part of a different survey as is shown by the evidence on the ground.

BLM 1980

Panchromatic

Sensitive to all or most of the visible electromagnetic spectrum, between 0.4 and 0.7 micrometers.

Wisconsin State Cartographers Office 2000

Parametric Least Square A least square analysis/adjustment that considers the quality of data that varies throughout the dataset. A weighted least square adjustment.

NILS Development Teams 2001

Parcel

A contiguous area of land described in a single description in a deed or as one of a number of lots on a plat; separately owned, either publicly or privately and capable of being separately conveyed.

Moyer, D. David and Kenneth Paul Fisher 1973

A portion of the earth defined by a boundary inside of which certain assigned rights apply regarding occupancy and/or use of land, air or water. Can also include linked attributes

that define the rules and conditions for exercising these rights.

Kansas Association of Mappers 1997

A single cadastral unit, which is the spatial extent of the past, present, and future rights and interest in real property.

FGDC - Subcommittee on Cadastral Data 1999

A portion of the earth defined by a boundary. In GIS, usually a plot of land inside of which certain assigned rights apply regarding occupancy and/or use of land, air or water. The most significant is the ownership parcel that serves as the basic land entity for defining responsibilities of the individual and governments regarding land use and occupancy.

URISA 2000

Parcel Editor

Parcel Editor (person) – staff person with authority to make changes to parcel geometry and associated attributes (i.e. LLD), and commit the changes to the database. Parcel Editor (software tool) – functionality in a GIS and textual environment which facilitates additions, – updates, etc to the attributes and geometry of a parcel.

NILS Development Teams 2001

Parcel Legal Description

A composite description that contains all the legal descriptions that define a parcel, and can be used to derive the full spatial extent of the parcel.

NILS Development Teams 2001

Parcel Management

A process for managing land information and cadastral feature data stored in the database model. It will include custom tools, and procedures for maintaining land parcels in a transactional, history tracking environment. Parcels can be constructed from existing or new legal descriptions of surveyed or unsurveyed lands to form integrated parcel networks based on a particular business practice (e.g., ownership, tax lots, and planning areas) in a user-defined geographic area. Users will be able to customize the Parcel Maintenance process to accommodate their established workflow and business processes.

NILS Development Teams 2001

Parenthetical Distance

Distances noted on the plats in parentheses are those regular and fractional portions of lines constituting the boundaries of the quarter-quarter sections and fractional subdivisions bounded thereby. Parentheses are used where the record is not supplied by the field notes, indicating that the distance

<p>was not measured on the ground. The figures show what was used in the calculation of areas. The same lengths are to be adopted proportionately whenever there is a need for an establishment of sixteenth-section corners on the section boundaries, and for control points for the subdivision of sections.</p> <p style="text-align: right;">BLM 1980</p> <p>Parol (Parole) Executed by word of mouth, or by writing not under seal. Also means a spoken promise. In its usual usage in criminal law; the promise of a prisoner to fulfill stated conditions in consideration of his release.</p> <p style="text-align: right;">BLM 1980</p> <p>Parol Agreement An oral agreement between the owners establishing the boundary dividing adjacent land.</p> <p style="text-align: right;">BLM 1980</p> <p>Parol Evidence Evidence gathered by testimony of witnesses. Sometimes "parole evidence." A witness who gives verbal evidence concerning positive knowledge of the location of an original monument prior to its destruction is said to give "parol evidence."</p> <p style="text-align: right;">BLM 1980</p> <p>Parsing The processing of addresses in order to recognize the various sub-components. Parsing uses pattern recognition to also identify components based on their juxtaposition, i.e. St. Asaph St. How is St in Saint recognized as being different from St for Street?</p> <p style="text-align: right;">URISA 2000</p> <p>Partition Line A survey line which cuts off a required area of a given parcel of land.</p> <p style="text-align: right;">BLM 1980</p> <p>Passing Calls Found frequently in cadastral surveyor's field notes, they are calls for (references to) cultural or topographic features along a survey line. Passing calls are sometimes used to locate a line or to recover obliterated corners.</p> <p style="text-align: right;">BLM 1980</p> <p>Patent A document by which the United States conveys, to those entitled thereto, legal title to some portion of the public lands.</p> <p style="text-align: right;">BLM 1980</p>	<p>A document by which the United States conveys, to those entitled thereto, legal title to some portion of the Public lands.</p> <p style="text-align: right;">New Mexico Assessors 2001</p> <p>A conveyance or deed from the sovereign for the sovereign's interest in a tract of land. Most but not all land in the public domain was patented by the US, A government grant of land, the instrument by which the government conveys title to land, a quit claim deed.</p> <p style="text-align: right;">Harbin, Andrew L. 1998</p> <p>A patent is a conveyance from the federal government to an individual. In the early years of the US, patents were common. Title searches of most tracts of land end in a patent as the first official land transaction conveying property. A patent is sometimes called a public deed.</p> <p style="text-align: right;">Buckner, R.B. 1991</p> <p>Patent Ambiguity An obvious and evident statement or written document that is unclear.</p> <p style="text-align: right;">Brown, Curtis M 1995</p> <p>A patent ambiguity is one that is readily discernable when a document is read.</p> <p style="text-align: right;">Buckner, R.B. 1991</p> <p>Pedis Possessio Actual possession of real property implying actual occupancy or enclosure and use.</p> <p style="text-align: right;">BLM 1980</p> <p>Pending A BLM cadastral survey which has: completed special instructions, a group file, funding allocation, and survey crews in the field, but the survey has not been completed and is not approved. This term is normally found on the BLM Master Title Plat.</p> <p style="text-align: right;">BLM 1990</p> <p>Penultimate Next to the last. The next to the last member in a series, such as the next to the last paragraph in a letter or the next to the last syllable of a word.</p> <p style="text-align: right;">BLM 1980</p> <p>Per Se Of itself; taken alone; unconnected with other matters.</p> <p style="text-align: right;">BLM 1980</p>
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Perch

A unit of linear measure equal to 25 links or 16 Ω feet. Also termed a “pole” or “rod.” In the land area, a square rod; 272.25 square feet or .00625 acre.

New Mexico Assessors 2001

A unit of linear measure equal to 25 links or 16 Ω feet. Also termed a “pole” or “rod.” In land area, a square rod; 272.25 square feet or .00625 acre.

BLM 1980

Perigean Tide

The tide that occurs when the Moon is closest to the Earth during a lunar month.

NOAA 1986

Personal Property

In a broad and general sense, everything that is the subject of ownership, excluding real property.

BLM 1980

Pittman Act Entry

An entry of public lands in Nevada made by an individual or association of individuals who earned the right to acquire title to the lands through discovery of underground sources of water.

BLM 1980

Pittman Underground Water The Act of October 22, 1919, under the terms of which an entry of public lands in Nevada could be made by an individual or association of individuals who earned the right to acquire title to a portion of the public lands through discovery of underground water sources.

BLM 1980

Pixel

Abbreviation for Picture Element, the smallest non-divisible image-forming unit of a plot or video display. Each cell can have assigned attributes, in addition to color. In raster processing, pixels refer to a single cell within a matrix of grid cells.

URISA 2000

Place Lands

Lands granted in aid of a railroad company which are within certain limits on each side of the road, and which became instantly fixed by the adoption of the centerline of the railroad.

BLM 1980

Placer

An alluvial or glacial deposit containing particles of valuable minerals.

BLM 1980

Placer Act of 1870

Under this act, placer claims included “all forms of deposit, excepting veins of quartz, or other rocks in place” It did not restrict placer claims to valuable deposits, probably due to an oversight. There was no provision for the reservation of known lodes within placer patents. Placer locations were limited to not more than 160 patents acres for any person or association of persons, though patents for additional acreages could be issued where adjoining claims had been purchased by the locator.

BLM 1980

Placer Claim

A mining claim located on the public domain for the purpose of placer mining. Under U.S. mining laws, mineral deposits not veins or lodes in place, are treated as placers so far as locating, holding, surveying, and patenting are concerned. Revised Statutes, see. 2331 (30 U.S.C., sec- 35) provides that all placer-mining claims located after May 10,1872, shall conform as nearly as practicable with the United States system of public land surveys and the rectangular subdivision of such surveys, and such locations shall not include more than 20 acres for each individual claimant (43 C.F.R. 3842.1-2(b)).

BLM 1980

Placer Law of 1897

This law provided that petroleum lands might be entered and patented under the placer mining laws and led, eventually, to the leasing of public lands valuable for minerals.

BLM 1980

Plaintiff

A person who brings an action; the party who complains or sues in a personal action and is so named on the record.

BLM 1980

Planimetric Map

Depiction of features on a two-dimensional plane without any reference to contours or topographic relief.

URISA 2000

A type of map that only shows horizontal features on a plane surface, without elevation contours to depict the terrain.

Wisconsin State Cartographers Office 2000

A map which presents only the horizontal positions for the features represented, distinguished from a topographic map by the omission of relief in measurable form.

New Mexico Assessors 2001

Horizontal depiction of map features on a two-dimensional plane without any reference to contours or topographic relief. Typical features defined within a planimetric map include such natural and cultural features as streams, roads, shorelines, waterways, building footprints, reservoirs, bridges, roadways, overpasses, sidewalks and parking lots.

Kansas Association of Mappers 1997

Plat

A map of land ownership parcels for an area.

Wisconsin State Cartographers Office 2000

As used technically by the BLM, the drawing which represents the particular area included in a survey, such as a township, private land claim or mineral claim, and the lines surveyed, established, retraced or resurveyed, showing the direction and length of each such line the relation to the adjoining official surveys; the boundaries, descriptions, and area of each parcel of land subdivided; and, as nearly as may be practicable, a representation of the relief and improvements within the limits of the survey.

BLM 1980

A map showing the boundaries and other features of land parcels that are being newly established for transfer, sale, or building development.

Wisconsin Register of Deeds Association 1995

Plat

As used technically by the BLM, the drawing which represents the particular area included in a survey, such as a township, private land claim or mineral claim and the lines surveyed, established, retraced or resurveyed, showing the direction and length of each such line; the relation to the adjoining official surveys; the boundaries, descriptions, and as nearly as may be practicable, a representation of the relief and improvements within the limits of the survey.

New Mexico Assessors 2001

PLSS Section

A PLSS section is a nominally one mile by one mile area of land bounded by section lines running east-west and north-south. A fractional section may be bounded by an irregular survey line, a grant boundary, an Indian reservation or other line which causes the configuration of the section to deviate significantly from the nominal dimensions.

BLM 1973

PLSS Standard Lines

“In the survey of the principal meridian and other standards lines (base lines, standard parallels, and guide meridians), two independent sets of measurements are made, but only the mean of the two measurements is shown in the final field notes.” (BLM 1973, paragraph 3-9.)

“A principal meridian is intended to conform to the true meridian, extending north or south or both directions, from the initial point as conditions require.” (BLM 1973, paragraph 3-8.) “The base line is extended east and west from the initial point on a true parallel of latitude.” (BLM 1973, paragraph 3-10.) “Standard parallels, which in earlier years were also called correction lines, are extended east and west from the principal meridian, at intervals of 24 miles north and south of the base line, in a manner prescribed for the survey of the base line.” (BLM 1973, paragraph 3-12.) Guide meridians are extended north from the base line or standard parallels at intervals of 24 miles east and west from the principal meridian, in the manner prescribed for running the principal meridian and terminate at the point of their intersection with the standard parallels. (BLM 1973, paragraph 3-14.)

BLM 1995

PLSS Township

A PLSS township is a nominally six mile by six mile area of land bounded by two township lines running east-west and two range lines running north-south. A fractional township may be bounded by an irregular survey line, a grant boundary, an Indian Reservation or other line which causes the configuration of the township to deviate significantly from the nominal dimensions. The south and east boundaries are normally the governing lines of the subdivision.

BLM 1973

Point

Single X,Y (optionally Z) location in space. Dimensionless geometric feature having no other spatial properties except location. Many different natural and man-made features are modeled as points in a spatial database including trees, hydrants, poles, building, etc.

URISA 2000

Single X,Y (optionally Z) location in space. Dimensionless geometric feature having no other spatial properties except location. Many different natural and man-made features are modeled as points in a spatial database including trees, hydrants, poles, buildings, etc.

Kansas Association of Mappers 1997

A position or location in a reference system determined by survey.	attributes that describe the geographic feature they represent. Kansas Association of Mappers	1997
BLM 1980	Closed plane figure bounded by three or more line segments. URISA	2000
Point of Beginning		
A point on the west boundary of the State of Pennsylvania at the north bank of the Ohio River is the point of beginning for the survey of the public lands of the United States The point was marked by a stake on August 20, 1785.	Possession	
BLM 1980	Exercise of the right to use real property to the exclusion of others. The adage possession is nine tenths of the law is not to be taken as true to the full extent. It does, however, focus light on the legal truth that every claimant must succeed by the strength of his own title and not by the weakness of his antagonist's prior to passage of statutory mining laws in this country, miners made this, quite literally, their rule. Brown, Curtis M	
In a survey, such as the survey of the boundaries of an Indian reservation, each angle point is monumented and assigned a number. The numbers are in a series with number 1 at the initial point.	1969	
New Mexico Assessors 2001	Post-Condition	
Point of Discovery		
In mining, the precisely indicated position at which a valuable mineral is exposed to view. In the absence of proof to the contrary, the discovery point is held to be the center of the vein on the surface.	The state of the system upon successful completion of the current use case.	
BLM 1980	NILS Development Teams 2001	
Point on Line		
A stake or object a surveyor has placed on a line for convenience, such as for a back sight. Points on line are set in prominent places to facilitate identification of lines. Modern BLM cadastral surveys may refer to points on line as Witness Points. Points on Line may also be Line Trees.	Precision	
BLM 1980	A quality associated with the refinement of instruments and measurements, indicated by the degree of uniformity and repeatability of observations. BLM 1980	
A stake or object a surveyor has placed on a line for convenience, such as for a backsight. Points on line are set in prominent places to facilitate identification of lines. Modern BLM cadastral surveys may refer to points on line as Witness Points. Points on Line may also be Line Trees.	The degree of refinement in the performance of an operation, or the degree of perfection in the instruments and methods used when making the measurements. A measure of the uniformity or reproducibility of the result. Precision relates to the quality of the operation by which the result is obtained, and is distinguished from accuracy which relates to the quality of the result. ACSM 1978	
BLM 1995	Degree of exactness with which a quantity is stated (e.g., the number of significant decimal places in an expressed coordinate value). Compare with Accuracy. URISA 2000	
Pole		
Also termed "perch" or "rod"; a unit of length in land measurement, equal to 25 links or 16 1/2 feet. New Mexico Assessors 2001	Refers to the level of measurement and exactness of description in a GIS database. Precise locational data may measure position to a fraction of a unit. Precise attribute information may specify the characteristics of features in great detail. It is important to realize, however, that precise data—no matter how carefully measured—may be inaccurate. Therefore, a distinction is made between precision and accuracy. Kansas Association of Mappers 1997	
Also termed "perch" and "rod"; a unit of length in land measurement, equal to 25 links or 16 1/2 feet. BLM 1980		
Polygon		
A coverage feature class used to represent areas. A polygon is defined by the arcs that make up its boundary and a point inside its boundary for identification. Polygons have		

The nearness of readings to one another which may not be accurate, i.e., measuring with a long tape.

Brown, Curtis M 1969

4. A quality associated with the refinement of instruments and measuring, indicated by the degree of uniformity and repeatability of measurements.

NILS Development Teams 2001

The degree of closeness or conformity of repeated measurements of the same quantity to each other.

Edward M Mikhail and Gordon Gracie 1981

Pre-Condition

The state of the system before the current use case is initiated.

NILS Development Teams 2001

Preemption Entry

An entry of public lands for purchase under the preemption laws. These laws, now repealed, gave the entryman a preferred right to acquire the land by virtue of his occupation and improvement to it.

BLM 1980

Preemption Right

The right given to settlers upon the public lands of the United States to purchase such lands in preference to other persons. This right was granted under preemption laws now repealed.

BLM 1980

Prescription

The method of obtaining easement rights from long usage. It must be open, continuous, and exclusive for a long period of time. Can be public or private.

Harbin, Andrew L. 1998

The manner of acquiring adverse rights in another's land. Prescriptive rights are similar to "adverse possession" but that term is used for title interest. "Prescription" refers to rights of use in land belonging to another, such as right of access, grazing rights or the right to divert flood waters.

BLM 1980

Prescriptive Easement (Right A right of way based upon its adverse use extending to the limits of tradition and memory. In contrast, a right of way by dedication exists by the consent, either expressed or implied, of the owner of the land crossed. If a claim to a right of way is based upon the fact that the owners of a certain ranch have "always" driven across a portion of another ranch, that may be the basis for a "prescriptive," right of way.

BLM 1980

A right acquired by an adverse user to use the land of another.

ASCE-ACSM 1993

Prima Facie Evidence

Latin. At first sight; on the first appearance; on the face of it; a fact presumed to be true unless disproved by some evidence to the contrary. Evidence good and sufficient on its face is prima facie evidence.

BLM 1980

Evidence deemed by law to be sufficient to establish a fact if the evidence is not disputed.

ASCE-ACSM 1993

Primary Limits

In railroad and wagon road grants, the strip of land lying within a specified distance on each side of, and adjacent to, the right of -way, within which (usually) every odd-numbered section was granted. Also the outside boundaries of this strip. The term "place limits" is sometimes used to indicate primary limits.

BLM 1980

Principal Meridian

A longitudinal basis for mapping grid systems. One group of commonly referenced principal meridians are part of the US PLSS, although such north-south trending lines as marked on the ground with monuments do not exactly follow a line of constant longitude. Wisconsin uses the 4th principal meridian extended.

Wisconsin State Cartographers Office 2000

The meridian extended from an initial point, upon which regular quarter quarter-section, section and township corners have been or are to be established. "A principal meridian is intended to conform to the true meridian, extending north or south or both directions, from the initial point as conditions require." (BLM 1973, paragraph 3-8.)

BLM 1980

"A principal meridian is intended to conform to the true meridian, extending north or south or both directions, from the initial point as conditions require."

BLM 1973

Private Land Claim

A claim to a tract of land which is based on the assertion that title thereto was granted to the claimant or his predecessors in interest by a foreign government before the territory in which it is situated was acquired by the United States; also, the land so claimed.

BLM 1980

Probate

The act or process of validating a will.
Harbin, Andrew L. 1998

Procedure Duplication Prevents entry of an existing point procedure for any point already in the present data set into the COGO procedure parameter form.
NILS Development Teams 2001

Projection

A system to portray all or part of the earth, which is an irregular sphere, on a planar, or flat surface.
Kansas Association of Mappers 1997

Mathematical method for representing the shape of the earth on a flat plane; a formula that converts latitude-longitude locations on the earth's spherical surface to X,Y locations on a maps flat surface.
URISA 2000

Property

Used commonly to denote everything which is the subject of ownership. It extends to every species of valuable right and interest, and includes real and personal property.
BLM 1980

Proportion

To equitably distribute systematic errors, between known points.
NILS Development Teams 2001

Proportionate Measurement

A proportionate measurement is one that applies an even distribution of a determined excess or deficiency of measurement, ascertained by retracement of an established line, so as to give concordant relation between all parts; that is, the new values given to each of the several parts, as determined by the measurement, shall bear the same relation to the record lengths as the new measurement of the whole line bears to that record. It should be noted that the rule is not ordinarily applicable in treating gross error or blunder, if the latter can be definitely segregated.
BLM 1980

Proration

Proportionate measurement, division, distribution or adjustment
BLM 1980

Protective Covenant

A contract between a subdivider and the purchaser of a lot, intended to assist the developer in marketing his lots and to assure the purchaser that the value of his property and the character of the neighborhood will be maintained, and that nuisances will not be created by other purchasers.
ASCE-ACSM 1993

Protest

A formal statement of objection, dissent, or disapproval in regard to some act about to be done or already performed, such as an objection to an application, entry, claim, etc.
BLM 1980

Protraction

The word means extension; prolongation. An example of its use would be the representation on paper of the fractional lots in the north and west tiers of sections within a township. These lines are not monumented on the ground. They are shown on the plat as a protraction (dashed line) indicating that they were not run in the field. The distances given are parenthetical until they are actually surveyed.
New Mexico Assessors 2001

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BLM 1980

Protraction Diagram

A diagram representing the plan for the extension of the rectangular system over unsurveyed public lands, based upon computed values for the corner positions. Only BLM approved protraction diagrams are official government records.
BLM 1973

Prudent Man Test

Also called 'prudent man rule.' In determining whether or not a mineral deposit is "valuable" under the meaning of the law, discovered deposits must be of such a character that a person of ordinary prudence would be justified in the expenditure of his labor and means, with a reasonable prospect of success, in developing a paying mine.
BLM 1980

Public Domain

In the USA, the territory ceded to the Federal Government by the original thirteen states, together with certain subsequent additions by cession, treaty, and purchase. At its greatest extent, the public domain contained over 1 820 000 000 acres and included the present States of Alaska, Alabama, Arizona, Arkansas, California, Colorado, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Utah, Washington, Wisconsin and Wyoming. It now contains about 677 800 000 acres (2 743 000 sq. km.), administered by Federal agencies.

ASCE-ACSM 1993

The term applied to any or all of those areas of land ceded to the Federal Government by the Original States and to such other lands as were later acquired by treaty, purchase or cession, and are disposed of only under the authority of Congress.

BLM 1980

Public Land Laws

The laws which have been passed by the Congress concerning the administration of the public lands and the resources thereon.

BLM 1980

Public Land Order

An order effecting, modifying or canceling a withdrawal or reservation. Such an order is issued by the Secretary of the Interior pursuant to powers of the President delegated to the Secretary by Executive Order No.9146 of April 24, 1943.

BLM 1980

Public Lands

(1) The term "public lands" means any land and interest in land owned by the United States within the several States and administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership, except: (a) lands located on the Outer Continental Shelf; and (b) lands held for the benefit of Indians, Aleuts, and Eskimos. Sec. 103(e)43 U.S.C. 1702. (2) Includes a) the remaining public domain of the United States, b) reservations, other than Indian reservations, created from the public domain, c) lands withdrawn, reserved or withheld from private appropriation and disposal under the public land laws, including the mining laws, d) outstanding interests of the United States in lands which have been patented or otherwise conveyed under the public land laws, e) National Forests, f) wildlife refuges and

ranges, and 9) the surface and subsurface resources of all such lands.

BLM 1980

Public Law 167

(July 23, 1955, 69 Stat. 357) Provides for multiple use of mining claims, and for a procedure where the Government may determine that it has the right to manage surface resources not required for mining purposes.

BLM 1980

Quantity Grant

A grant in connection with which the Congress specifies only the number of acres or the general type of public lands which are granted and which the grantee will secure by making selections from available public lands.

BLM 1980

Quarter Corner

A corner at an extremity of a boundary of a quarter section. Written as 1/4 section corner, not as one fourth section corner.

BLM 1980

A corner at the extremity of a boundary of a PLSS quarter-section, not including the section corner. Written as 1/4 not one fourth.

FGDC - Subcommittee on Cadastral Data 1999

Quarter Section

One-fourth of a section, containing 160 acres more or less.

New Mexico Assessors 2001

One-fourth of a section, containing 160 acres more or less. One of the aliquot parts of a section. Nominally it is a quadrangle measuring approximately 1/2 mile on each side and containing approximately 160 acres.

BLM 1980

Quasi

As if. Almost as if it were. Seen often in terms such as "quasi-legal" or "quasi-judicial."

BLM 1980

Quiet Title

Action of law to remove an adverse claim or cloud on title.

Harbin, Andrew L. 1998

In the legal proceeding called "action to quiet title," the word "quiet" means to pacify; to render secure or unassailable by the removal of unsettling causes or disputes. Under this proceeding, the plaintiffs title to land is established by

bringing into court an adverse claimant and there compelling him either to establish his claim or be forever after estopped from asserting it. See liability of any kind as to title conveyed or encumbrances.

BLM 1980

Quit Claim Deed

A form of conveyance whereby whatever interest the grantor possesses in the property described in the deed is conveyed to the grantee without warranty of title.

ASCE-ACSM 1993

A deed in the nature of a release containing words of conveyance as well as release. It conveys any interest the maker may have in the property described without any representations or liability of any kind as to title conveyed or encumbrances that may exist thereon. A patent from the Government is a quitclaim deed.

BLM 1980

Quit Claim Deed

A deed signed by grantor, whereby title to realty is transferred from one to another operating by way or release; that is, intended to pass any title, interest, or claim which the grantor may have in the premises, but not professing that such title is valid, nor containing any warranty or covenants for title. The federal government conveys land to others with quitclaim deed. Examples of quit claim deeds include: Government Land Patent - A deed issued by a government or state for the conveyance of some portion of the public domain. Marshall's Deed - A document giving ownership rights in property to a buyer at a Marshall's sale (i.e. a sale held by a Marshall to pay a court judgment against the owner of the property). Deed given at Marshall's sale in foreclosure of a mortgage. The giving of said deed begins a statutory redemption period. In some states or locales referred to as a "sheriff's deed." Reversionary Right Quitclaim Deed - A quitclaim deed providing that a future interest under which a grantor retains a present right in the property being conveyed.

FGDC - Subcommittee on Cadastral Data 1999

QV

An abbreviation of "quod vide," used to refer a reader to the word, chapter etc., the name of which it immediately follows. Quod vide means which see.

BLM 1980

Radius

The radius of a circular curve is the distance from either the point of tangency or the point of curvature, measured along

the perpendicular, to the curve center. The radius of a spiral is continually changing. Often abbreviated as R.

Gibson and Meyer 1980

Railroad Grant

Usually, title to railroad grant lands passed under patent conveyances. These grants were made to railroads to aid in their construction, and covered designated sections within specified grant limits. Prior to 1875, railroad right-of-way grants conveyed a hybrid type of interest in the public lands. Laws authorized each grant and set forth the limits of the grant and the lands granted. In determining these limits, and ascertaining the interests obtained under the various grants, legal advice may be required.

BLM 1980

Random and True

A survey method whereby a trial line is run to connect two monuments. With the data obtained while running the trial line, the true line is computed and rerun.

BLM 1980

Random Line

A trial line run from one monument toward the next monument so that the difference in latitude and departure between monuments may be determined and the true line may be computed. On the trial line, temporary intermediate corners are set. Offsets may then be computed from the temporary corners to the correct positions on the true line.

BLM 1980

Range

A north-south tier of townships or sections. A range of townships is described by its relationship to the principle meridian.

BLM 1980

Raster

Raster data takes an evenly spaced grid (like a piece of graph paper) and places a value in each square, or cell. Raster data is best suited for continuous data such as slope, rainfall, or the amount of light reflecting off the ground (as in a photograph). Aerial photographs and satellite images are examples of raster images used in mapping.

Kansas Association of Mappers 1997

A grid structure holding data or image values.

Wisconsin State Cartographers Office 2000

Images containing individual dots with color values, called cells (or pixels), arranged in a rectangular, evenly spaced

array. Aerial photographs and satellite images are examples of raster images used in mapping.	URISA	2000	Reclamation Homestead Entry	An entry initiated under the act of June 17, 1902 (32 Stat. 338; 43 U.S.C., sec. 43 et seq.), which provides for the issuance of patents to entrymen who settle upon and improve agricultural public lands, not exceeding 160 acres in size, within reclamation projects.	BLM	1980
Reach	A continuous unbroken portion of a river, particularly a straight stretch.		Reclamation States	The public-land States in which the Bureau of Reclamation is authorized to function, viz., Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, and Wyoming.		
	BLM	1980		BLM 1980		
Reading	Readings can be averaged and have factors applied to them to achieve a more usable value that we are calling Observations. Example: Four angle readings are averaged to obtain the observed angle. Example: A slope distance reading and vertical angle reading are automatically combined within the total station to derive an observed horizontal distance.		Record	1) The approved field notes and plat of a survey. 2) A value of area, bearing or distance from the approved field notes. 3) The act of recording a document as in a county. 4) All of the documents pertaining to title and boundaries including status, group files, county surveyor information as well as field notes and plats, when used as "to search the record."		
	NILS Development Teams	2001		BLM 1980		
	A value taken from an arbitrary scale (chronometer, theodolite circle, compass, chain, etc.), returned by a measuring device.			1) An assemblage of textural data within a DBMS table and/or drawn statement as a means of preserving knowledge. 2) Collected and preserved data describing a particular subject. 3) A row (series of field values) in a database table. In a spatial database, each graphic feature may be linked to one or more records in one or more tables. 4) A collection of fields or other sub-portion of computer file treated as a data unit.		
	NILS Development Teams	2001		Kansas Association of Mappers 1997		
	A measurement device's direct output of observations (i.e. circle readings, distance, etc.). This can vary depending on the type of measuring device.		Recording	The main object of the registration or recording of deeds is to give constructive notice of such conveyance to purchasers and creditors. A deed may be valid between the grantor and grantee but will fail to give constructive notice to others if not so registered or recorded.		
	NILS Development Teams	2001		BLM 1980		
Real Estate	An ownership interest in real property. In common usage it has come to mean the property itself.		Real Property	Land and generally whatever is erected upon, growing on or affixed to the land.		
	BLM	1980		BLM 1980		
Real Time Kinematic	1. A method for implementing a survey using GPS.		Real-Time Kinematic	1. A method for implementing a survey using GPS.		
	NILS Development Teams	2001		NILS Development Teams 2001		
Recession of Water	A legal expression that is applied to the gradual, natural and more or less permanent lowering of the surface elevation of a lake, or its complete disappearance, when referred to what at one time had been regarded as the normal (as at the date of an established survey).		Recession of Water	A legal expression that is applied to the gradual, natural and more or less permanent lowering of the surface elevation of a lake, or its complete disappearance, when referred to what at one time had been regarded as the normal (as at the date of an established survey).		
	BLM	1980		BLM 1980		
				To enter in a book in the Register of Deeds Office the information from a conveyance or instrument affecting title to land. Depending on the legal requirement, the instrument may be returned to the person who presented it to the Register. Recording establishes a public record that the instrument did exist. It establishes: the real estates involved; the parties involved; the nature of the transaction as it will affect rights in real estate.		
				Wisconsin Register of Deeds Association 1995		

Rectangular System of A system inaugurated by the Continental Congress on May 20, 1785, for the survey of the public lands of the United States. Its distinguishing characteristic is that in the main, and in all cases where practicable, its units are in rectangular form.

BLM 1980

A reference scheme for recording property ownership by section, township, range, and aliquot parts (half or quarter sections) in the United States. The PLSS was laid out during the settlement of the country, dividing land areas into townships of 36 one-square mile sections.

Kansas Association of Mappers 1997

Inaugurated by the Northwest Ordinance of 1785, and designed to facilitate the transfer of federal lands to private citizens, this system is the basis for the rectangular grid of 6x6 mile townships, subdivided down to 1/4 sections (each nominally 160 acres) over most of Wisconsin.

Wisconsin State Cartographers Office 2000

Rectification

A set of techniques for removing data errors through calculation or adjustment. In image processing, computer programs that remove distortion within a digital image, aerial photography or remotely sensed data by removing parallax errors due to relief (high ground being closer to the camera than low lying areas), camera tilt, corner and other distortions.

URISA 2000

Reef

A chain or range of rock or coral, elevated above the surrounding bottom of the sea, generally submerged and dangerous to surface navigation. A barrier reef roughly parallels the land but is some distance offshore, with deeper water intervening.

BLM 1980

Reference Features

Features used entirely, or in part, to define other features.

NILS Development Teams 2001

Reference Monument

“A reference monument is an accessory and is employed in situations where the site of a corner is such that a regular permanent monument cannot be established or where the monument would be liable to destruction, and bearing trees or a nearby bearing object are not available.” (BLM 1973, paragraph 4-16.)

BLM 1980

“A reference monument is an accessory and is employed in situations where the site of a corner is such that a regular permanent monument cannot be established or where the monument would be liable to destruction, and bearing trees or a nearby bearing object are not available.” (BLM 1973, paragraph 4-16.)

FGDC - Subcommittee on Cadastral Data 1999

Regimen

The condition of a stream and its channel with respect to stability. A river or canal is “in regimen” if its channel has reached a stable form as a result of its flow characteristics.

BLM 1980

Register

An official in the General Land Office who was in charge of a land office subordinate to that agency. The reference to “register” was changed to “officer designated by the Secretary of the Interior” under the 1946 reorganization plan which created the Bureau of Land Management.

BLM 1980

Regress

The right to return to land.

BLM 1980

Reliability Parameter Form

A data entry tool accessible prior to successive least square adjustment sessions that allows the user to set or adjust the reliability values, such as (1) to toggle on/off function to calculate reliability values, and (2) to set a buffer distance around the selected set of measurement features to limit the actual set of measurement features to be used when generating reliability values.

NILS Development Teams 2001

Reliability Values

Data describing the ellipse surrounding an adjusted point's coordinates that represent a statistical chance that the true coordinate values will be within the ellipse. Ninety-five percent chance is a usable measure.

NILS Development Teams 2001

Reliction

The gradual and imperceptible recession of the water resulting in an uncovering of land once submerged. Also known as dereliction.

BLM 1980

Relocation

The legal appropriation of a claim previously staked and held by either the re-locator or by another. The term implies that there was a former mining location which once had legal significance but has become open to forfeiture by abandonment, laches or the like. The burden of proof is on the re-locator.

BLM 1980

Remonumentation

The construction of a corner monument (iron post, rock cap or concrete monument) at the position of an original monument as determined from proper measurement from its original accessories. New accessories may be added if required.

BLM 1980

Remote Sensing

Using a recording device not in physical contact with the surface being analyzed including: 1) Using sensors sensitive to various bands of the electromagnetic spectrum. 2) Assessing its spectral image without having the sensor in direct contact with the surface. 3) Interpreting environmental conditions at, below and above the surface of the earth, typically by processing images from an aircraft (i.e. aerial photography), satellite imaging (i.e. LANDSAT), or radar.

Kansas Association of Mappers 1997

The process of obtaining information about land, water, or an object, without any physical contact between the instrument doing the sensing and the subject. Remote sensing most often refers to collecting data using instruments aboard aircraft or satellites.

URISA 2000

Representative Corner

A measured feature, which has been chosen to be the corner position over other measured features in the immediate vicinity.(e.g. multiple, theoretical, porcupine)

NILS Development Teams 2001

Res Judicata

A matter settled by judgment. The rule of “res judicata” is that a matter once judicially decided is finally decided. The plea of “res judicata” is an “estoppel” against the losing party from again litigating matters involved in previous action, but does not have that effect in matters which occurred later and which were not at issue in the prior action.

BLM 1980

Research Results

Map and tabular view of items that match the search parameters of the Research Scope and access permission level in the GC-01 Conduct Search process.

NILS Development Teams 2001

Research Scope

Data to be investigated for a given project defined by area of interest and source criteria. May include digital records and hardcopy records during a defined epoch. The sum total of the selected search parameters or the query including spatial extent.

NILS Development Teams 2001

Reservation

A withdrawal, usually of a permanent nature also, any Federal lands which have been dedicated to a specified public purpose.

BLM 1980

Residual Error

They [residuals] are similar to errors, but errors are obtained by subtracting the true value, rather than the best possible value, from the measurements.

Francis H Moffitt and Harry Bouchard 1975

1) The total error of closure of a traverse. 2) In mathematics, the difference between an observed value of a series and its corresponding adjusted value. 3) Any remaining error after all adjustments are made.

BLM 1980

The difference between any measured quantity and the most probable value for that quantity. It is the value which is dealt with in adjustment computations, since errors are indeterminate. The term ‘error’ is frequently used when ‘residual’ is in fact meant, and although they are very similar, there is a theoretical distinction.

Wolf, Paul R 1974

The difference between any value of a quantity in a series of observations, corrected for known systematic errors, and the value of the quantity obtained from the mean or other adjustment of that series.

ACSM 1978

Residual Tolerance

A mathematical term indicating the allowable variation from a standard or from specified conditions.

ACSM 1978

A small distance (such as 0.01 feet) under which further refinement through network adjustment would not result in any meaningful positional refinement.

NILS Development Teams 2001

Resolution

Fineness of detail that can be distinguished in an image as on a video display terminal.

URISA 2000

Restoration

1) The purpose of a resurvey; the recovery of one or more lines or corner positions, or both, of a prior approved survey; or the replacement of one or more lost corners or obliterated monuments by approved methods, including the substantial renewal of one or more monuments, as required for the purpose of a survey. 2) A revocation of a withdrawal which also effects the opening of the public lands in the withdrawal. Also, an action which returns ceded Indian lands to tribal ownership.

BLM 1980

Restrictions

Removal, for a specified period, subject to valid existing rights, of public lands from the operation of one or more of the public land laws, including the mining laws. Restrictions are administrative, judicial, or other limitations or permissions for the use and enjoyment of land by the land right holder. These are not transferred rights, although succeeding owners may agree to the same restriction on a Parcel. Not all restrictions are the result of a segregation. For example local governments often manage restrictions through zoning ordinances.

NILS Development Teams 2001

Restrictive Covenant

An agreement creating an obligation contained in a deed, forbidding the commission of some act.

NILS Development Teams 2001

A private agreement restricting the use and occupancy of real estate which is a part of the conveyance and is binding on all subsequent purchasers. Such covenants may deal with control of the size, set-back and/or placement of buildings, architecture or cost of improvements.

ASCE-ACSM 1993

Resurvey

The government provides for resurveys of sectionalized lands. Resurveys are of two types, dependent and independent.

Buckner, R.B. 1991

A term applied to the reestablishment or restoration of land boundaries and subdivisions by the rerunning and remarking of the lines that were represented in the field note record and on the plat of the previous official survey.

New Mexico Assessors 2001

A term applied to the reestablishment or restoration of land boundaries and subdivisions by the rerunning and remarking of the lines that were represented in the field note record and on the plat of the previous official survey. This includes, as in the original survey, a field note record of the retracement data, observations, measurements and monuments descriptive of the work performed, and a plat that represents such resurvey, all subject to the approval of the directing authority. The above definition is intended or implied unless modified as in an Independent Resurvey or in some other appropriate manner. The adjective "dependent" applied to the term "resurvey" is for emphasis, and specifically to suggest the recovery and restoration of the prior official survey.

BLM 1980

Retracement Survey

A survey made to ascertain the direction and length of lines and to identify monuments and other marks of an established prior survey.... Recovered corners are rehabilitated but lost corners are not restored and lines through timber are not reblazed.

BLM 1973

A survey made to ascertain the direction and length of lines and to identify monuments and other marks of an established prior survey. Recovered corners are rehabilitated, but lost corners are not restored and lines through timber are not reblazed (BLM, 1973, paragraph 6-7).

BLM 1980

A retracement survey is a survey made for the purpose of reestablishing the evidence of an original survey. Technically there can be no retracement surveys of tracts of land unless there was an original survey. Often the term resurvey is used to mean the same thing as retracement but resurvey has connotations of a new survey superimposed over the original survey, perhaps setting corners as the surveyor feels they should have been set rather than as they were.

Buckner, R.B. 1991

Returns

Official reports. BLM Cadastral Survey use. In cadastral survey parlance, the "returns" are the field notes, report and approved plat of a survey.

BLM 1980

Reversion Clause

A clause in an order of withdrawal providing that the lands shall revert to their former status after they have served the purpose for which they are withdrawn; also, a clause in a patent providing that title to the lands shall revert to the United States upon failure of the patentee to use the lands for the purposes stated in the patent.

BLM 1980

Revocation

Generally, an action which cancels a previous official act; specifically, an action which cancels a withdrawal.

BLM 1980

Right

A Right is a benefit or enjoyment in real property that can be conveyed, passed, or otherwise allocated to another for economic remuneration.

Brown, Curtis M 1969

A capacity residing in one man of controlling, with the assent and assistance of the State, the actions of others.

Burke, J. 1976

An interest recognized and protected by the law, respect for which is a duty, and disregard of which is a wrong.

Burke, J. 1976

Right Ascension

The angle between the plane of the hour circle passing through a celestial body and the plane of the hour circle passing through the vernal equinox. It is measured eastward from the vernal equinox through 24 hours (1 angular hour equals 15°) or 360°. It may also be defined as the angle, at the celestial pole, between the tangents to the hour circles of the celestial body and of the vernal equinox. Right ascension and declination form a pair of coordinates that conveniently specify the location (direction) of a body on the celestial sphere. It is conventionally represented by "a".

ASCE-ACSM 1993

Right of Way

The legal right to cross the lands of another. Also used to indicate the strip of land for a road, railroad or power line. In BLM, a permit or an easement which authorizes the use of public lands for certain specified purposes, commonly for pipe lines, roads, telephone lines or power lines. Also the lands covered by such an easement or permit.

New Mexico Assessors 2001

Any strip or area of land, including surface, overhead, or underground, granted by deed or easement, for construction

and maintenance according to designated use, such as for drainage and irrigation canals and ditches; electric power, telegraph, and telephone lines; gas, oil, water, and other pipelines; highways, railroads, and other roads, including right of portage; sewers; flowage or impoundment of surface water; and tunnels.

ACSM 1978

The legal right to cross the lands of another. Also used to indicate the strip of land for a road, railroad or power line. In BLM, a permit or an easement which authorizes the use of public lands for certain specified purposes, commonly for pipe lines, roads, telephone lines or power lines. Also, the lands covered by such an easement or permit.

BLM 1980

Right of Way Survey

The plat and field note record of the observations, measurements and monuments descriptive of a right-of-way. Right-of-way is the legal right to cross the lands of another. Also, used to indicate the strip of land for a road, railroad, power line, or easement.

NILS Development Teams 2001

Riparian

From the Latin "ripa" meaning river bank.

BLM 1980

Riparian Boundaries

Water boundaries, or boundaries formed by a river, lake or the sea. The general rule is that riparian boundaries shift with changes due to accretion or erosion but retain their original location if brought about by avulsion or by artificial causes.

BLM 1980

Riparian Lands

In strict interpretation, lands bordering on a river. The term "riparian" is also used as relating to the shore of the sea or other tidal water, or of a lake or other considerable body of water not having the character of a watercourse.

BLM 1980

Riparian Law

The branch of the law which deals with the rights in land bordering on a river, lake or sea.

BLM 1980

Riparian Owner

One who owns land having a boundary defined by a water course. Usage has broadened the term to include land along the sea or other tidal water, or along the shore of a lake or other considerable body of water. Strictly speaking, the

correct term for lands bordering the sea, or other tidal water, is "littoral."

BLM 1980

Riparian Rights of Entry

An owner of contiguous land may be permitted to make such an entry of public lands when, due to erroneous meandering of a river, lake, or other body of water, public lands are shown on the original survey plat as water-covered areas.

BLM 1980

Robustness

This is a method of using least squares as a filtering mechanism for detection of blunders. Robustness averages the absolute value of a measurement's residual with its error estimate, and that average becomes the new error estimate in a readjustment. The measurements with large residuals get reassigned larger error estimates, and vice-versa. This enables the adjustment to be filtered to the suspect measurement. The success of robustness in blunder detection is a function of the size of the blunder, number of blunders, and the geometry and redundancy of the traverse network.

NILS Development Teams 2001

Rod

One rod equals 16.5 feet or 25 links. Also termed "perch" or "pole" in older surveys.

BLM 1980

A unit of length in the English system legally equal to 5 1/2 yards, 198 inches, or 25 links. It is equivalent to 5.0292 meters. It was established as a unit of length by the 1303 ordinance of Edward I, as equal exactly to 5 1/2 ulnae (the una was the length of a standard iron bar which was the prototype of the yard). Also called a perch or a pole. Rods were commonly used as length of units in deeds written in the time of the 13 American colonies to describe boundaries of parcels of land. The public-land surveyor, in the early 1800's was required to use two pole or two rod chains in surveying.

NOAA 1986

Rood

A square measure equal to 1/4 acre or 40 square rods. The term rood was sometimes used also for a linear measure varying locally from 5 1/2 yards to 8 yards.

BLM 1980

A square measure equal to 1/4 acre or 40 sq. rods. The term rood is sometimes used also for a linear measure varying locally from 5 π yd. to 8 yd.

New Mexico Assessors 2001

Rule of Approximation

A purely administrative expedient intended to equitably decide whether an entryman could obtain patent to more than the area provided by the Preemption and Homestead laws, still maintaining the contiguity of tract entered. Where the excess is less than the deficiency would be if the smallest legal subdivision is excluded from the entry then it is allowed to stand. (See 8 LD 205). Thus, if an entryman selects surveyed lands in excess of the statutory amount, say 175 acres, the Rule would allow him to pay for and receive the excess fifteen acres under certain conditions. The principle condition is that the excess cannot exceed the deficiency which would occur if the smallest legal subdivision were disallowed. The Rule would not be applied if the entry an had made substantial improvements to the tract disallowed and the differences were small (27 LD 78). The final selection was required to be one continuous tract after application of the Rule. If, in the sample, the selection included aliquot parts containing 40, 40.50, 65 and 29.50 acre lots totaling 175 acres, the 29.50 acre lot would be disallowed because $40 + 40.50 + 65 = 145.50$ which is deficient by only 14.5 acres whereas the excess was 15 acres. The Rule does not apply to the mining laws except placer claims filed by legal subdivisions of 10 acres, (34 ID 9). It does not apply to claims in unsurveyed areas, (28 ID 149). See 43 CFR 2731.6-1 concerning acreage limitations and the application of the rule of approximation in the matter of small tracts.

BLM 1980

Salt Marsh

In area of low lying, wet ground containing a high proportion of salt or alkali; generally in arid regions.

BLM 1980

Scale

The relationship between distance on a map and the corresponding distance on the earth's surface. Map scale is often recorded as a representative fraction such as 1:1,000,000 (1 unit on the map represents a million units on the earth's surface) or 1:24,000 (1 unit on the map represents 24,000 units on the earth's surface). The terms "large" and "small" refer to the relative magnitude of the representative fraction. Since 1/1,000,000 is a smaller fraction than 1/24,000, the former is said to be a smaller scale. Small scales are often used to map large areas because each map unit covers a larger earth distance. Large-scale maps are employed for detailed maps of smaller areas.

Kansas Association of Mappers 1997

Relationship between the dimensions of a feature on a map and the geographic features they represent on the earth,

<p>commonly expressed as a fraction. For example map scale of 1:24000 means that one unit of measure on the map equals 24000 of the same unit on the earth (1 inch would equal 24000 inches = 2000 feet). 2) A calibrated line, as on a map or an architectural plan, indicating such a proportion.</p> <p>URISA 2000</p>	<p>Scrip A certificate which allows the owner to make a selection of a specified number of acres out of available public lands. BLM 1980</p>
<p>Scale An instrument consisting of a strip (as of wood, plastic or metal) with one or more sets of spaces graduated and numbered on its surface for measuring or laying off distances or dimensions. New Mexico Assessors 2001</p> <p>The proportion or ratio between a map measurement and the corresponding measurement in the real world. Map scale is usually expressed as a ratio, such as 1:24,000, which means that a measurement of one unit on the map represents 24,000 units in the real world. Kansas Association of Mappers 1997</p>	<p>Sea Level (1) An equipotential surface passing through a specified point whose elevation above mean sea level is known and which is used as a referent for elevations. (2) A surface passing through mean sea level at certain specified points and through other specified points whose elevations are known, and to which vertical distances determined by leveling are referred. ASCE-ACSM 1993</p>
<p>Scale Factor In the State Plane Coordinate systems scale factors are applied to geodetic lengths to obtain grid lengths. BLM 1980</p>	<p>Section A PLSS section is a nominally one mile by one mile area of land bounded by section lines running east-west and north-south. A fractional section may be bounded by an irregular survey line, a grant boundary, an Indian reservation or other line which causes the configuration of the section to deviate significantly from the nominal dimensions. (BLM 1973, paragraphs 3-17 through 3-46.) BLM 1980</p>
<p>School Land Patent A patent which is issued to a State to give it additional evidence of title to a school section since title to school sections ordinarily passes to a State merely upon filing of the accepted survey of the lands. BLM 1980</p>	<p>The unit of subdivision of a township with boundaries conforming to the rectangular system of surveys, nominally one mile square, containing 640 acres. New Mexico Assessors 2001</p>
<p>School Lands Sometimes referred to as 'school sections' they are the lands included in a grant in place, or a grant in praesenti, to a State in support of common schools. Under the Ordinance of May 20, 1785, section 16 (called Lot 16 in the Ordinance) in each township was set aside for the maintenance of public schools. In 1850 this was changed to sections 16 and 36. In Arizona, New Mexico and Utah, sections 2, 16, 32 and 36 were granted. BLM 1980</p>	<p>Section Corner A corner at the extremity of a section boundary. New Mexico Assessors 2001</p> <p>A corner at the extremity of a section boundary. BLM 1980</p> <p>A corner at the extremity of a PLSS section boundary. FGDC - Subcommittee on Cadastral Data 1999</p>
<p>Scree Slope A steep slope formed of rocky material with a marked tendency to creep or slide. BLM 1980</p>	<p>Segregation Survey Defined by running survey lines on the ground which separate appropriated lands from public lands. BLM 1980</p>
<p>Scribe A hand tool used by surveyors to inscribe the prescribed markings on bearing trees. BLM 1980</p>	<p>Segregations Removal, for a specified period, subject to valid existing rights, of public lands from the operation of one or more of the public land laws, including the mining laws. Restrictions are administrative, judicial, or other limitations or permissions for the use and enjoyment of land by the land right holder. These are not transferred rights, although</p>

succeeding owners may agree to the same restriction on a Parcel. Not all restrictions are the result of a segregation. For example local governments often manage restrictions through zoning ordinances.

NILS Development Teams 2001

Selection

In general, an application to acquire title to public lands which is submitted by an applicant who acquired the right to apply for such lands by receipt of a grant, by surrender of his own lands in an exchange, by relinquishment of his rights to other lands (lieu selection), by surrender of scrip or by similar means.

BLM 1980

Semi-Diurnal Tides

Tides that occur with two high tides and two low tides per day. Atlantic Coast.

Harbin, Andrew L. 1998

Semimajor Axis

The line from the center of an ellipse to the extremity of the longest diameter. I.e., one of the two longest lines from the center to the ellipse. The term is also used to mean the length of the line.

ASCE-ACSM 1993

Semiminor Axis

The shortest line that can be drawn thru the center and from one side to the other of an ellipse or ellipsoid. The line from the center of an ellipse to the extremity of the shortest diameter. i.e., one of the two shortest lines from the center to the ellipse. The term is also used to mean the length of the line.

ASCE-ACSM 1993

Senior Corner

A point established and monumented by an approved prior survey.

BLM 1980

Senior Line

Survey lines created at different times have different standings. The "senior" line would be the line which was surveyed and approved first.

BLM 1980

Senior Rights

The rights which take precedence. The first patent issued usually takes precedence in a situation where a later survey is in conflict with an earlier survey. The first patent issued

usually has the superior (senior) right or title regardless of the dates of the surveys.

BLM 1980

Senior Survey

The oldest of two or more surveys which fixed the position of the line and is controlling unless officially superseded by a subsequent survey.

BLM 1980

Sequence Conveyance

Sequence conveyances are those written deeds in which junior and senior rights exist between adjoining parcels. In general sequential conveyances come into being because of a lapse of time between successive conveyance instruments. Another way these arise is from the sequential partition of large land holdings into separate parts.

Brown, Curtis M 1969

Shoreline

The intersection of a specified plane of water with the shore or beach (e.g., the high water shore line would be the intersection of the plane of mean high water with the shore or beach). The line delineating the shore line on U.S. Coast and Geodetic Survey nautical charts and surveys approximates the mean high water line. The terms "shoreline" and "coast line" are frequently used as being synonymous. When "shore line" is used the user should specify what is meant, e. g., mean high water shore line, mean low water shore line, etc.

BLM 1980

Simultaneous Conveyance

When several parcels of land are created at the same moment of time, such as lots in a subdivision, several parcels in a will, or sections in a Township, all parcels have the same legal standing. They were all created at the same moment. Discrepancies in measurements are adjusted evenly and proportionately throughout a simultaneous conveyance.

Brown, Curtis M 1969

Single Proportional A method of proportioning measurement in the restoration of a lost corner whose position is determined with reference to alignment in one direction. Examples of such corners are quarter-section corners on the line between two section corners, all corners on standard parallels, and all intermediate positions on any township boundary line. The ordinary field problem consists of distributing the excess or deficiency between two existent corners in such a way that the amount given to each interval shall bear the same proportion to the whole difference as the record length of the interval bears to the whole distance.

After having applied the proportionate difference to the record length of each interval, the sum of the several parts will equal the new measurement of the whole distance.

BLM 1980

Site Survey

This is a series of observations and measurements conducted at a construction site to determine the requirements for buildings, roads, and cut and fill.

NILS Development Teams 2001

Sketch

A draft or interim version of a parcel that is used as the basis for creating a new parcel and/or to verify the geometry, attributes and validity of a given parcel legal description.

NILS Development Teams 2001

Small Holding Claim

A small holding claim entry is an entry in connection with which the entry man and his or her predecessors of interest maintained continuous, adverse, actual, bona fide possession of public lands for at least 20 years prior to cadastral survey of the lands involved. Acts of March 3, 1891 and June 15, 1922 as amended.

FGDC - Subcommittee on Cadastral Data 1999

An entry in connection with which the entryman and his predecessors-in-interest maintained continuous, adverse, actual, bona fide possession of public lands in the Southwest for at least 20 years prior to cadastral survey of the lands involved (acts of March 3, 1891, 26 Stat. 861; and June 15, 1922, 42 Stat.650).

BLM 1980

An entry in connection with which the entry man and his predecessors-in-interest maintained continuous, adverse, actual, bona fide possession of public lands in the Southwest for at least 20 years prior to cadastral survey of the lands involved (Acts of March 3, 1891, 26 Stat. 861; and June 15,1922 Stat. 650).

New Mexico Assessors 2001

Small Tract

A parcel of public lands of 5 acres or less which has been found chiefly valuable for sale or lease as a home, recreation, business, or community site under the act of June 1, 1938 (52 Stat. 609; 43 U.S.C.682 a-c), as amended.

BLM 1980

Small Tract Act Survey

A parcel of land surveyed under BLM authority and defined by the small tracts acts, Public Law 97-465, January 12, 1983. It applies to parcels within the National Forest System which may be sold, exchanged, or interchanged. The acreage of the parcels may be: (1) 40 acres or less when interspersed with adjacent lands not in federal ownership, (2) 10 acres or less when encroached upon by color of title improvements, or (3) Rights of way, reserved or acquired, which are no longer needed by the federal government and are surrounded by lands not owned by the federal government.

FGDC - Subcommittee on Cadastral Data 1999

Small Tract Survey

A small tract is a parcel of the public lands of 5 acres or less which has been found chiefly valuable for lease as a home, recreation, business or a community site under the act of June 1, 1938. Does not include Small Tract Act survey, code 21.

FGDC - Subcommittee on Cadastral Data 1999

Smallest Legal Subdivision

A quarter-quarter section or one lot.

BLM 1980

Spatial Extent

Location on the ground (footprint). Includes any method for describing a point or area. Examples include latitude/longitude, PLSS, minimum bounding rectangle, and boundaries (admin, other).

NILS Development Teams 2001

Spatial Reference

Projection(s), coordinate system(s), datum used. Listed in Data Catalog.

NILS Development Teams 2001

Special Assessment

A special assessment is in the nature of a tax levied upon property according to benefits conferred on the property.

Black, Henry Campbell 1991

Special Instructions

Special instructions are a permanent record of the survey, showing that the survey was properly authorized. The immediate purpose is to outline the extent of the field work and the method and order of procedure.

BLM 1995

The written statement containing the detailed specifications for every cadastral survey assignment. The special instructions include the basic information necessary for accomplishing the field work and are an important part of the record relating to the survey. Special instructions are usually prepared by the officer in administrative charge of the work. They are usually written in the third person and, together with the Manual and supportive data, contain the necessary specifications and information for the execution of the survey.

BLM 1980

Special Meander Corner

A corner established at: 1) the intersection of a surveyed subdivision of section line and a meander line of a body of water or an island; 2) the intersection of a computed center line of a section and a meander line of an island over 50 acres in area which is located entirely within a section. (BLM 1973, paragraphs 121 and 122.)

FGDC - Subcommittee on Cadastral Data 1999

A corner established at: 1) the intersection of a surveyed subdivision of section line and a meander line of a body of water or an island; 2) the intersection of a computed center line of a section and a meander line of an island over 50 acres in area which is located entirely within a section. (BLM 1973, paragraphs 121 and 122.)

BLM 1980

Special Purpose Monument

Special purpose monuments are set or designated when other designations are not available. These are decided case-by-case and application-by-application. Currently there are two special purpose monuments recognized by BLM and both are in Colorado (Williams, 1990).

BLM 1995

Special purpose monuments are set or designated when other designations are not available. These are decided case-by-case and application-by-application. Currently there are two special purpose monuments recognized by BLM and both are in Colorado (Williams, 1990).

BLM 1980

Special Survey

A cadastral survey that involves unusual application of, or departure from, the rectangular system. They often carry out the provisions of a special legislative act and include such work as small tract surveys; townsite survey; island and omitted land surveys; homestead, homesite, trade and

manufacturing site surveys; also the survey and resurvey of portions of sections.

BLM 1980

Spherical Aberration

The focusing of rays from a point source on the optical axis into points whose distance from the focal plane varies as the angle at which the rays entered the optical system, with rays entering at a small angle to the optical axis focusing closer to the focal plane than rays entering at a larger angle. The envelope of the converging rays is called the caustic of the optical system. The amount of spherical aberration varies with the location of the source and for any particular source is approximately proportional to the square of the distance of the outermost rays from the optical axis.

ASCE-ACSM 1993

Spheriod

In general, any figure differing but little from a sphere. In geodesy, a mathematical figure closely approaching the geoid in form and size.

BLM 1980

Spiral Curve

A curve that winds around a center or central point which gradually recedes from or approaches it. As opposed to a circular curve, a spiral curve has no fixed radius as it recedes or approaches the central point.

New Mexico Assessors 2001

A curve with a constantly changing radius. Used for a smooth transition from straight line to a circular curve.

NILS Development Teams 2001

Spring Tide

A tide of increased range that occurs semi-monthly when the Moon the Earth and the Sun are aligned in right ascension.

NOAA 1986

Squatters Rights

An asserted right to occupy public lands by virtue of occupancy.

BLM 1980

Standard Corner

A senior corner on a standard parallel or base line.

BLM 1980

A corner on a standard parallel or base line.

NOAA 1986

Standard Error of Unit Weight

A number that evaluates all residuals and corresponding error estimates. It is the square root of the sum of the squares of all the residuals divided by the sum of the error estimates which, in turn, is divided by the degrees of freedom.

NILS Development Teams 2001

Standard Parallel

“Standard parallels, which in earlier years were also called correction lines, are extended east and west from the principal meridian, at intervals of 24 miles north and south of the base line, in a manner prescribed for the survey of the base line.”

BLM 1973

Also called iacorrection line.” A line extended east or west from the principal meridian, usually at intervals of 24 miles north and south of the base line, along a parallel of latitude. Standard parallels are established to correct for the convergence of range lines and to maintain a workable adherence to the requirement that each township be 6 miles square.

New Mexico Assessors 2001

Stare Decisis

To abide by, or adhere to, decided cases. It is under the policy of “stare decisis” that courts stand by precedent and do not disturb a settled point. It is the doctrine which states that when the court has once laid down a principle of law as applicable to a certain state of facts, it will adhere to that principle and apply it to all future cases where facts are substantially the same.

BLM 1980

State

“This element provides names, abbreviations and codes representing the 50 states and the District of Columbia, and the outlying areas, all of which are to be considered ‘first order subdivisions’ of the United States”

Federal Information Processing Standards

State Boundaries

A boundary between two States of the United States may be changed by agreement of the State legislatures, but this agreement must be approved by Congress. The United States Congress cannot change a State boundary without the consent of the State, nor can two States by mutual agreement change their common boundary without the consent of Congress. The consent of Congress to change a boundary need not be granted by a special act but may be inferred from subsequent legislation. Several times Congress has given its consent in advance for adjoining States to fix an indefinite

water boundary between them. A boundary between a State and a territory is fixed by joint action of Congress and the State. Boundaries between territories are fixed by congressional action alone. Disputes between States regarding boundaries must be settled by the United States Supreme Court, whose decisions are final. It is a well established principle, recognized by the courts and by Congress, that a State or national boundary line as marked on the ground and accepted by the parties interested is the legal boundary for all purposes whether or not it is the place designated by statute. Nearly all boundaries of States west of the Mississippi, as well as those of many central and southern States, were surveyed under the direction of the General Land Office. Notes of all such surveys, and plats for most of them, are now on file in the Bureau of Land Management, Dept. of Interior, or in the Cartographic Records Div., National Archives and Records Service, Washington, D.C.

BLM 1980

State Plane Coordinate The plane rectangular coordinate systems established by the U.S. Coast and Geodetic Survey, one for each State in the Union, used for defining positions of geodetic stations in terms of plane-rectangular (x and y) coordinates. The two principal systems in use in the United States are the Lambert Conformal Conic map projection and the Transverse Mercator map projection.

BLM 1980

The plane-rectangular coordinate systems, established by the United States Coast and Geodetic Survey, one or more for each state in the United States, is used for defining positions in terms of plane-rectangular (x and y) coordinates. Also called State Plane Coordinate Systems.

New Mexico Assessors 2001

System of X,Y coordinates defined by the USGS for each state. Locations are based on the distance from an origin point defined for each state.

URISA 2000

Station

A point shown on Highway Right-of-Way maps indicating, in feet, a particular position along the R/W centerline and usually abbreviated “Sta.”. Example Sta. 60 + 64.7 which indicates a station located 6,064.7 feet along the R/W centerline from where a particular highway construction project began.

New Mexico Assessors 2001

A definite point on the earth whose location has been determined by surveying methods. It may or may not be marked on the ground. A station usually is defined by the addition of a term which describes its origin or purpose.

ACSM 1978

A definite point on the earth whose location has been determined by surveying methods. It may or may not be marked on the ground. A station usually is defined by the addition of a term which describes its origin or purpose. Usually marked on the ground by a monument of special construction, or by a natural or artificial structure. INSTRUMENT STATION - A station at which a surveying instrument is set up for making measurements.

ACSM 1978

Stick

A measurement term used in some field notes and deeds in the early 1800's, a stick is 1/2 chain or 2 poles (rods). It is the point where, in the use under Tiffin's 1815 instructions of "a two poles chain of 50 links," a chain man called out "stick" to be replied with "stuck."

BLM 1980

Stone Bound

A substantial stone post set into the ground with its top end approximately flush with the ground surface. Used to mark accurately and permanently the important corners of a land survey.

BLM 1980

Strength of Figure

The comparative precision of computed lengths in a triangulation network as determined by the size of the angles, the number of conditions to be satisfied, and the distribution of base lines and points of fixed location. Strength of Figure in triangulation is not based on an absolute scale but rather is an expression of relative precision. The strength of figure number is really a measure of a network's weakness, since it increases in size as the strength decreases. The strength of figure N_f derived from that part of the formula for probable error of a triangle's side which is independent of the accuracy of the observations is given by: $N_f = ((N_d - N_c) / N_d)$ (sum of $(S_a^2 + S_a S_b + S_b^2)$ where N_d and N_c are the numbers of directions observed and of conditions to be satisfied respectively and S_a and S_b are the rates of change of the sine of the distance angles A and B . Note the 2 in the equation is a squared value.

NOAA 1986

Sub Surface Estate

As opposed to surface estate. Includes more rights than mineral estate. Term originated by Congress in ANCSA, and is continually being defined by the courts, ruling that sand and gravel are included in the subsurface rights.

NILS Development Teams 2001

Subdivision

(statutory definition) Division of a piece of land for sale or building development where five or more pieces of land of one and one half (1 1/2) acres each or less are created all at once or in several actions within a period of five (5) years. A municipality may establish a more restrictive definition and require platting.

Wisconsin Register of Deeds Association 1995

In the private practice of land survey, subdivision is the division of an area into lots, streets, rights-of-way, easements and accessories, usually according to State law and local regulations.

New Mexico Assessors 2001

Subdivision of Section Corner

The BLM 1973 Manual distinguishes between one sixteenth section subdivision corners and minor subdivision corners, which are 1/64 and smaller subdivision corners. This difference is recognized, but for the purposes of definition a subdivision corner is any corner which defines a one sixteenth or smaller division of a section and is not a section, quarter-section, or center quarter-section corner. In some cases, subdivision corners may be corners of government lots, however, all corners of government lots may or may not be section subdivision corners.

FGDC - Subcommittee on Cadastral Data 1999

Subdivision of Sections

Subdivision of a section into half sections, quarter-sections, sixteenth-sections, or sixty-fourth-sections, or into lots, according to the Manual of Surveying Instructions.

New Mexico Assessors 2001

The division of sections into smaller areas using standard rules as prescribed in the BLM Manual of Surveying Instructions, 1973 edition.

NILS Development Teams 2001

Subdivision Rule

See legal description. The available methods to divide or aggregate parcels according to a specific survey system.

NILS Development Teams 2001

Supplemental Plat

A supplemental plat is prepared entirely from office records and is designed to show a revised subdivision of one or more sections without change in the section boundaries and without other modification of the subsisting record.

BLM 1973

Surface Estate

All rights in the surface of the land except the oil, gas and other mineral or subsurface rights which a party owns, including the right to transfer and dispose of the surface of that land. The surface estate is severed from the mineral estate in a conveyance when the grantor excepts or reserves all or part of the minerals from the land being conveyed.

NILS Development Teams 2001

Surface Rights

All rights in the land excepting the oil, gas and mineral rights to underground deposits.

BLM 1980

Survey

1) The plat and the field-note record of the observations, measurements, and monuments descriptive of the work performed. Occasionally used as implying that the official plat is "The Survey." Commonly, any survey but, specifically an original survey. 2) The process of recording observations, making measurements, and marking the boundaries of tracts of lands.

BLM 1980

Typically, a boundary survey performed in the field by a professional land surveyor, but not meant to exclude a variety of field survey types (e. g., boundary survey, site survey, resource mapping, right-of-way survey, transect survey, administrative survey, densification of control corners, topological survey, engineering/ construction survey, real-time mapping (GPS), ALTA, custom, vertical control survey).

NILS Development Teams 2001

Survey Control Network

1) Graphically defined lattice work of precise control points (monuments) and traverse alignments reconciled to those monuments, serving as a framework for referencing the position of all map features in the spatial database, thereby assuring appropriate precision standards. 2) Points with a given horizontal position and surface elevation. 3) Used to determine unknown horizontal positions and elevations of locations elsewhere in the active portion of the spatial database.

URISA 2000

Survey Point

A point feature that has XYZ coordinate values. Any point in a measurement network. Each survey point has a list of coordinate values or a coordinate set.

NILS Development Teams 2001

Survey Project

This is an organizational/ system concept to represent a set of field activities. It's where and how all the relevant data and files are stored for future use. A survey project may be comprised of one or more field surveys.

NILS Development Teams 2001

Survey Project Parameters

Initial, base information about a surveying project. For Example: Name of Project with Audit data of User Name, Created By, Creation Date, Date modified. Description of survey project including Unit of Measurement (International feet, Survey feet, Meters, Chains, Native Units – Units that the data was stored in) Default Error estimates or (Bearing, Angles, Distances, –Control) Metadata of Datum, UTM Zone, State Plane Zone, Project Elevation.

NILS Development Teams 2001

Suspended Survey

When question or doubt arises concerning an approved or accepted survey or resurvey, all actions related to the area covered may be held in abeyance until the matter is resolved. The survey may be corrected, reinstated, or canceled either in whole or in part, but no action based on the plat may be initiated or completed while the survey is suspended. The result of this action may be called a suspended plat.

BLM 1980

Swamp

1) Low lying land saturated with moisture and overgrown with vegetation but not covered with water. 2) Land at elevations below the upland such as would be wet and unfit for agriculture without construction of artificial drainage.

BLM 1980

System

The total sum of all hardware, software and human elements of the computer application under consideration.

NILS Development Teams 2001

T Sheet

A topographic map or chart prepared by the former Coast and Geodetic Survey, and now by the National Ocean Survey, including the manuscript copy. The topographic map is identified with a number, prefixed with the letter T, such as T5542. As now prepared they are prefixed "TP"

(topographic-photogrammetric). The term “T-Sheet” is an inhouse expression to denote such maps and charts.

BLM 1980

Ten Mile Rule

The rule which limits inland waters at coastal indentations to a distance of 10 miles between headlands. For indentations 10 miles or less at the entrance, a headland-to-headland line would mark the limits for indentations wider than 10 miles, the limit would be a line drawn across the bay in the part nearest the entrance at the first point where the width does not exceed 10 miles.

NOAA 1986

Tenancy by the Entirety

A tenancy which is created between husband and wife and by which together they hold title to the whole with right of survivorship so that upon death of either, the other takes whole to the exclusion of the deceased heirs.

FGDC - Subcommittee on Cadastral Data 1999

Tenancy from A periodic tenancy which runs from month to month, year-to-year or other specified period of time. A Lease is an example of Tenancy from Period-to-Period.

FGDC - Subcommittee on Cadastral Data 1999

Tenancy in Common

A form of ownership hereby each tenant or right holder holds an undivided interest in property. Unlike a joint tenancy or a tenancy by the entirety, the interest of a tenant in common does not terminate upon his or her death. The percentage of Tenancy in Common interests pass on in the estate.

FGDC - Subcommittee on Cadastral Data 1999

Tenancy in Partnership

Real Estate held by partnership and governed under the Uniform Partnership Act.

FGDC - Subcommittee on Cadastral Data 1999

Tenant

One who has the temporary use and occupancy of real property owned by another person.

Harbin, Andrew L. 1998

Tenant at Will

One who holds the possession of rights by permission of the right grantor but without fixed term.

FGDC - Subcommittee on Cadastral Data 1999

Tenement

In its original, proper and legal sense, “tenement” signifies everything that may be held, if it is of a permanent nature,

whether it is corporeal or incorporeal. Though often applied to houses and other buildings or to lands, it is also applicable to offices, rents, franchises and so forth.

BLM 1980

Tenement

Property held by tenant. Everything of permanent nature. In a more restrictive sense a house or dwelling.

Harbin, Andrew L. 1998

Thalweg

The line following the lowest part of a valley, whether or not it is under water. The intricacy of detail in ordinary relief often makes it difficult in practice to locate a thalweg; in surveying a political boundary line, this difficulty may be considerable. The line down the center of the main channel of a stream.

NOAA 1986

The deepest part of the channel

Harbin, Andrew L. 1998

In river boundaries, the rule which holds that where a navigable river separates two nations, the middle of the main channel is the boundary between them, as distinguished from the geographic middle of the river, per Shalowitz. The rule of thalweg has also been applied to other boundaries where the boundary is described as being the “middle (or center) of the main channel” of a navigable river.

BLM 1980

Thematic Map

Representation of data to show trends or patterns. Data is highlighted or emphasized using properties and values, such as color and line width.

Kansas Association of Mappers 1997

A map that portrays the distribution of features, incidents or classifications related to a specific topic.

URISA 2000

Tidal Datum

A reference for leveling defined by tidal phase observation and measurements. Mean sea level is usually used as the datum for elevations. Mean high water, mean low water and similar terms are tidal datums.

BLM 1980

Tidal Epoch

A period of nineteen years adopted by the National Ocean Service as the period over which observations of tides are to be taken and reduced to average values for tidal datums. The

epoch is designated by the years the period began and ended, for example National Tidal Datum Epoch of 1941 through 1959. The word is used here in variance with astronomic and geodetic conventions.

NOAA 1986

The period of time specified for uninterrupted measurement of tides at a tide gage. The U.S. National Ocean Service specifies a period of at least 19 years.

ASCE-ACSM 1993

Tide

The periodic rising and falling of the water that results from the gravitational attraction of the moon and sun acting upon the rotating earth.

BLM 1980

Tide Gage

A horizontal plane defined at a particular, arbitrary distance below a tide gage bench mark and from which tidal heights at a tide gage are, in theory, measured. In the period between successive levelings to a tide gage bench mark, the plane is established at the tide gage by reference to the contact mark.

ASCE-ACSM 1993

Tie Point

A survey connection to an existing station or corner of the Public Lands from a point whose position is desired to be referenced.

New Mexico Assessors 2001

The point to which a survey connection is made.

BLM 1980

Timeshare Ownership

Timeshare ownership is a condominium ownership that extends for a specified time period as well for a specified space. This is a special case of a tenancy in common.

FGDC - Subcommittee on Cadastral Data 1999

Toise

A French unit of measure based on a French legal standard of length of the same name and equal to about 6.4 English feet. The actual length varied according to the standard used in the definition. It was used in early geodetic surveys and was the basis in many countries for the standard of length. Excluding the Rhineland Rod used by Snel the toise was the first geodetic unit of length.

NOAA 1986

Tolerance

A mathematical term indicating the allowable variation from a standard or from specified conditions.

ACSM 1978

Topographic Map

Graphic representation of the surface features of a place or region on a map, indicating their relative positions and elevations.

URISA 2000

A map, which presents the horizontal and vertical positions of the features, represented; distinguished from a planimetric map by the addition of relief in measurable form. A topographic map generally shows the same features as a planimetric map, but contour lines or comparable symbols are used to show mountains, valleys and plains; and depth curves are used to show depth in bodies of water.

New Mexico Assessors 2001

Topographical Survey

A survey which has for its major purposes the determination of the configuration (relief) of the surface of the earth (ground), and the location of natural and artificial objects thereon. Also, the designation of an organization making such a survey.

ACSM 1978

Topology

Is a branch of mathematics. When applied to geographic features, topological concepts deal with spatial relationships such as adjacency and connectivity.

Wisconsin State Cartographers Office 2000

A set of defined relationships between links, nodes, and centroids. Topology describes how lines and polygons connect and relate to each other, and forms the basis for advanced GIS functions, such as network tracing and spatial analysis.

Kansas Association of Mappers 1997

Based on a branch of mathematics called graph theory, deals with the relationships of simple geometries, i.e. points, lines and areas. These relationships can be used to automate and edit GIS data relating to both attributes and their graphic representation. Topology is the bases for DIME and TIGER files and is used by key GIS vendors to drive a "smart map".

URISA 2000

The spatial relationships between connecting or adjacent coverage features (e.g., arcs, nodes, polygons, and points). For example, the topology of an arc includes its from-and

to-nodes, and its left and right polygons. Topological relationships are built from simple elements into complex elements: points (simplest elements), arcs (sets of connected points), areas (sets of connected arcs), and routes (sets of sections, which are arcs or portions of arcs). Redundant data (coordinates) are eliminated because an arc may represent a linear feature, part of the boundary of an area feature, or both. Topology is useful in GIS because many spatial modeling operations don't require coordinates, only topological information. For example, to find an optimal path between two points requires a list of the arcs that connect to each other and the cost to traverse each arc in each direction. Coordinates are only needed for drawing the path after it is calculated.

NILS Development Teams 2001

Torrens Title

Torrens title includes the guarantee of sufficiency of title. At the time of the first registration under this system there is a quiet title action on the property giving a new starting point to the chain of title and eliminating the need for maintaining previous records. Torrens has the main advantage that ownership and possession is assured. 1898 Massachusetts Registration Act provides for a Torrens system with a land court. Chicago Illinois Cook County has a Torrens system which came into effect in 1897 after the fire of 1871 which destroyed many of the county's land records

Buckner, R.B. 1991

The basic principle of the system is the registration of the title to the land, instead of recording the evidence of such title.

BLM 1980

Township

The unit of survey of the public lands; normally a quadrangle approximately 6 miles on a side with boundaries conforming to meridians and parallels within established limits, containing thirty-six sections, some of which are designed to correct for convergence of meridians or range lines.

New Mexico Assessors 2001

The unit of survey of the public lands; normally a quadrangle approximately 6 miles on a side with boundaries conforming to meridians and parallels within established limits, containing thirty-six sections, some of which are designed to correct for the convergence of meridians or range lines.

BLM 1980

Township Corner

A corner at the extremity of a PLSS township boundary. Normally a PLSS township has four township corners. This does not include section, quarter-section or section subdivision corners which are on a PLSS township boundary.

BLM 1980

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FGDC - Subcommittee on Cadastral Data 1999

Township Line

The township boundaries that run north and south are termed "range lines;" with few exceptions the range lines are run on cardinal and have been intended to be on cardinal. The boundaries running east and west are termed "township lines." By law, they were intended to be on true parallels of latitude.

BLM 1980

Townsite

A townsite is an area of public lands which has been segregated for disposal as an urban development, often subdivided into blocks which are further subdivided into lots. A townsite survey is a survey of street and lot boundaries executed to segregate from public lands and area of land qualifying under the townsite laws.

FGDC - Subcommittee on Cadastral Data 1999

Tract

Generally, a metes and bounds survey of an area at large within a township. In modern public land surveys the term is used specifically to mean a parcel of land that lies in more than one section or that cannot be identified completely as a part of a particular section. Tract numbers begin with the next higher number of the numerical designation within a township, for example: if there is an old numbers are sequential and no number is repeated within a township, for example; if there is an old Mineral Lot No.37, the tract would be Tract No.38. If a tract falls across a township line it is given a separate number in each township.

BLM 1980

Generally a metes and bounds survey of an area at large within a Township. The term is also defined as a parcel of land that lies in more than one section or that cannot be identified as completely part of one section. The tract numbers begin with the next highest number of the

numerical designation in a township or in Alaska may begin with a letter designation. If a tract falls in two townships, it is given a separate number in each township.

FGDC - Subcommittee on Cadastral Data 1999

Transaction Agent

Any participant or party identified in land transaction.

NILS Development Teams 2001

Transect Survey

This is a series of observations and measurements gathered to determine a profile or cross section of the land. These are most common in road, power line or other utility construction projects. Transect surveys may be used in agricultural practices.

NILS Development Teams 2001

Traverse

A series of connected lines of known length related to one another by known angles.

Francis H Moffitt and Harry Bouchard 1975

In surveying, a sequence of lengths and directions of lines between points on the earth, obtained by field measurements and used to determine the positions of the points through use of trigonometric computations.

BLM 1980

A succession of straight lines connecting a succession of established points along a route of a survey

Davis, Richard, Foote, Francis S.
and Kelly, Joe W 1966

A sequence of field measurements (length and directions) if lines between points on the earth and used to determine positions of points.

Brown, Curtis M 1969

A method of surveying in which lengths and directions of lines between points on the earth are obtained from field measurements, and used in determining positions of the points. A survey traverse may determine the relative positions of the points which it connects in series. And, if tied to control stations on an adopted datum, the positions may be referred to that datum. CLOSED TRAVERSE? A survey traverse which starts and ends at the same station, or upon stations whose relative positions have been determined by other surveys of equal or higher order of accuracy.

ACSM 1978

In surveying, a sequence of lengths and directions of lines between points on the earth, obtained by field measurements and are used to determine the positions of the points through use of trigonometric computations.

New Mexico Assessors 2001

Traverse Data

This consists of control points and the bearings and distances necessary to physically survey to the points (indicated by dots in the figure) that are going to define the measured features. At this point the measured data within the survey has been adjusted so there is a distinct set of coordinates.

NILS Development Teams 2001

Trespass

An unlawful act causing injury to rights or property of another. As used in BLM, an unauthorized use of federal lands or resources.

BLM 1980

Triangular Excess

The amount by which the sum of the internal angles of a triangle exceeds or falls short of 180°. Triangular excess is positive for triangles on a sphere or spheroid, zero for triangles on a plane and negative for triangles on a hyperboloid.

ASCE-ACSM 1993

Triangulated Irregular (TIN) A representation of a plane surface as a grid of triangular polygons. These models are used to represent elevations or other variables as a three dimensional surface.

URISA 2000

True Bearing

A bearing based on astronomic observation. In early sectionalized land surveys true north was determined by magnetic north corrected to astronomic north by subtracting or adding the magnetic declination. This term should be avoided in deeds.

Brown, Curtis M 1995

True Line

The term 'true line' is used to indicate the direct forward bearing from one monument to the next, as distinguished from a random line.

ACSM 1978

A line of constant bearing (rhumb line) between two corners of a survey.

BLM 1973

Trust Agreement

An agreement between two or more parties with respect to the effect upon their relative rights and duties pertaining to the legal entity created by a grantor for the benefit of designated beneficiaries.

Wisconsin Register of Deeds Association 1995

An agreement between two or more parties with respect to the effect upon their relative rights and duties pertaining to the legal entity created by a grantor for the benefit of designated beneficiaries.

FGDC - Subcommittee on Cadastral Data 1999

Trust Patent

A trust patent vests title in the Bureau of Indian Affairs as trustee for an Indian. Upon termination of the trust status of the Indian, a patent issues conveying fee-simple title to the Indian.

BLM 1980

Turning Point

In meandering, or in any irregular survey, "turning point" is synonymous with "angle point." In leveling, however, "turning point" refers to an intermediate point of known elevation in a level circuit.

BLM 1980

Twenty Four Mile Tracts

The largest unit in the rectangular system of surveys. Each area controlled by a principal meridian and a base line is divided into tracts by means of standard parallels or correction lines (true parallels of latitude) located at intervals of 24 miles to the north and south of the base line and by means of guide meridians (true meridians) spaced at intervals of 24 miles east and west of the principal meridian. (In New Mexico, however, standard parallels occur every 30 miles south of the base line). Because of the convergence of the meridians, the distance between the guide meridians is 24 miles only at the starting points; at all other points, the distance is less by the amount of convergence. Twenty-four mile tracts were first specified in the 1881 Manual of Surveying Instructions.

New Mexico Assessors 2001

U.C.C. Financing Statement

Under the Uniform Commercial Code, a financing statement is used under Article 9 to reflect a public record that there is a security interest or claim to the goods in question to secure a debt. The financing statement is filed by the security holder with the Secretary of State, or similar public body, and as such becomes public record. When the document is filed

with the appropriate government agency, all potential lenders and third parties are put on constructive notice of the security interest.

FGDC - Subcommittee on Cadastral Data 1999

Unapproved

A cadastral survey which has not, for whatever reason, reached the status of an accepted survey.

BLM 1980

Unconstrained Adjustment

A least squares adjustment using only one point of control.

NILS Development Teams 2001

Undivided Interest

An undivided right or title, or title to an undivided portion of an estate, is that owned by two or more tenants in common or by joint tenants before partition. Held by the same title by two or more persons, whether their rights are equal as to value or quantity or unequal.

FGDC - Subcommittee on Cadastral Data 1999

United States Code

A compilation, under 50 subjects, or titles, of the general and permanent laws of the United States in force as of an indicated date. Most of the statutes governing the operations of the Bureau of Land Management appear in Title 43, "Public Lands," and Title 30, "Mineral Lands and Mining." Many laws relating to Alaska are found in Title 48, "Territories and Insular Possessions."

BLM 1980

United States Survey

(AK) A metes and bounds survey executed to comply with one of various regulations for entry of public lands.

FGDC - Subcommittee on Cadastral Data 1999

Unorganized Mining District

Where land office forms, or other forms, have a space to indicate "Mining District" and there is, in fact, no organized mining district, the form is completed by writing the words, "unorganized mining district."

BLM 1980

Unreserved Public Lands

Public lands which have not been withdrawn or reserved for general purposes. The public lands which are not affected by a general order of withdrawal, by a mineral withdrawal for classification, or by inclusion within a grazing district under the Taylor Grazing Act, are considered unreserved public lands since they are subject to classification and disposal.

BLM 1980

Unsurveyed Lands

Lands not yet surveyed. Fractional section surveys, for example, leave unsurveyed land within a section. The land is known to exist, but the survey has either not yet been authorized or has not yet, for whatever reason, been completed.

BLM 1980

Uplands

1) Land situated above ordinary high water. 2) Land situated above riparian land or land adjacent to riparian areas but remote from the body of water and having no riparian rights.

BLM 1980

Use Case

A use case is a narrative that describes the sequence of events of an actor using a system to complete a task and possibly the surrounding context and business rules.

NILS Development Teams 2001

Use Plat

A copy of the master title plat and any supplemental master title plats of a township. Use plats show, in addition to the status shown on the master title plat, information concerning use of the lands, such as applications, leases and permits.

BLM 1980

User Interface

The portion of a software program with which a user interacts. Types include command line interfaces, menu-driven interfaces, and graphical user interfaces.

URISA 2000

Vacant and Unappropriated Public domain lands which have never left Federal ownership and have not been reserved, withdrawn, dedicated or set aside for a specific purpose. These lands, some 450 million acres, are mostly in the 11 Western States and Alaska. The vacant and unappropriated public domain is administered by the Bureau of Land Management.

BLM 1980

Vacation

Land can change hands through vacation or abandonment whereby the land reverts to others.

Buckner, R.B. 1991

Valuable Mineral

A deposit of a mineral ore or substance which is useful in commerce or the arts, occurring in quantity and quality sufficient to justify its mining and removal for sale; also, any quantity of such ore or substance in a vein or lode, the size and continuity of which are such as to justify an ordinarily

prudent man in the expenditure of his labor and means in an effort to develop a paying mine.

BLM 1980

Vara

A Spanish unit of measurement of various lengths.

BLM 1980

Any of various Spanish, Portuguese and Latin American units of length from between 31 and 34 inches. In New Mexico, although there are exceptions, there are predominately 1,901.0 varas to a mile, each vara amounting to approximately 33.33 inches.

New Mexico Assessors 2001

Variable Correction

A correction that is multiplied with a distance measurement value. The longer the distance, the more correction is applied i.e., parts per million (PPM) correction made to a distance.

NILS Development Teams 2001

Vector

Vector data is the storage of X,Y,Z coordinates connected to form points, lines, areas, and volumes. Vector data is best suited to store discrete, well-defined data that can clearly be delimited. Location of oil wells (points), street centerlines (lines), timber stands (areas), and groundwater tables (volumes) are good candidates for vector storage.

Kansas Association of Mappers 1997

Any quantity having both amount and direction. Vectors are usually represented by directed line segments; the length of the line segment shows the vector quantity, and its direction is the same as that of the vector. A vector map contains the data about lines that allows the computer to calculate length and direction. This is contrasted with a raster map that displays images but not the data for line calculation.

URISA 2000

A value with a direction vector data structure - a common way for CAD or GIS software to encode geographic features as points, lines, or areas.

Wisconsin State Cartographers Office 2000

Vein

In mining law, a continuous body of mineral or mineralized rock, filling a seam or fissure in the earth's crust, within defined boundaries in the general mass of the mountain (boundaries which clearly separate it from the neighboring rock), and having a general character of continuity in the direction of its length. A requirement that a miner shall locate his claim "along the vein" means along the out-crop or course

of the apex and not along the strike. "Lode," "ledge," and "vein" are synonymous in mining law as well as in common usage.

BLM 1980

Vernal Equinox

(1) That point at which the celestial equator intersects the ecliptic and at which the Sun apparently passes from south to north. It is also called the First Point of Aries and First of Aries. It is the point from which right ascension is reckoned along the celestial equator and from which celestial longitude is reckoned along the ecliptic. The true location of the equinox is affected by precession and nutation, while the average location (the mean equinox) is affected by precession but not by nutation. (2) The time at which the Sun apparently passes from south to north across the celestial equator. Also called the March equinox. It occurs about 21 March.

ASCE-ACSM 1993

Vertical Control Survey

The measurements taken by surveying methods for the determination of elevation only with respect to an imaginary level surface, usually meaning sea level.

ACSM 1978

Vertical Curve

A curve in a vertical plane. Example: parabolic curve.

NILS Development Teams 2001

Visible

A state in which a feature appears to the user and is used to form topology of the land area description fabric. A user can toggle this state on and off during the editing of the data. This state has no bearing on whether the feature can be used in data analysis/adjustment or in COGO computations.

NILS Development Teams 2001

Warranty Deed

A promise that a statement is true. In conveyance, a warranty deed conveys fee title (to the land described) to the grantee and in addition guarantees the grantor will make good the title if it is found wanting.

BLM 1980

A deed signed by grantor, whereby grantor warrants good, clear title. A deed which explicitly contains covenants concerning the quality of title it conveys. In some states, statutes impute warranties or covenants from the use of specific words, such as grant. The usual covenants of title are warranties of seisin, quiet enjoyment, right to convey, freedom from encumbrances and defense of title as to all claims.

FGDC - Subcommittee on Cadastral Data 1999

In conveyance, a warranty deed conveys fee title (to the land described) to the grantee and in addition guarantees the grantor will make good the title if it is found wanting.

New Mexico Assessors 2001

A deed in which the grantor warrants the title against defects arising at any time either before or after the grantor became connected with the land.

ASCE-ACSM 1993

Weight

The relative reliability (or worth) of a quantity as compared with other values of the same quantity. If one value of a quantity has a weight of 2, and another value of the same quantity has a value of 1, the first value is worth twice the second value, and a mean value would be obtained by taking the weighted mean - twice the first value plus once the second value, the sum being divided by 3.

ACSM 1978

Numeric values that are used to restrict the amount of adjustment of a measured value, based on the confidence in the measurement's reliability. A highly reliable measurement will have a small 'error estimate' and is referred to as being 'more weighted' than unreliable data.

NILS Development Teams 2001

With Remainder

The remnant of an estate in land, depending upon a particular prior estate created at the same time and by the same instrument, and limited to arise immediately on the determination of that estate, and not in abridgement of it. A future interest created in some person other than grantor or transferor.

FGDC - Subcommittee on Cadastral Data 1999

Withdrawal

Withholding an area of Federal land from settlement, sale, location, or entry under some or all of the general land laws, for the purpose of limiting activities under those laws in order to maintain other public values in the area, or reserving the area for a particular public purpose or program, or transferring jurisdiction over an area of Federal land, other than property from one management agency to another.

NILS Development Teams 2001

An action which restricts the disposition of public lands and which holds them for specific public purposes; also, public lands which have been dedicated to public purposes.

BLM 1980

Witness Corner

A monumented survey point usually on the line of survey near a corner established as a reference when the corner is so situated as to render its monument or ready use impracticable.

New Mexico Assessors 2001

A witness corner is a monumented point usually on a line of a survey and near a corner. It is established only in situations where it is impracticable to occupy the site of a corner. Usually only one witness corner is established, and it should be located upon one of the lines leading to a corner if a secure place within a distance of 10 chains is available. If there is no place to be found on a surveyed line within that distance, a witness corner may be located in any direction within a distance of 5 chains. (BLM 1973, paragraph 4-15.)

FGDC - Subcommittee on Cadastral Data 1999

A witness corner is a monumented point usually on a line of a survey and near a corner. It is established only in situations where it is impracticable to occupy the site of a corner. Usually only one witness corner is established, and it should be located upon one of the lines leading to a corner if a secure place within a distance of 10 chains is available. If there is no place to be found on a surveyed line within that distance, a witness corner may be located in any direction within a distance of 5 chains. (BLM 1973, paragraph 4-15.)

BLM 1980

Witness Point

“A witness point is a monumented station on a line of the survey that is used to perpetuate an important location more or less remote from and without special relation to any regular corner.” (BLM 1973, paragraph 4-17).

BLM 1980

A witness point is a monumented station on a line of the survey that is used to perpetuate an important location more or less remote from and without special relation to any regular corner.” (BLM 1973, paragraph 4-17).

FGDC - Subcommittee on Cadastral Data 1999

Witness Tree

According to the General Instructions of 1846, and other instructions prior to that year, “Witness trees are signalized and marked as [bearing trees], but the course and distance to them, as well as the small chop, are omitted.” Later, all trees used as corner accessories were marked as bearing trees, and the distance and bearing from the corner was recorded. The term “Witness tree” became obsolete.

BLM 1980

Writ of Error

A process of common law origin, it is a precept issued in writing by an appellate court to a lower court for supposed error in law apparent on record. A writ of error removes nothing to the higher court for re-examination except the law.

BLM 1980

Zone

The unit of division in State Plane Coordinate Systems created where state boundaries extend beyond limits imposed in the design of the projection system. Where the scale error between a geodetic distance and its grid representation exceeds 1 in 10,000 a state was usually divided into two or more zones. A new origin is used for each zone.

BLM 1980

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Acronyms

A

ACSM	American Congress on Surveying and Mapping
ADA	Americans with Disabilities Act
ADEOS	Advanced Earth Observing Satellite (Japan)
ADA	Americans with Disabilities Act
AI	Artificial Intelligence
ALTA	American Land Title Association
AM/FM	Automated Mapping / Facilities Management
AML	ARC Macro Language
ANSI	American National Standards Institute
APA	American Planning Association
API	Application Program Interface
ASCE	American Society of Civil Engineers
ASCII	American Standard Code for Information Interchange
ASCS	Agriculture Stabilization and Conservation Service (now NRCS)
ASIC	Application Specific Integrated Circuit
ASPRS	American Society of Photogrammetry and Remote Sensing
ATM	Adaptive Triangular Mesh
AVHRR	Advanced Very High Resolution Radiometer

B

BBS	Bulletin Board Service
BIT	Binary Digit
BIL	Band Interleaved by Line
BIP	Band Interleaved by Pixel
BLM	Bureau of Land Management address book
BLOB	Binary Large Object
BLPU	Basic Land and Property Unit
BLUE	Best Linear Unbiased Estimate
BM	Bench Mark
BPS	Bits Per Second
BSQ	Band Sequential
BSU	Basic Spatial Unit

C

CAD	Computer Aided Design, Dispatch, or Drafting
CAM	Computer Aided Mapping or Manufacturing
CAMA	Computer Assisted Mass Appraisal
CASE	Computer Aided Software Engineering
CCT	Computer Compatible Tape
CD-I	Compact Disc-Interactive
CD-R	Compact Disc, Recordable
CD-ROM	Compact Disc, Read Only Memory
CEFB	Cadastral Electronic Field Book
CGI	Common Gateway Interface
CGM	Computer Graphics Metafile
CIR	Color Infrared
CMM	Cadastral Measurement Management
CMS	Cadastral Mapping Specialist
COBOL	Common Business Oriented Language
COE	Corps of Engineers
COGO	Coordinate Geometry
COM	Component Object Model
CORBA	Common Object Request Broker Architecture
CORS	continuously operating reference stations
COURS	Concept of Operations and User Requirements
CPU	Central Processing Unit
CSDGM	Content Standard for Digital Geospatial Metadata

D

DASC	Data Access and Support Center
DB	1) Database, 2) Decibel
DBMS	Database Management System
DDE	Dynamic Data Exchange
DDL	Data Definition Language
DEM	Digital Elevation Model
DES	Data Encryption Standard
DGM	Digital Geospatial Metadata
DGPS	Differential Global Positioning System
DIF	Data Interchange Format
DIGEST	Digital Geographic Information Working Group Exchange Standard
DIME	Dual Independent Map Encoding (Census)
DIP	Digital Image Processing
DLG	Digital Line Graph

DMA	Defense Mapping Agency - The predecessor to NIMA.
DMS	Direct Memory Addressing
DML	Data Manipulation Language
DMS	Degrees Minutes Seconds
DNR	Department of Natural Resources (often with a state letter)
DOA	Department of Administration (often with a state letter)
DOR	Department of Revenue (often with a state letter)
DOS	Disk Operating System
DOP	Digital Orthophoto
DOQQ	Digital Orthophoto Quarter Quads
DOT	Department of Transportation (often with a state letter in front)
DPI	Dots Per Inch
DRAM	Dynamic RAM
DRF	Digital Raster File
DRG	Digital Raster Graphic
DTD	Digital Terrain Data
DTM	Digital Terrain Model
DWG	Drawing Files (AutoCAD)
DXF	Digital Exchange Format (Autodesk)

E

EDI	Electronic Data Interchange
EDIFACT	Electronic Data Interchange For Administration, Commerce and Transport
EDM	Electronic Distance Measurement
EDO	Extended Data Out
EIDE	Extended Integrated Device Electronics
EISA	Enhanced Industry-Standard Architecture
EOS	Earth Observation Satellite
EOSAT	Earth Observation Satellite (company)
EPA	Environmental Protection Agency
EPS	Encapsulated Postscript
ERIN	Environmental Resources Information Network
EROS	Earth Resources Observation Systems
ERS	European Remote-Sensing Satellite (international)
ESIC	Earth Sciences Information Center
ESRI	Environmental Systems Research Institute (company)
ETM	Enhanced Thematic Mapper

F

FAT	Feature Attribute Table
FCC	Federal Communications Commission
FDD	Floppy Disk Drive
FDDI	Fiber Distributed Data Interface
FDHD	Floppy Disk High-Density
FEMA	Federal Emergency Management Agency
FGCC	Federal Geodetic Control Committee
FGDC	Federal Geographic Data Committee
FHBM	Flood Hazard Boundary Map
FIPS	Federal Information Processing Standard
FIRM	Flood Insurance Rate Map
FRAMME	Facilities Rulebased Application Model MTG Environment (Intergraph)
FSA	Farm Services Agency, USDA
FTP	File Transfer Protocol

G

GB	Gigabyte
GBF	Geographic Base File
GCDB	Geographic Coordinate Database (BLM)
GFIS	Geographic Facilities Information System (IBM)
GIF	Graphics Interchange Format
GIS	Geographic Information System
GITA	Geospatial Information and Technology Association
GLIS	Global Land Information System
GLONASS	Global Orbiting Navigation Satellite System (Russia)
GMT	Greenwich Mean Time
GNIS	Geographic Names Information System
GOES	Geostationary Operational Environmental Satellite
GPR	Ground Penetrating Radar
GPS	Global Positioning System
GRASS	Geographic Resource Analysis Support System
GRF	Geographic Reference File
GRID	Global Resource Information Database
GRS	Geodetic Reference System
GSD	Ground Sample Distance
GUI	Graphical User Interface

H

HARN	High Accuracy Reference Network
HDD	Hard Disk Drive
HP2	Hewlett Packard Graphics Language 2 (HPGL2 file)
HRV	High Resolution Visible
HSB	Hue, Saturation, Brightness
HSV	Hue, Saturation, Value
HTML	HyperText Markup Language
HTTP	Hypertext Transfer Protocol
HUA	Hydrologic Unit Area
HUC	Hydrologic Unit Code
HUD	Department of Housing and Urban Development

I

IAAO	International Association of Assessing Officers
IAC	Inter-application Communication
ICES	Initial Graphics Exchange Specifications
ICMA	International City/County Management Association
IDE	Integrated Device Electronics
IEC	International Electrotechnical Committee
IFF	Interchange File Format
IGDS	Interactive Graphics Design Software (Intergraph)
IGES	International Graphics Exchange Specification
IGLD	International Great Lakes Datum
IHS	Intensity, Hue, Saturation
IP	Internet Protocol
IR	Infrared, Imaging Radiometer
IRDS	Information Resource Dictionary System
IRS	Indian Remote-Sensing Satellite
ISA	Industry Standard Architecture
ISDN	Integrated Services Digital Network
ISO	International Standards Organization
IT	Information Technology
IVHS	Intelligent Vehicle Highway System

J

JERS	Japanese Earth Resources Satellite
JFIF	JPEG File Interchange Format
JPEG	Joint Photographic Experts Group

K

KB	Kilobyte (1,000 bytes)
KM	Kilo Meter

L

LAN	Local Area Network
LANDSAT	Land Satellite
LAT	Latitude
LAT/LON	Latitude / Longitude
LCD	Liquid Crystal Display
LED	Light-Emitting Diode
LIPS	Logical Instruction Per Second
LIS	Land Information System
LPI	Lines Per Inch
LRD	Low Resolution Data
LU	Land Use
LUT	Look-up Table

M

M	Meter
MAF	Master Address File
MB	Megabyte (1,000,000 bytes)
MDL	Microstation Development Language (Bentley)
MDS	Meta Data Standards
MGE	Modular GIS Environment (Intergraph)
MHZ	Megahertz
MIPS	Millions of Instructions Per Second
MMU	Minimum Mapping Units
MN	Magnetic North
MO	Map Objects (ESRI)
MOS	Marine Observation Satellite (Japan)
MOSS	Map Overlay and Statistical System
MPEG	Motion Picture Experts Group
MS	Micro Soft
MSA	Metropolitan Statistical Area
MSL	Mean Sea Level
MSS	Multi-Spectral Scanner

N

NAD	North American Datum (followed by a year designation)
NAPP	National Aerial Photography Program
NASA	National Aeronautics and Space Administration
NAVD	North American Vertical Datum
NCGIA	National Center for Geographic Information and Analysis
NDIS	Network Driver Interface Specification
NDOP	National Digital Orthophoto Program
NESDIS	National Environmental Satellite, Data, and Information Service
NFS	Network File System
NGD	National Geospatial Database

NGDC	National Geophysical Data Center
NGNDB	National Geographic Names Data Base
NGS	National Geodetic Survey
NIST	National Institute of Standards and Technology
NITF	National Image Transfer Format
NMD	National Mapping Division
NOAA	National Oceanic and Atmospheric Administration
NOS	National Ocean Service
NPS	National Park Service
NRCS	Natural Resources and Conservation Service, USDA
NS	Nanosecond
NSDI	National Spatial Data Infrastructure
NSGIC	National States Geographic Information Council
NSRS	National Spatial Reference System
NTF	National Transfer Format
NWI	National Wetlands Inventory

O

OCR	Optical Character Recognition
ODBC	Open Database Connectivity
OGC	Open GIS Consortium
OGIS	Open GeoData Interoperability Specification
OLE	Object Linking and Embedding
OMG	Object Management Group
OOP	Object-Oriented Programming
OS	Operating System
OSF	Open Software Foundation
OSI	Open Systems Interconnection
OSTF	Ordinance Survey Transfer Format

P

PAT	Point/Polygon Attribute Table
PC	Personal Computer
PCI	Peripheral Component Interconnect
PCMCIA	Personal Computer Memory Card International Association
PDA	Personal Digital Assistant
PDD	Portable Digital Document
PDF	Portable Document File
PDN	Public Data Network
PHIGS	Programmer Hierarchical Interactive Graphics System
PID	Parcel Identifier
PIM	Personal Information Manager
PIN	1) Parcel Identification Number, 2) Personal Identification Number

PIXEL	Picture Element
PKM	Professional Kansas Mapper
PLS	Professional Land Surveyor
PLSS	Public Land Survey System
POSIX	Portable Operating System Interface
PPI	Pixels Per Inch
PPRT	Post Processing Real Time (DGPS)
PROM	Programmable Read-Only Memory
PVD	Property Valuation Division, KDOR

Q

QUAD	Quadrangle
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R

RADAR	Radio Detecting and Ranging
RADARSAT	Canadian Space Agency's Radar Satellite
RAM	Random Access Memory
RDBMS	Relational Database Management System
RGB	Red, Green, Blue
RIP	Raster-Image Processor
RISC	Reduced-Instruction Set Computer
RLC	Run-Length Compressed
RLE	Run-Length Encoding
RMS	Root Mean Square
ROD	Register of Deeds
ROM	Read Only Memory
RS	Remote Sensing
RTK	Real-Time Kinematic (GPS)
RTP	Real-Time Positioning
RTV	Real-Time Video

S

SCS	Soil Conservation Service - former agency of NRCS
SCSI	Small Computer Systems Interface
SDB	Spatial Database
SDE	Spatial Database Engine (ESRI)
SDES	Spatial Data Exchange Standard
SDML	Spatial Data Manipulation Language
SDTS	Spatial Data Transfer Standard
SEASAT	NASA's oceanographic remote-sensing satellite
SID	Scanned Image Data
SIF	Standard Interchange Format
SIG	Special Interest Group
SIMM	Single In-Line Memory Module
SINES	Spatial Information Enquiry Service
SLF	Standard Linear Format
SNA	Systems Network Architecture
SPCS	State Plane Coordinate System

SPIN-2	Space Information-2 Meter satellite (Russia)
SPOT	Satellite Pour l'Observation de la Terre
SQL	Structured Query Language
SQL/MM	Structured Query Language/ Multi Media
SRG	Standardized Raster Graphic
STED	Standard for the Exchange of Data
SVGA	Super Video Graphics Array
SYMAP	Synagraphic Mapping
S/N	Signal to Noise

T

TAG	Tabular and Graphic
TCP/IP	Transmission Control Protocol/ Internet Protocol
TIFF	Tagged Image File Format
TIGER	Topologically Integrated Geographic Encoding and Referencing
TIN	Triangulated Irregular Network
TM	1) Thematic Mapper, 2) Transverse Mercator
TVP	Topological Vector Profile

U

UPS	Uninterruptible Power Supply
URISA	Urban and Regional Information Systems Association
USDA	United States Department of Agriculture
USGS	United States Geological Survey
USLM	United States Land Monument
USMM	United States Mineral Monument
UTM	Universal Transverse Mercator

V

VABM	Vertical Angle (elevation) Bench Mark
VGA	Video Graphics Array
VI	Vegetation Index
VPF	Vector Product Format
VRAM	Video RAM
VRF	Vector Relational Format
VRML	Virtual Reality Markup Language

W

WAIS	Wide Area Information Service
WAN	Wide Area Network
WGS	World Geodetic System
WORM	Write Once, Read Many
WRS	World Reference System
WWW	World Wide Web

Appendix A

File Extension Naming Conventions

.ADF	Arc Data Files	.FRM	program)
.AI	Adobe Illustrator subset of .EPS	.GIF	Form design (Visual Basic)
.ARG	Arc digitized Raster Graphic	.HLP	Bitmap graphics file (CompuServe format)
.APR	Arc View Projects	.ICO	Help file
.ASC	ASCII text file	.INI	Icon (Windows or OS/2)
.BAK	Backup copy of a file that has been edited (also BK)	.LOG	Initialization file (configuration settings)
.BAS	BASIC program file	.MAK	Log of installation or usage (various software)
.BAT	Batch job (file of commands, in MS-DOS)	.MID	Makefile (Visual Basic and other environments)
.BIL	Band Interleaved by Line	.PAS	MIDI digitized music file
.BIP	Band Interleaved by Pixel	.PCD	Pascal program file
.BMP	Bitmap (Windows or OS/2 graphics)	.PCX	Bitmap graphics file (Photo CD format)
.C	C program file	.PIF	Bitmap graphics file (Zsoft format)
.CDR	Vector graphics (CorelDraw)	.PRJ	Program information file (Windows)
.CIB	Controlled Image Base, panchromatic images	.PS	Project file (various compilers)
.CMD	File of commands (in OS/2)	.SYS	PostScript printable file
.COM	Command file (smaller version of .EXE)	.TIF	Component of the operating system
.CPP	C++ program file	.TTF	Bitmap graphics file (TIFF format)
.DXF	Drawing Exchange Format	.TMP	True Type font
.DOC	Document file (ASCII or Microsoft Word)	.TXT	Temporary file
.DLG	Digital Line Graph	.WAV	ASCII text file
.DLL	Dynamic link library	.WKS	Sound wave file
.DWG	AutoCAD Drawing Format	.WP	Lotus 1-2-3 worksheet file (also WK2, WK3, etc.)
.EPS	Vector graphics, encapsulated PostScript format	.WRI	WordPerfect document (also WP5, WP6)
.EXE	Executable file (machine-language	.XLS	Document file (Windows Write)
		.ZIP	Excel worksheet file
			File compressed with PKZIP