



The Language of Economic Development



**A Reference Guide
for Economic Developers**



University of Missouri Extension

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We designed this guide to provide the new, as well as the experienced, economic developer with easy access to definitions, tables, and other key information in today's economic development environment.

We offer the following definitions of the trade:

Economic Development — The process of creating wealth through the mobilization of human, financial, capital, physical, and natural resources to generate marketable goods and services.

Community Development — The act or process of engaging community members to proactively understand and enhance the economic, social, political, environmental, cultural, physical, and educational aspects of a community through the adoption of vision statements, goals, objectives and implementation plans.

Community Economic Development — The blending of “economic development” and “community development” into a holistic approach to community problem solving.

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Energy and Utilities

access charge — In 1996, the Federal Energy Regulatory Commission (FERC) published rules to establish open access to electric transmission lines as a major step toward electricity deregulation. A provision of those rules established open-access tariffs that would permit companies to recover part of the “stranded” costs represented by investments in their transmission lines and supporting equipment. At the same time, the FERC designed the rules to assure that companies could not exercise an unfair competitive advantage by charging competing generators or resellers exorbitant rates for access to their lines.

active power — The power that performs useful work; the power that is measured by ordinary meters (measured in kilowatts).

actuals — The actual commodities or physical cash commodities, as opposed to futures contracts or derivatives. Also called spot commodities or cash commodities. Utilities trade these commodities daily as a way to make sure the right amount of power gets to the right place at the right time.

adequate regulating margin — The minimum online capacity of a system that can be adjusted instantly to handle changes in electricity use.

adjustments — Are changes made in calculating a utility’s test year costs to reflect constant expenses for the future.

affiliate transactions — Selling and trading between companies, one of which owns a controlling or influential share of the other(s), or all of which are being controlled by the same parent company.

affiliated power marketing companies — Power marketers that are more than 5 to 10 percent owned by an electric utility or independent power producer. Many companies had such affiliates prior to the collapse of Enron. Since then, many companies, including Aquila, have shut down their affiliated power marketing companies.

allocation of costs of service — Determination of how much each type of a utility’s customers will pay for their service.

alternating current (AC) — Electric current that reverses direction at regularly recurring intervals of time (such as 50 cycles per second), known as the frequency. AC can easily be converted to higher or lower voltages. (See also direct current.) In the

United States the standard is 60 cycles.

alternative energy sources — Also known as supplemental energy sources; methods of producing energy other than those commonly in use. Solar, wind, tidal, geothermal, fusion and synfuels are some alternative energy sources.

ampere — A term used to measure the rate at which an electric current flows through a wire.

ancillary services — Also known as interconnected operations services, these are the services necessary for the transfer of electricity between purchasing and selling parties. The FERC requires a transmission provider to include these services (balancing, for example) as part of its open access transmission tariff. In other words, this makes the grid work nicely so your lights don't flicker all night long.

annualized costs — An adjusted amount to reflect increases in such costs during the test year for a full 12-month period.

anthracite — A hard and jet-black coal with a high luster, it is the highest rank of coal and is mined in northeast Pennsylvania.

appeal — Request by any party in a rate case for the courts to reconsider a commission decision.

aquifer — A water-bearing formation that provides a groundwater reservoir.

available margin — The difference between the demand for electricity and the electricity a utility has available. Expressed as a percent, it's the capacity available to cover demand in the face of random events, such as forced outages, demand forecast errors, weather extremes and slippage in capacity service schedules; also known as capacity margin.

available transfer capability (ATC) — A measure of physical transmission network available for further commercial activity.

average demand (water) — The total quantity of water used divided by the number of days of measurement. See also demand and peak demand.

avoided cost — Money a utility saves by purchasing power from another company instead of producing the power itself. Avoided costs include such things as reduced capacity requirements or fuel and lower line costs.

B

backstart capability — The ability of a generating unit to start without assistance from an outside electric system. It's like jump-starting your car without hooking the jumper cables to another car.

barrel — A unit of measure for petroleum products, equal to 42 gallons.

base load — The minimum amount of electric power delivered or required over a given period, at a constant rate.

base load plant — A power plant built for the specific purpose of providing power to a utility's customers. Engineers explain it this way, because they want to be precise: A plant operated to take all or part of the minimum continuous load of a system, and which produces electricity at an essentially constant rate. These plants are operated

to maximize system mechanical and thermal efficiency and minimize operating costs. For accounting-types only: These plants typically have high fixed costs and low unit operating costs.

base pressure — The pressure of gas in excess of atmospheric pressure.

Bcf — Is one billion cubic feet, a common measure of natural gas. See also cubic foot.

best efforts service — A service level offered to customers that includes the possibility that service might be interrupted on short notice, particularly during peak load periods. Peak load occurs when many people turn on their air conditioners at the same time.

billing demand — A charge a customer pays to reserve capacity or facilities used, regardless of the customer's actual consumption. Billing demand may vary from actual demand during a given billing period since it can be based on a contract maximum, minimum or previous peak demand. It is also known as ratchet or ratcheted demand Charge. Basically, you pay for what you think you might need. Some companies buy their power to ensure power is there when they want it.

bituminous — This most common coal is soft, dense and black with well-defined bands of bright and dull material. When burned, yields a considerable quantity of ash and volatile tars. Bituminous is ranked after anthracite and is mined chiefly in Kentucky, Pennsylvania and West Virginia.

blanket certificate (authority) — A general authority, exercised under FERC rules, to purchase, transport or sell natural gas or electricity. A blanket certificate relieves the seller or buyer from obtaining prior approval for a sale or purchase.

block rate — A rate that prices blocks of demand or consumption using different unit charges.

book cost — The value at which property or assets are carried on a company's books, without adjusting for depreciation, amortization or other items. Book value is the book cost minus depreciation. Because book value is designed to allow a company to recover the item's cost, it may vary significantly from the actual market value, which is used to calculate the cost of replacing the asset at today's prices.

briefs — Written arguments submitted to a commission by the parties in a rate case.

British thermal unit (Btu) — The heat quantity required to raise the temperature of one pound of water one degree Fahrenheit at a specified temperature. When it comes to natural gas, Btu are divided into "dry" and "saturated." Natural gas that is moisture-free, or that contains less than seven pounds of water vapor per Mcf, is measured in dry Btu; when natural gas is fully saturated with water vapor, under standard temperature, pressure and gravity conditions, it is measured in saturated Btu.

broadband over power lines (BPL) — The transmission of data along an electric company's existing wire network. It will also allow customers to use their home wiring to create a local network, thereby allowing various devices, such as personal computers, set-top boxes, and consumer electronic devices, to communicate with one another. It will also make broadband available to small communities too remote for the service-for-pay telephone or cable companies.

brownout — A reduction in the voltage of power supplied to customers. It results from insufficient supply of power to match demand. It's the first cousin to a blackout, which

is what happens next if demand doesn't drop or more power isn't produced in time.

bulk power transmission — The transport of a large amount of electricity at high voltages, usually from one utility to another, through high-voltage lines. These are usually rated at 100 kilovolts (kV) and above.

bundling — Billing for a group of services, such as generation, transmission and distribution of electricity, in a single fee. Aquila customers, as well as most utility customers across the U.S., receive a bundled bill.

burner tip — The end user or the point of consumption for natural gas, such as your house (which has burners in the gas stove, furnace and water heater).

busbar — An electrical conductor in the form of rigid bars that serves as a common connection for two or more electrical circuits.

bypass — Direct sales by producers, pipelines or marketers to end-users, thus eliminating services and costs associated with utilities or local distribution companies (LDCs).

C

capability margin — Is a surplus in excess of peak use.

capacity factor — The ratio of the average load on equipment for the period of time relative to the capacity rating of the equipment.

capacity margin — Excess electric generating capacity, beyond planned peak system demand. It is reserved for emergencies and generally specified by NERC standards.

capacity release — A party that owns firm gas transportation rights beyond its own needs may sell or release those rights to another party. The transfer of this capacity may be permanent or temporary.

capacity — The quantity of electricity that can be delivered under certain conditions.

capillary rise — The height above a free water elevation to which water will rise by capillary action.

capillary water — Water subject to the influence of capillary action.

captive customer — A customer, generally a residential or small business customer, who can purchase natural gas or electricity from only one supplier.

carbon monoxide (CO) — A colorless, odorless and tasteless gas that can be potentially harmful to you and your family. The incomplete burning of fuels such as natural gas, propane, heating oil, kerosene, coal, charcoal, gasoline and wood produces CO.

casinghead gas — Is unprocessed natural gas that is produced from a reservoir containing oil.

catch basin — A filter at the entrance to a drain or sewer.

certificate of convenience — A state-issued permit that authorizes a utility to engage in business, construct facilities or perform other services.

chlorination — Addition of chlorine to water for the purpose of disinfection.

circuit — The completed path traveled by an electric current.

city gate — The point where ownership of natural gas transfers from one party to another, neither of which is the end user. It also is the place where pipelines sell and deliver natural gas to the local distribution utility company.

city gate rate — The rate a supplier charges a local distribution company/utility. It is the cost of the natural gas where the distribution company takes ownership of it.

coal — A black or brownish solid combustible substance formed by partial decomposition of vegetable matter without free access of air and under the influence of moisture, intense pressure and temperature. Coal is commonly ranked by its heating value and is domestically abundant with U.S. reserves that are plentiful enough to last the next 250 years.

cofiring — Burning natural gas along with another fuel to help reduce sulfur dioxide and nitrogen oxide emissions of the other fuel.

cogeneration — Using heat (steam) that is produced by a natural gas-fired power plant to produce even more electricity or heating. In essence, cogeneration produces energy (electricity or heat) from two sources. While electric production may be somewhat less, more energy from the fuel reaches users (as steam or electricity) than is the case with a boiler or turbine designed to produce only electricity.

coke — The solid residue remaining from the destructive distillation of coal or other carbonaceous material such as pitch, petroleum, or petroleum residue.

combined cycle — A combustion turbine installation using waste heat boilers to capture exhaust energy for steam generation.

combined pumped-storage plant — A plant that uses a combination of stream-flow and pumped water to generate electricity.

combustion turbine — An electric generating unit in which the prime mover is a gas turbine engine. See also combined cycle, regenerative cycle and simple cycle.

combustor — A unit that consumes fuels used primarily to provide heat. Examples are boilers, furnaces, ovens, combustion turbines, blast furnaces, internal combustion engines, etc.

commission — State authority charged with regulating public utilities; may be called a Public Service Commission, Public Utilities Commission or Corporation Commission.

commodity charge — The charge applied to the total volume of gas used during a billing period.

comparability of service (comparable access) — Law under FERC Order 636 that states all natural gas pipeline customers are assured equal access to transportation, storage, flexible delivery points and other services, regardless of whether they purchase natural gas from an interstate pipeline or an independent supplier.

compressor station — Increases gas pressure to keep it moving through a network of underground pipelines.

conductor — Any material, such as copper wire, that allows electric current to move through it easily.

confirmed nominations — Verification by the pipeline (supplier) that a change in

a customer's level of transportation service will be matched by a change in supplier quantities.

connected load — The sum of the ratings from the motors, lighting, and appliances that a customer may have connected to the system.

conservation — Reducing the amount of energy consumed by a customer for a specific end-use. Behavior changes, such as thermostat setback, are included in this definition. This definition does not include changing the timing of energy use, switching to other fuel sources or increasing off-peak usage, even though these actions may make more efficient use of generation or distribution facilities.

contingency reserve — An operating reserve that allows a generating facility to reduce control area error to zero within 10 minutes after the loss of generating capacity. A control area is a utility's service territory, as in Southwest Missouri, for example. Error, in this case, means there's no more juice in the lines.

continuous rating — The amount of electricity that a system, facility or element can support or withstand indefinitely without "burning up." For example, if you put too much electricity into your coffee pot, it will burn up or stop working. It could also catch fire. See also emergency rating.

contract demand — The maximum service amount that a party agrees to furnish over a given time (daily, monthly or annually) and for which a buyer agrees to pay a set charge.

control area — Is generally a utility's service area.

cooling degree days — A measure of warm weather determined by subtracting 65 from the mean daily temperature; the positive result being the number of cooling degree days occurring that day. If a negative number results, heating degree days will be recorded.

cooling tower — A structure that cools the water used in the electrical generation process; cooling towers prevent thermal (heat) pollution to nearby water bodies.

cooperative (co-op) — A nonprofit utility owned by its members. Rural electric cooperatives generate and purchase wholesale power, own or arrange for the transmission of that power and then distribute the power to serve the demand of rural customers. Co-ops typically become involved in ancillary services such as energy conservation, load management and other demand-side management programs to serve their customers at least cost.

core market — A group of customers who have no choice but to buy electricity, or natural gas, or both, from a local supplier. Also called regulated market because prices are set by regulators, not by competition.

cost of service — Total dollars required to provide utility service (revenue requirements), including a fair return on investment.

cross-subsidization — The practice of charging higher rates to one class of customer in order to lower the rates for another class. Also, transferring assets or services from a regulated business to the business of a company's unregulated affiliate. As used most commonly in the media, a cross-subsidy means the ratepayers are paying for a nonregulated activity, a no-no from a regulator's viewpoint.

cubic foot — A measure of natural gas volume, referring to the amount of gas needed

to fill one cubic foot at standard atmospheric pressure and 60 degrees Fahrenheit. A cubic foot of gas contains approximately 1,000 Btu.

cubic foot (water) — A volume equal to approximately 7 1/2 gallons.

curtailability — A transmission provider's right to interrupt all or part of transmission service due to constraints that reduce the capability of the transmission network to provide that transmission service. Transmission service is to be curtailed only in cases where system reliability is threatened or emergency conditions exist.

cushion gas — Is the natural gas required in a gas storage reservoir to maintain enough pressure to permit recovery of stored gas.

customer charge — An amount a customer pays monthly without regard to the amount of energy consumed.

D

declining block rate — A rate design that reflects the lower unit cost of serving those customers using large amounts of energy.

decommissioning sinking fund — Money set aside to fund the permanent shutdown of a nuclear power plant.

decontracting — Substantially reducing commitment by local distribution companies for firm space on pipelines when transportation contracts expire.

degree day — The difference between the average temperature on a given day and 65°F. The sum of the degree days during the entire heating season, normally about 4,800 in Missouri, indicates the average energy required to maintain comfort. Summer degree days represent the energy required for cooling.

deliverability — The volume of gas that a well, pipeline or distribution system can deliver during a given period, usually 24 hours.

demand — The rate at which electric energy is delivered to or by a system, part system, or a piece of equipment. It is expressed in kilowatts, kilovoltamperes or other suitable unit at a given instant or averaged over any designated period of time. The primary source of demand is the power-consuming equipment of the customers.

demand charge (also called capacity charge) — A charge designed to recover costs associated with a given level of electric demand. It is paid even if a customer doesn't use the service. The demand charge generally includes all costs associated with operating and maintaining a utility's generation, transmission and distribution systems.

demand factor (electricity) — The ratio of the maximum demand over a specified time period to the total connected load on any defined system.

demand-side management — Any effort aimed at getting customers to use less electricity during peak demand periods, such as during and after dinner. It includes conservation efforts like high-efficiency lighting, home insulation and lighting design, and incentives for replacing inefficient heating and cooling systems. Load control may include incentives to use less electricity as well as enabling the utility to turn a customer's heating and cooling units off or on by remote control.

derating — Running a generator below the manufacturer's rating, which could

damage or destroy the unit. For example, if the rating is 10 revolutions per minute and you run it at 5, it will (1) get hot and (2) stop running.

deregulation — Since everyone has their own favorite way of explaining this one, let's go with what Webster has to say: To halt or reduce government regulations.

design day — A 24-hour period used as a basis for determining capacity requirements. It assumes a mean temperature, known as the Design Day Temperature.

DIP — Is the abbreviation for ductile iron pipe.

direct current (DC) — Electric current that flows in one direction, remaining as close to constant "magnitude," or a certain flow, as possible (see also Alternating Current).

disco — Short for distribution company; refers to a vertically disaggregated utility company (with distribution separated from generation and transmission), or one that has never owned power businesses other than retail distribution.

dispatching — Assigning generation and transmission of electricity through a system to assure coordinated operation. Also, sequencing the order in which resources are called upon to generate power to serve fluctuating loads at the most effective cost.

distributed generation — Any technology that provides electricity closer to an end-user's site, such as a home or business. It may involve a small onsite generating plant or fuel cell technology. It's a hot topic today because improving technology is enabling manufacturers to make generators that are the size of a refrigerator or smaller. Like personal computers, these units are getting cheaper.

distribution — The systems that bring energy to the end-user. Electric distribution refers to the system of power lines, transformers and switches. Natural gas distribution systems include the mains, service connections and equipment used to transport or control the supply of natural gas from the city gate to the customer. This is similar to the "last mile" referred to in the fiber optic and broadband communication business.

distribution substation — You see them around towns and cities. They are those small fenced-in areas that have electric lines coming in and going out. Inside these fenced-in areas are transformers that reduce voltage to a lower level so the power can be sent out on distribution lines to the surrounding community.

distribution system (electricity) — Includes main or primary lines and lower voltage, or secondary lines that deliver electricity through overhead or underground wires to homes and businesses. You see these lines every day on poles alongside roads and streets.

distribution system (gas) — Takes the gas from the regulator station to cities, towns and communities.

dry gas — A natural gas that contains few or no hydrocarbons, which can be recovered as a liquid product. Also, gas in which the water content has been reduced.

E

EEl — The Edison Electric Institute, a Washington, D.C.-based national trade organization of investor-owned electric companies that provides industry information and monitors regulatory changes and political developments.

EIA — The Energy Information Administration, an agency of the U.S. Department of Energy that collects and analyzes statistical information. It also gathers required information from industry participants. It provides a wealth of information at www.eia.doe.gov.

electric constants — Any electric circuit or apparatus has certain electric properties (or characteristics) that are inherent to that circuit and characteristic of that circuit just as any object has such physical properties as weight, shape and volume. These electric properties are: resistance, inductance (or inductive reactance) and capacitance (or capacitive reactance).

electric current — The flow of electricity; analogous to the flow (or current) of water in a pipe. Water current is caused by water pressure; the greater the pressure, the greater the current through a pipe. Electric current is caused by voltage (electric pressure); the higher the voltage, the greater the electric current through a wire.

electric system losses — The total energy losses in an electric system between supply sources and delivery points. Loss occurs in transmission and distribution, primarily in the form of heat.

embedded costs — The cost of all the facilities in an electric or natural gas supply system. Also called sunken costs, because the money cannot be recovered after abandoning the project.

emergency rating — The rating, defined by the equipment owner, that specifies the level of electrical loading that a system, facility or element can support or withstand for a finite period. It assumes acceptable loss of equipment life or other physical or safety limitations for the equipment.

emergency voltage limits — The operating voltage range on interconnected systems that is acceptable for a limited time while system adjustments are made following a facility outage or system disturbance.

enabling agreement — The agreement that details the general terms and conditions for the purchase or sale of electricity, but that does not include the specific details or obligations of either the seller or the buyer.

end user — That's you: a homeowner, business, plant or other type of consumer of electricity or natural gas.

equilibrium price — The price that prevails in a particular market when supply and demand are equal. That's really different from market clearing price, which is the price at the end of the day when the market closes.

equity financing — Raising money by issuing shares of stock.

examiner — Commission examiner, or a designated senior staff person assigned by a commission, to conduct the rate case hearings; takes and studies evidence and makes a recommendation on findings to the commission.

exceptions — Statement of disagreement with an examiner's recommendations to a commission, filed by any party in a rate case.

exclusive vs. nonexclusive franchise agreements — In almost all states only one electric utility is permitted to serve a community because of building expense and maintaining electric distribution systems. Those franchises are "exclusive. Natural gas is different. While most communities only have one natural gas utility, state law

generally permits communities to have multiple natural gas franchises. Those natural gas franchises are “non-exclusive.” Competition of natural gas distribution facilities sometimes occurs in the communities served by Aquila.

exempt wholesale generators (EWGs) — Independent power plants that generate electricity for sale on a wholesale basis versus a more exempt plant that generates electricity for assigned or “regulated” customers. EWGs can be owned by utilities, utility holding companies, or developers not affiliated with an electric utility. The Federal Energy Regulatory Commission (FERC) determines EWG status and “exempts” the facility from restrictions imposed by the Public Utility Holding Company Act (PUHCA).

exit fee — The fee charged a customer to leave a utility system. It is intended to compensate the utility for its stranded, or fixed, costs related to supporting that customer.

extra high voltage (EHV) — Voltage levels of transmission lines above normal levels; 345,000 volts and higher.

F

fair value — Current value of a facility, computed by taking the original cost and adding the cost of inflation from the time of construction to the present.

Federal Energy Regulatory Commission (FERC) — The federal regulatory agency within the Department of Energy that oversees interstate electricity sales, electric rates, hydroelectric licensing, natural gas transmission, gas and oil pipeline rates and investor-owned utility transmission.

Federal Power Act — Legislation enacted in 1920 and amended in 1935 that governs the FERC.

Federal Power Commission (FPC) — The federal agency that preceded the FERC.

fire demand (water) — The amount of water required to fight a fire and the amount of time for which it is needed (usually expressed in gallons per minute for a certain number of hours).

fire hydrant — A device placed within the distribution system to withdraw water for fighting fires. Hydrants can also be used to flush out distribution lines.

firm customer — A customer considered a high priority end-user, such as a residential customer, for whom contract demand is reserved and to whom the supplier is obligated to provide service. The customer receives “firm service,” service that anticipates no interruption, except for “force majeure” (causes beyond the control of the supplier, such as extreme acts of Nature).

firm power — Power intended to have assured availability to the customer to meet its load requirements. Electric power or power-producing capacity intended to be available at all time during the period covered by a guaranteed commitment to deliver, even under adverse conditions, but subject to force majeure interruptions. Firm power consists of either firm energy, firm capacity or both.

fixed price — A price that is agreed upon by two parties and cannot change, regardless of subsequent fluctuations in market price.

flat — A rate that does not vary with the quantity used or the contract demand.

flat rate — The rate charged to all customers for all units of energy used is considered to be a “flat rate” if all are charged the same rate (see also declining block rate and inverted rate).

floor — A guaranteed minimum price that a seller will pay in a supply contract. Also, the space directly opposite the ceiling.

flue gas desulfurization unit (scrubber) — Equipment used to remove sulfur oxides from a power plant’s combustion gases before they are discharged into the atmosphere.

forced outage — The unplanned shutdown of a generating unit, transmission line or other facility.

forced outage reserves — The capacity needed to meet peak load during forced outages.

forecast uncertainty — The probable deviations from the expected values considered in a forecast for energy demand or supply.

fractionation — The process of separating liquid hydrocarbons, removed from natural gas, into propane, butane, ethane and the like. Fractionation can also refer to separating various petroleum liquids from crude oil.

franchise agreement or franchise ordinance — A legal agreement, which becomes a city law, between the community and the utility that explains in detail how the utility will operate within the community. The purpose of such an agreement is to grant permission to the utility to locate its property inside city limits, minimize misunderstandings of the community’s governing requirements and to provide guidance to utility duties.

franchise record — One of the factors financial rating companies and prospective investors consider when the company prepares to obtain long-term financing. These financial institutions prefer long-term franchise agreements and close to 100-percent renewals. A good franchise record contributes to a better credit rating and results in lower interest rates, and thereby lower rates for customers.

frequency — The rate at which alternating current oscillates, expressed in cycles per second, or Hertz (Hz). The standard for alternating current is 60 Hz in the United States, and 50 Hz in Europe.

FT (firm transportation) — Capacity contracted for a natural gas or power transmission system that cannot be cancelled by the operator of the system. That means you bought it, so use it.

fuel cell — A device that generates direct current electricity from a chemical reaction. This rapidly developing technology promises radical advances in powering everything from automobiles to small buildings, and maybe even homes.

fuel cost adjustment — Rate change that reflects an increase or decrease in the price of fuel used or sold by the utility, granted by a commission in a separate action apart from a general rate case.

functional unbundling — Pricing each aspect of a service separately, such as the generation, transmission and distribution of electricity, or the production, transportation and storage of natural gas.

G

gas — One of the three forms of matter — the others are solid and liquid.

gas inventory charge (GIC) — A charge paid by a buyer to the supplier for holding natural gas supplies that will be delivered later.

gathering system — The pipelines and other equipment used to collect, process and deliver natural gas from the producing field to the trunk or main transmission lines of a pipeline system.

genco — Short for generating company; the generating portion of a disaggregated utility's operations. Said another way, it's a company that owns solely generators and no transmission or distribution systems.

generating capacity — The maximum amount of electricity a given power plant is able to produce, usually expressed in megawatts.

gigajoule — A unit of energy that equals 943,213.3 Btu.

gigawatt (GW) — Is equal to one billion watts.

gigawatt-hour (GWh) — Is measurement of one billion watt-hours.

green power — Electricity produced using wind, sun, or steam escaping from the earth. By definition, federal regulation also includes power generated by sources such as gas produced by decaying garbage in landfills. In Kansas and Missouri, Aquila customers can purchase power produced by windmills. Also includes energy produced by biomass, hydro and geothermal.

greenhouse effect — The result of water vapor, dioxide, and other atmospheric gases trapping radiant (infrared) energy, thereby keeping the earth's surface warmer. Greenhouse gases within the lower levels of the atmosphere trap this radiation, which would otherwise escape into space. Subsequent reradiation of this energy back to the Earth maintains higher surface temperatures.

grid — The network of high-voltage transmission lines through which power moves. In the United States, there are three distinct electric power grids: the Eastern Interconnection, the Texas (or ERCOT) Interconnection and the Western Interconnection.

gross available capacity (GAC) — The capacity at which a unit can operate with a reduction imposed by a derating (see definition). Translation: the power you have available to sell.

gross dependable capacity (GDC) — The gross maximum capacity (GMC) modified for seasonal limitation over a specific period.

gross maximum capacity (GMC) — The maximum capacity of a unit sustainable over a period of time, unmodified by seasonal or other deratings.

ground water level — The level below which the rock and subsoil, to unknown depths, are saturated with ground water.

ground water — Water beneath the earth's surface. Ground water used to supply water requirements of residences or industry generally comes from 300 to 1,600-foot wells. Drinking water in Missouri must meet certain chemical, physical and biological limitations as outlined in the state's drinking water standards.

H

header — A natural gas facility where several pipeline systems interconnect.

hearing — Public meeting at which a utility, intervenors and the commission staff present their arguments on a pending rate case.

heat (or heating) rate — The measure of efficiency by converting fuel to electricity, expressed as Btu's of fuel per kilowatt-hour. The lower the heat rate, the more efficient the plant.

heat pump — An electric appliance that can heat and cool a building using the refrigeration principle. Usable heat from outside air is supplied to an inside space during the winter; in summer, the operating cycle is reversed to extract heat from the inside space and transfer it outdoors.

heating degree day — A measure of cold weather determined by subtracting the mean daily temperature from 65 degrees F, the positive result being the number of heating degree days occurring that day. If the mean temperature exceeds 65 degrees F, the result is negative and no heating degree days are recorded.

high service pumps — Pumps used to transport water to a water tower or standpipe when needed.

high-pressure pipelines — Used to transport gas to distribution systems, often across long distances. The pipelines can range up to 48 inches in diameter.

hold harmless or indemnity clause — Part of a franchise agreement that protects the community from liability for injury or damages related to utility negligence during construction, operation or maintenance of its facilities.

horsepower (hp) — A unit of energy equivalent or equal to .746 kW. Some new energy efficient motors are rated at one hp to one kW.

hourly peak — The peak demand for energy from a transmission or distribution system during a one-hour period.

HVAC (heating, ventilation and air conditioning) — Technology to keep you warm and cool.

I

imbalance (electric) — The condition that occurs when generation and interchange schedules do not match demand. An imbalance could lead to a "brownout." A prolonged imbalance could lead to a "blackout."

imbalance (gas) — The condition that occurs when there is a discrepancy between a transporter's receipts and its deliveries of natural gas for a shipper.

imbalance penalties — Penalties imposed by a pipeline when a shipper fails to maintain a specified percentage balance between receipts and deliveries. This applies to the natural gas business only.

independent power marketer — A company, other than a utility, that sells wholesale electricity. That is, they sell to just about anyone except homeowners. With the advent of electricity deregulation, independent power marketers proliferated and became an

important market force. Now their futures are in question, in part because after the fall of Enron and the highly publicized energy problems in California, many people wonder if there is a future for deregulation in the energy business.

independent power producer (IPP) — A producer of electricity not affiliated with the local utility company selling the power. Also see exempt wholesale generator (EWG).

independent producer — In the natural gas industry, a company engaged in just the production or gathering of natural gas.

independent system operator (ISO) — An entity that controls and administers access to electric transmission in a region or state or across several systems, on a non-discriminatory basis (that means one guy doesn't get a better deal than the others) for a number of independent utilities. Under FERC Order 2000 an ISO, after complying, can become an RTO (regional transmission organization).

individual pipe and meter connection — Connects homes and businesses to the distribution system. A gas meter measures the amount of gas consumed by the customer.

input/output test — A test of generating units used to determine their efficiency (heat rate) at various loads and operating outputs.

instantaneous demand — The rate of energy used right now.

instantaneous service — The ability to change delivery of natural gas on a pipeline on the same day you ask for it.

interchange (or transfer) — The net exchange of power across or between control areas. In some ways it resembles an interchange where several highways criss-cross each other.

interchange energy agreement — An arrangement that assures all parties an equal ability to serve their firm loads. (Remember, a firm load is what you really need to meet customer demand.) Parties unable to meet their loads in a given month may request interchange energy from someone else who has extra.

interconnected system — Two or more power systems with connecting tie lines that are normally synchronized in their operation, so they operate as a single entity.

interconnection — Facilities that connect two electricity grid systems, gas pipelines or control areas.

interconnection — When capitalized, the word refers to one of four synchronized bulk electric system networks in the North American Electric Reliability Council: the Eastern, Western, ERCOT and Quebec. When it is lowercase, it refers to facilities that connect two or more systems or control areas.

interim rate increase — Portion of a requested rate increase, authorized by a commission to be implemented before the final outcome of the rate case is determined. The reason for this adjustment is because the utility would experience a severe financial emergency without immediate rate relief.

intermediate load — The range between baseload (see definition) and peak load.

interrogatories — Requests from a commission staff or intervenors to a utility for supplemental information or clarification on a rate case petition.

Interruptible load/demand — A demand that can be interrupted by direct action of the supplying system’s operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial, industrial or irrigation consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions.

interruptible service — Gas service that can be interrupted at the option of the pipeline operator. Also referred to as “best efforts” service, the tariff for interruptible service is lower than for firm service.

intervenors — Consumer and other interested groups who participate, with a commission’s permission, in rate case hearings by presenting viewpoints and data and questioning witnesses.

inverted block rate (graduated rate) — A rate structure by which successive blocks of power are priced at increasingly higher rates.

IOU —Short form for an investor-owned utility, i.e., a utility that has stockholders.

joint use (or common use) facility — A facility jointly used by two or more power generating units.

joule — A measure of energy equal to one watt-second, or one watt of power supplied to, or taken from, an electrical circuit steadily for one second.

just and reasonable rate — A rate set at the lowest reasonable level that recovers a pipeline’s costs, according to the Natural Gas Act of 1938 and the Natural Gas Policy Act of 1978 (see table on page 10). It generally means a rate based on the properly allocated cost of providing service. State regulators use this in rate setting.

K

kilovolt (kV) — Electrical potential equal to 1,000 volts. Most car batteries are 12-volt, so 1 kV is the juice that could be produced by 83.3 car batteries.

kilowatt (kW) — A unit of electrical power equal to 1,000 watts.

kilowatt-hour (kWh) — The basic unit for pricing electricity, a kilowatt-hour is equivalent to one kilowatt of power used for one hour.

KVA (kilovoltamperes) — The actual capacity in the electric/system required to serve a particular load.

KVAR (kilovoltamperes reactive) — See reactive power.

L

lambda — The measure of the rate at which fuel is consumed relative to electric output, expressed in Btu per kWh. It is often referred to as the incremental cost of power. Also, the eleventh letter of the Greek alphabet.

LDC — A local distribution company, which is a utility that obtains the major part of its income from a retail distribution system for the delivery of natural gas or electricity to end-users.

lifeline — A residential rate for a specified block of energy that is priced below the allocated cost of service.

lifeline rates — Rate design in which disproportionately low rates are granted to low-income, low-use customers in consideration of their limited finances.

lignite — A brownish-black coal with high inherent moisture and volatile matter of the lowest rank. It is mined in North Dakota, Montana and Texas.

liquefied natural gas (LNG) — Is gas that has been super-cooled under pressure and remains a liquid at minus 116 degrees Fahrenheit and 673 psi. Not to be confused with liquid or liquefied petroleum gases (LPGs), which are hydrocarbons such as propane or butane that are gases at normal temperatures and pressures, but liquids under moderate pressure at normal temperature.

live steam — Steam supplied directly from a boiler with full power to do work (as opposed to exhaust steam).

load curve — A graphic representation showing power supplied, plotted against time, to illustrate the varying magnitude of the electric load during the period covered.

load duration curve — Used to show the period of time that electric load was above a certain magnitude. These curves profile system demand and can be drawn on a daily, monthly or yearly basis.

load factor — In electric systems, it's the ratio of average output to peak output during a specific period of time, expressed as a percent. In gas, the ratio of the amount of gas a customer takes compared to the maximum amount the customer is entitled to take. The load factor capability is a measure of the degree to which physical facilities are being utilized. It's one indicator of efficiency.

load following — An electric system's ability to regulate generation in response to instantaneous changes in demand.

load management — Shifting of electric load patterns to use a system's facilities more efficiently. Load management generally tries to shift usage from peak times to off-peak periods of a day or year. This is different from conservation measures, which attempt to reduce total usage for a given period of time.

load shape — The magnitude of power load pattern over a given period of time.

load shedding — Deliberately removing pre-selected demand from a power system to keep the system working and minimize outages during periods of abnormal conditions.

load shifting — See load management.

load — The amount of electric power delivered or required at any specified point on a system. Expressed in kilowatts per hour. See also demand.

loop system — A circuit providing two sources of electricity to a consumer or substation to increase reliability of service.

loss of load probability — A measure of the expectation that system demand will exceed system capacity during a given period; usually expressed as a number of days per year or longer period.

loss supply — Supplemental power provided by another utility, called a wheeling utility, to compensate for losses incurred during transmission.

M

main — A distribution line for natural gas or electricity that serves as a common source of supply for more than one service line.

marginal cost — For electric utilities, it is the cost of providing the next, or marginal, kilowatt-hour of electricity, irrespective of fixed costs; also known as incremental or differential cost.

marketer — A company that specializes in bringing together sellers and buyers of energy, usually on a spot-market basis. A marketer negotiates price and arranges transportation and delivery.

marketing affiliate — A gas or electricity marketing company owned or substantially controlled by a gas pipeline or distributor or by an electric utility.

maximum demand (energy) — The maximum rate at which a customer takes energy from a system. The maximum demand is usually measured as the average rate of use of energy during the 15-minute period (or the 30-minute period) in which that average is highest during a billing period. For large amounts of power, the unit of time for measuring the demand is sometimes one hour.

Mcf — Measures one thousand cubic feet, generally of natural gas. See also cubic foot.

megawatt (MW) — A megawatt equals 1,000 kilowatts.

MGD — Abbreviation for million gallons per day. A measurement of the quantity of water used or produced per day.

mileage-based — A rate determined by the length of the haul.

mill — Is one-tenth of a cent. The common unit for pricing electricity.

minimum generation — The lowest level to run a generator so you can meet peak power needs.

MMBtu — One million British thermal units (Btu), also known as one dekatherm. It is equal to approximately 1,000 cubic feet of natural gas.

Mmcf — Is one million cubic feet, usually of natural gas.

monopsony — A monopsony is a market in which there is only one buyer for multiple sellers. Gas pipelines typically had a monopsony relationship with producers and a monopoly relationship with downstream customers. The creation of a national grid system with open access policies results in competitive relationships that are sensitive to price.

muni-lite — A municipal utility that does not own generation, or significant transmission or distribution facilities. It owns only home and business meters and purchases power from a wholesale market for resale to homeowners and businesses.

must-run units — A generating unit that must be online or on the grid to ensure the stability of the system, even if it costs more to run than other units that may be available on the system or in the power pool.

must-take gas — Is natural gas that is committed to a purchaser who is obligated to take it.

N

native load — The total requirements of a utility's retail market.

natural gas — A gas, consisting mostly of methane, generated naturally in underground oil deposits.

net actual generation — The actual electrical energy a unit generates during a given period, less any generation used by the unit itself or it by its auxiliaries. Also known as the net generating station capability. The amount can vary depending on the season and other factors.

net capacity — The maximum capacity a power plant can sustain over a period of time, less the capacity used to supply its own needs such as motors and other equipment essential to its operation. This capacity may be modified to account for seasonal or ambient limitations.

net generating station capability — The total capacity of a generating facility to produce power, less the amount it needs for its own uses.

net-back pricing — A method of pricing natural gas at the wellhead, based on what it sells for at the burner tip (i.e., where you use the gas, such as your stove or furnace).

no-bump rule — A rule that protects a natural gas shipper from losing pipeline capacity because of an increase in volumes by another shipper with a higher priority in the interruptible queue.

nominal voltage rating — Voltage standards set by U.S. electrical equipment manufacturers and electric utilities to ensure that equipment is designed for the voltage range encountered in actual use.

nomination — A request for service under a service agreement. Also, a natural gas shipper's offer to move gas on a pipeline during a given period. Nominations may be made on a daily, mid-day or hourly basis.

non-associated gas — Is gas that is not in contact with or dissolved in crude oil in a reservoir.

noncoincident demand (NCD) — A customer's maximum electric demand during a given period. Sometimes called a customer's monthly non-coincident peak load.

nondepletable energy sources — Energy obtained from sources such as the sun or falling water that are not depleted by use.

nonfirm energy — Electricity that is not required to be delivered or taken under the terms of an electric purchase contract.

non-notice service — A service under which a customer may receive additional natural gas on demand, regardless of prior nominations, without paying penalties.

nonrecurring cost — A one-time-only expense incurred by a utility, such as the cost of repairing storm damage to its facilities.

nonspinning reserve — Generating units that are not connected to a system, but that may be placed online when needed.

nonutility generator (NUG) — A generator not owned by a utility. A NUG may be a qualifying facility, an independent power producer or an exempt wholesale generator. (See definitions.)

normalization — Elimination of nonrecurring expenses from test year costs.

North American Electric Reliability Council (NERC) — A power industry alliance formed in 1968 as a result of the massive 1967 New York City blackout. Its purpose is to make sure that kind of event doesn't reoccur. NERC is composed of 10 regional councils and includes virtually all the power regions of the contiguous United States, Canada, and part of the Mexican state of Baja.

NRC (The Nuclear Regulatory Commission) — A federal agency that licenses and regulates U.S. nuclear power plants.

O

OASIS (Open Access Same-Time Information System) — The FERC-sanctioned electronic information system for electronic transmission capacity availability. OASIS replaces the Real-Time Information Networks System (RINS). Each public utility that owns, controls or operates facilities used for the transmission of electric energy in interstate commerce must participate in an OASIS. It provides existing or potential open access transmission customers with information about available transmission capacity, prices, and other information essential for obtaining non-discriminatory open access transmission service.

off-peak — Is a utility period of lower energy demand.

off-peak power — Electricity generated during periods of typically low demand, such as early morning hours, Sundays and holidays.

ohm — A unit of electrical resistance. One volt can produce a current of one ampere through a resistance of one ohm.

one pound — The amount of coal it takes to produce one kilowatt-hour of electricity.

one-part — A per-unit or commodity charge without components for reservation, demand, etc.

open access — Access on a non-discriminatory basis to the transportation or transmission services of a pipeline or electric utility.

operable nuclear unit — A nuclear generating unit certified for full-power operation by the NRC, following successful completion of its low-power tests.

operating costs — Expenses incurred by a utility in providing its products and services, including employee wages and benefits, maintenance, advertising and promotion, customer service, materials and supplies, fuel, administration, taxes, and depreciation.

original cost — An amount paid to construct a facility the utility built it.

P

P.S.I. (pounds per square inch) — This is a measurement of the pressure exerted by water in a pipeline. Normal water pressure for a house service connection should be a minimum of 30 psi with typical values of 40-70 psi. Industrial requirements vary.

P.V.C. (poly vinyl chloride) — A plastic type material used in making pipes for water distribution systems.

passive solar energy — Using the sun to help meet energy needs through architectural design, such as the orientation of a building, arrangement of windows and choice of materials to conserve heat in winter and dissipate it in summer.

peak demand (electricity) — The maximum amount of electricity used by a utility customer at any time during the year.

peak demand (water) — The maximum momentary load placed on a water plant or system. The duration is generally one hour or less.

peak load plant, or peaker unit — A power plant used during maximum load periods. A peaker generally has quick start up time per megawatt energy costs, but often has low capital costs. Generally, it's used only during peak demand periods like a long hot summer.

peak shaving — Is reduction of peak demand for natural gas or electricity.

peaking supply — A supply of natural gas available to meet peak demand.

peaking supply service — A service that allows a customer to obtain a given quantity of natural gas at the buyer's request during peak periods.

percolation test — A soil test to determine if soil will take sufficient water seepage for use of a septic tank.

percolation — Gravity causing a fluid to move through a permeable substance to seek its own level.

performance-based rates (or regulation) — An alternative to cost-of-service rates (or regulation). In this method, rates are adjusted to reflect a utility's practice of exceeding targets for efficiency, cost-savings or customer satisfaction. Essentially, the utility and its customers share the rewards of excellent performance. For example, if the utility meets improved efficiency targets, the customers can enjoy lower rates and the utility is allowed to keep some of the savings.

photovoltaic conversion — Direct conversion of the sun's energy into electricity using photovoltaic cells.

planned derating — The planned reduction in a power plant's capacity to allow repairs or maintenance on system components.

plant-use electricity or plant auxiliary load — The electric energy used to operate an electric generating facility.

point of delivery (POD) — The point where a power supplier delivers electricity. It could include an interconnection with another system or a substation.

postage-stamp — Transportation rate applicable to a given zone or area, as opposed to a mileage-based rate.

postage-stamp rate — A flat-rate charge for transportation of natural gas or transmission of power without regard to distance.

power broker — An individual or firm that arranges bulk power transactions. Power brokers bring together a seller and buyer, without taking title to the power. Power brokers, unlike power marketers, assume no risk. Utilities will sometimes go to a power

broker to find the lowest priced power available, especially in the summertime when high temperatures and high cooling use increase the need.

power capacity — The amount of power which can be generated. For example, if an electric generator has a power capacity of 25,000 kilowatts; it can deliver energy at the maximum rate of 25,000 kilowatt-hours per hour.

power exchange (PX) — A place where power from various systems is scheduled.

power factor — That part of the power actually used by a customer's electrical equipment, expressed as a percentage of the total power supplied. Power factors only apply to AC circuits.

power grid — Electricity is carried over a network, or "grid," that connects power plants to a substation and from there to distribution lines that take the power to homes or businesses.

power marketing administrations — One of five administrations established by Congress to sell hydroelectric power generated by federal dams and power plants.

power plant — Electricity starts here, produced by spinning generators that are driven by water, a diesel engine, or a natural gas or steam turbine. Steam is made by burning coal, oil or natural gas or by a nuclear reactor. When needed, plants bring extra power.

power swipes — When one utility takes power off the grid without telling anyone it did it.

preferred day-ahead schedule — A scheduling coordinator's preferred schedule for day-ahead scheduling process. The schedule may also be done on an hour-ahead basis.

preferred schedule — Produced by a scheduling coordinator representing the preferred mix of generation to meet demand. Included in the schedule are the quantity of output (generators) and consumption (loads), details about any adjustment bids, and the location of each generator and load. The schedule details the quantities and location of trades among scheduling coordinators and is balanced with respect to generation, transmission losses, load and trades.

prehearing conference — Meeting of representatives from a commission, a utility and intervenors to set a schedule for rate case hearings, to limit issues to be considered in the case and to establish facts on which all the parties agree.

primary energy — Energy available from firm power.

provider of last resort — An entity, traditionally a utility, obligated by law to provide service to a customer whose business is not wanted by competing utilities.

public right-of-way use — Allows the utility to use the community's streets, alleys, avenues and other public places for its facilities. Sometimes the utility will also need to enter into private (easement) agreements with property owners for use of their property. Private easement or private right-of-way agreements would not be part of the utility franchise agreement.

pumped-storage hydroelectric plant — A plant that generates electricity during periods of high power demand by releasing water that was pumped into a reservoir during periods of low demand. It is an efficient means of using low-demand energy to meet high demand needs, since pumped storage returns about two-thirds to three-

fourths of the electricity put into it.

purchased gas adjustment clause — Provision which permits a utility to pass on to consumers any increase or decrease in costs for the natural gas supply it purchases.

Q

quad — One quadrillion British thermal units (Btu), or the energy equivalent of 170 million barrels of oil. In a typical year, the United States uses an average of 83 quads.

R

ratchet or ratcheted demand charge — See billing demand.

rate base — The value of property on which a utility is allowed to earn a specified rate of return. There are many ways to calculate the rate base, including fair value, prudent investment, reproduction cost and original cost. It may also cover items such as working capital and prepayments, and can be adjusted for items such as depreciation, deferred taxes and accumulated deferred investment tax credits.

rate base (investment base) — Amount of money a utility has invested over the years in facilities that serve the customers, plus the amount of working capital required to keep the company going, less depreciation collected over the years.

rate case — Proceeding before a regulatory commission through which a utility seeks a change in the rates it charges its customers.

rate design — Allocation of a utility's cost of service to the various types of customers it serves.

rate of return — Percentage of a utility's investment allowed as profit and paid to stockholders in dividends or kept in the business as retained earnings.

rate order — Commission's decision in a rate case, stating the commission's findings on the utility's petition and an explanation of the basis for the order.

rate structure — The schedule of charges that an energy company or utility uses to bill customers for energy.

reactive power — Creates a magnetic field, as in an electric motor. It is identified as Kilovoltamperes reactive (KVAR).

real power — The rate of supply of energy measured in kilowatts.

real-time pricing — Pricing of electricity that reflects the actual time of day when the power is used. Customers with real-time pricing receive frequent signals throughout the day on the price of electricity at that moment.

regenerative cycle — A simple cycle combustion turbine to which has been added a heat exchanger to warm the incoming combustion air from the exhaust gases to increase thermal efficiency.

regional transmission organization (RTO) — FERC-mandated regional organizations charged with managing the transmission of power in a region of the country.

regulated monopoly — Company authorized to provide service in a specific geographic area under an exclusive franchise, meaning it has no competition.

regulator station — Reduces the pressure of the gas as it enters the distribution system and injects an odorant into the gas so it can be smelled in the event of a leak. Natural gas otherwise is odorless.

regulatory lag — Amount of time that elapses between the filing of a rate case petition and issuance of the final rate order. It can also be the amount of time that elapses from the time an expenditure is made and lasts until that expenditure is recovered in rates.

rehearing — Reconsideration of a rate order by a commission, requested by any dissatisfied party in a rate case.

release — A party's ownership of firm gas transportation rights beyond its own.

reliability — For an electric system, reliability means the ability to supply the electrical demand and energy requirements of its customers at all times, taking into account scheduled and unscheduled outages as well as the ability of the system to withstand sudden disturbances, such as electrical shorts or unanticipated loss of facilities.

reliability must-run generation — Generation that an independent service operator (ISO) determines is necessary to meet the system's reliability, satisfy demand in constrained areas, or provide voltage or security support for the ISO or a local area.

reliability must-run unit — A unit that an ISO can, with compensation, demand that an owner run when required for grid reliability.

reserve — The generating capability that an electric utility needs, in addition to the highest level of user demand, to meet its needs.

reserve generating capacity — The capacity of units kept available by an electric utility to meet special needs. This may occur when demand is unusually high, or when other units are offline for maintenance, repair or refueling.

reserve margin — The margin between a system's dependable capacity

residual pressure — The pressure maintained by the source of water supply when downstream hydrants or stand pipes are in use. Used in establishing insurance premiums for fire protection.

resistance — The property of an electric circuit or conductor which tends to resist the flow of electric current through the conductor. It is the electric equivalent of friction in a mechanical system.

rolled-in pricing — A pricing method in which rates are based on the weighted average of all costs for all customers or services rather than on allocating specific costs to specific customers.

rollover clause — A clause in a natural gas contract that allows the contract to extend beyond its initial term.

royalty — Money paid to the owners of mineral rights, typically based on a percentage of total production. Such owners may or may not bear a share of the expenses of production, according to the lease terms.

run-of-river plant — A hydroelectric plant that relies on the flow of a stream or river with no capacity to store water.

S

safety valves — Used to shut off gas to specific areas during construction and emergencies.

scheduling coordinator — Submits balanced schedules and provides settlement-ready meter data to the independent system operator. The scheduling coordinator also settles with generators and retailers, the PX and the ISO; maintains a year-round, 24-hour scheduling center; provides non-emergency operating instructions to generators and retailers, and transfer schedules in and out of the power exchange, or PX. The PX is considered a scheduling coordinator.

scrubber — An apparatus that cleans the gases passing through a smokestack of a coal-based power plant. Equipment designed to reduce sulfur dioxide (SO₂) emissions from coal-based power plants; devices that use a liquid spray to remove aerosol and gaseous pollutants from an air stream.

seasonal — A rate that changes with the season.

security coordinator — The regional entity charged with ensuring the reliability of a power system by monitoring the operation of regional grids and coordinating the actions of control area operators during emergencies. A security coordinator is barred from participating in wholesale or retail merchant functions.

seepage — The infiltration or percolation of water through rock or soil to or from the surface. The term seepage is usually restricted to the slow movement of ground water.

service connection — That's the line that connects to the meter on the side of homes and businesses. The meter is used to determine how many kilowatt-hours each customer uses.

service voltage — The voltage at which a customer is connected to the electric system.

sewer — A conduit that transports wastewaters from the premises to the treatment plant. Quantities transported usually range from 50 to 100 gallons of wastewater per person per day, depending on the community and the condition of the sewer system. Industrial contributions vary greatly, depending on the type of industry.

shaping — The management of generating resources to meet variable demand. In a hydroelectric system, for instance, shaping may involve varying the release of water from a reservoir in order to maintain a balance between generation and demand.

short-run avoided cost (SRAC) — Costs that a utility avoids by taking power from a qualifying facility for a relatively short period, such as one month. A qualifying facility, as defined by the Public Utilities Regulatory Policy Act of 1978 (PURPA), is a small power producer or a co-generator that sells its electricity to public utilities.

shut-in gas — Is intentionally not produced because of state conservation orders, unfavorable economics, or committed buyers failing to take it.

simple cycle — A compressor section that pumps the air for combustion, and a

combustion section where the compressed air is mixed with natural gas or oil and burned. The air, in turn, expands with the products of combustion and attains a higher temperature and pressure. This expanded mixture of air and gas then impinges on turbine blades attached to the same shaft as the compressor section, thus providing the power required to rotate the combustion air compressor. After the hot gases pass through the compressor turbine, the gasses go into the power turbine, where the shaft power is used to turn the generator or other power plant equipment.

single-phase power — The ordinary electric service usually provided to households (120v, two-wire or 120v/ 240v three-wire). Lights and small appliances operate at 120v. Major units such as electric ranges, clothes driers, heating and central air conditioning, or operate at 240 volts.

small power producer (SPP) — Defined by PURPA as an entity that generates electricity using renewable resources, such as waste, wind, solar or geothermal energy, for at least 75 percent of its total energy input. Its design capacity must be 80 megawatts or less.

sour gas — Natural gas that contains lethal hydrogen sulfide; it must be purified before it can be introduced into the interstate pipeline system. It smells sour.

spill — The overflow structure of a dam; the release of water from a reservoir that does not pass through turbines to generate electricity.

spinning reserve — Unused but available capacity from generating units that are connected to and synchronized with a grid. It is nearly “instantly available” to meet additional demand.

staff report — A commission staff report on a rate case petition following the staff’s investigation of the case.

standby demand — The amount of power available as a secondary source or backup for the outage of a customer’s primary source, as specified by contractual arrangement.

standpipe — Is a water tower.

step — A tiered price structure that depends on the step within which the last consumed unit falls.

storage facility — Natural gas is compressed and injected into underground storage facilities (like depleted salt caverns or old gas fields) between April and October when demand is low. In colder weather months, the gas is brought back into the distribution system as needed. Purists in the business like to say it’s “drawn out.”

straightline — A constant per-unit charge that remains constant with an increase or decrease in the units used.

subbituminous — A dull black coal ranking between lignite and bituminous. It is mined primarily in Montana and Wyoming.

subject to refund — Condition placed on rate increases that are made prior to a final commission order. If the commission later decides on a lower amount, the utility gives back the money it receives under the preliminary rate increase.

substation — A facility that switches, steps down or regulates electricity. Substations also serve as control or transfer points in an electrical system. Their purpose is to route and control electricity, alter voltage levels and serve as delivery points.

sump pump — An automatic water pump used in basements to raise water to the sewer level.

surface water — A name for lakes, reservoirs and rivers.

suspended solids — Solids that either float on the surface of, or are suspended in, wastewater.

suspension — Delay in putting a rate increase into effect until the commission can study and rule on it.

sweet gas — Natural gas that does not need to be purified to remove sulfur-bearing compounds; the opposite of sour gas.

swing supply — A supply of natural gas that is the last to be taken by a customer and the first to be curtailed if a shortage arises.

synthetic natural gas (SNG) — Is methane derived from sources other than naturally occurring reservoirs; it might be extracted by heating coal, refining heavier hydrocarbons or processing organic materials, such as garbage.

T

take-or-pay — A contract clause that requires a buyer to pay for a quantity of natural gas or electricity whether that amount is actually used. Typically in the past, take-or-pay clauses stipulated an absolute amount (usually of gas) or a percentage of the total contract amount that had to be taken over a period of time, usually a year. Take-or-pay clauses are rare today.

terawatt-hours (TWh) — Equal to 1,000 gigawatt-hours, the terawatt is an energy yardstick in Europe.

test year — A recent 12-month period, often the previous calendar year, used as a basis in estimating future utility costs in a rate case.

therm — A unit of heating value equal to 100,000 Btu.

three-part — A rate consisting of a customer charge, a demand charge and a commodity charge.

three-phase power — Electric power supplied using (alternating current with three branches, differing by one-third of a cycle (120°) in phase, such that when one branch is at full value the others are at half value, but flowing in the opposite direction. This type of power is generally required for operating heavy equipment.

tiered rates — A system of rate schedules that divides customer usage into different tiers or blocks, each with a different price.

time-of-day rates — Rates that vary with the time of day — higher during periods of peak use and lower during periods of low demand. Also known as time-of-use Rates, they differ from real-time pricing in that they are based on forecast, rather than actual costs. While rates for real-time pricing fluctuate many times a day, time-of-day rates vary on a fixed schedule, usually in blocks of three to four hours.

tolerable zone — A band of voltages that is above and below the Preferred Zone. While not ideal, voltages in the tolerable zone permit customers' equipment to operate

satisfactorily and without undue wear or damage, although performance may be compromised.

transco — Short for transmission or transportation company. The bulk transmission part of a disaggregated electric utility, operated as a separate entity.

transcript — Written record of rate case proceedings, including the utility's case and documentation, cross-examination, the staff report and witnesses and the intervenors' presentations and cross-examination.

transformer — A device that changes the voltage of alternating current.

transition costs — Costs associated with deregulating a formerly regulated industry. These costs include stranded costs. They occur when customers are permitted to switch providers before the original provider has recovered certain costs, including mandated purchased power arrangements, capital, taxes and costs associated with social policy and environmental matters.

transmission — The network of high voltage lines, transformers and switches used to move electricity from generators to the distribution system. Also used to interconnect different utility systems and independent power producers together into a synchronized network. Transmission is considered to end when the energy is transformed for distribution to the consumer.

transmission grid — An interconnected system for transmitting power along high-voltage lines in bulk from points of supply to points of demand.

transmission substation — These facilities look like giant erector sets connected to wires from the power plant. Here large transformers increase voltage from thousands to hundreds of thousands of volts so the power can be sent over long distances.

treatment facility — Once out of the well, the gas is treated to remove any sand, dust, contaminants, water or condensed petroleum liquids.

two-part — A rate consisting of a demand charge and a commodity charge.

types of customers — Residential, commercial and industrial groups that purchase a utility's product or service.

U

unbundled services — Energy services that are sold and priced separately, such as generation, transmission and distribution.

utility easement — Legal permission to enter onto, or cross, private property within a specified area to install and maintain utilities.

V

valves — Devices placed in a distribution system to control the flow of water. Valves in general are used to isolate sections of pipeline requiring repairs without having to shut down the entire system.

vanilla — A plain transaction. For example, you own natural gas and you sell it.

vertical integration — A corporate structure in which one company owns all the different aspects of making, selling and delivering a product or service. A vertically integrated electric utility would own generation, transmission and distribution facilities.

volatility — Changes in the commodity price. The more a price changes, the greater the volatility and the greater the opportunity to make a profit through trading.

volt — A unit of electromotive force. One volt, applied to a circuit with a resistance of one ohm, produces a current of one ampere. In the United States, electrical systems of most homes and offices are 110 volts.

volt ampere — The basic unit of apparent power. The volt amperes of an electric circuit are the mathematic product of volts and amperes.

voltage — The measure of electric pressure in an electrical system, analogous to water pressure in a water system. For a pipe of a given size, an increase in water pressure increases the capacity of the pipe to deliver water in gallons per hour. Similarly, for a wire of given size, an increase in voltage (pressure) results in an increase in the capacity of that wire to deliver energy, this capacity measured in kilowatts. For this reason, when electricity is to be transmitted over long distances, high voltages are used to keep the required size of the wire to a minimum for the purpose of delivering the required number of kilowatts. Relatively high pressure is used in transmitting water or oil over long distances through pipe lines.

volumetric — A rate or charge based on the amount or volume a customer actually receives.

W-Z

wastewater — Liquid and water-carried industrial or domestic wastes.

water meter — A device used to measure the quantity of water used by a customer.

water rate schedule — A list of prices that the utility will charge for water consumption. Most rate schedules are of the declining rate type. This means that the more water you use, the less it will cost per unit of measurement. In computing a rate schedule, the utility will include all of its costs for water production, system maintenance and repairs, administrative costs and capital improvements.

water table — Distance from surface to ground to a depth at which natural ground water is found.

water tower (or standpipe) — A structural steel vessel used for storage of water in a distribution system. The water tower or standpipe will generally be elevated 90 to 120 feet above the ground to continually supply water pressure to the distribution system.

watt — The basic unit for measuring volume of electricity. Technically, it's the power produced by a current of one ampere across a potential difference of one volt.

watt-hour (Wh) — One watt of power supplied to, or taken from, a circuit for one hour.

wellhead — Natural gas is flushed out of the ground. The pressure of the gas where it exists underground pushes it to the surface after the well is drilled.

wellhead price — The price paid to the producer for natural gas at the well.

wet gas — Natural gas that contains liquefiable hydrocarbons; also, natural gas that has more than seven pounds of water per million cubic feet.

wheeling — Electric utility operation wherein transmission facilities of one system are used to transmit power produced by another system.

zone — A rate based on a zone through which the energy moves.

ENERGY CONVERSION FACTORS^a

Unit of Measure	Multiplied by	Yields
British Thermal Units	X 0.2530	= kilogram-calories
	X 777.5	= foot-pounds
	X 3.927 X 10 ⁻⁴	= horse-power-hours
	X 107.5	= kilogram-meters
	X 2.928 X 10 ⁻⁴	= kilowatt-hours
BTU Per Minute	X 12.96	= foot-pounds per second
	X 0.02356	= horse-power
	X 0.01757	= kilowatts
Horsepower	X 17.57	= watts
	X 746	= watts
	X 0.746	= kilowatts
Kilowatts	X 56.92	= BTUs per minute
	X 4.425 X 10 ⁴	= foot-pounds per minute
	X 737.6	= foot-pounds per second
	X 1.341	= horse-power
	X 14.34	= kilogram-calories per minute
	X 103	= watts
Kilowatt-hours	X 3.415	= British thermal units
	X 2.655 X 10 ⁶	= foot-pounds
	X 1.341	= horse-power-hours
	X 860.5	= kilogram-calories
	X 3.671 X 10 ⁵	= kilogram-meters
Watts	X 0.05692	= BTUs per minute
	X 107	= ergs per second
	X 44.26	= foot-pounds per minute
	X 0.7376	= foot-pounds per second
	X 1.341 X 10 ⁻³	= horse-power
	X 0.01434	= kilogram-calories per minute
	X 10 ⁻³	= kilowatts
Watt-hours	X 3.415	= BTUs
	X 2,655	= foot-pounds
	X 1.341 X 10 ⁻³	= horsepower-hours
	X 0.8605	= kilogram-calories
	X 367.1	= kilogram-meters
	X 10 ⁻³	=kilowatt-hours

^aDirect conversions in energy should consider relative efficiencies.

APPROXIMATE ENERGY CONVERSION VALUES BY ENERGY SOURCE

Source	Measure	Yield
Natural Gas	1MCF 1MCF 1 Therm 1 Therm 1 Cubic Foot	= 1,000,000 BTU = 10 Therms = 100,000 BTU = 100 Cubic ft. = 1,000 BTU
Electricity	1 KWH 1 KWH 30 KWH 1 Amp 1 HP	= 3,413 BTU = 3.4 Cubic ft. NG = 1 Therm = 1 Volt @ 1 ohm resistance = 746 watts
Propane	1 Gal 1 Gal 1 Gal	= 95,500 BTU = 92 Cubic ft. NG = 0.92 Therm
Bituminous Coala	1 lb 7.7 lb	= 13,000 BTU = 1 Therm
Fuel Oil, Grades 1-4	1 Gal 1 Gal	= 106,000 BTU = 106 Cubic ft. NG
Fuel Oil, Grades 5 & 6	1 Gal	= 115,000 BTU

^aThe energy available from coal varies with coal quality.

Financing

acceleration clause — A provision in a note and deed of trust or mortgage requiring immediate payment of the entire unpaid balance of principal and interest following a specified event or events.

adjusted basis — Base price from which to judge capital gains or losses upon sale of an asset, such as a stock or bond.

adjustable rate mortgage (ARM) — Mortgage agreement between a financial institution and a real estate buyer stipulating predetermined adjustments of the interest rate at specified intervals based on an index of interest rates. There is no prepayment penalty. Borrowers get lower rates at the beginning of the ARM than they would if they took out a fixed rate mortgage covering the same term.

alienation clause — See acceleration clause.

amortization — The process of gradually liquidating a financial obligation by a series of periodic payments to the creditor.

annual percentage rate (APR) — A measure of the cost of credit expressed at a yearly rate.

APR — Is total amount of interest and finance charges/loan amount

arithmetic mean — Simple average obtained by dividing the sum of two or more items by the number of items.

asset — Anything having commercial or exchange value that is owned by a business, institution or individual.

asset financing — Financing that seeks to convert particular assets into working cash or exchange for a security interest in those assets. This term is replacing commercial financing.

at par — At a price equal to the face, or nominal, value of a security. See also par value.

B

bad debt — Open account balance or loan proven uncollectible and is written off.

balloon payment — Final payment on a debt that is substantially larger than the preceding payments. Loans or mortgages are structured with balloon payments when some projected event is expected to provide extra cash flow or when refinancing is anticipated.

bonds — Certificates of indebtedness representing long-term borrowing of capital funds.

bond rating — Method of evaluating the possibility of default by a bond issuer.

bond ratio — Leverage ratio representing the percentage of a company's capitalization in bonds.

business development corporation (BDC) — A business financing agency, usually comprised of the financial institutions in an area or state, organized for assisting in the financing of industrial concerns which are not able to obtain such assistance through normal channels. The "risk" is spread among various members of the BDC and interest rates are usually somewhat higher than those charged by the member institutions.

buy-down — For a fee, the lender agrees to reduce the interest or payment on a loan to a below-market rate, usually for a certain period of time.

C

callable — Able to be redeemed prior to maturity.

call loan — A loan that may be terminated on demand of either party at any time; a demand loan.

call rate — The interest rate on call or demand loans.

capital assets — The total amount of money and property owned.

capital-intensive — Requiring large investments in capital assets.

CDBG (Community Development Block Grants) — A program that allows communities to address development needs.

Chapter 100, RSMo. — The chapter of the Revised Statutes of Missouri which contains the statutes pertaining to municipal bonding for industrial development.

Chapter 349, RSMo. — The chapter of the Revised Statutes of Missouri that contains the financing law enacted in 1977 under which cities and counties are allowed to form industrial development corporations to issue tax-exempt industrial development bonds without a public vote for approval.

community development corporation — A corporation set up in an area to develop economic programs for a community and, in most cases, to provide financial support for such economic development.

consortium — A coalition, as of banks or corporations, for ventures requiring large capital resources.

constant dollars — Dollars of a base year used as a gauge to adjust the dollars of other years as certain actual purchasing power.

Consumer Price Index — Measure of change in consumer prices as determined by a monthly survey of the U.S. Bureau of Labor Statistics. Also known as the “cost-of-living index.”

creative financing — The ability to make use of alternative mortgaging and financing techniques while exploring a buyer’s chances to generate additional cash and/or improve his ability to handle mortgage payments.

current assets — Cash, accounts receivable, inventory and other assets that are likely to be converted into cash, sold, exchanged or expensed in the normal course of business, usually within a year.

current liability — Debt or other obligation coming due within one year.

current ratio — Current assets divided by current liabilities.

D

debenture — 1. A certificate given as acknowledgement of a debt secured by the general credit of the issuing corporation. 2. A bond, usually without security, issued by a corporation, sometimes convertible to common stock.

debt-to-equity-ratio — 1. Total liabilities divided by total shareholders’ equity; 2. Total long-term debt divided by total shareholders’ equity. 3. Long-term debt and preferred stock divided by common stock equity. Debt Service-Cash required in a period, usually one year, for payments of interest and current maturities of principal on outstanding debt.

deeds — An instrument in writing by which the owner of land (grantor) transfers to another (grantee) some right, title or interest in or to real estate.

discount — The difference between the balance due on a note and the amount an investor pays for it.

discount rate — 1. Interest rate the Federal Reserve charges member banks for loans. 2. Interest rate used in determining the present value of future cash flows.

disposable income — Personal income remaining after personal taxes and noncommercial government fees have been paid.

due date — A specified period at the end of which the entire unpaid balance of a note becomes due and payable in full.

due on sale clause — A provision in a note and deed of trust or mortgage requiring immediate payment of the entire amount of unpaid principal and interest upon the sale, transfer and, sometimes, further encumbrance of the property or any part, at the option of the lender.

E

earnings-price ratio — Relationship of earnings per share to current stock price.

equity — The difference between the amount a property could be sold for and the claims against it.

F

FASB (Financial Accounting Standards Board) — The private sector organization that establishes financial reporting standards.

fixed asset — Tangible property used in the operation of the business but not expected to be consumed or converted into cash in the ordinary course of events.

fixed-rate mortgage — A mortgage that provides for repayment of the principal amount (the unpaid balance of a loan) over a specified number of years in equal monthly payments, including interest. The interest rate does not fluctuate with general market conditions.

503 Certified Development Company — A development organization certified by the Small Business Administration under Section 503 to provide fixed-asset financing to small business concerns for plant acquisition, construction, conversion or expansion. It includes the acquisition of land, existing buildings and leasehold improvements. Plant construction includes the acquisition and installation of machinery and equipment. The SBA debenture may not exceed \$500,000 nor may it comprise more than 50 percent of the project's total cost. The term of the loan, which may not exceed 25 years, depends on the economic life of the asset being financed.

G

gap — Amount of a financing need for which a provision has yet to be made.

General Obligation Bond (G.O. Bond) — A type of municipal bond, which is secured by the taxing power of the municipality, and which may be used to finance new or expanding industrial facilities. A Missouri municipality may issue G.O. bonds equal to 10 percent of its assessed valuation of taxable tangible property.

Graduated Payment Mortgage (GPM) — A financing mechanism under which the interest rate remains fixed throughout the term of the loan, but the monthly payments start out at a low level and gradually increase (for example, at three percent a year) until they rise above the level at which a standard fixed-rate mortgage would have been written.

Group of Ten — Ten major industrialized countries that try to coordinate monetary and fiscal policies to create a more stable world economic system. The ten are Belgium, Canada, France, Italy, Japan, The Netherlands, Sweden, the United Kingdom, the United States, and Germany. Also known as the “Paris Club.”

I

Industrial Development Authority — The financial arm of a state or other political subdivision established for the purpose of financing economic development in an area, usually through loans to nonprofit organizations, which in turn provide facilities for manufacturing and other industrial operations.

Industrial Revenue Bonds — Bonds issued by agencies designated by state and local governments to finance industrial and/or commercial projects (depending on the state law) that serve a public good. The bonds usually are not backed by the “full faith and

credit” of the government. They are repaid solely from the project’s revenues.

inflation rate — Is a price rate change.

L

leverage — The use of borrowed funds to increase purchasing power and, ideally, to increase the profitability of an investment.

leverage — Debt in relation to equity in a firm’s capital structure. The more long-term debt there is, the greater the financial leverage.

liquid asset — Cash or an asset easily converted into cash.

local development companies (LDCs) — For-profit or nonprofit companies authorized by the Small Business Administration (SBA) to assist small businesses in low-income target areas. The SBA makes direct long-term loans and guarantees loans made by private lending institutions for fixed-asset financing.

local development corporation — An organization of local citizens of a community designed to improve an area’s economy by inducing business and industry to locate therein and expand in the area. A local development corporation usually has financing capabilities.

long-term debt — Liability due in a year or more.

M

MEDEIB (Missouri Economic Development Export and Infrastructure Board) — Is a regulating board in Missouri for economic development.

municipal bonds — Bonds that are issued and sold by a municipality to obtain funds to purchase, construct, extend or improve industrial plants. Missouri law allows either of two types of municipal bonds to be issued, general obligation (G.O.) bonds and revenue bonds.

N

net worth — All legal assets less indebtedness.

note — A commercial paper, some types of which are negotiable, relating to the owing of debts or the payment of money (e.g., a promissory note; a bank note).

P

par value — The stated value of a stock or bond; face value, as opposed to market value.

passive financial instruments — Stocks and bonds that bear no interest.

pay-off rate — The amount of monthly payments, including principal and interest, expressed as a percentage of the face value of a note.

Planned Industrial Expansion Authority (P.I.E.) — A bond-issuing authority limited

to urban areas of more than 400,000 (Kansas City and St. Louis). A P.I.E. authority may acquire property to be built upon or improved for the city's economic growth and general welfare. The authority may issue tax-exempt revenue bonds to finance such projects.

prime rate — The lowest commercial interest rate charged by banks on short-term loans to their most creditworthy customers.

R

renegotiable-rate mortgage (RRM) (or rollover mortgage) — An automatically renewable short-term loan (three, four or five years) secured by a long-term mortgage, with renegotiation of the interest rate at the time of renewal. Rate changes are tied to an index. There is no prepayment penalty.

revenue bond — See industrial revenue bond.

S

SBA (Small Business Administration) — An independent agency of the Federal Government created by Congress in 1953 to help small businesses grow and prosper.

RLF (Revolving Loan Funds) — Loans in which seed money is established. Loans are made out of and paid back into the same fund, usually for a specified purpose.

SBIC (Small Business Investment Company) — Is a privately owned institution licensed by the Small Business Administration. Although the SBIC must operate within SBA regulations, its transactions with small companies are private arrangements and have no direct connection with the SBA. An SBIC may be formed by any three (or more) parties, but it must be chartered by the state in which it is formed. No individual bank can own more than 49 percent of any SBIC. Minimum initial private capitalization is \$150,000. SBICs may lend or invest a maximum of 20 percent of their initial private capital to any one borrowing company. After 75 percent of the initial private capital has been loaned out, the SBIC may then borrow additional capital from SBA at the rate of two dollars for each dollar loaned out.

Shared Appreciation Mortgage (SAM) — Under this type of mortgage, the lender offers a below-market interest rate in return for a percentage in the appreciation of the property.

short-term debt — All debt obligations coming due within one year.

sinking fund — Assets set apart for retirement of debt, redemption of stock or bonds or for the protection of an investment in depreciable property.

T

Tax Increment Financing (TIF) — A financing mechanism under which a taxpayer's property tax payments for improved property are used to finance the improvement. Normally, these property taxes would go to the taxing authority as revenue taxes. Under tax increment financing, the taxing authority receives property taxes only on the

value of unimproved property.

term — The length of time for which a loan is made.

terms of a note — The conditions or limits of a note. The terms of a note include: the interest rate per annum, the pay-off rate, the due date and transferability.

time deposit — A bank deposit that cannot be withdrawn prior to a specified future time.

transferability — Whether a note contains a “due on sale” clause stating that the note comes immediately due and payable in full if the event the borrower sells or transfers the property given as security for the note.

treasury bills — Short-term investment tender issued by the Federal Reserve Bank in amounts of \$10,000 to \$1 million that mature within one year.

treasury bonds — Long-term notes with maturity dates of not less than 10 years issued in minimum denominations of \$1,000.

treasury notes — Intermediate-term notes with maturities of one to 10 years. Denominations range from \$1,000 to \$1 million or more.

U

usury — Charging more than the legal rate of interest for the use of money.

V

Variable Rate Mortgage (VRM) — A mortgage that provides for fluctuations in interest during the life of the loan. Rate changes are tied to an index. A change in the rate of interest must result in a change in monthly payments or in the length of the loan. Thus a variable rate mortgage can either have a variable payment and fixed maturity, or a fixed payment and variable maturity. This type of loan agreement usually includes limits on the frequency of interest changes and a maximum increase in rate, for each change and for the life of the loan.

venture capital — 1. Money used to support new or unusual undertakings. 2. Speculative or risk investment capital.

W

working capital — The difference between current assets and current liabilities.

wrap-around mortgage — A secondary mortgage that increases a borrower’s indebtedness while leaving the original mortgage contract in force.

Y

yield — The return to an investor, in percent, on the price he pays for a note.

Foreign Trade

acceptance — 1. A time draft (or bill of exchange) which the drawee (the payer) has accepted and is unconditionally obligated to pay at maturity. The draft must be presented first for acceptance — the drawee becomes the “acceptor” — then for payment. The word “accepted” and the date and place of payment must be written on the face of the draft. 2. The drawee’s act in receiving a draft and thus entering into the obligation to pay its value at maturity. 3. Any agreement to purchase goods under specified terms.

affreightment, contract of — An agreement by a steamship line to provide cargo space on a vessel at a specified price to accommodate an exporter or importer, who then becomes liable for payment even though he is later unable to make the shipment.

all-risk clause — An insurance provision that all loss or damage to goods is insured except that of inherent vice (self-caused).

alongside — A phrase referring to the side of a ship. Goods to be delivered “alongside” are to be placed on the dock or within reach of the transport ship’s tackle so that they can be loaded aboard the ship.

American conditions (F.P.A.A.C.) — Partial loss not insured unless caused by the vessel being sunk, stranded, burned, on fire, or in a collision within reach of its loading tackle.

anti-dumping duty — A tariff imposed to discourage sale of foreign goods in the United States market at low prices which would be detrimental to U.S. manufacturers.

appraisement — The determination, by a proper Customs official, of the dutiable value of imported merchandise following procedures outlined in the Tariff Act of 1930, as amended.

arbitrage — The practice of exchanging the currency of one country for that of another or a series of countries to gain an advantage from the differences in exchange rates.

arbitration clause — A clause in a sales contract outlining the method under which disputes will be settled.

avoirdupois — The system of weights based on a pound of ounces.

B

balance of trade — Net difference over a period of time between the value of a country's imports and exports of merchandise.

bill of lading — A document which provides the terms of the contract between the shipper and the transportation company to move freight between stated points at a specified charge.

bonded warehouse — A building authorized by customs authorities for the storage of goods, without payment of duties, until the goods are removed.

booking number — A number assigned to a contract of affreightment used as an identifying reference on bills and correspondence.

booking — An arrangement with a steamship company for the acceptance and carriage of freight.

C

C & F Named Port — The price quoted to the buyer includes cost of goods and freight. Buyer pays insurance while aboard ship to overseas inland destination.

C. & I. — The seller quotes a price, including the cost of the goods, the marine insurance and all transportation charges, except the ocean freight to the named port of destination.

C.I.F. & C. — Price includes commission as well as C.I.F.

C.I.F. & E. — Price includes exchange of currency from United States to foreign money as well as C.I.F.

C.I.F. duty paid — The seller includes in the total price to the buyer, in addition to the cost of the goods, the insurance fee, the freight charge and the estimated United States duty.

C.I.F. named port — Cost, insurance, freight. Same as C & F except seller also provides insurance up to named destination.

cable address — A code word of less than 10 letters, registered annually with the Central Bureau of Registered Addresses, used in lieu of the entire name and address of a firm receiving or sending cablegrams to reduce words required in a cablegram.

Cash Against Documents (C.A.D.) — A method of payment for goods in which documents transferring title are given the buyer upon payment of cash to an intermediary acting for the seller, usually a commission house.

Cash In Advance (C.I.A.) — A method of payment for goods in which the buyer pays the seller in advance of the shipment of goods. Usually employed when the goods are built to order, such as specialized machinery.

Cash With Order (C.W.O.) — A method of payment for goods in which cash is paid at the time of order and the transaction becomes binding on both buyer and seller.

certificate of origin — A certified document as to the origin of goods, used in foreign commerce.

CFR (cost and freight) — to a named overseas port where the seller quotes a price for the goods that includes the cost of transportation to the named point of debarkation. The buyer covers the cost of insurance. Used only for ocean shipments.

charter party — Renting of an entire vessel or part of its freight space, for a particular trip or stipulated period of time.

CIF (cost, insurance, freight) — to a named overseas port where the seller quotes a price for the goods (including insurance), all transportation and miscellaneous charges to the point of debarkation from the vessel. (Used only for ocean shipments.)

clean bill of lading — Document of receipt by a carrier when the goods are received in good order.

combination export manager — A firm that acts as an export sales agent for more than one U.S. manufacturer, all of which are noncompetitive with the others. Business is transacted under the name of the manufacturers and revenue is derived from sales commissions.

commercial code — A published code designed to reduce words required in a cablegram.

conditionally free — Merchandise that is free of duty under certain conditions and provided the conditions can be satisfied.

confirmed letter of credit — A letter of credit, issued by a foreign bank, with validity confirmed by an American bank. An exporter, whose payment terms are a confirmed letter of credit, is assured of payment even if the foreign buyer or foreign bank defaults. (See also Letter of Credit)

consignee marks — A symbol placed on packages for export for identification purposes; generally consists of a diamond, square, circle, triangle and/or cross, with letters and/or numbers as well as port of discharge.

consignment — Delivery of merchandise from an exporter (the consignor) to an agent (consignee).

consul — A government official residing in a foreign country who is charged with the representation of the interests of his country and its nationals.

consular declaration — A formal statement describing goods to be shipped made to the consul of the country of destination. Approval must be obtained prior to shipment.

consular invoice — A document required by some foreign countries showing exact information as to consignor, consignee, value and description of a shipment.

consulate — The jurisdiction, term of office or official premises of a consul.

countertrade — International trade in which the seller is required to accept goods or other instruments of trade in partial or whole payment for its products.

countervailing duty — An additional duty imposed by the Secretary of the Treasury to offset export grants, bounties or subsidies paid to foreign suppliers in certain countries by the government of that country for the purpose of promoting export.

CPT (carriage paid to) and CIP (carriage and insurance paid to) — a named place of destination. These terms are used in place of CFR and CIF, respectively, for all modes of transportation, including intermodal.

credit risk insurance — A form of insurance that protects the seller against loss due to default on the part of the buyer.

customhouse broker — A person or firm, licensed by the Treasury Department, engaged in entering and clearing goods through customs. The duties of a broker include preparing the entry blank and filing it; advising the importer on duties to be paid; advancing duties and other costs; and arranging for delivery to his client, his trucking firm or other carrier.

customs bonded warehouse — A warehouse where imported goods may be stored for a total of three years without the payment of duty or taxes.

customs court — The court to which importers might appeal or protest decisions made by customs officers.

D

D/A sight draft — Documents against acceptance sight draft. A method of payment for goods in which documents transferring title are delivered to the buyer as soon as it's signed and stamped on a draft, guaranteeing payment of the draft.

demurrage — Excess time taken for loading or unloading of a vessel not caused by the vessel operator, but due to the acts of a charterer or shipper.

direct exporting — Sale by an exporter directly to a buyer located in a foreign country.

dispatch — An amount paid to a charterer by the vessel operator if loading or unloading is accomplished in less time than provided for in the charter agreement.

distributor — A foreign agent who sells directly for a manufacturer and maintains an inventory.

dock receipt — A receipt given for a shipment received or delivered at a steamship pier. When delivery of a foreign shipment is completed, the dock receipt is surrendered to the vessel operator or his agent and serves as the basis for preparation of the ocean bill of lading.

documents against payment (D/P) — A type of payment for goods in which the documents transferring title to the goods are not given to the buyer until he has paid the value of a draft issued against him.

draft (or bill of exchange) — An unconditional order in writing from one person (the drawer) to another (the drawee), directing the drawee to pay a specified amount to a named payee at a fixed or determinable future date.

drawback — Articles manufactured or produced in the United States with the use of imported merchandise and later exported are entitled to a refund of 99 percent of the duty paid. The refund of duty is known as drawback.

drawee — The individual or firm on whom a draft is drawn and who owes the indicated amount. Compare to “drawer.” See also “draft.”

drawer — The individual or firm that issues or signs a draft and stands to receive payment of the indicated amount from the drawee. Compare to drawee. See also draft.

dumping — Selling goods abroad below cost to eliminate a surplus, or to gain an edge in foreign competition.

duty — The tax imposed by customs on imported merchandise. See also tariff. **Ad Valorem Duty**: tax imposed on imported merchandise based on a percentage of the value. **Specific Duty**: tax imposed on imported merchandise without regard to value, usually based on the net weight or number of pieces, etc. **Compound duty**: Tax imposed on imported merchandise based on a percentage of value and also on the net weight or number of pieces, etc.

E

embargo — A government prohibition against the shipment of certain goods to another country.

Euro-dollars — U.S. dollars owned by foreigners and placed on deposit.

English conditions (F.P.A.E.C.) — Partial loss not insured unless a result of the vessel sunk, stranded, burned, on fire or in collision.

ex mill (ex warehouse, ex mine, ex factory) — The seller is obligated to place the specified quantity of goods at the specified price at his mill loaded on trucks, railroad cars or any other specified means of transport.

export broker — One who brings together the buyer and seller for a fee and then withdraws from the transaction.

export commission house — An organization which, for a commission, acts as a purchasing agent for a foreign buyer.

export declaration — A formal statement made to the collector of customs at a port of exit declaring fully particular about goods being exported.

export license — A permit required to engage in the export of certain commodities and quantities to certain destinations. Lists of such goods are found in the Comprehensive Export Schedule issued by the Bureau of Foreign Commerce.

export merchant — A producer or merchant who sells directly to a foreign purchaser without going through an intermediary such as an export broker.

export rate — A freight rate specially established for application on export traffic and generally lower than the domestic rate.

export — To send goods to a foreign country.

EXW (ex works) — A named point of origin (e.g., ex factory, ex mill, ex warehouse) where the price quoted applies only at the point of origin. The seller agrees to place the goods at the buyer's disposal at the specified place within the fixed time period. All other charges are put on the buyer's account.

F

F.A.S. (free alongside) Vessel — The seller quotes a price including delivery of goods alongside of overseas vessel

F.I. (free in) — Is a pricing term indicating that the charterer of a vessel is responsible

for the cost of loading goods onto the vessel.

F.I.O. (free in and out) — Is a pricing term indicating that the charterer of a vessel is responsible for the cost of loading and unloading goods from the vessel.

F.O. (free out) — is a pricing term indicating that the charterer of a vessel is responsible for the cost of unloading goods from the vessel.

F.O.B. (free on board) — The price quoted applies only at inland shipping point and the seller arranges for loading of the goods on, or in, railway cars, trucks, lighters, barges, aircraft or other conveyance furnished for transportation.

F.O.B. freight allowed — The same as F.O.B. named inland carrier except the buyer pays the transportation charge and the seller reduces his invoice by a like amount.

F.O.B. freight prepaid — The same as F.O.B. named inland carrier except the buyer pays the freight charges of the inland carrier.

F.O.B. named inland carrier — Seller must place the goods on the named carrier at the specified inland point and obtain a bill of lading. The buyer pays for the transportation.

F.O.B. named point of exportation — Seller is responsible for placing the goods at a named point of exportation at the seller's expense. Some European buyers use this form when they actually mean F.O.B. Vessel.

F.O.B. vessel — Seller is responsible for goods and preparation of export documentation until actually placed aboard the vessel.

FCA (free carrier) — This term replaces the former "F.O.B. named inland port" to designate the seller's responsibility for handing over the goods to a named carrier at the named shipping point. It may also be used for multimodal transport, container stations, or any mode of transport, including air.

foreign branch office — A sales (or other) office maintained in a foreign country and staffed by direct employees of the exporter.

foreign freight forwarder — Acts as an agent for the exporter in moving cargo to the overseas destination. Some recommend that a Freight Forwarder, licensed by the Federal Maritime Administration, move this cargo from U.S. Port of Export. These agents are familiar with the import rules and regulations of foreign countries, methods of shipping, U.S. government export regulations and with the documents connected with foreign trade.

foreign sales agent — An agent residing in a foreign country who acts as a salesman for a domestic manufacturer.

Foreign Trade Zone (FTZ) — A free port in the United States divorced from customs authority but under Federal control. Merchandise, except that which is prohibited, may be stored in the zone without United States tariff regulations.

Foreign Trade Zone entry — A form declaring goods which are brought duty-free into a Foreign Trade Zone for further processing or storage and subsequent exportation.

foul bill of lading — A receipt for goods issued by a carrier bearing a notation that the outward containers or the goods have been damaged.

Free of Capture and Seizure (F.C. &S.) — An insurance clause providing that loss is not insured if due to capture, seizure, confiscation and similar actions, whether legal or not, or from such acts as piracy, civil war, rebellion and civil strife.

Free of Particular Average (F.P.A.) — A marine insurance clause providing that partial loss or damage is not insured.

G

G.m.B.H. — The abbreviation of the German term “Gesellschaft mit Beschraenkter Haftung,” meaning a limited liability company.

general average — A deliberate loss or damage to goods in the face of a peril in which sacrifice is made for the preservation of the vessel and other goods. The cost of the loss is shared by the owners of the saved goods.

general license (export) — Authorization to export without specific documentary approval.

general license, limited value (GLV) — Authorization to export a limited value amount of goods without specific documentary authorization.

general order — Merchandise for which proper entry has not been made within five working days after arrival is sent to a General Order Warehouse. All costs are at the expense of the importer.

gross weight — Entire weight of goods, packing and container, ready for shipment.

I

in bond — A term applied to the status of merchandise admitted provisionally to a country without payment of duties — either for storage in a bonded warehouse or for transshipment to another point where duties will eventually be imposed.

indent — A requisition for goods, enumerating conditions of the sale. A seller accepts indent.

indirect exporting — Sale by the exporter to the buyer through a domestically located intermediary.

inherent vice — A condition causing damage to merchandise as a result of its own inherent defects.

inland bill of lading — A bill of lading used in transporting goods overland to the exporter’s international carrier; although a through bill of lading can sometimes be used, it is usually necessary to prepare both an inland bill of lading and an ocean bill of lading for export shipments.

inland carrier — A transportation line that hauls export or import traffic between ports and inland points.

international and territorial operations — In general, operations outside the territory of the United States.

irrevocable letter of credit — A letter of credit in which the bank guarantees the

specified payment if all terms and conditions are not met by the drawee.

jettison — The throwing overboard of the cargo or equipment of a ship to save the rest from marine disaster.

lay days — The dates between which a chartered vessel is to be available in a port for loading of cargo.

legal weight — The weight of goods plus any immediate wrappings that are sold along with the goods; e.g., the weight of a tin can as well as its contents. See also “net weight.”

letter of credit — This is a document, issued by a bank at the buyer’s request in favor of the seller, promising to pay the agreed amount of money upon receipt by the bank of certain documents within a specified time. With an irrevocable Letter of Credit the seller is guaranteed payment if the seller complies with all the terms and conditions of the Letter of Credit. This substitutes the bank’s credit for the buyer’s and eliminates the seller’s risk.

lighterage — The cost of loading or unloading a vessel by means of barges alongside.

liquidation — The ultimate determination of the duties due.

L

Ltd. (limited) — The abbreviation for a company in Great Britain and possessions where the liability of the owners is limited to the amount of capital invested or subscribed.

M

manufacturer’s export agent — A firm that acts as an export sales agent for several non-competing manufacturers. Business is transacted under the name of the agent firm.

marine insurance — An insurance that will compensate the owner of goods transported overseas in the event of loss which cannot be legally recovered from the carrier.

marking — Every article of foreign origin, or its container, imported into the United States shall be permanently marked in a conspicuous place in a manner which would indicate to the ultimate purchaser the English name of the country of origin.

metric ton — The equivalent in the metric system of 2,204.62 pounds avoirdupois.

N

navicert — A government certificate issued in wartime granting permission for vessel and cargo to proceed to destinations.

net weight (actual net weight) — Weight of the goods alone without any immediate wrappings; e.g., the weight of the contents of a tin can without the weight of the can. See also legal weight.

Non-Vessel Operating Carrier (NVOCC) — A cargo consolidator of small shipments

in ocean trade, generally soliciting business and arranging for or performing containerization functions at the port.

O

ocean bill of lading — A bill of lading indicating that the exporter consigns a shipment to an international carrier for transportation to a specified foreign market. Unlike the inland type, the ocean bill of lading also serves as a collection document. If it is a straight bill of lading, the foreign buyer can obtain the shipment from the carrier by simply showing proof of identity. If a negotiable bill of lading is used, the buyer must first pay for the goods, post a bond, or meet other conditions agreeable to the seller.

offset — A variation in countertrade in which the seller is required to assist in or to arrange for the marketing of locally produced goods.

open account — Shipping your merchandise to the consignee in the foreign country with no guarantee of payment.

P

par of exchange — The equivalent of the unit of money in one country expressed in the currency of another country, using gold as a standard of value.

parcel post receipt — A signed acknowledgement by the postal authorities of delivery to them of a shipment.

particular average — Is a partial loss or damage to goods.

per mille — Is name for Per 1,000 and is a basis on which quotations are frequently made in foreign countries.

perils of the sea — Those causes of loss of goods for which the carrier is not legally liable. The elemental risks of ocean transport.

phytosanitary inspection certificate — A certificate, issued by the United States Food and Drug Administration (USDA) to satisfy import regulations of foreign countries, indicating that a U.S. shipment has been inspected and is free of harmful pests and plant diseases.

port marks — An identifying set of letters, numbers and/ or geometric symbols followed by the name of the port of destination, which are placed on export shipments. Foreign government requirements may be exceedingly strict in the matter of Port Marks.

port of entry — A port at which foreign goods are admitted into the receiving country. Missouri has four ports of entry, more than any other non-coastal state. They are: Kansas City, St. Joseph, St. Louis and Springfield.

private code — A secret code system devised to conceal the contents of a message and to reduce the number of words required in a cablegram.

pro forma invoice — An invoice forwarded by the seller of goods prior to shipment advising the buyer of the weight and value of the goods being shipped so the buyer can obtain the necessary import payments.

prohibited imports — Merchandise which, because of its nature or origin may not be imported into the United States.

protective tariff — A tariff designed to protect domestic industries against foreign competition.

Pty — The abbreviation for proprietary signifying a privately owned company in Australia and possessions.

public stores — Government property used for the examination of merchandise prior to its release from Customs custody.

Q

quota — The quantity of goods which may be imported without restriction or additional duties or taxes.

quotation — An offer to sell goods at a stated price and under stated terms.

R

rate of exchange — The basis upon which money of one country will be exchanged for that of another. S/S-Abbreviation for steamship.

revocable letter of credit — A letter of credit which can be canceled or altered by the drawee (buyer) after it has been issued by the drawee's bank; compare to "irrevocable letter of credit."

S

Schedule B — Refers to Schedule B, statistical classification of domestic and foreign commodities exported.

shipper's export declaration — A form required by the Treasury Department and completed by a shipper showing the value, weight, consignee, destination, etc., of export shipments as well as Schedule B (see definition) identification number.

ships manifest — An instrument in writing containing a list of the shipments comprising the cargo of a vessel.

sight draft — Is used when the seller wishes to retain control of the shipment, either for credit reasons or for the purpose of title retention. Money will be payable upon sight of the completed documents.

steamship conference — A group of vessel operators joined together for the purpose of establishing freight rates. A shipper may receive reduced rates if the shipper enters into a contract to ship on vessels of conference members only.

sterling bloc — The British Commonwealth countries that fixed the price of sterling used in foreign exchange. With a fixed price, sterling was not readily convertible to other currencies. This resulted in trade within the Bloc being favored.

Strikes, Riots and Civil Commotions (S.R. & C.C.) — A term referring to an

insurance clause excluding insurance of loss caused by labor disturbances, riots and civil commotions or any person engaged in such actions.

subzone — A special purpose foreign trade zone. Subzones are created around single manufacturing facilities under special circumstances that make it impossible for the plant to locate in an established FTZ.

sue and labor clause — A provision in marine insurance obligating the insured to do those things necessary after a loss to prevent further loss and to act in the best interest of the insurer.

swap arrangements — A form of trade in which the title to similar or identical products from different locations is traded to save transportation costs.

switch transactions — The practice of exporting (or importing) goods through an intermediary country to final destination. This is done when the destination country is short of U.S. dollars and the intermediary country has available U.S. dollars and is willing to exchange for the destination country's currency on goods. Switch transactions must be performed within the limits of the various laws controlling export licenses.

T

tare weight — The weight of containers and packing without the goods to be shipped, i.e., the weight of the containers and packing themselves.

tariff — Federal tax on imports or exports, usually imposed either to raise revenue or to protect domestic firms from import competition. A tariff may also be designed to correct an imbalance of payments. The money collected under tariffs is called "duty."

tenor — The term fixed for payment of a draft that is also called usance.

through bill of lading — A single bill of lading covering both the domestic and international carriage of an export shipment. An air waybill, for instance, is essentially a through bill of lading used for air shipments. Ocean shipments usually require two separate documents, and inland bill of lading for domestic carriage and an ocean bill of lading for international carriage. Through bills of lading cannot be used.

time draft — The same as a Sight Draft except that the buyer can defer payment for a specified period of time after accepting the draft.

tramp steamer — A ship not operating on regular routes or schedules.

U

usance — The term fixed for payment of a draft. Also called Tenor.

V

validated export license — A document issued by the U.S. Government authorizing the export of commodities for which written export authorization is required by law.

W

W.A. — “With average” is a marine insurance term meaning that a shipment is protected from partial damage whenever the damage exceeds 3 percent (or some other percentage).

war risk insurance — Separate insurance coverage for loss of goods that results from any act of war. This insurance is necessary during peacetime due to objects, such as floating mines, from previous wars War Risk Insurance in the United States is underwritten exclusively through the American Cargo War Risk Reinsurance Exchange, a group formed to share the extreme losses possible.

warehouse receipt — A receipt given by a warehouseman for goods received for storage.

weather working day — A day when reasonable weather conditions prevail to allow normal working of the vessel.

Western Hemisphere Trade Corporation — A domestic (U.S.) corporation whose business is done in any country in North, South or Central America, or the West Indies, and which usually receives certain tax advantages.

wharfage — The charge assessed by pier personnel for the handling of incoming or outgoing cargo.

With Particular Average (W.P.A.) — An insurance term meaning that partial loss or damage to goods is insured. Generally must be caused by seawater. May have a minimum percentage of damage before payment. May be extended to cover loss by theft, pilferage, delivery, leakage and breakage.

Labor and Industrial Relations

Civilian Labor Force (CLF) — All employed or unemployed persons in the noninstitutional population who are 16 years of age or older, excluding military personnel, retired persons, homemakers, students, disabled persons and voluntarily idle persons.

closed shop — A factory, business, etc., operating under a contractual arrangement between a labor union and the employer by which only members of the union may be employed.

D

Davis-Bacon Act — Is the federal Prevailing Wage Law.

F

fringe benefits — The benefits a worker accrues beyond regular wages, such as vacation, paid insurance, etc.

L

labor force — See civilian labor force and total labor force.

labor market area — The area within which workers will travel to work.

labor turnover — The change in a company's labor forces due to employees leaving, quits, discharges, layoffs, retirements, replacements, etc.

labor union — An association of workers organized to promote and protect the welfare, interests and rights of its members, primarily by collective bargaining.

lockout — To keep workers from a place of employment in an attempt to make them accept the employer's terms in a labor dispute.

M

MALT (Missouri Area Labor Trends) — A monthly publication produced by the Missouri Division of Employment Security that includes employment and unemployment data by county.

man-hour — The amount of work performed by one person in one hour.

man-hours — The number of persons working multiplied by the number of hours worked.

manpower — The number of capable persons whose capabilities are available.

MODES — Missouri Division of Employment Security

MOICC — Missouri Occupational Information Coordinating Committee

O

open shop — A factory, business, etc. operating under the system of employing workers without regard to whether they are members of a union.

P

prevailing wage — The wage generally paid in an area to workers engaged in work of a similar character.

R-Z

RTW — Is the standard abbreviation for right-to-work.

right-to-work law — Is statute outlawing the closed shop.

strike — To refuse to continue work until certain demands have been met.

total labor force — Is the Civilian Labor Force (CLF) plus military personnel.

unionize — To organize a group of workers in a shop, industry, etc. into a labor union.

union shop — 1. A shop, business establishment, etc. in which a contract between the employer and a labor union permits the hiring of nonunion workers, but that requires that all new employees join the union within a specified period, often 30 days, and remain members of the union throughout their employment. 2. A shop, business establishment, or part thereof in which wages, hours and working conditions of all employees are fixed by contract between the employer and a labor union.

work stoppage — A substantial diminution of activities, production or services at the establishment, plant, factory or premises of the employing unit.

Industry

Articles of Incorporation — A document that founders of a corporation file with a U.S. state.

C

clustering / industry clusters — A group of businesses having geographic proximity that rely on an active set of relationships among themselves for individual efficiency and competitiveness.

Consumer Price Index — An index issued by the U.S. Department of Labor as a measure of average changes in the retail prices of goods and services bought by families of wage earners and clerical workers living in the cities.

cost of materials — Direct charges actually paid or payable for items consumed or put into production, including freight charges and other direct charges incurred by a manufacturer in acquiring materials.

cottage industry — Production carried on at home, usually with the cooperation and assistance of the entire family.

E

econometrics — Use of computer analysis and modeling techniques to describe in mathematical terms the relationship between key economic forces such as labor, capital, interest rates, and government policies, then testing effects of changes in economic scenarios. For instance, an econometric model might show the relationship between housing starts and interest rates.

economic gardening — A focus on growing local businesses by providing an enriched environment for entrepreneurs.

economic growth rate — Rate of change in the Gross National Product (GNP) as expressed in an annual percentage. If adjusted for inflation, it is called the “real economic growth rate.” Two consecutive quarterly drops in the growth rate mean recession; two conservative quarterly advances in the growth rate mean an expanding economy.

economic indicators — Key statistics showing the direction of the economy. Among these are unemployment rate, inflation rate, factory utilization rate and balance of trade.

employment density — The number of main shift employees per acre of land.

enterprise zone — A special zone created in a distressed urban area to induce investment and job generation through removal of taxes, regulations and other governmental barriers to business expansion.

entrepreneur — A person skilled at increasing the productivity of economic resources by searching for change, responding to it and exploiting it as an opportunity. Tends to develop new technologies through innovation.

F

Forbes 500 — Annual listing by Forbes magazine of the largest U.S. publicly owned corporations ranked four ways: by sales, assets, profits, and market value.

Fortune 500 — Annual listing by Fortune magazine of the 500 largest U.S. industrial (manufacturing) corporations, ranked by sales.

Fortune Service 500 — Annual listing by Fortune magazine of the 500 largest nonmanufacturing U.S. companies by sales or revenue.

G

global economy / globalization — An economy characterized by services, sales and/or product distribution throughout the world.

grandfather clause — An exemption by which businesses operating prior to a certain date are not affected by enactment of a regulation, law or proceeding.

Gross National Product (GNP) — The total market value of a nation's goods and services before any deductions or allowances are made.

I

industrial plant — An establishment at a single location where industrial operations are performed (as opposed to an industrial firm that may have one or more plant locations).

industry — The gainful activity involved in producing, distributing, and changing the form of raw materials, or of assembling components and parts, packaging, warehousing, and transporting finished products.

L

labor-intensive — Requiring large pools of workers.

M

manufacturing — The mechanical or chemical transformation of inorganic or organic substances into new products.

market area — A geographic region from which one can expect the primary demand for a specific product or service provided at a fixed location.

MEDIS (Missouri Economic Development Information System) — Is an extensive computerized data base which includes data from community profiles, population and labor statistics, cost of living information, site availability, etc.

MIDC — Stands for Missouri Industrial Development Council

MOICC (Missouri Occupational Information Coordinating Committee) — A council comprised of Economic Development, Job Development & Training, Vocational Education, Employment Security, and Vocational Rehabilitation. The MOICC serves as a coordinating body for labor market information and as a vehicle for communication between the various agencies which produce and use such information.

P

plant area — The sum of the areas on each floor included within the principal outside faces of exterior walls, excluding architectural set-backs or projections.

Producer Price Index — A measure of the average changes in wholesale prices received in primary markets of the United States by producers of commodities in all stages of processing.

R

RPC (Regional Planning Commission) — Missouri has 20 RPCs.

S

satellite industry — A company, supplier or consumer, which has located in proximity to a manufacturing plant, either using its products or which produces products which may be used by the industry near which the satellite has located.

SBA (Small Business Administration) — A federal agency that provides numerous programs and services to the business community.

SIC (Standard Industrial Classification) — Number classifications assigned by the U.S. Bureau of the Census to designate establishments by type of product or industrial activity.

site intensity of use — The ratio of land area to total floor area.

small business — The Small Business Administration currently defines a small business as independently owned and operated; not dominant in its field; within the following category limitations: Manufacturing-not more than 1,500 employees.

wholesaling — Annual sales of no more than \$9.5 million to \$22 million.

services — Annual sales not more than \$2 to \$8 million.

general construction — Not exceeding \$9.5 million for three most-recent construction projects.

special trade construction — Not exceeding \$1 million to \$2 million for three most-recently completed fiscal years.

agriculture — Annual sales of not more than \$1 million.

Note: Standards vary according to type of assistance that the small business seeks from the SBA. Specific details are available from SBA Branch and District Offices.

V

value added by manufacture — A measure of manufacturing activity derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity and contract work from the value of shipments for products manufactured, plus receipts for services rendered.

value of shipments — The received or receivable net selling values of manufactured goods after discounts and allowances and excluding freight charges and excise taxes.

Industrial Real Estate

absorption — A measure of how much a real estate product is absorbed or used within a given year, generally indicated by square feet per year (e.g. class ‘A’ office had an absorption rate of 350,000 sq. ft./year in this submarket).

absolute fee simple title — One that is unqualified; it is the best title one can obtain.

abstract of title — A condensed history of the title, consisting of a summary of the various links in the chain of title, together with a statement of all liens, charges, or encumbrances affecting a particular property.

acceleration clause — A clause in a mortgage, land purchase contract or lease stating that, upon default of a payment due, the balance of the obligation should at once become due and payable.

access right — The right of an owner to have ingress and egress to and from his property.

acclivity — Is an upward slope.

accretion — Addition to the land through natural causes, usually by change in water flow.

acre foot — The quantity of water necessary to cover one acre to a depth of one foot (43,560 cubic feet).

acre inch — Is equal to 3,360 cubic feet.

acre — Is equal to 43,560 square feet.

ad valorem — Means in proportion to value. Thus, ad valorem taxes are taxes in proportion to the value of the item being taxed.

agreement of sale — A written agreement whereby the purchaser agrees to buy certain real estate and the seller agrees to sell upon terms and conditions set forth therein.

air rights — The ownership of the right to use, control or occupy the air space over a designated property.

allowable bearing value (allowable soil pressure) — The maximum pressure that can be permitted on foundation soil, giving consideration to all pertinent factors, with

adequate safety against rupture of the soil mass or movement of the foundation of such magnitude that the structure is impaired.

allowable pile bearing load — The maximum load that can be permitted on a pile with adequate safety against movement of such magnitude that the structure is endangered.

alluvium — Soil, the constituents of which have been transported in suspension by flowing water and subsequently, deposited by sedimentation.

amortization — The liquidation of a financial obligation on an installment basis.

annexation — The process by which a municipality expands its jurisdiction to include lands

annuity — A sum of money or its equivalent that constitutes one of a series of periodic payments.

appogee — Is the highest point.

appraisal — An estimate of quantity, quality, or value. The process through which conclusions of property value are obtained; also refers to the report setting forth the estimate and conclusion of value.

appraised value — The taxable value of an asset (real or personal property) assigned by the entity

appreciate — To rise in value.

appurtenance — That which belongs to something else; incidental rights and interests that attach to and pass with the transfer of land; something that is outside the property itself but which is considered a part of the property and adds to its greater enjoyment, such as the right to cross another's land.

aquifer — A water-bearing formation that provides a ground water reservoir.

area — Length & width; square footage, acreage, etc.; a two-dimensional space defined by boundaries.

assessed valuation — The valuation of property for tax purposes.

assessment — A charge against real estate made by a unit of government to cover the proportionate cost of an improvement, such as a street or sewer.

avulsion — Removal of land from one owner to another when a stream suddenly changes its channel.

B

backfill — The replacement of excavated earth into a hole or against a structure.

base and meridian — Imaginary lines used by surveyors to find and describe the location of lands.

bay — The principal open space or division of a structure between columns, walls or piers.

bedrock — The more or less continuous body of rock which underlies the overburden soils.

benchmark — A mark indicating position and elevation used as a reference point in surveys of areas.

blanket mortgage — A single mortgage covering more than one piece of real estate.

blighted area — A section of a city in which a majority of the structures are dilapidated.

bond — Any obligation under seal. A real estate bond is a written obligation, usually issued on security of a mortgage or a trust deed.

boring — A sample of soil or other underlying material.

boulders — Rock fragments, usually rounded by weathering or abrasion, with an average dimension of 12 inches (305 mm) or more.

broker — A person who serves, for a fee, as an intermediary to bring together two or more participants in a market transaction.

brownfield site — Abandoned, idled or under utilized industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

BTS/Build-to-Suit — Construction of a new building designed specifically for a company.

buffer zone — An area separating housing developments from other activities such as commercial or industrial operations.

building code — Regulating the construction of buildings within a municipality by ordinance or law.

building line — A line fixed at a certain distance from the front and/or sides of a lot, beyond which no building can project.

C

Central Business District (CBD) — A geographically defined area containing the greatest concentration of a city's commercial activity.

chain — A unit of land that measures 66 feet.

chattel — Is personal property, such as removable fixtures, furniture, etc.

closing statement — An accounting of funds in a real estate sale made by a broker to the seller and buyer, respectively.

cloud on the title — An outstanding claim or encumbrance that, if valid, would affect or impair the owner's title; a judgment or dower interest.

compaction curve (proctor curve) (moisture density curve) — The curve showing the relationship between the dry unit weight (density) and the water content of a soil for a given compaction effort.

compaction test — A test to determine the bearing properties of soils. Usually conducted prior to establishing locations for buildings, especially factories requiring heavy floor loads or stamping equipment.

compaction — The densification of a soil by means of mechanical manipulation.

condemnation — Taking private property for public use, with compensation to the owner, under the right of eminent domain.

D

default — 1. The nonperformance of a duty, whether arising under a contract, or otherwise. 2. Failure to meet an obligation when due.

depreciation — Loss in value, brought about by deterioration through ordinary wear and tear, action of the elements or becoming functionally or economically obsolete.

development district — A group of counties having common geographic, social and economic ties and facing interrelated development problems. The district serves as a regional clearing house for most federal and state grant-in-aid programs.

distressed property — Real estate that is under foreclosure or impending foreclosure because of insufficient income production.

E

earnest money — Down payment made by a purchaser of real estate as evidence of good faith.

easement — The privilege or right of making limited use of another's property, such as the easement rights granting an electric power company access to cross a property with power lines and permitting entry for the maintenance thereof.

economic life — The period over which a property may be profitably utilized.

elevation — 1. The distance from ground level to the top of a building, tract of land, etc. 2. The distance from sea level to ground level.

eminent domain — The right of a government to take, or to authorize the taking of, private property for necessary public use, upon payment of just compensation to the owner.

employment density — The number of main shift employees per acre of land.

encroachment — A building, part of a building, or obstruction which intrudes upon or invades a highway or sidewalk or trespasses upon property of another.

encumbrance — A claim, lien, charge, or liability attached to and binding upon real property, such as a judgment, unpaid taxes, or a right of way; defined in law as any right to, or interest in, land which may subsist in another to the diminution of its value, but consistent with the passing of the fee.

environmental impact statement — An analysis of the expected effects of a development or action on the surrounding natural and fabricated environment. Such statements are required for many federally supported developments under the National Environmental Policy Act of 1969.

equity — The difference between the fair market value of a property and the total amount of outstanding loans against it; the capital investment an owner has in property.

erosion — The gradual wearing away of land through processes of nature as by streams and winds.

escrow — A deed delivered to a third person for the grantee to be held by him until the fulfillment or performance of some act or condition.

F

fault — A fracture or fracture zone along which there has been displacement of the two sides relative to one another parallel to the fracture (this displacement may be a few centimeters or many kilometers).

fee simple — 1. Complete ownership. 2. An estate of land inherited without any restrictions.

fill — Man-made deposits of natural soils or rock products and waste materials.

fixed assets — Is property that is personal and real.

floodplain — A plain or area bordering a stream which is subject to flooding and in which certain activities are barred through floodplain zoning restrictions.

floor-area ratio — The arithmetic relationship of the total square feet of a building to the square footage of the land area. See also site intensity & use.

footing — A structural unit used to distribute wall or column loads to foundation materials; the portion of the foundation of a structure that transmits loads directly to the soil.

foundation bed — The surface on which a structure rests.

foundation soil — Upper part of the earth mass carrying the load of the structure.

foundation — 1. That part of a building wholly or partially below the surface of the ground that constitutes the base. 2. An endowment, or an endowed institution, that grants funds for or conducts research or support projects.

freehold — An interest in real estate without a predetermined time span.

fringe area — The portion of a municipality immediately outside the central business district in which there is a wide range in type of business activity, including some industrial activity.

front foot — A standard of measurement, one foot wide, extending from street line for a depth, generally conceded to be 100 feet.

frontage — 1. The front part of a building or lot. 2. The land adjacent to a street, highway or railroad. 3. Land lying between the front of a building and the street.

frost action — Freezing and thawing of moisture in materials and the resultant effects on these materials and on structures of which they are a part or with which they are in contact.

frost heave — The raising of a surface due to the accumulation of ice in the underlying soil or rock.

G

general warranty — A covenant in the deed whereby the grantor agrees to protect the grantee.

grade — The ratio of the rise or fall of the grade line to its length.

gentrification — An evolutionary change in the use of residential land that relocates lower income housing due to redevelopment of higher income housing.

gradient — Degree of incline of a slope; usually expressed as a percentage.

grantee — A person to whom real estate is conveyed.

grantor — A person who conveys real estate by deed; the seller.

gravel — Rounded or semi rounded particles of rock that will pass a three-inch (76.2 mm) sieve and be retained on a Number 4 (4.75 mm) U.S. standard sieve.

greenfield site — A site that currently is undeveloped and has no environmentally sensitive impacts due to current or historic use of the land.

greyfield site — Old, obsolete and nonprofitable retail and commercial sites. Characteristics include outdated buildings and large expanses of parking.

grid — An arrangement of regularly-spaced parallel or intersecting bars, wires, etc.

gross lease — A lease of property whereby lessor is to meet all property charges regularly incurred through ownership.

ground lease — A lease that rents the land only.

ground rent — The rent earned by leased land.

H

H.U.D. — Federal Department of Housing and Urban Development.

horizon (soil horizon) — One of the layers of the soil profile, distinguished principally by its texture, color, structure, and chemical content.

I

I-Beam — A beam or joist that in cross-section has the shape of the letter “I.”

implicit — Implied or understood but not specifically expressed.

improved land — Land that has been partially or fully developed for use.

incubator — A type of development, typically a single building, that houses many small businesses in flexible space at below-market rates who share common operation spaces such as meeting rooms, copying facilities and receptionist duties. Often the purpose of these facilities is to help grow businesses in a community. (a.k.a. Enterprise Center, Business & Technology Center, Innovation Center)

industrial park — A planned industrial park is a special and exclusive type of industrial subdivision prepared according to a comprehensive plan to provide serviced sites for a community of compatible industrial operations. The park, under continuing

management, provides for the absolute control of the tract and buildings through restrictive covenants and/or adequate zoning, with a view toward maintaining aesthetic value and protecting the environment throughout development.

industrial real estate — All land and buildings utilized or suited for industrial activities.

industrial site — A tract of land suitable for an industrial building, which is within the economic reach of transportation, and utilities. It is under fee simple ownership such that it can be offered at a firm price to a buyer.

infrastructure — The basic framework and facilities of a community or area, including streets, pipelines, light poles, parks, etc.

installment contract — Purchase of real estate upon an installment basis; upon default, payments are forfeited.

industrial tract — A land area reserved for industrial development through ownership, zoning, or both. Irrigation District-Quasi-political districts created under special laws to provide for water services to property owners in the district.

J

junior mortgage — A mortgage second in lien to a previous mortgage.

L

land contract — A contract for the purchase of real estate upon an installment basis; upon payment of last installment, deed is delivered to purchaser.

landlocked — The condition of a lot that has no access to a public thoroughfare except through an adjacent lot.

landlord — One who rents property to another.

lease with option to purchase — A lease wherein the tenant, in return for a nonrefundable lump-sum consideration, has the right to purchase a given property at a predetermined price, on predetermined terms and conditions, within a specified period of time. The contract usually provides that a portion of the rental payments and the lump-sum cash payment be applied toward the purchase price in the event the tenant exercises the option.

lease — A contract, written or oral, for the possession of lands and tenements or a recompense of rent or other income.

leasehold — The interest on estate on which a tenant of real estate has a lease.

leakage — Leakage from the local economy occurs when local residents purchase goods and services outside the local economy.

legal description — A description recognized by law, which is sufficient to locate and identify the property without oral testimony.

lessee — A person to whom property is rented under a lease.

lessor — One who rents property to another under a lease.

lien — A hold or claim that one person has upon property of another as security for a debt or charge; judgments, mortgages, taxes.

listing — Oral or written employment of broker, by owner, to sell or lease real estate.

loam — A mixture of sand, silt, or clay, or a combination of any of these, with organic matter. Loam is sometimes called topsoil in contrast with the subsoils that contain little or no organic matter.

M

macadam — Broken stone used in paving a road.

market price — The amount of money that is actually paid, offered or asked for a particular property.

market value — The highest estimated monetary price that a property will bring when exposed for sale in the open market, allowing a reasonable time to find a purchaser who buys with knowledge of all the uses to which the property is adapted, and for which it is capable of being used.

master plan — A document that describes, in narrative and with maps, an overall development concept.

metes and bounds — A description in a deed of the land location in which the boundaries are defined by directions and distances.

metropolitan area — The area including and surrounding a large urban region used as a center for trading, employment. etc.

moisture content (water content) — The ratio, expressed as a percentage of: 1. the weight of water in a given soil mass, 2. the weight of solid particles.

mortgage — A conditional transfer of real property as security for the payment of a debt or the fulfillment of some obligation.

mortgagee — A person to whom property is conveyed as security for a loan made by such person (the creditor).

mortgagor — An owner who conveys his property as security for a loan (the debtor).

multiple listing — The arrangement among real estate board or exchange members whereby each broker brings his listings to the attention of the other members so that if a sale results, the commission is divided between the broker bringing the listing and the broker making the sale, with a small percentage going to the board or exchange.

multiplier effect — A measure, typically regarding employment, that identifies the total employment created for every basic employee created. For example, a multiplier of 3.0 represents that for every additional basic employee generated by a project, a total of three new jobs will be created (the basic job plus two non-basic jobs).

N

net listing — A price, which must be expressly agreed upon, below which the owner will not sell the property and at which price the broker will not receive a commission;

the broker receives the excess over and above the net listing as his commission.

nonconforming use — A use that violates zoning regulations or codes but which is allowed to continue because it began before the zoning restriction was enacted.

normally consolidated soil deposit — A soil deposit that has never been subjected to an effective pressure greater than the existing overburden pressure.

note — A commercial paper, some types of which are negotiable, relating to the owing of debts or the payment of money (e.g., a promissory note; a bank note).

nuisance — A land use with associated activities are incompatible with surrounding land uses.

O

optimum moisture content (optimum water content) — The water content at which a soil can be compacted to a maximum dry unit weight by a given compacted effort.

option — The right to purchase or lease a property at a certain price for a certain designated period.

overburden — That portion of soil overlying a rock strata or a desired level of operation.

over consolidated soil deposit — A soil deposit that has been subjected to an effective pressure greater than the present overburden pressure.

P

penetration resistance (standard penetration resistance) — The number of blows of a hammer of specified weight falling a given distance required to produce a given penetration into soil of a pile, casing or sampling tube.

percent compaction — The ratio, expressed as a percentage, of dry unit weight of a soil to the maximum unit weight obtained in a laboratory compaction test.

percentage lease — A lease of property in which the rental is based upon the volume of sales made upon the leased premises.

perch — A unit of land measurement equal to 16 and a half feet feet.

percolation test — A procedure to measure the drainage characteristics of the soil on a lot. This test is required in the proper design of septic tank fields.

personalty — All articles or property that are not real estate.

pile — A heavy, slender metal or concrete pole forced into the earth to form a foundation for a building or other structure.

plant area — The sum of the areas on each floor included within the principal outside faces of exterior walls, excluding architectural set-backs or projections.

plant site — The total land area within the property boundaries.

plasticity — The property of a soil or rock which allows it to be deformed beyond the

point of recovery without cracking or appreciable volume change.

plasticity index — The numerical difference between the liquid limit and the plastic limit.

plat — A plan or map of a piece of land showing the actual or proposed features, such as road, lot, easement, etc.

plat book — A public record of property plats and ownership.

S

subsoil — 1. Soil below a subgrade of fill. 2. That part of a soil profile occurring below the “A” horizon.

survey — The process by which a parcel of land is measured and its area ascertained.

T

title insurance — A policy of insurance that indemnifies the holder for any loss sustained by reason of defects in the title.

title — Evidence of ownership, which refers to the quality of the estate.

topographic map — A map showing the relative position and elevations of all natural and man-made features of the land.

topsoil — Is surface soil, usually containing organic matter.

township — A territorial subdivision six miles long, six miles wide and containing 36 sections, each one mile square.

U

ultimate bearing capacity — The average load per unit of area required to produce failure by rupture of a supporting soil or rock mass.

undisturbed sample — A soil sample that has been obtained by methods in which every precaution has been taken to minimize disturbance to the sample.

unearned increment — An increase in value of real estate due to no effort on the part of the owner (often due to increase in population).

unimproved property — Land that has received no development, construction or site preparation. See also raw land.

V

vara — A Spanish term of measurement that equals 33 and one-third inches.

variance — A departure from specific zoning to permit an operation which does not conform to the zoning regulations. A variance applies only to a specific piece of property and is granted only for modification of land development.

vendee — The name for a purchaser of real estate under an agreement.

vendor — The seller of real estate, usually referred to as the party of the first part in an agreement of sale.

W

waiver — The renunciation, abandonment or surrender of some claim, right or privilege.

warranty deed — A deed that contains a covenant that the grantor will protect the grantee against any claimant.

water table — The upper level at which underground water is normally encountered in a particular area.

weathering — The process of disintegration and decomposition as a consequence of exposure to the atmosphere, to chemical action and to the action of frost, water and heat.

wetlands — Land, such as a marsh or swamp, normally saturated with water.

Z

zone — An area set off by local ordinance for specific use and subject to certain restrictions or conditions.

zoning ordinance — Exercise of police power of a municipality in regulating and controlling the character and use of property.

Zoning — 1. A regulation that controls the use of property and places limitations on the shape and size of buildings that occupy an area. 2. The type of occupancy that a particular area is designated for, i.e., residential, commercial or industrial.

WIDTHS X DEPTHS = ONE ACRE

16.5' X 2,640'	75' X 580.8'	150' X 290.4'
33' X 1,320'	100' X 435.6'	208.71' X 208.71'
50' X 871.2'	110' X 396'	220' X 198'
60' X 726'	120' X 363'	240' X 181.5'
66' X 660'	132' X 330'	440' X 99'

CONVERSION TABLE FRACTIONS TO DECIMALS TO ACREAGE IN SQUARE FEET

Fraction	Decimal Equivalent	Acreage (Sq. Feet)	Fraction	Decimal Equivalent	Acreage (Sq. Feet)
1/8	.125	5,445	2 5/8	2.625	114,345
1/4	.250	10,890	2 3/4	2.750	119,790
3/8	.375	16,335	2 7/8	2.875	125,235
1/2	.500	21,780	3	3.000	130,680
5/8	.625	27,225	3 1/8	3.125	136,125
3/4	.750	32,670	3 1/4	3.250	141,570
7/8	.875	38,115	3 3/8	3.375	147,015
1	1.000	43,560	3 1/2	3.500	152,460
1 1/8	1.125	49,005	3 5/8	3.625	157,905
1 1/4	1.250	54,450	3 3/4	3.750	163,350
1 3/8	1.375	59,895	3 7/8	3.875	168,795
1 1/2	1.500	65,340	4	4.000	174,240
1 5/8	1.625	70,785	4 1/8	4.125	179,685
1 3/4	1.750	76,230	4 1/4	4.250	185,130
1 7/8	1.875	81,675	4 3/8	4.375	190,575
2	2.000	87,120	4 1/2	4.500	196,020
2 1/8	2.125	92,565	4 5/8	4.625	201,465
2 1/4	2.250	98,010	4 3/4	4.750	206,910
2 3/8	2.375	103,455	4 7/8	4.875	212,355
2 1/2	2.500	108,900	5	5.000	217,800

Map of a Section of Land Showing Area and Distances

2,640 ft	1,320 feet	1,320 feet	2,640 feet					
	80 acres	80 acres	160 acres					
1,320 feet	1,320 feet	1,320 feet	1,320 feet 20 acres		660 feet		660 feet	
	40 acres	40 acres			1,320 feet 20 acres		1,320 feet 20 acres	
1,320 feet	1,320 feet	40 acres	660 feet	660 feet	330 ft 5 acres		330 ft	5 acres
			660 feet 10 acres	660 feet 10 acres	330 ft 5 acres		660 feet 5 acres	660 feet
					330 ft 660 feet			
					660 feet 10 acres	660 feet 10 acres	330 ft	
330 ft	330 ft	2 1/2 acres						

One mile = 320 rods = 80 chains = 5,280 feet

CONVERSION TABLE ACRES TO SQUARE FEET

Acres	Square Feet	Acres	Square Feet	Acres	Square Feet
0.1	4,356	4.1	178,596	8.1	352,836
0.2	8,712	4.2	182,952	8.2	357,192
0.3	13,068	4.3	187,308	8.3	361,548
0.4	17,424	4.4	191,664	8.4	365,904
0.5	21,780	4.5	196,020	8.5	370,260
0.6	26,136	4.6	200,376	8.6	374,616
0.7	30,492	4.7	204,732	8.7	378,972
0.8	34,848	4.8	209,088	8.8	383,328
0.9	39,204	4.9	213,444	8.9	387,684
1.0	43,560	5.0	217,800	9.0	392,040
1.1	47,916	5.1	222,156	9.1	396,396
1.2	52,272	5.2	226,512	9.2	400,752
1.3	56,628	5.3	230,868	9.3	405,108
1.4	60,984	5.4	235,224	9.4	409,464
1.5	65,340	5.5	239,580	9.5	413,820
1.6	69,696	5.6	243,936	9.6	418,176
1.7	74,052	5.7	248,292	9.7	422,532
1.8	78,408	5.8	252,648	9.8	426,888
1.9	82,764	5.9	257,004	9.9	431,244
2.0	87,120	6.0	261,360	10.0	435,600
2.1	91,476	6.1	265,716	11.0	479,160
2.2	95,832	6.2	270,072	12.0	522,720
2.3	100,188	6.3	274,428	13.0	566,280
2.4	104,544	6.4	278,784	14.0	609,840
2.5	108,900	6.5	283,140	15.0	653,400
2.6	113,256	6.6	287,496	16.0	696,960
2.7	117,612	6.7	291,852	17.0	740,520
2.8	121,968	6.8	296,208	18.0	784,080
2.9	126,324	6.9	300,564	19.0	827,640
3.0	130,680	7.0	304,920	20.0	871,200
3.1	135,036	7.1	309,276	30.0	1,306,800
3.2	139,392	7.2	313,632	40.0	1,742,400
3.3	143,748	7.3	317,988	50.0	2,178,000
3.4	148,104	7.4	322,344	60.0	2,613,600
3.5	152,460	7.5	326,700	70.0	3,049,200
3.6	156,816	7.6	331,056	80.0	3,484,800
3.7	161,172	7.7	335,412	90.0	3,920,400
3.8	165,528	7.8	339,768	100.0	4,356,000
3.9	169,884	7.9	344,124	110.0	4,791,600
4.0	174,240	8.0	348,480	120.0	5,227,200

Note: To obtain acreage from square feet, divide by 43,560; or multiply by 23 and point off 6 decimal places from the right. For example: 600,000 sq. ft. divided by 43,560 = 13.774 or 13.8 ; 600,000 sq. ft. x 23 = 13,800,000; taking off 6 decimal places, 13,800,000 is 13.8.

CONVERSION TABLE CENTS PER SQUARE FOOT TO DOLLARS PER ACRE

Cents per Sq. Ft.	Dollars per acre	Cents per Sq. Ft.	Dollars per acre	Cents per Sq. Ft.	Dollars per acre
\$.01	\$435.60	\$.41	\$17,859.60	\$.81	\$35,283.60
.02	871.20	.42	18,295.20	.82	35,719.20
.03	1,306.80	.43	18,730.80	.83	36,154.80
.04	1,742.40	.44	19,166.40	.84	36,590.40
.05	2,178.00	.45	19,602.00	.85	37,026.00
.06	2,613.60	.46	20,037.60	.86	37,461.60
.07	3,049.20	.47	20,473.20	.87	37,897.20
.08	3,484.80	.48	20,908.80	.88	38,332.80
.09	3,920.40	.49	21,344.40	.89	38,768.40
.10	4,356.00	.50	21,780.00	.90	39,204.00
.11	4,791.60	.51	22,215.60	.91	39,639.60
.12	5,227.20	.52	22,651.20	.92	40,075.20
.13	5,662.80	.53	23,086.80	.93	40,510.80
.14	6,098.40	.54	23,522.40	.94	40,946.40
.15	6,534.00	.55	23,958.00	.95	41,382.00
.16	6,969.60	.56	24,393.60	.96	41,817.60
.17	7,405.20	.57	24,829.20	.97	42,253.20
.18	7,840.80	.58	25,264.80	.98	42,688.80
.19	8,276.40	.59	25,700.40	.99	43,124.40
.20	8,712.00	.60	26,136.00	1.00	43,560.00
.21	9,147.60	.61	26,571.60	1.05	45,738.00
.22	9,583.20	.62	27,007.20	1.10	47,916.00
.23	10,018.80	.63	27,442.80	1.15	50,094.00
.24	10,454.40	.64	27,878.40	1.20	52,272.00
.25	10,890.00	.65	28,314.00	1.25	54,450.00
.26	11,325.60	.66	28,749.60	1.30	56,628.00
.27	11,761.20	.67	29,185.20	1.35	58,806.00
.28	12,196.80	.68	29,620.80	1.40	60,984.00
.29	12,632.40	.69	30,056.40	1.45	63,162.00
.30	13,068.00	.70	30,492.00	1.50	65,340.00
.31	13,503.60	.71	30,927.60	1.55	67,518.00
.32	13,939.20	.72	31,363.20	1.60	69,696.00
.33	14,374.80	.73	31,798.80	1.65	71,874.00
.34	14,810.40	.74	32,234.40	1.70	74,052.00

Columns continue on next page

CONVERSION TABLE CENTS PER SQUARE FOOT TO DOLLARS PER ACRE (Continued)

Cents per Sq. Ft.	Dollars per acre	Cents per Sq. Ft.	Dollars per acre	Cents per Sq. Ft.	Dollars per acre
.35	15,246.00	.75	32,670.00	1.75	76,230.00
.36	15,681.60	.76	33,105.60	1.80	78,408.00
.37	16,117.20	.77	33,541.20	1.85	80,586.00
.38	16,552.80	.78	33,976.00	1.90	82,764.00
.39	16,988.40	.79	34,412.40	1.95	84,942.00
.40	17,424.00	.80	34,848.00	2.00	87,120.00
2.10	91,476.00	3.25	141,570.00	10.00	435,600.00
2.20	95,832.00	3.50	152,460.00	20.00	871,200.00
2.30	100,188.00	3.75	163,350.00	30.00	1,306,800.00
2.40	104,544.00	4.00	174,240.00	40.00	1,742,400.00
2.50	108,900.00	4.50	196,020.00	50.00	2,178,000.00
2.60	113,256.00	5.00	217,800.00	60.00	2,613,600.00
2.70	117,612.00	6.00	261,360.00	70.00	3,049,200.00
2.80	121,968.00	7.00	304,920.00	80.00	3,484,800.00
2.90	126,324.00	8.00	348,480.00	90.00	3,920,400.00
3.00	130,680.00	9.00	392,040.00	100.00	4,356,000.00

Taxes

ACRS (Accelerated Cost Recovery System) — Federal provision which establishes rules for the depreciation of qualifying assets within a shorter period than the asset's expected useful (economic) life.

acceleration clause — Provision in indenture agreement, mortgage or other contract that the unpaid balance is to become due and payable if specified events of default should occur such as failure to meet, invest, principal, or sinking fund payments; insolvency and nonpayment of taxes on mortgaged property.

ad valorem — Ad valorem taxes are taxes in proportion to the value of the item taxed.) In Missouri, the term generally refers to real and personal property taxes.

adjusted gross income — Income on which a company or an individual computes federal income tax, determined by subtracting any deductible expenses from gross income.

alternative minimum tax — Federal tax aimed at ensuring that individuals and corporations pay at least some income tax.

assessed valuation — The valuation of property for tax purposes.

C

Chapter 353, RSMo. — The chapter of the Revised Statutes of Missouri that sets forth Missouri's Urban Redevelopment Corporation Law, a unique tax abatement act passed in the 1940s.

consumption tax — See also value added tax (VAT), sales tax, and use tax.

coterminous — 1. Having a common boundary at some point; contiguous. 2. Having the same boundaries or limits.

D

deduction — Item allowed as a subtraction from adjusted gross income in arriving at taxable income for federal or state income tax purposes. The amount of tax reduction for the taxpayer is the amount of deduction times the taxpayer's tax rate.

depreciable property — Property with a definite useful life that is held for production of income or for use in the taxpayer's trade or business and subject to physical deterioration or obsolescence.

depreciation — Is functional or economic obsolescence; loss in value or efficiency as a result of age, deterioration, usage, etc., and the recovery of such costs through tax deductions.

E

excise tax — Federal or state tax on the sale or manufacture of a commodity.

F

franchise tax — A tax levied by a governmental body on a company for the privilege of operating within an area.

I

income, earned — Income from labor, business transactions or other activities in which personal effort of the recipient is involved.

income, unearned — Income received from rent, interest, dividends, etc.

indirect tax — A tax, such as a customs duty, the burden of which is ultimately passed on to another in the form of higher prices, surcharges or through other means.

N

NAP (Neighborhood Assistance Program) — A program through which tax credits can be earned for donations to approved neighborhood assistance projects.

net worth — All legal assets less indebtedness.

P

political subdivision — A governmental entity having the power to tax. The state of Missouri is a political subdivision of itself.

property tax — An ad valorem tax levied on real and tangible personal property owned by a taxpayer on January 1 of any given year.

S

sales tax — A tax imposed by a taxing authority for the privilege of selling tangible personal property, or rendering taxable services. Sales taxes are paid by the ultimate purchaser of these goods and services, collected by sellers and remitted to the government.

T

tax — A mandatory charge assessed against persons or property by a taxing authority for public purposes.

tax credit — A direct, dollar-for-dollar reduction in tax liability. Tax credits are different from deductions because deductions reduce the amount of income that is taxed while a tax credit reduces the actual tax liability by the credit amount.

TIF (Tax Increment Financing) — See language of financing.

U

use tax — A tax imposed by a taxing authority for the privilege of storing using or consuming any article of tangible personal property. This tax is paid by the purchaser of the property and is sometimes called “consumer’s use tax” . Use tax also refers to a type of sales tax that is collected by out-of-state sellers on sales made to Missouri customers. This type of use tax is called “vendor’s use tax.”

V

Value Added Tax (VAT) — Consumption tax levied on the value added to a product at each stage of its manufacturing cycle and at the time of purchase by the ultimate consumer.

Transportation

abandonment — A proceeding wherein a rail or motor carrier seeks authority to abandon all or parts of its line.

acceptance — Receipt by the consignee of a shipment that terminates the common carrier liability.

ADT (Average Daily Traffic) — Average number of vehicles to use a particular road in a 24-hour period.

advanced charge — The amount of freight or other charge on a shipment advanced by one transportation line to another, or to the shipper, to be collected from the consignee.

aggregated shipments — Numerous shipments from different shippers to one consignee that are consolidated and treated as a single consignment.

agreed valuation — The value of a shipment agreed upon in order to secure a specific rating and/or liability.

agreed weight — The weight agreed upon between carrier and shipper for goods shipped in certain packages or in a certain manner.

all commodity rate — A freight rate applying, with certain restrictions, on any and all commodities.

all rail — Entirely by rail transportation

all water — Entirely by water transportation

allowance — 1. A sum granted as a reimbursement or repayment. 2. A deduction from the gross weight or value of goods.

alternative rates — Two or more rates. The lowest charge is applicable.

alternative tariff — A tariff containing two or more rates from and to the same points, on the same goods, with authority to use the lowest charge.

any-quantity rate — A rate applicable to an article in any quantity.

average agreement — An agreement made between a shipper and a transportation line whereby the shipper is debited for the time cars are held for loading or unloading beyond a certain period and credited for the time cars are released within a certain period. Demurrage charges are usually assessed at the end of the month for any outstanding debits.

B

back haul — To haul a shipment back over part of a route which it has traveled.

barge — A flat-bottomed boat used chiefly on inland waterways.

bill of lading — a document which provides the terms of the contract between the shipper and the transportation company to move freight between stated points at a specified charge.

blanket rate — 1. A rate applicable from and / or to a group of points. 2. A special rate applicable on several different articles in a single shipment.

blanket waybill — A waybill covering two or more consignments of freight.

blocking or bracing — Wood or metal supports to keep shipments in place in or on cars.

box car — A closed car used for hauling freight.

branch line — A secondary line of a railroad.

break bulk — to unload and distribute a portion or all of the contents of a car.

bulk freight — Freight not in packages or containers.

C

carfloat — A large flat-bottomed boat equipped with tracks on which railroad cars are moved on inland waterways.

cargo — The lading of a vessel, car or vehicle.

carload — The minimum weight required for the application of a carload rate (not necessarily a car loaded to capacity).

cartage — 1. Term for intracity hauling. 2. The charges made for such services.

classification (freight) — A publication containing a list of articles and the classes to which they are assigned for the purpose of applying class rates while following governing rules and regulations.

class rate — A rate applicable to a class rating to which articles are assigned in a classification.

class tariff — A tariff containing only class rates.

class and commodity tariff — A tariff containing both class and commodity rates.

combination rate — A rate made by combining two or more rates published in different tariffs.

commercial aviation — Transportation of persons or property via air routes operated as a business enterprise.

commodity — Any article of commerce. Goods shipped.

commodity rate — A rate applicable on a specific commodity between certain specified points.

commodity tariff — A tariff containing only commodity rates.

common carrier — A transportation company serving the public by transporting passengers and/ or freight between points prescribed by state or federal agencies.

common tariff — A tariff published by or for the account of two or more transportation lines as issuing carriers.

compartment tank car — A tank car with compartments or separate tanks into which different kinds or grades of oil or other liquids may be loaded for transportation.

compartmentizer car — A box car equipped with movable bulkheads that can be used to divide the car into separate compartments.

competitive point — A point at which two or more transportation lines compete for the movement of traffic.

competitive rate — A rate established by a transportation line to meet competition of another transportation line.

concentration point — A point at which less than carload shipments are brought together to be re-forwarded as a carload.

connecting carrier — A carrier that has a direct physical connection with another or forming a connecting link between two or more carriers.

consignee — The person to whom articles are shipped.

constructive mileage — An arbitrary mileage allowed to a transportation line in dividing joint rates, etc., on a mileage prorated (not the actual mileage).

constructive placement — When due to some disability on the part of the consignor or consignee, a car cannot be placed for loading or unloading at a point previously designated by the consignor or consignee, and it is placed elsewhere, it is considered as being under “constructive placement” and subject to demurrage rules and charges just as if it were actually placed at the designated point.

container — Anything in which articles are packed.

container car — A flat-top or open-top railroad car on which containers of freight are loaded for shipment.

containerization — A shipping system based upon the use of large cargo containers that may be interchanged between truck, ship and/or train without re-handling the contents.

contract carrier — Any person not a common carrier who, under special and individual contracts or agreements, transports passengers or property for compensation.

cubic foot — Is a measure of 1,728 cubic inches.

cubical capacity — The carrying capacity of a car according to measurement in cubic feet.

D

demurrage — a penalty charge assessed by carriers for the detention of cars, vehicles or vessels by shippers or receivers of freight beyond a specified free time.

density of traffic — The amount of traffic handled per mile within a given region.

D. F. Car (Damage Free Car) — A box car equipped with special bracing material.

differential — An amount added or deducted from base rate to make a rate to or from some other point or via another route.

distance rate — A rate that is applicable according to distance.

dockage — The charge made for use of a dock.

draft (vessel) — The number of feet or inches below the water line that the hull of a vessel is submerged.

drayage — The charge made for hauling freight on carts, drays or trucks, usually from a terminal or warehouse to a consignee's door.

dunnage — Material used to protect or support freight, such as bracing, racks, props, etc.

E

express train — 1. A passenger train that does not stop at all stations on its route. 2. A train consisting of express freight.

F

firkin — A capacity measurement equal to one-fourth of a barrel.

fixed charges — Charges that do not vary with an increase or decrease in traffic.

flat car — An open car without sides, ends or top, used principally for hauling lumber, stone, heavy machinery etc.

floatage — 1. The floating or transfer of railroad cars across water. 2. The charge for such service.

FOB (free on board) — The invoice price includes delivery at the seller's expense to a specified point and no further.

foreign car — A car on the rails of a carrier by which it is not owned.

foul bill of lading — A bill of lading which indicates that a damage or shortage existed at the time of shipment.

G

grade — The grade of a track is the rate of ascent or descent; the extent to which the track deviates from a level surface. A perfectly level track has a zero grade. A vertical ascent of two feet in one-hundred feet of track length is known as a two percent ascending grade. Grades from 0.01 to 1.00 percent predominate on main lines throughout the country. In mountainous territory, grades up to more than three percent are sometimes necessary. Grades in excess of two percent on main lines are uncommon.

gross ton — Is also called a long ton measuring 2,240 pounds.

gross ton-mile — The movement of a ton of transportation equipment and contents a distance of one mile.

gross weight — 1. The weight of an article together with its container and packing material. 2. The total weight of contents and the railroad car or motor vehicle hauling the contents.

H

home car — A car on the tracks of its owner.

hopper car — A railroad car with floor sloping to one or more hoppers through which contents may be unloaded by gravity.

hump — That part of a track that is elevated so that when a car is pushed up on “the hump” and uncoupled it runs down on the other side by gravity.

I

idle hour system — A system of distributing cars to coal mines under which the allotment of empty cars to each mine is increased or reduced according to the number of hours the mine is idle in comparison with other mines.

individual tariff — A tariff issued by a transportation line individually.

industrial carrier; industrial line; industrial road — A short railroad owned or controlled by one or more of the principal industries served by it. It may be either a common carrier with all the rights and obligations attached thereto, or merely a private carrier or plant facility. It may be separately incorporated or operated merely as a department of the operating company’s business.

infrastructure — Is a basic system of transportation, communication, etc.

inland carrier — A transportation line that hauls export or import traffic between ports and inland points.

interchange switching — The service performed in transferring cars from one transportation line to another as a part of a transportation movement.

interchange track — A track on which freight is delivered by one transportation line to another company’s business.

intermediate carrier — A transportation line over which a shipment moves but on which neither the point of origin nor the point of destination is located.

intermodal freight — Freight traffic that moves by any combination of rail, motor, water or air carrier.

Interstate Commerce Commission (ICC) — The federal body charged with the duty of enforcing acts of Congress affecting common carriers in interstate commerce.

J

joint rate — A rate applicable from a point located on one transportation line to a

point located on another transportation line, made by agreement or arrangement between all transportation lines over which the rate applies; published in a single tariff.

joint tariff — A tariff containing joint rates.

L

loading — That which constitutes a load. The freight in a car or vessel.

lay day — The period of time that a ship is to be loaded or unloaded.

LCL shipment — Any shipment of freight that is too small to make a carload. (The initials stand for “less than carload.”)

lighter — A flat-bottomed boat usually used in inland waterways.

lighterage — The charge made for hauling freight on lighters or barges.

lighterage limits — The limits of the area where freight is handled by lighters or barges under certain lightering charges, rules and regulations.

line-haul — The movement of freight over the tracks of a railroad line from one town or city to another town or city (not a switching service).

line-haul switching — The moving of cars within the yard or switching limits of a station, preceding or following a line-haul.

local rate — The rate applying between stations located on the same transportation line.

local tariff — A tariff containing rates applicable only between stations located on the same transportation line.

long ton — Term for a gross ton or 2,240 pounds.

M

main line — A major rail route having frequent, regularly scheduled trains.

manifest — A document giving the description of a ship's cargo or the contents of a car or truck.

measurement cargo — A cargo on which the transportation charge is assessed on the basis of measurement.

merchandise car — A car containing several less-than-carload shipments.

metric ton — 2,204.6 pounds.

mileage allowance — An allowance, based on distance, made by carriers to owners of privately owned freight cars.

mileage rate — A rate applicable according to distance.

mileage tariff — A tariff containing rates applicable according to distance.

minimum carload weight — The least weight at which a shipment is handled at a carload rate.

minimum truckload weight — The least weight at which a shipment is handled at a truckload rate.

N

net ton — Term for a short ton or 2,000 pounds.

net ton-mile — The movement of a ton of freight one mile.

net weight — 1. The weight of an article clear of packing and container. 2. The weight of the contents of a car (i.e., without the weight of the car itself).

O

open tare — Means actual weight.

overage — Freight in excess of the quantity specified on the bill of lading.

over freight — Freight separated from its waybill and bearing no identifying marks.

P

package car — A car loaded with several less-than-carload shipments destined for distant points and moving via fast freight trains.

package freight — Merchandise shipped in less-than carload quantities.

pallet — A small portable platform for holding material for storage or transportation.

paper rate — A published rate under which no traffic moves.

pick-up allowance — An allowance made by a carrier to a consignor or consignee for delivery of freight to a pickup from the carrier's terminal in lieu of such service performed by the carrier.

piggy-back — The transportation of truck trailers and containers on railroad flat-cars.

point of origin — The station at which a shipment is received by a transportation line from the shipper.

political subdivision — A governmental entity smaller than the whole.

port — A harbor or haven where ships may anchor.

port authority — A political subdivision that may be formed with the approval of the state transportation commission, in any city or county which encloses, or is situated on or adjacent to, a navigable waterway in Missouri. It shall be the purpose of every port authority to promote the general welfare, to encourage private capital investment, to endeavor to increase the volume of commerce, and to promote the establishment of a free trade zone within the port districts.

port charge — A charge made for services performed at ports.

port district — The area within a county or city which is connected to the business of a port, the boundaries of which are designated by a port authority.

port-to-port — From one port to another port.

prepaid — A term denoting that transportation charges have been or are to be paid at the point of shipment

private carrier — A company that maintains its own trucks to transport its own freight.

private cars — Cars whose ownership is vested in a person or company not engaged primarily in common carrier service.

private siding — A sidetrack owned or leased by an individual or firm.

prohibited articles — Articles which will not be handled.

R

railroad bond — A bond issued by a railroad for the purpose of financing improvements, extensions, etc., and generally secured by mortgages on tracks, rolling stock and other property.

rate breaking point — The point at which rates are made or at which the rate is divided.

rate-making lines — The transportation lines that control the making of rates from one point to another point by reason of their geographical location.

rate basis — A formula of the specific factors or elements that controls the making of a rate.

rate scale — A table of rates graduated according to distances or zones.

red label — A label required on shipments of articles of an inflammable character.

restricted articles — Articles handled only under certain conditions.

ruling grade — The grade on any given engine district which determines the tonnage that can be handled over that district by one locomotive.

S

scow — A hollow, flat-bottomed boat used for transporting sand, gravel and other freight in bulk.

semi-trailer — A vehicle without motive power designed to be drawn by another vehicle and so constructed that some part of its weight and that of its load rests upon, or is carried by, a towing vehicle.

short ton — Measures a net ton or 2,000 pounds.

side-track — A short track extending alongside and connecting at both ends with another track.

side-track agreement — A contract between railroad and shipper establishing rights as to use and operation of a siding.

special service tariff — A tariff containing charges and/or rules governing switching, storage, demurrage, reconsignment, diversion, etc.

spotting — The placing of a railroad car in the position required for loading or unloading.

spur — An extension of a railroad track (including switch connection) from an industrial track to serve two or more users.

standard gauge — The distance between the rails of a railroad, 4 ft. 8 1/2 in.

storage in transit — The stopping of freight traffic at a point located between the point of origin and the destination, to be stored and reforwarded at a later date.

surcharge — Is a charge above the usual or customary charge.

surtax — Is an additional or extra tax.

switch — 1. A connection between two lines of track to permit cars or trains to pass from one track to the other. 2. To move cars from one place to another within switching limits.

switch engine — An engine used in the service of switching cars.

switching limits — The area where railroad cars are moved under switching rules and charges.

T

tank car — A car used for transporting liquid in bulk.

tap line — A short railroad usually owned or controlled by the industries that serves that taps (connects with) a trunk line.

tare weight — 1. The weight of a container and the material used for packing. 2. The weight of a railroad car or truck exclusive of its contents.

tariff — A published price list that can't be changed. Includes freight rates, passenger fares, and governing rules and regulations.

terminal — Either end of a transportation line.

through rate — A rate applicable from point of origin to destination. A through rate may be either a joint rate or a combination of two or more rates.

through train — A train that does not stop at all stations on its route.

tolerance — An allowance made for differences in weights due to variations in scales or inherent nature of goods.

tonnage — 1. The number of tons of freight handled. 2. The cubic capacity of a merchant vessel expressed in tons of 100 cubic feet.

towage — The charge made for towing a vessel.

track storage — The charge made on railroad cars held on a carrier's tracks for loading or unloading after the expiration of free time allowed. The charge is generally made in addition to demurrage charges.

trackage right — The right obtained by one carrier to operate its trains over the tracks of another carrier.

traffic — Persons and property carried by transportation lines.

trailer — A vehicle without motive power designed to be drawn by another vehicle and so constructed that no part of its weight rests upon the towing vehicle. See also “semi-trailer”.

train-mile — The movement of a train one mile.

transit privilege — A service granted on a shipment enroute, such as milling, compressing, refining, etc.

transit rate — A rate restricted in its application to traffic that has been or will be milled, stored or otherwise specially treated in transit.

tri-level car — A three-level freight car used for transporting automobiles.

truck line — A transportation line operating over an extensive territory.

tugboat — A small boat used to tow or move other boats, lighters, barges, etc.

U

unit of traffic — 1. The average number of tons of freight hauled one mile. 2. The average number of passengers hauled one mile.

unit train — A freight train that moves large tonnages of single bulk products between two points. Such trains are unloaded on arrival and returned promptly for another load, cutting costs by eliminating intermediate yarding and switching.

V

vessel ton — One-hundred cubic feet.

W

waybill — A document prepared by a freight carrier containing details of a shipment, including description of the lading, route and charges.

wharfage — 1. The charge made for handling traffic on a wharf. 2. The charge made for docking vessels at a wharf.

TRANSPORTATION CONVERSION FACTORS

Unit of Measure	Multiplied by	Yields
Kilometers	X 0.6214 X 1093.6	= miles = yards
Kilometers per hour	X 27.78 X 54.68 X 0.9113 X 0.5396 X 16.67 X 0.6214	= centimeters per second = feet per minute = feet per second = knots per hour = meters per minute = miles per hour
Knots	X 6,080 X 1.853 X 1.152 X 2,027	= feet per hour = kilometers per hour = miles per hour = yards per hour
Knots per hour	X 51.48 X 1.689 X 1.853 X 1.152	= centimeters per second = feet per second = kilometers per hour = miles per hour
Miles (statute)	X 1.609 X 105 X 5,280 X 1.6093 X 1,760	= centimeters = feet = kilometers = yards
Miles per hour	X 44.70 X 88 X 1.467 X 1.6093 X 0.8684 X 26.82	= centimeters per second = feet per minute = feet per second = kilometers per hour = knots per hour = meters per minute
Miles per minute	X 2,682 X 88 X 1.6093 X 0.8684	= centimeters per second = feet per second = kilometers per minute = knots per minute
Tons (long)	X 1,016 X 2,240	= kilograms = pounds
Tons (metric)	X 103 X 2,204.6	= kilograms = pounds
Tons (short)	X 907.2 X 2,000	= kilograms = pounds
Tons (short) per sq. ft.	X 9,765 X 13.89	= kilograms per sq. meter = pounds per sq. inch
Tons (short) per square inch	X 1.406 X 106 X 2,000	= kilograms per sq. meter = pounds per sq. inch

Telecommunications and Information Technology

backbone — The primary path or paths that tie a communications network together and carry the bulk of the digital traffic between various points on the LAN, WAN or between PoP's on a telecommunications network.

bit — A binary digit that is the smallest unit of data in a computer with a single binary value of 0 or 1.

blog — Writing a personal web diary (log) for all to read it.

byte — In a computer a byte represents a character, number or typographical symbol. A byte equals 8 bits.

broadband — The Federal Communications Commission (FCC) defines broadband as data transmission speeds greater than 200 Kbps in one direction.

C

Central Office (CO) — A facility that houses a telecommunications company's primary equipment.

Competitive Local Exchange Carrier (CLEC) — A competitive local telephone company that provides local phone services in competition with the incumbent local exchange carrier.

D

Digital Signal Level 3 (DS-3) — The equivalent of 28 T-1 channels. A DS-3 is sometimes referred to as a T-3.

Digital Subscriber Line (DSL) — A type of digital service offered by local telephone companies to homes and businesses across existing copper telephone lines. xDSL refers to the various types of DSL that is available (ADSL, HDSL, RADSL, etc.). Limitations exist with DSL based on the distance of the end user from the central office switch of the telephone company (often 10,000 feet or less). The connections often provide upload speeds that are less than download speeds, which vary based upon

the service level, equipment and copper wires in use.

Demarc (D-Marc or Demarcation Point) — The physical location on a customer's premises where a telecommunications provider places its end equipment to provide services to the customer. It is at this point where the telecommunications provider's responsibilities for the circuit end and the customer's responsibilities begin.

E

ethernet — A Local Area Network (LAN) standard for connecting computers and other network hardware within the same building or campus. Ethernet can also be transmitted for long distances to connect several different sites. Ethernet is an extremely flexible connection option for businesses.

fiber optics — A system that transmits light signals over fiber made of extremely pure glass filament. The signals are transmitted in various colors, or wavelengths, of light that pass the speed of light between communications boxes and contain digitized data (data, voice and video).

F

frame relay — A physical and data link connection option for wide area networks (WAN) on copper connections.

G

Gbps — Means gigabits per second or a billion bits per second

Intranet — A private network that uses Internet software and Internet standards.

Internet — Also known as the World Wide Web, is a large, complex computer and communications network which uses a standard for communications (TCP/IP) between end points.

I

Integrated Services Digital Network (ISDN) — A set of standards for digital transmission of data over ordinary telephone copper wire with speeds of 128,000 bits per second.

ISP — Internet service provider

Inter-Exchange Carrier (IXC) — Is a long distance service provider

K

kilobits per second (Kbps) — Is a thousand bits per second

L

Local Area Network (LAN) — Is a communications network connecting personal computers, workstations, printers, file servers and other devices inside a building or a campus.

Local Access and Transport Area (LATA) — Sometimes referred to as ‘service areas’ by some telephone companies. LATA’s are the boundaries of the service areas of various local telephone companies. Intra-LATA refers to connections within a LATA. Inter-LATA refers to connections that occur between LATA’s and are often provided by long distance carriers.

last mile — The physical connection between the carrier’s equipment and the end user (home or business), sometimes referred to as the “local loop.”

Local Exchange Carrier (LEC) — Is another name for a local telephone company.

local loop — The physical connection between the carrier’s equipment and the end user (home or business), sometimes referred to as the “last mile.”

M

Metropolitan Area Network (MAN) — A communications network connecting personal computers, workstations, printers, file servers and other devices on a citywide network.

Megabits per second (Mbps) — Is a million bits per second

P

Point of Presence (PoP) — A location or locations where telecommunications carriers house their communications equipment and establish connections to both customers and other carriers.

R

router — A piece of hardware on a computer network or communications network that is an interface between two networks, allowing the communications traffic to flow.

S

switch — A mechanical, electrical or electronic device that opens or closes circuits, completes or breaks and electrical path, or selects paths or circuits.

T

T-1 — The equivalent of 24 voice channels (telephone lines) or 1.5 Mbps data speed. T-1s may be passed on properly conditioned copper telephone lines or on fiber optic connections. It may also be referred to as a “T1” or “DS-1.”

Transmission Control Protocol/Internet Protocol (TCP/IP) — The basic communications language (protocol) of the Internet that can also be used as a language or protocol for a local network.

triple play — Describes the ability of a communications network to deliver voice, video and data across a single connection.

W

Wide Area Network (WAN) — A public voice or data network that extends beyond the metropolitan area.

BANDWIDTH SPEEDS

Type	Definition
DS-0	One voice/data channel of 64 kilobits per second
DS-1 or T1-24	Channels of 64 KBPS or 1.544 megabits per second
E1-30	Channels at 2.048 megabits
DS-2 or T2-96	Channels or 6.213 megabits per second (4T-1's)
DS-3 or T3-672	Channels or 44.736 megabits per second
DS-4 or T4-4032	Channels or 274.176 megabits per second
SONET OC-1	51.8 megabits per second or 1 T-3 Contains a T-3 but has a lot of overhead or protection (error checking)
SONET OC-3	155 megabits per second or 3 T-3's
SONET OC-12	622 megabits per second or 12 T-3's
SONET OC-48	2.488 gigabits per second or 48 T-3's
SONET OC-96	4.976 gigabits per second or 96 T-3's
SONET OC-192	9.953 gigabits per second or 192 T-3's
SONET OC-255	13.92 gigabits per second or 255 T-3's
SONET OC-768	39.81 gigabits per second or 768 T-3's

Environment and Recycling

ABS (acrylonitrile butadiene styrene) — A high durability plastic polymer that is used in a number of consumer products, including black pipe and auto components.

acid rain — Precipitation that has a pH value lower than 5.6 on a scale of 0 to 14. Substances with pH readings below 7 are acidic, above 7 are alkaline. Pure water (pH 5.6 to 5.7) becomes more acidic when chemicals, from natural or manufactured sources, are added.

action level — The level of lead or copper which, if exceeded, triggers treatment or other requirements that a water system must follow.

acute health effect — An immediate (i.e. within hours or days) effect that may result from exposure to certain drinking water contaminants (e.g., pathogens).

advanced disposal fee (ADF) — Fees charged to products at the time of purchase to support recovery and recycling programs.

aerobic — Ability to thrive in oxygen environment. Compost is created from the aerobic bacterial decomposition of organic materials. See also anaerobic.

amber glass — Are brown glass beverage containers.

ambient air — The air outside buildings. The Clean Air Act regulates harmful pollutants discharged into ambient air from numerous and diverse local sources, including small businesses and vehicles.

anaerobic — Able to thrive only in the absence of free oxygen. Methane gas is produced from the anaerobic bacterial decomposition of organic materials (e.g., in landfills).

aquifer — A natural underground layer, often of sand or gravel, that contains water.

aseptic packaging — Packing for drink boxes, made of aluminum foil, plastic and paper. Some communities have begun to recycle these.

ash monofill — A special landfill constructed for the sole purpose of disposing of ash from power plants and incinerators.

ASTM (American Society for Testing and Materials) — A nonprofit organization that develops standards and specifications defining the properties and characteristics of materials and manufactured goods, including those manufactured from recycled materials.

attainment area — An area in which the ambient air meets or exceeds federal Clean Air Act and state standards for air quality. See also nonattainment area.

B

B.O.D. (Biochemical Oxygen Demand) — Measurement of the oxygen used by microorganisms to break down organic matter (e.g., leaves, yard waste, pet waste) in water. Oxygen used in decomposition depletes oxygen needed by other aquatic organisms, often resulting in the elimination of more sensitive species.

baler — Machine that compacts materials, such as paper, cardboard and plastic, for recycling into rectangular or cubed bales for more efficient storage and transport.

best available technology — The water treatment(s) that EPA certifies to be the most effective for removing a contaminant.

bioconversion — Conversion of one form of energy into another by microorganisms or plants. Examples include the bacterial conversion of mercury into highly toxic methyl-mercury in lakes and streams.

biodegradable — Organic material capable of being converted into basic compounds or elements by bacteria.

brown goods — Also called bulky items. Household discards that are difficult to recycle and take up space in landfills. Often requires special collections.

C

capture rate — Percent of generated materials recovered for recycling from a household or business.

cell — Area of landfill where solid waste is disposed daily until it is filled and capped.

cellulose insulation — Blow-in insulation produced from shredded and chemically treated old newspapers.

chronic health effect — The possible result of exposure over many years to a drinking water contaminant at levels above its MCL.

clean rubble — Inert uncontaminated construction and demolition waste (e.g. concrete, pavement, brick, rock) that can be used as fill in low areas.

closed loop recycling — Materials continually recycled into the same product (e.g., aluminum and glass beverage containers).

closure — Ending disposal operations and preparing for long-term care of the site under terms specified in the permit.

coliform — A group of related bacteria whose presence in drinking water may indicate contamination by disease-causing microorganisms.

commercial waste — Solid wastes originated from wholesale businesses, offices and stores.

commingled recycled materials — A mixture of several types of recyclables in one container to sort later at a processing facility.

community water system — A water system that supplies drinking water to 25 or more of the same people year-round in their residences.

compliance — The act of meeting all state and federal drinking water regulations.

construction and demolition landfill (C&D) — A permitted site used exclusively for the disposal of nonhazardous construction and demolition wastes, including wood, sawdust, glass, dry wall, wiring, insulation and floor coverings . Sites used exclusively for disposal of clean rubble are not considered C&D landfills.

contaminant — Anything found in water (including microorganisms, minerals, chemicals, radionuclides, etc.) that may be harmful to human health.

cryptosporidium — A microorganism commonly found in lakes and rivers which is highly resistant to disinfection. Cryptosporidium has caused several large outbreaks of gastrointestinal illness, with symptoms that include diarrhea, nausea, and/or stomach cramps. People with severely weakened immune systems (that is, severely immunocompromised) are likely to have more severe, and more persistent symptoms, than healthy individuals.

D

disinfectant — A chemical (commonly chlorine, chloramine, or ozone) or physical process (e.g., ultraviolet light) that kills microorganisms such as bacteria, viruses, and protozoa.

dissolved oxygen (D.O.) — The amount of oxygen dissolved water, expressed in milligrams per liter (mg/l). D.O. levels below 5.0 mg/l may threaten the health of aquatic systems.

distribution system — A network of pipes leading from a treatment plant to customers' plumbing systems.

diversion rate — Amount of waste diverted from the waste stream through pollution prevention, recycling or composting.

drainage study — Report on a particular area regarding the adequacy of existing storm water facilities. The report predicts anticipated storm flows based on the projected development, and recommends needed improvement (i.e., channel realignment, culverts, and storm water detention ponds).

E

electrostatic precipitator — Equipment that removes particles from the flue gases using an electrical charge that allows them to be drawn out of the gas stream as if by a magnet.

end user — Business or manufacturer that uses recyclable materials for converting into new products.

environmental audit — Evaluation of a site done to determine potential environmental liabilities or issues related to a particular site.

EPA (Environmental Protection Agency) — The federal governing body over water, air and soil quality.

erosion control plan — A plan generally submitted prior to beginning of construction, which requires the delineation of undisturbed areas of the land, as well as erosion mitigation measures such as silt fencing, and sedimentation ponds.

e-waste — Electronic wastes, including computers, televisions, telephones and other products.

exemption — State or EPA permission for a water system not to meet a certain drinking water standard. An exemption allows a system additional time to obtain financial assistance or make improvements in order to come into compliance with the standard. The system must prove that: 1. there are compelling reasons (including economic factors) why it cannot meet a MCL or Treatment Technique, 2. was in operation on the effective date of the requirement, and 3. the exemption will not create an unreasonable risk to public health. The state must set a schedule under which the water system will comply with the standard for which it received an exemption.

F

ferrous metals — Are metals predominantly composed of iron.

finished water — Treated water that is ready to be delivered to customers.

full-cost accounting — Inclusion of all direct and indirect upfront, operating and back-end costs for comparing various materials management options.

G

giardia lamblia — A microorganism frequently found in rivers and lakes, if not treated properly, may cause diarrhea, fatigue and cramps after ingestion.

glasphalt (or glassphalt) — The trade name for a highway paving material in which recovered ground glass replaces some of the gravel normally used in asphalt.

granulator — A mechanical device that produces small plastic particles.

gravity separation — The separation of mixed materials based on the differences of material size and specific gravity.

ground water — The water that systems pump and treat from aquifers (natural reservoirs below the earth's surface).

groundwater — Water beneath earth's surface that moves between soil particles and rocks and charges wells and springs.

H

HDPE (high density polyethylene) — A plastic used in a number of consumer goods, including milk bottles and motor oil bottles — Resin code #2.

health advisory — An EPA document that provides guidance and information on contaminants that can affect human health and that may occur in drinking water, but which EPA does not currently regulate in drinking water.

high-grade waste paper — Computer paper, letterhead and other sorted paper that is the most valuable waste paper for recycling.

household hazardous waste — Consumer products that when discarded exhibit hazardous characteristics — toxicity, corrosivity, reactivity or flammability. Includes pesticides, automotive products, paints and cleaners.

I

industrial waste — Nonhazardous solid wastes generated by industries and manufacturing facilities. May also include small quantities of wastes generated from cafeterias, offices or sales departments in the facility.

inorganic contaminants — Mineral-based compounds such as metals, nitrates and asbestos. These contaminants are naturally-occurring in some water, but can also get into water through farming, chemical manufacturing, and other human activities. EPA has set legal limits on 15 inorganic contaminants.

institutional waste — Material originating from services offered on behalf of the public (e.g., nursing homes, jails, hospitals, schools).

integrated solid waste management — System designed with complementary components for the various waste streams. Systems may include pollution prevention, recycling, composting, household hazardous waste collection and landfilling.

L

low density polyethylene (LDPE) — A plastic used in many consumer products, such as plastic bags and food storage containers — Resin code #4.

M

Materials Recovery Facility (MRF) — Facility that sorts and processes recycled materials for end users.

Maximum Contaminant Level (MCL) — The highest level of a contaminant that EPA allows in drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk. EPA attempts to set MCLs at levels that are economically and technologically feasible. Some states set MCLs which are more strict than EPA's.

Maximum Contaminant Level Goal (MCLG) — The level of a contaminant at which there should be no risk to human health. This goal is not always economically or technologically feasible, and the goal is not legally enforceable.

medical waste — All waste materials generated at health care facilities (e.g., hospitals, clinics, physician's offices, dental practices, blood banks, and veterinary hospitals/clinics) as well as medical research facilities and laboratories. Medical wastes generally fall into one of four categories — infectious, hazardous, radioactive and general wastes — each associated with regulatory requirements for handling and disposal.

microorganisms — Tiny living organisms that can be seen only with the aid of a

microscope. Some microorganisms can cause acute health problems when consumed in drinking water. Also known as microbes.

mixed paper — Combination of waste papers including letterhead and computer paper, manila, notepad paper and envelopes.

monitoring — Systematic inspection, data collection and analysis of the operational parameters of a facility and the air, groundwater, surface water or soils on or in the vicinity of the facility.

monitoring — Testing that water systems must perform to detect and measure contaminants. A water system that does not follow EPA's monitoring methodology or schedule, is in violation, and may be subject to legal action.

N

nonattainment area — An area in which the ambient air does not meet federal Clean Air Act and/ or state air quality standards> See also attainment area.

nontransient, noncommunity water system — A water system which supplies water to 25 or more of the same people at least six months per year in places other than their residences. Some examples are schools, factories, office buildings, and hospitals that have their own water systems.

O

OCC — Stands for old corrugated cardboard.

off-specification resins — Resin supplies that do not meet producer requirements or are surplus to demand. Off-specification resins often compete against recycled plastics.

ONP — Stands for old newsprint.

organic contaminants — Carbon-based chemicals, such as solvents and pesticides, which can get into water through runoff from cropland or discharge from factories. EPA has set legal limits on 56 organic contaminants.

P

paperboard — Heavy grade of paper most often used in packaging (e.g., cereal boxes) that is recycled differently than corrugated cardboard.

pathogen — A disease-causing organism.

pay-as-you-throw — Incentive for waste reduction that charges based on weight or volume of waste generated (not including recyclables). Also known as a variable rate.

pelletizer — A machine commonly used in recycled plastics processing that produces chips or granules.

pesticides — Substance designed to kill living organism, including insects, plants, fungi, rodents and bacteria.

photodegradable — A material which is degradable by exposure to ultraviolet radiation.

pollution prevention — Reducing or eliminating the production of pollution emitted into air, water, and land as a preferable alternative to disposal, recycling or environmental controls.

polyethylene terephthalate (PET) — Lightweight, transparent plastic used in beverage containers and other consumer goods — Resin code #1.

polypropylene (PP) — Plastic material used to manufacture various products, including dairy tubs, lids and straws — Resin code #5.

polystyrene — A lightweight plastic material often used in food services, including plates, bowls, cups and hinged containers (“clamshells”). Resin code #6.

polyvinyl chloride (PVC) — A plastic made by polymerization of vinyl chloride with peroxide catalysts — Resin code #3.

postclosure — A period of time after the closure of a solid waste disposal area when monitoring and other actions at the site (specified by the permit) must be performed.

postconsumer content — Portion of a product’s content that is made from material (e.g., paper, plastic) that was consumed and recycled by a business or residence.

Prevention of Significant Deterioration Permit (P.S.D.) — Permit regulating the amount of additional air pollution a new facility may generate to protect public health and welfare and ensure economic growth of an area.

primacy state — A state that has the responsibility and authority to administer EPA’s drinking water regulations within its borders. The State must have rules at least as stringent as EPA’s.

public notification — An advisory that EPA requires a water system to distribute to affected consumers when the system has violated MCLs or other regulations. The notice advises consumers what precautions they should take to protect their health.

public water system (PWS) — Any water system that provides water to at least 25 people for at least 60 days annually. There are more than 170,000 PWSs providing water from wells, rivers and other sources to about 250 million Americans.

R

radio nuclides — Any man-made or natural element that emits radiation and that may cause cancer after many years of exposure through drinking water.

raw water — Water in its natural state, prior to any treatment for drinking.

recycling — Collecting, sorting, cleaning, treating and reconstituting materials and returning them to the economic mainstream as raw material for new or reconstituted products.

S

sample — The water that is analyzed for the presence of EPA-regulated drinking water contaminants. Depending on the regulation, EPA requires water systems and states to take samples from source water, from water leaving the treatment facility, or from the taps of selected consumers.

sanitary survey — An on-site review of the water sources, facilities, equipment, operation and maintenance of a public water systems for the purpose of evaluating the facilities for producing and distributing safe drinking water.

scrubber — Emissions cleansing device that chemically removes sulfur from gases that are produced in the coal-burning process.

secondary drinking water standards — Nonenforceable federal guidelines regarding cosmetic effects (such as tooth or skin discoloration) or aesthetic effects (such as taste, odor, or color) of drinking water.

secondary fibers — A general term for waste paper, cardboard and fiberboard.

sharps — Wastes that might be infectious or injurious to waste haulers and often generated as part of medical waste. Sharps include needles, syringes with attached needles, capillary tubes, slides and cover slips and scalpel blades.

sole source aquifer — An aquifer that supplies 50 percent or more of the drinking water of an area.

solid waste — Waste materials produced by individuals, businesses, institutions, and industry, not including liquids, hazardous wastes and other nonsolid materials.

source water — Water in its natural state, prior to any treatment for drinking.

surface water — The water that systems pump and treat from sources open to the atmosphere, such as rivers, lakes and reservoirs.

T

toxic pollutant — Any pollutant or combination of pollutants determined by the EPA to be harmful in lower doses to human health and the environment.

transfer station — Facility where solid wastes are consolidated and compacted before being transported elsewhere.

transient, non-community water system — A water system which provides water in a place such as a gas station or campground where people do not remain for long periods of time. These systems do not have to test or treat their water for contaminants that pose long-term health risks because fewer than 25 people drink the water over a long period. They still must test their water for microbes and several chemicals.

treatment technique — A required process intended to reduce the level of a contaminant in drinking water.

turbidity — The cloudy appearance of water caused by the presence of tiny particles. High levels of turbidity may interfere with proper water treatment and monitoring.

V

variance — State or EPA permission not to meet a certain drinking water standard. The water system must prove that 1. it cannot meet a MCL, even while using the best available treatment method, because of the characteristics of the raw water, and 2. the variance will not create an unreasonable risk to public health. The State or EPA must review, and allow public comment on, a variance every three years. States can also

grant variances to water systems that serve small populations and that prove that they are unable to afford the required treatment, an alternative water source, or otherwise comply with the standard.

vermicomposting — Use of worms to speed the decomposition of organic materials (e.g., vegetable scraps, leaves) in a controlled environment to produce a high-quality soil amendment.

violation — A failure to meet any state or federal drinking water regulation.

vulnerability assessment — An evaluation of drinking water source quality and its vulnerability to contamination by pathogens and toxic chemicals.

W

waste assessment — Review of processes to identify options for reducing waste generation, energy and water consumption.

watershed — The land area from which water drains into a stream, river or reservoir.

wellhead protection area — The area surrounding a drinking water well or well field that is protected to prevent contamination of the well(s).

white goods — A generic term for obsolete refrigerators, ranges, water heaters, freezers, washers, dryers, dishwashers, kitchen compactors, window unit air conditioners and other domestic and commercial large appliances.

Y

yard waste — Solid waste consisting solely of vegetative matter resulting from landscape maintenance (e.g., grass, brush and leaves).

Workforce Development

able and available (A&A) — The requirement that a recipient of unemployment insurance (UI) benefits be able to work and available for work in order to receive benefits.

additional claim — An application for unemployment insurance benefits for a new period of unemployment within a benefit year after a break in benefits of at least one week due to employment.

adjudicator — An individual who, on behalf of the state, investigates issues that could affect unemployment insurance benefit eligibility, and who issues initial determinations resolving those issues.

administrative law judge (ALJ) — An individual who conducts hearings and makes decisions after initial determinations have been appealed. (Also called hearing officer or referee).

adult basic education (ABE) — Education for adults whose inability to read, write or speak English or to effectively use mathematics is a barrier to their ability to get or keep employment. ABE is designed to improve their ability to benefit from training and improve their opportunities for employment and to meet adult responsibilities.

adult education — Instruction in reading, writing and mathematics for adults at lower literacy levels; includes adult basic education (ABE), English as a Second Language (ESL), and preparation for the General Education Development (GED) test.

adult secondary education skills — Education for adults consisting of courses in mathematics, reading, history, science, government, language arts and other courses and classes that lead to a high school diploma or a General Education Development (GED) Certificate.

adult — For the purpose of the WIA programs, is an individual who is age 18 or older.

advanced training — An occupational skills employment / training program, not funded under Title I of the WIA, which does not duplicate training received under Title I. Includes only training outside of the One-Stop, WIA and partner, system (i.e., training following exit).

America's Job Bank (AJB) — A Web site where job seekers can post their resumes and search for job openings. Employers can post job listings in the nation's largest

online labor exchange, create customized job orders and search resumes.

appeal decision — The written ruling issued to one or more parties as a result of an appeal. If more than one person is involved only one decision is made that applies to all the claimants involved in the appeal.

appeal — A request for a hearing to reconsider a state agency's decision about an individual's unemployment insurance benefits.

apprenticeship program — A program combining on-the-job training with related instruction that enables workers to master the practical and technical skills required for a skilled occupation.

aptitude — A natural or acquired talent, or ability or quickness in learning and understanding.

associate degree — The degree awarded after a two-year period of study that can be either terminal (vocational) or transfer (the first two years of a bachelor's degree). The vocational degree is the Associate of Applied Science (AAS) and the transfer degree may be either the Associate of Arts (AA) or the Associate of Science (AS).

B

backdated claim — An unemployment insurance claim with an effective date in any week prior to the week in which it was filed.

barriers to employment — Conditions that may make employment difficult for certain individuals. Individuals with such barriers may include: single parents, displaced homemakers, youths, public assistance recipients, older workers, substance abusers, teenage parents, veterans, ethnic minorities. May also include those with limited English speaking ability, or a criminal record or with a lack of education, work experience, credentials, transportation or child care arrangements.

basic education — Instruction usually conducted in an institutional setting that is directed towards imparting the basic skills of communication, computation, problem solving, health, consumer development and citizenship.

— Instruction for youths could include, but not be limited to, enrollment in a secondary school.

— Adult Basic Education would include upgrading the same basic skills and it is directed towards adults who are generally classified as functionally illiterate, undereducated, or whose inability to speak, read or write the English language impairs their ability to get or retain employment commensurate with their real ability. Such instruction is designed to raise the level of education of such individuals with a view to make them less dependent on others, to improve their ability to benefit from occupational training and increases their opportunities for more productive and profitable employment.

basic literacy skills deficient — Defined at the local level. These definitions may establish such criteria to address the local concerns, and must include a determination that an individual:(A) Computes or solves problems and reads, writes or speaks English at or below the Eighth-grade level on a generally accepted standardized test or a comparable score on a criterion referenced test; or(B) Is unable to compute or solve problems and read, write, or speak English at a level necessary to function on the job,

in the individual's family or in society. Note: Grade Level scores below 9.0 (e.g.8.9) should be considered as at or below the 8th grade level.

basic period (BP) — The time period an unemployment insurance claim is based. Earnings during this time period are used to establish the UI claim. It may be the first four of the last five completed calendar quarters, or the state may use an alternate period if there are insufficient earnings in the primary period.

basic skills — Fundamental skills such as literacy, reading comprehension, writing, math, and English language competency, which are crucial to success in a workplace.

below grade level — An individual with educational attainment that is one or more grade levels below the grade level appropriate to the age of the individual.

Benefit Rights Interview (BRI) — Information provided to an unemployment insurance claimant for the purpose of explaining the individual's rights and responsibilities under the applicable state unemployment compensation law or federal law.

Benefit Year (BY) — The time period, beginning with the first week of a claim, during which a claimant may draw out unemployment insurance benefits due based on a claim. This may not always be a full calendar year.

bridge program — Program designed to prepare individuals, particularly those individuals with literacy levels below ninth grade, to enter and succeed in postsecondary education and training leading to career-path employment.

C

calendar quarter — One fourth of the calendar year. The quarters are: January 1 to March 31, April 1 to June 30, July 1-September 30, and October 1 to December 31.

calendar week — Seven consecutive days beginning on Sunday and ending on Saturday, except in at least one state where seven consecutive days beginning Monday and ending Sunday is considered the calendar week.

call center — A center of operations unemployment insurance claims are taken over the telephone.

career pathway — A series of occupations within an industry that build from the relatively minimal skill and education requirements needed for entry-level employment to increasing levels of skills, experience, and/or formal education.

case management — The provision of a client-centered approach in the delivery of services designed, 1. to prepare and coordinate comprehensive employment plans, such as service strategies, for participants to ensure access to necessary workforce investment activities and supportive services, using computer-based technologies, and 2. to provide job and career counseling during program participation and after-job placement.

chief elected official — The chief elected executive officer of a unit of general, local government in a local area.

child/dependent care (family care) — A supportive service that helps parent(s) meet their family care needs. Family care ranges from day care outside the home or in-home to after school programs (outside the home or in-home). It usually includes supervision

and shelter, and may include subsistence and transportation.

claimant — An individual who files a claim for unemployment insurance benefits.

claims specialist or claims taker — A person who assists in the filing of unemployment insurance claims and offers related assistance to claimants.

collaboration — A mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals without duplicating services. The relationship includes: commitment to mutual relationships and goals; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards.

Combined Wage Claim (CWC) — An unemployment insurance claim based on wage credits from more than one state.

Community Based Organization (CBO) — A nonprofit organization that originates and is developed locally to serve the needs of the community in which it is based. Services provided are varied and can include health, education, housing, and employment training.

community based services — Services provided to individuals, family members or other caregivers in the community, e.g. schools, churches, etc., rather than in an institution. These services are an alternative to facility-based services or Institutionalization.

community college — A public, two-year institution of higher education, offering instruction in programs adapted to the needs of the community. Programs may include adult education, certificate and degree programs, workforce preparation, noncredit continuing education and customized training for business.

Community Housing Development Organization (CHDOs) — Organizations certified by the state to provide grants for tenant-based rental assistance, assistance to first time homebuyers, property acquisition, new construction (justification required for neighborhood revitalization and special needs) reconstruction, moderate rehabilitation, substantial rehabilitation, site improvements, demolition, relocation, and other activities with prior approval of Housing and Urban Development.

Community Services Block Grant (CSBG) — Federal program aimed at ameliorating the causes and conditions of poverty in communities. The funds provide a range of services and activities to assist the needs of low-income individuals, including the homeless, migrants and the elderly.

community — A group of individuals or families that share certain values, services, institutions, interests or geographic proximity.

community-based organization — A private nonprofit organization that is representative of a community or a significant segment of a community and that has demonstrated expertise and effectiveness in the field of workforce investment.

competency-based curricula — Curricula defined in terms of the abilities, knowledge and skills a student should be able to demonstrate once they have completed the course. The competencies that provide the learning objectives for bridge programs are based on the requirements of entry and success at the next levels of education and employment.

continues claim — A claimant's weekly certification of eligibility for unemployment

insurance during a claim series.

continuum of care — A comprehensive array of services available at any intensity or level of need required to adequately address the needs of an individual so that they may attain their maximum potential.

contribution employer — An employer who pays taxes (contributions) to the state unemployment insurance fund.

contributions (taxes) — Payroll taxes paid by employers that are used to pay unemployment insurance benefits.

core services — Services are available to all persons who seek assistance at any One-Stop Center or affiliate employment service provider. This may include: job search and placement assistance, labor market information, training information, information about filing for unemployment, food stamps or public benefits, child care or transportation assistance.

core training — Employment-focused interventions which address basic vocational skills deficiencies that prevent the participant from accessing appropriate jobs and/or occupations.

counseling — A service that is the process of assisting participants in realistically assessing their needs, abilities and potential; providing guidance in the development of vocational goals and the means to achieve them; helping with the solution of a variety of personal problems occurring during participation.

counseling — Guidance or assistance to develop a participant's vocational or employment goals and the means to achieve those goals, or to assist the person with the solution to individual problems that may prevent him/her from accomplishing those goals, including substance abuse counseling, job counseling, child care arrangements or any other barrier that prevents their success in becoming self-supporting.

covered employer — An agency, business, organization or other employing unit that is subject to the unemployment insurance law of any state.

covered employment — Services for an employer that are covered by the unemployment insurance law.

credential — A nationally recognized degree or certificate or state/locally recognized credential. Credentials include, but are not limited to, a high school diploma, GED or other recognized equivalents, post-secondary degrees/certificates, recognized skill standards and licensure or industry-recognized certificates. States should include all State Education Agency's recognized credentials. States should work with local Workforce Investment Boards to encourage certificates to recognized successful completion of the training services listed above that are designed to equip individuals to enter or re-enter employment, retain employment or advance into better employment.

critical conditions — Community condition indicators that can be assessed and evaluated.

customer — Under WIA (Workforce Investment Act) definitions. Any person seeking assistance to find employment or training, whether employed or unemployed, and employers who need qualified workers for their company or training for the workers who are already employed with them.

customized training — A training program designed to meet the special requirements of an employer who has entered into an agreement with a Service Delivery Area to hire individuals who are trained to the employer's specifications. The training may occur at the employer's site or may be provided by a training vendor to meet the employer's requirements. Such training usually requires a commitment from the employer to hire a specified number of trainees who satisfactorily complete the training.

D

development needs — Items, materials, situations, steps or acts that need to occur to aid in the growth of an individual or to assist an individual to realize or meet their potential.

disability — 1. A physical or mental impairment that substantially limits one or more of the major life activities of such individual. 2. A record of such an impairment; or (C) Being regarded as having such impairment.

disabled veteran — A veteran entitled to compensation under laws administered by the Veterans Administration, or an individual who was discharged or released from active duty because of service-connected disability.

disadvantaged adults — Educationally or skills disadvantaged adults are those persons who score below grade level on standardized tests. They require educational assistance to bring their basic skills to a level that would make them eligible for secondary (high school) education or to hold a job with basic English and math skills.

dislocated worker — A person who: 1. (A) has been terminated or laid off from their job, or who has received a notice of termination or layoff, from their employer; (B) is eligible for or has used up their unemployment payments; or has been employed for long enough to show, to a program at a one-stop center referred to in section 134(c), attachment to the workforce act, but who can not get unemployment payments because of low earnings or having done work for an employer that is not covered under a State unemployment compensation law, and (C) is not likely to return to the same type of work. 2. (A) Has lost his or her job, or has received a notice of termination or layoff, from their job because of a permanent closure of, or a big layoff at a plant, facility, or company; (B) is working at a facility where the employer has announced that it will close within 180 days; or (C) in order to receive services besides the training services described in section 134(d)(4), intensive services described in section 134(d)(3), or supportive services, is employed at a place where the employer has made an announcement that the facility will close. 3. Was self-employed (including employment as a farmer, a rancher, or a fisherman) but is unemployed because of the local economy where the individual lives or because of natural disasters. 4. Is a displaced home maker.

displaced homemaker — A person who has been doing unpaid work for family members in the home and who 1. has been dependent on the income of another family member but is no longer supported by that income, and 2. is unemployed or underemployed and is having difficulty in finding a job or getting a better job.

E

economically disadvantaged — An individual who is either a member of a family whose income is below the poverty level, or is receiving cash benefits from a federal,

state or local welfare program. May also receive food stamps, is a homeless person, is a foster child or is a disabled person.

educationally disadvantaged adult — See also disadvantaged adults.

eligibility barriers for income eligible youths — Eligible participants must fall within one or more of the following categories:

1. Deficient in basic literacy skills
2. School dropout
3. Homeless, runaway, or foster child
4. Pregnant or parenting
5. Offender or
6. An individual (including a youth with a disability) who requires additional assistance to complete an educational program or to secure and hold employment.

Note: CFR 664.210 states that criterion for this definition and the documentation to prove need shall be established at the local level by the Youth Council. It will be approved by the WIA Board, based on local area need and must be included in local policy.

Eligibility Barriers of Youth Participants who do not have to meet income eligibility requirements:

1. School dropout
2. Basic skills deficient
3. Are one or more grade levels below the grade level appropriate to the individual's age;
4. Pregnant or parenting;
5. Possess one or more disabilities, including learning disabilities;
6. Homeless or runaway;
7. Offender; or
8. Faces serious barriers to employment as identified by the local board (WIA sec. 129(c)(5)).

eligibility review program (ERP) — A program under which claimants are periodically contacted to review their eligibility for benefits, work search activities and reemployment needs.

eligibility — The meeting of specific qualifications to receive certain benefits; the criteria used by public assistance programs to determine which people may receive help. For example, to be eligible for the Food Stamp program, a person must meet certain income requirements and to be eligible for Medicare a person must be above a certain age.

eligible training provider (ETP) — An organization, such as a public or private college and university, or community-based organization, whose application has been approved by the local workforce board and approved for the state list of training services through the use of an Individual Training Account.

eligible training provider list — A statewide collection of providers approved to give services through the One-Stop system. These lists contain consumer information, including cost and performance information for each of the providers, so that participants can make informed choices on where to use their Individual Training Accounts.

Employment and Training Administration (ETA) — Part of DOL with direct responsibility for WIA programs.

employment service — The state level organization or public labor exchange system connected with the Department of Labor's United States Employment Service.

English as a Second Language (ESL) — English language education for adults whose inability to understand, speak, read, or write the English language is a barrier to their ability to get or keep employment. This also has effects on their real ability to function in society or successfully complete the citizenship application process.

entered employment rate — Method used to determine the percentage of participants who become employed. The percentage is calculated by dividing the number of total participants who were enrolled in the program by the number of participants who were placed or entered employment through the program.

entry-level occupation — The lowest paid occupations within an industry or firm, usually requiring minimal work experience and limited educational background as conditions for hire. Criteria differ widely from industry to industry.

estimated begin date — The date the participant is scheduled to begin each activity.

estimated end date — The date the participant is scheduled to complete each training activity.

exit — To separate a participant who is no longer receiving WIA funded enrollment training or services (except follow-up services) or non-WIA funded services included in the service plan. See also hard exit and soft exit.

F

Faith Based Organization (FBO) — Organization whose founding, governance, or membership is derived from a religious institution or religiously affiliated entity.

Family Literacy Services (FLS) — Services that are sufficient to make lasting changes in a family, and that integrate all of the following activities: 1. literacy activities between parents and their children, 2. training for parents regarding how to be the primary teacher for their children and full partners in the education of their children, 3. parent literacy training that leads to economic self-sufficiency, 4. an age-appropriate education to prepare children for success in school and life experiences.

field-specific bridge program — A bridge program that prepares adults for college-level occupational certificate programs and advancement to entry-level skilled positions. These programs are geared toward participants who have decided upon a career sector focus.

follow-up — The tracking of what happens to participants when they leave the WIA program for a period of 180 days after first job placement. The reporting requirements include the following information: employment status (number of Entered Employments/Placements at 180 days after program has ended), average hourly wage (earnings change at 180 days after program has ended), and job retention (of those enrolled in training, provide number of those still employed in trained occupation at 180 days after program has ended).

Food Stamp Program — Provides basic food needs to low-income families.

foster child — An individual under the age of 18 on behalf of whom State or local government payments are made. (WIA Act 101 (25)(E))

G

General Equivalency Diploma (GED) — A high school equivalency diploma, which is obtained by passing the General Educational Diploma Equivalency Test that measures skills and knowledge generally associated with four years of traditional high school instruction.

H

Hard Exit — The exiting of a WIA youth participant who has a date case closure, completion or known exit from WIA funded or non-WIA funded partner services. This must be initiated by the caseworker in two places:

1. In the case detail under “exit,” and
2. In the case detail under “programs of enrollment”

hearing officer — See “administrative law judge.”

hearing — The opportunity for parties to appeal an initial determination to be heard by an administrative law judge, hearing officer, or referee.

Hispanic or Latino/Latina — A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

homeless — An individual who 1. lacks a fixed, regular, and adequate nighttime residence, and 2. has a primary nighttime residence that is:

- a. A supervised publicly or privately operated shelter designed to provide temporary living accommodations (including welfare hotels, congregate shelters and transitional housing for the mentally ill);
- b. An institution that provides a temporary residence for individuals intended to be institutionalize
- c. A public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings.

I

Individual Employment Plan (IEP) — A plan developed by the participant and the case manager to identify the participant’s employment goals, the appropriate achievement objectives and the appropriate combination of services for the participant to achieve the employment goals.

Individual of Limited English Proficiency (LEP) — An adult or out-of-school youth who has limited ability in speaking, reading, writing or understanding the English language, and (A) whose native language is a language other than English; or (B) who lives in a family or community environment where a language other than English is the dominant language.

Individual Service Strategy (ISS) — An agreement of skills and goals decided between a WIA Youth participant and WIA Youth staff counselor (usually a case

manager), that sets out a plan for the participant to make progress towards his/her educational and employment goals.

Individual Training Account (ITA) — An expenditure account established on behalf of a participant that provides for vocational training.

individual with a disability — An individual with any disability (as defined in section 3 of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102). Refer to the definition for the term disability.

Initial Claim (IC) — An application for a determination of entitlement to unemployment insurance benefits. There are four types of initial claims: new claims, reopened claims, additional claims and transitional claims.

in-school youth — A youth enrolled in a secondary school program, and who is seeking a secondary school diploma; is determined at the time of registration.

intake — A process for screening individual applicants for eligibility for services; making a determination whether the program can benefit the applicants; providing information about the program, its services and the availability of those services; and selecting individual applicants for participation in the program.

intensive services — Services available to adults and dislocated workers who have completed one or more Core Services and are still unable to gain employment, or who are employed and have been determined in need of services to get a better job in order to gain self-sufficiency. Intensive Services include individual career planning, resume preparation, job clubs, career counseling, internships and comprehensive assessments. Basic education, ESL and basic computer literacy are also sometimes considered intensive services.

issue — An act, circumstance or condition potentially disqualifying a claimant from receipt of unemployment insurance benefits under state/federal law.

J

job club activities — A form of job search assistance provided in a group setting. Usually job clubs provide instruction and assistance in completing job applications and developing résumés and focus on maximizing employment opportunities in the labor market and developing job leads. Many job clubs use telephone banks and provide group support to participants before and after they interview for openings.

job development — The process of marketing a program participant to employers, including informing employers about what the participant can do and asking for a job interview for that individual with the employer.

job placement services — Services that specifically assist participants find jobs that may involve activities such as job search assistance, training or job development.

job retention — The ability to keep a job for a certain period of time, usually 90 or 180 days or more, which shows that a worker has the skills to fit into the workplace and succeed in a job.

L

labor exchange — Services provided to job seekers and employers by the State Employment Service Agencies. Services to job seekers may include assessment, testing, counseling, provision of labor market information and referral to prospective employers. Employer service may include accepting job orders, screening applicants, referring qualified applicants and providing follow-up.

labor force — The total of all civilians classified as employed and unemployed and members of the Armed Forces stationed in the United States. (Bureau of Labor Statistics Bulletin 2175).

Labor Market Area (LMA) — An economically integrated geographic area within which individuals can reside and find employment within a reasonable distance or can readily change employment without changing their place of residence. Such an area shall be identified in accordance with criteria used by the Bureau of Labor Statistics of the Department of Labor in defining such areas or similar criteria established by a governor.

Labor Market Information (LMI) — Is related information about unemployment, industries, occupations, etc.

life skills — Those skills which are included in adult literacy dealing with such topics as consumer economics, government and law, occupational knowledge, community resources and health that are included into an educational agency's basic literacy skills course of study.

Limited English Proficiency (LEP) — An individual with LEP is one who has limited ability in speaking, reading, writing or understanding the English language and 1. whose native language is a language other than English or 2. who lives in a family or community environment where a language other than English is the dominant language.

literacy — An individual's ability to read, write, and speak in English, compute, and solve problems, at levels of proficiency necessary to function on the job, in the family of the individual, and in society.

livable wage — The self-sufficiency earning level.

local youth programs — Those youth activities offered for youths in the 12 local workforce investment areas by youth providers and vendors.

lower living standard income level — Income level (adjusted for regional, metropolitan, urban, and rural differences and family size) determined annually by the Secretary based on the most recent lower living family budget issued by the Secretary.

low-income individual — A person who: 1. receives, or is a member of a family that receives, cash payments under a Federal, State, or local income-based public assistance program. 2. Received an income, or is a member of a family that received a total family income, for the six-month period before application for the program involved (besides unemployment compensation, child support payments, payments described in subparagraph and old-age and survivors insurance benefits received under section 202 of the Social Security Act (42 U.S.C. 402) that, for their family size, is not more than the higher of (A) the poverty line, for an equivalent period, or (B) 70 percent of the lower living standard income level, for a similar period, (C) belongs to a household

that receives (or has been decided within the six-month period before application for the program to be eligible to receive) food stamps according to the Food Stamp Act of 1977 (7 U.S.C. 2011 et seq.); (D) is a homeless person, as defined in subsections (a) and (c) of section 103 of the Stewart B. McKinney Homeless Assistance Act (42 U.S.C. 11302); (E) is a foster child for whom State or local government payments are made; or (F) in cases permitted by rules decided by the Secretary of Labor, is a person with a disability whose own income meets the requirements of a program described in subparagraph (a) or of subparagraph (b), but who is a member of a family whose income does not meet such requirements.

M

Maximum Benefit Amount (MBA) — The total amount of unemployment insurance benefit payable to a claimant in a benefit year.

Medicaid — A program of medical aid for people that cannot afford regular medical service that is paid for by the state and federal governments

mental health services — Psychological and psychiatric treatment and counseling services for individuals with a diagnosed mental illness, conducted in a group or individual setting, and provided by a mental health professional licensed or authorized within the state to render such services; typically includes psychiatrists, psychologists, and licensed clinical social workers.

Migrant or Seasonal Farm Worker (MSFW) — A migrant farm worker, a migrant processing worker or a seasonal worker.

military service — Reporting for active duty.

monetary determination — A written notice issued to inform an individual of whether or not he/she meets the employment and wage requirements needed to establish entitlement to unemployment insurance, and, if entitled, the weekly and maximum benefit amounts that he/she may receive.

monetary redetermination — A new determination made after reconsideration and/or re-computation of an unemployment insurance claimant's monetary entitlement based on the receipt of new employment and wage information.

N

new claim — See also initial claim.

no longer attending any school — A situation where an individual is not attending secondary school program seeking a secondary school diploma.

nonmonetary determination — A written notice issued to inform an unemployment insurance claimant and/or employer about the determination of eligibility arising from issues of separations from work or other eligibility requirements.

nontraditional employment — Occupations or fields of work for which individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation or field of work.

North American Free Trade Agreement (NAFTA) — Establishes Transitional

Adjustment Assistance (TAA) for workers in companies affected by imports from Mexico or Canada or by shifts of U.S. production to those countries.



objective assessment — Objective (comprehensive) assessment is a client-centered, diagnostic approach to evaluating the needs of a participant without regard to services or training programs already available in a local area. It is an independent, comprehensive evaluation of an individual designed to identify information vital to the design of an individual service strategy. Objective assessment is an ongoing process and should not be viewed as a one-time event. It should be a multi-faceted approach that includes a full array of options including items such as structured interviews, paper and pencil tests, performance tests, behavioral observations, interest inventories career guidance instruments, aptitude tests, and basic skill tests. As an ongoing process, it must be revisited regularly and amended, as appropriate, when additional needs are identified or goals achieved.

Note: Must provide an objective assessment of each youth participant, that meets the requirements of WIA section 129(c)(1)(A), and includes a review of the academic and occupational skills levels, as well as the service needs, of each youth.

occupational (vocational) certificate — A credential earned by completing a training program for a specific industry or career. Programs vary in length from one to more than four semesters of full-time study. They are generally state-recognized and thus carry college credit, although this credit does not necessarily transfer to a college degree program.

occupational skills training — Includes both 1. vocational education which is designed to provide individuals with the technical skills and information required to perform a specific job or group of jobs, and 2. on-the-job training.

occupational skills — Primary occupational skills include the proficiency to perform actual tasks and technical functions required by certain occupational fields at entry, intermediate or advanced levels. Secondary occupational skills entail familiarity with, and use of, set-up procedures, safety measures, work-related terminology, record keeping and paperwork formats, tools, equipment and materials, and breakdown/clean-up routines. Individuals without these occupational skills would be considered deficient.

offender — Any adult or juvenile who 1. is or has been subject to any stage of the criminal justice process, for whom services under this Act may be beneficial, or 2. requires assistance in overcoming artificial barriers to employment resulting from a record of arrest or conviction.

Office of Special Education and Rehabilitative Services (OSERS) — Is federal office within the US Department of Education that administers special education and rehabilitation services.

older youth — An individual that falls within the ages of 19 through 21 at the date of registration.

one-stop career center — A One-Stop Center is a facility that makes a wide range of the system's services available at a single site, through self-service or with staff help.

The number of centers, the services offered and the manner in which they are given will vary from one area to another, according to local needs and resources.

on-site industry-specific training — This is training which is specific to the needs of a particular employer and/or industry. Participants may be trained according to requirements developed by an employer for a job site. There may be an agreement to hire participants who have successfully completed training.

on-the-job-training — Training by an employer that is provided to a paid participant while engaged in productive work in a job that 1. provides knowledge or skills essential to the full and adequate performance of the job, 2. provides reimbursement to the employer of up to 50 percent of the wage rate of the participant, for the extraordinary costs of providing the training and additional supervision related to the training, and 3. is limited in duration as appropriate to the occupation for which the participant is trained, taking into account the content of the training, the prior work experience of the participant and the service strategy of the participant, as appropriate.

Note: In most cases, on-the-job training is not an appropriate work-experience activity for youth participants under age 18.

outcomes — Specific, measurable desired changes in conditions (knowledge, skills, attitudes and behaviors) resulting from strategies.

out-of-school youth — 1. An eligible youth who is a school dropout, or 2. an eligible youth who has received a secondary school diploma or its equivalent, but is basic skill deficient, unemployed, or underemployed. Status is determined at the time of registration.

outreach — An effort by program staff to encourage individuals in the service delivery area to use the program's services.

overpayment — An amount of benefits paid to an individual to which the individual was not legally entitled.

P

participant — Any individual who has 1. been determined eligible for participation upon intake, and 2. started receiving employment, training, or services (except post-termination/follow-up services) funded under WIA following intake. Participation shall begin on the first day, following determination of eligibility, in which the individual began receiving subsidized employment, training, or other services provided under WIA.

partner — Entities included in the definition of a one-stop partner and other entities that provides services through collaboration with the local program.

performance measures — The WIA regulations include 17 performance measures or indicators. The performance measures focus on entering employment, retaining employment, increasing wages and increasing academic or occupational skills (and related credentials). The measures are categorized by program (i.e., adult, dislocated worker, older youth, and younger youth). The performance indicators also include customer satisfaction measures. Customer satisfaction is measured for both individual participant customers and employer customers. Many of the outcomes are measured using data gathered from the Unemployment Insurance reporting system.

Personal Responsibility and Work Opportunity Reconciliation Act of 1996

(PRWORA) — The Federal welfare reform law that established the Temporary Assistance for Needy Families (TANF) program, which transforms welfare into a system that requires work and provides for time-limited financial assistance.

placement — The act of obtaining unsubsidized employment for or by a participant.

pre-apprenticeship training — Any training designed to increase or upgrade specific academic or physical skills required as a condition for entry into a specific type of work.

pre-enrollment assessment — A process to determine the employability and training needs of participants before enrolling them into the program. Individual factors considered during pre-enrollment assessment include: a judgment of vocational interests, abilities, previous education and work experience, income requirements and personal circumstances.

pregnant or parenting youth — An individual who is under 22 years of age and pregnant, or a youth (male or female) who is providing custodial care for one or more dependents who are under 18 years of age. Males do not qualify as a parent until the child is born.

profiling — Profiling identifies the claimants who are most likely to exhaust their unemployment benefits. The Profiling Orientation sessions allow workforce center staff to make preliminary assessments of the claimant's marketable job skills, their likelihood to return to the workforce or their need for additional training/retraining.

public assistance — Means federal, state or local government cash payments for which eligibility is determined by a needs or income test.

Q

qualified apprenticeship — A program approved and recorded by the ETA / Bureau of Apprenticeship and Training (BAT). Approval is by certified registration or other appropriate written credential. (TEGL 7-99)

rapid response — Early intervention services provided by the state, or by an agency chosen by the state, in case of a factory closing, significant layoff or a natural or other disaster that causes job loss for large numbers of workers. Assists dislocated workers in obtaining reemployment as soon as possible.

R

referee — See administrative law judge.

registration — Registration is the process of collecting information to support a determination of eligibility. It is also the point at which performance accountability information begins to be collected. Individuals seeking information only, and who do not require a significant degree of staff assistance, do not need to be registered. All youth participants must be registered prior to the receipt of any WIA funded youth services.

rehabilitation services — Services provided by a licensed or authorized professional in accordance to an individualized plan of care intended to improve or maintain a

client's quality of life and optimal capacity for self-care. Services include physical and occupational therapy, speech pathology, and low-vision training.

remedial education — Educational instruction, particularly in basic skills, to raise an individual's general competency level in order to succeed in vocational education, or skills training programs or employment.

reopened claim — An application for unemployment insurance filed after a break in a claim of at least one week caused by something other than employment. See also additional claim.

résumé — The basic document that shows a job candidate's employment and academic qualifications and history of employment. It is a requirement to apply for most jobs and an opportunity to show why the candidate is best suited for the job being applied for.

retention — Continuing or keeping a job, usually for at least 90 days or more.

S

SCANS Competencies — Developed by the U.S. Department of Labor's Secretary's Commission on Achieving Necessary Skills, these are a specific set of skills and competencies determined by the commission as those people need to succeed in the world of work.

school dropout — A person who is not in school and who has not received a secondary school diploma or a General Equivalency Diploma (GED).

Secretary's Commission on Achieving Necessary Skills (SCANS) — A U.S. Labor Department initiative to study employer needs in the marketplace. It categorizes specific employee skills required by employers.

sector — A group of closely interrelated industries that use common technologies or draw on similar resources, such as particular occupations or raw materials (e.g., healthcare, manufacturing, transportation).

self-sufficiency — The ability to earn enough money to support oneself.

separation issue — Issues that must be adjudicated to determine if an unemployment insurance claimant's reason for separation is disqualifying under state law, issues generally involve voluntary leavings (quits), discharges (misconduct) or labor disputes.

Social Security Number (SSN) — The 9-digit identification number assigned to an individual by the Social Security Administration under the Social Security Act.

soft exit — When a participant has not received any WIA funded or non-WIA funded partner service for 90 days and is not scheduled to receive any future service except follow-up services. Done by Service Link automatically following the 90-day period.

soft skills — Nontechnical skills that build an individual's ability to succeed in any workplace. Examples include teamwork, interpersonal communication, working well with supervisors, time management and conflict resolution.

stipend — Monetary payment, used as an incentive to retain youths in a program, which may be given upon completion of established benchmarks or upon final program completion. The guidelines providing stipends to youth participants must be described in local policy.

subsidies — Cash assistance or similar payments for transportation, housing, food or other basic expenses.

substance abuser — An individual dependent on alcohol or drugs, whose dependency results in a significant barrier to employment.

suitable work — Work that is determined to be reasonable for a UI claimant (considering his or her skills, training, education and experience.)

summer employment opportunities — Summer employment that must provide direct linkages to academic and occupational learning, such as coordinating with school systems and/or school-to-work, and may provide other elements and strategies as appropriate to serve the needs of the participant. This service is not intended to be a stand-alone activity and should be part of a comprehensive strategy to address the youth's employment and training needs.

supportive services — Services that are needed to help a person to participate in job training or job search. Supportive services may include transportation, health care, financial assistance, drug and alcohol abuse counseling and referral, individual and family counseling, special services and materials for individuals with disabilities, job coaches, child care and dependent care, temporary shelter, financial counseling and other reasonable expenses required for participation in the program and may be provided in-kind or through cash assistance.

T

Temporary Assistance for Needy Families (TANF) — Time limited public assistance payments made to poor families, based on Title IV-A of the Social Security Act. Under the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), which was signed into law in 1996, TANF funds may also be used by states to fund job-placement programs for TANF recipients and other low-income populations. Purpose is to provide temporary assistance to families with dependent children deprived of basic support due to death, desertion or unemployment of one or both parents. Formerly Aid to Families with Dependent Children. (AFDC)

Test of Adult Basic Education (TABE) — A widely used diagnostic and evaluative tool that measures basic reading, math and language skills for adults with low literacy levels; often used for program placement, skills assessment or as a measure of student progress.

Trade Adjustment Assistance (TAA) — Trade Adjustment Assistance service and allowances provided for achieving reemployment of adversely affected workers, including TRA, training, and other re-employment services and job search allowance and relocation allowances.

Trade Readjustment Allowance (TRA) — A federal program created under the Trade Adjustment Act to retrain workers laid off due to increased imports or whose employment was moved to Canada or Mexico. TRA benefits may be payable to eligible workers following exhaustion of their unemployment insurance benefits, if they are participating in or have completed an approved training program.

training market — A training market reflects an approach with vendors selling training directly to individual participants rather than through intermediary

organizations.

training services — The education and employment training services to be offered at no cost to One-Stop system customers who have been unable to get a job after having received one or more core services and one or more intensive services (see also Individual Training Account).

transitional benefits — Child care and Medicaid benefits given to a recipient for a period of time after their time limits have expired. Recipient is usually employed at this time.

tuition reimbursement — Partial or full payment by employers, public entities, or others for courses that individuals take at educational institutions. Payment is made either to the institution or reimbursed or paid upfront to the employee.

U

Unemployment Compensation (UC) — Is a program or Unemployment Insurance (UI) program – The federal/state program that provides unemployment benefits to eligible individuals covered under state or federal unemployment insurance laws.

Unemployment Compensation for Ex-Service Members (UCX) — The federal unemployment insurance program that provides benefits to ex-service members.

Unemployment Compensation Program for Federal Employees (UCFE) — The federal unemployment insurance program that provides benefits to former employees of the federal government.

United States Department of Labor (USDOL) — The federal department that regulates and funds state workforce activities.

universal services — Services available to every individual through the one-stop system without regard to any specific eligibility criteria, including information about job vacancies, career options, employment trends, job search techniques, résumé writing and access to the employment training provider lists.

unsubsidized employment — A job for which wages are paid directly by the employer and that is not subsidized through any government program.

V

Vocational Adult Basic Education (VABE) — Programs that teach basic literacy skills to native English-speaking students in the context of preparing them to work in a specific occupation.

Vocational English as a Second Language (VESL) — Programs that teach basic literacy skills to non-native English speaking students in the context of preparing them to work in a specific occupation.

vocational exploration training — A process to find out, by testing or counseling, what job occupations will best fit a customer's abilities and needs.

vocational rehabilitation — An agency or program that provides vocational services to individuals with disabilities. Every state has a State Vocational Rehabilitation agency

with local district offices. The state/federal program is administered by Rehabilitation Services Administration (RSA), within the Office of Special Education and Rehabilitation Services (OSERS), in the U.S. Department of Education. The state and local vocational rehabilitation program is a mandatory One-Stop employment service partner.

W

Weekly Benefit Amount (WBA) — The amount payable to an unemployment insurance claimant for each compensable (eligible) week of total unemployment.

welfare and/or public assistance recipient — A person who, during the course of the program year, receives or is a member of a family who receives cash welfare or public assistance payments under a federal, state or local welfare program.

Welfare-to-Work (WTW) — A series of federal and state plans to move people from welfare into employment and training for better jobs.

WIA Title I Training Funds — Funds that can be used by registered WIA participants for state and local workforce board–approved training programs. The majority of training funds are distributed through vouchers called Individual Training Accounts, but training contracts are also permissible under federal law.

WIA Title II — Funds that are meant to assist those who lack basic educational skills (including reading, numeracy, and English-language skills), do not have a high school diploma or GED or who lack literacy in English. Eligible providers include community colleges, regional offices of education, CBOs, public schools, and universities.

work experience — A temporary activity (six months or less) which provides a person with the opportunity to gain the skills and knowledge necessary to perform a job, including work habits and behaviors, and which may be combined with classroom or other training.

work search — An individual state requirement that the claimant must seek suitable work in a week for which benefits are claimed.

workforce intermediaries — Organizations that provide resources such as program-design assistance, assistance evaluation, and others to workforce program providers.

Workforce Investment Act (WIA) — An Act of the U.S. Congress to establish programs to prepare youths and unskilled adults for entry into the labor force and to give job training to those economically disadvantaged individuals and other individuals who face serious barriers to employment and who are in need of such training to obtain prospective employment. The Workforce Investment Act (WIA) of 1998 supersedes the Job Training Partnership Act (JTPA) and provides a broad range of workforce-development activities through both statewide and local organizations.

workforce investment activity — An adult or dislocated worker employment and training activity. May also be a youth activity. See also “Workforce Investment Act.”

Workforce Investment Board (WIB) — Replaces local Private Investment Councils; members are appointed by the chief elected official (CEO), WIBs have the role of strategic planning, policy development and oversight of the local workforce investment system. Like the state WIB, the local WIBs require 51 percent business membership

with a minimum of two labor representatives.

Workforce Investment Boards-Local and State (LWIB and SWIB) — Advisory committees established under WIA to set policy and direction for implementation of the workforce investment system and, at the state level, to foster cooperation between the government and private sector to meet the workforce preparation needs of employers and workers. Members may consist of businesses, educational entities, labor organizations, community-based organizations and/or economic development agencies. Replaces State Private Investment Council or Human Resource Investment Council; is established by the governor with membership meeting federal guidelines; 51 percent must be representatives of business with a minimum of two labor representatives. The SWIB develops the state plan and oversees how it is carried out.

working poor — Individuals working below the livable wage level. They are often one emergency, or one missed paycheck, away from needing public assistance.

workkeys — A national ACT system for teaching and assessing workplace skills places an emphasis on skills not education levels. It connects “knowing with doing and learning with earning.”

Y

younger youth — An individual that falls between the ages of 14 through 18 at the date of registration.

youth activity — An activity described in section 129 that are carried out for eligible youth.

youth — In the WIA program, any young person, between the age of 14 and 21 years of age, who may be in school or out-of-school, and whose family income is within the WIA Low Income Guidelines.

APPENDIX

Common Equivalencies

Linear Measurements 7.92 inches = 1 link 12 inches = 1 foot 3 feet = 1 yard 25 links = 1 rod 5½ yards; 16 ½ feet = 1 rod; 1 pole; 1 perch 4 rods = 1 chain 220 yards = 1 furlong; 1/8 mile 8 furlongs = 1 mile; 1,760 yards; 5,280 feet 3 miles = 1 league
Square Measurements 144 square inches = 1 square foot 9 square feet = 1 square yard 30 1/4 square yards = 1 square rod 160 square rods = 1 acre; 4,840 square yards
Surveying Measurements 62.73 square inches = 1 square link 625 square links = 1 square pole 16 square poles = 1 square chain; 4,356 square feet 10 square chains = 1 acre 640 acres = 1 square mile 36 square miles = 1 township 1 square mile = 259 hectares 1 township = 9,324 hectares; 93.24 square kilometers
Circular Measurements 60 seconds = 1 minute 60 (arc) minutes = 1 degree 90 degrees = 1 quadrant 4 quadrants = 1 circle (360 degrees)

COMMON METRIC CONVERSION FACTORS

Unit of Measure	Multiplied by	Yields
LENGTH		
Inches	x 25.4	= millimeters
Feet	x 30	= centimeters
Yards	x 0.9	= meters
Miles	x 1.6	= kilometers
Millimeters	x 0.04	= inches
Centimeters	x 0.4	= inches
Meters cubed	x 264.2	= gallons
Kilometers	x 0.6	= miles
AREA		
Sq. inches	x 6.5	= square centimeters
Sq. feet	x 0.09	= square meters
Sq. yards	x 0.8	= square meters
Sq. miles	x 2.6	= square kilometers
Acres	x 0.4	= hectares
Sq. centimeters	x 0.16	= square inches
Sq. meters	x 1.2	= square yards
Sq. kilometers	x 0.4	= square miles
Hectares	x 2.5	= acres
MASS		
Ounces	x 28	= grams
Pounds	x 0.45	= kilograms
Short tons	x 0.9	= mega grams (Metric tons)
Grams	x 0.035	= ounces
Kilograms	x 2.2	= pounds
Mega grams (metric tons)	x 1.1	= short tons
VOLUME		
Ounces	x 30	= milliliters
Pints	x 0.47	= liters
Quarts	x 0.95	= liters
Gallons	x 3.8	= liters
Milliliters	x 0.034	= ounces
Liters	x 2.1	= pints
Liters	x 1.06	= quarts
Liters	x 0.26	= gallons
TEMPERATURE		
Degrees Fahrenheit -32	x 5/9	= Degrees Centigrade
Degrees Centigrade	x 9/5 + 32	= Degrees Fahrenheit

MISCELLANEOUS CONVERSION FACTORS

Unit of Measure	Multiplied by	Yields
Acres	x 43,560 x 4,047 x 1.562 x 10 ⁻³ x 4,840	= square feet = square meters = square miles = square yards
Acre Feet	x 43,560 x 3.259 x 10 ⁵	= cubic feet = gallons
Atmospheres	x 76.0 x 29.92 x 33.90 x 10.333 x 14.70 x 1.058	= centimeters of mercury = inches of mercury = feet of water = kilograms per square meter = pounds per square inch = tons per square foot
Bars	x .9869 x 10,200 x 2.089 x 10 ⁻³ x 14.5	= atmospheres = kilograms per square meter = pounds per square foot = pounds per square inch
Board feet	x 144 sq. in. x 1 in.	= cubic inches
Centimeters	x 0.3937 x 0.01 x 10	= inches = meters = millimeters
Centimeters of mercury	x 0.01316 x 0.4461 x 136.0 x 27.85 x 0.1934	= atmospheres = feet of water = kilograms per square meter = pounds per square foot = pounds per square inch
Centimeters per second	x 1.969 x 0.03231 x 0.036 x 0.6 x 0.02237 x 3.728 x 10 ⁻⁴	= feet per minute = feet per second = kilometers per hour = meters per minute = miles per hour = miles per minute
Cord-feet	x 4 ft. x 4 ft. x 1 ft.	= cubic feet
Cords	x 4 ft. x 8 ft. x 4 ft.	= cubic feet

MISCELLANEOUS CONVERSION FACTORS (Continued)

Unit of Measure	Multiplied by	Yields
Cubic centimeters	$\times 3.531 \times 10^{-5}$ $\times 6.102 \times 10^{-2}$ $\times 10^{-6}$ $\times 1.308 \times 10^{-6}$ $\times 2.642 \times 10^{-4}$ $\times 10^{-3}$ $\times 2.113 \times 10^{-3}$ $\times 1.057 \times 10^{-3}$	= cubic feet = cubic inches = cubic meters = cubic yards = gallons = liters = pints (liquid) = quarts (liquid)
Cubic feet	$\times 2.832 \times 10^4$ $\times 1,728$ $\times 0.02832$ $\times 0.03704$ $\times 7.48$ $\times 28.32$ $\times 59.84$ $\times 29.92$	= cubic centimeters = cubic inches = cubic meters = cubic yards = gallons = liters = pints (liquid) = quarts (liquid)
Cubic feet per minute	$\times 472.0$ $\times 0.1247$ $\times 0.4720$ $\times 62.4$	= cubic centimeters per second = gallons per second = liters per second = lbs. of water per minute
Cubic inches	$\times 16.39$ $\times 5.787 \times 10^{-4}$ $\times 1.639 \times 10^{-5}$ $\times 2.143 \times 10^{-5}$ $\times 4.329 \times 10^{-3}$ $\times 1.639 \times 10^{-2}$ $\times 0.03463$ $\times 0.01732$	= cubic centimeters = cubic feet = cubic meters = cubic yards = gallons = liters = pints = quarts
Cubic meters	$\times 106$ $\times 35.31$ $\times 61,023$ $\times 1.308$ $\times 264.2$ $\times 103$ $\times 2,113$ $\times 1,057$	= cubic centimeters = cubic feet = cubic inches = cubic yards = gallons = liters = pints = quarts

MISCELLANEOUS CONVERSION FACTORS (Continued)

Unit of Measure	Multiplied by	Yields
Cubic yards	x 7.646x105 x 27 x 46,656 x 0.7646 x 202.0 x 64.6 x 1,616 x 807.9	= cubic centimeters = cubic feet = cubic inches = cubic meters = gallons = liters = pints = quarts
Cubic yards per minute	x 0.45 x 3.367 x 12.74	= cubic feet per second = gallons per second = liters per second
Liters	x 103 x 0.03531 x 61.02 x 10 ⁻³ x 1.308 x 10 ⁻³ x 0.2642 x 2.113 x 1.057	= cubic centimeters = cubic feet = cubic inches = cubic meters = cubic yards = gallons = pints = quart
Liters per minute	x 5.855 x 10 ⁻⁴ x 4.043 x 10 ⁻³	= cubic feet per second = gallons per second
Meters	x 100 x 3.2808 x 39.37 x 10 ⁻³ x 103 x 1.0936	= centimeters = feet = inches = kilometers = millimeters = yards
Meters per minute	x 1.667 x 3.281 x 0.05468 x 0.03 x 0.03728	= centimeters per second = feet per minute = feet per second = kilometers per hour = miles per hour
Meters per second	x 196.8 x 3.281 x 3.6 x 0.06 x 2.237	= feet per minute = feet per second = kilometers per hour = kilometers per minute = miles per hour
Milliliters	x 10 ⁻³	= liters
Millimeters	x 0.1 x 0.03937	= centimeters = inches

MISCELLANEOUS CONVERSION FACTORS (Continued)

Unit of Measure	Multiplied by	Yields
Pounds per square foot	x 0.01602 x 4.882 x 6.944 x 10 ⁻³	= feet of water = kilograms per square meter = pounds per square inch
Pounds per square inch	x 0.06804 x 2.307 x 2.036 x 703.1 x 144	= atmospheres = feet of water = inches of mercury = kilograms per square meter = pounds per square foot
Quarts (dry)	x 67.20	= cubic inches
Quarts (liquid)	x 57.75	= cubic inches
Square centimeters	x 1.076 x 10 ⁻³ x 0.1550 x 10 ⁻⁵	= square feet = square inches = square meters
	x 100	= square millimeters
Square feet	x 2.296 x 10 ⁻⁵ x 144 x 10 ⁻⁵ x 9.29 x 10 ⁴	= acres = square inches = square meters = square millimeters
Square inches	x 6.452 x 6.944 x 10 ³ x 645.2	= square centimeters = square feet = square millimeters
Square kilometers	x 10.76 x 10 ⁶ x 105 x 0.3861 x 1.196 x 10 ⁶	= square feet = square meters = square miles = square yards
Months	x 30.42 x 730 x 43,800 x 2.628 x 10 ⁶	= days = hours = minutes = seconds
Ounces	x 16 x 437.5 x 28.35 x 0.0625	= drams = grains = grams = pounds
Ounces (fluid)	x 1.805 x 0.02957	= cubic inches = liters

MISCELLANEOUS CONVERSION FACTORS (Continued)

Unit of Measure	Multiplied by	Yields
Ounces per square inch	x 0.0625	= pounds per square inch
Pints (dry)	x 33.60	= cubic inches
Pints (liquid)	x 28.87	= cubic inches
Pounds	x 7,000 x 453.6 x 16	= grains = grams = ounces
Pounds of water	x 0.01602 x 27.68 x 0.1198	= cubic feet = cubic inches = gallons
Pounds of water per min.	x 2,669 x 10 ⁻⁴	= cubic feet per second
Pounds per cubic inch	x 5.787 x 10 ⁻⁴ x 27.68 x 2.768 x 10 ⁴ x 1,728	= pounds per cubic inch = grams per cubic centimeter = kilograms per cubic meter = pounds per cubic foot
Pounds per foot	x 1.488	= kilograms per meter
Square meters	x 2.471 x 10 ⁻⁴ x 10.764 x 3.861 x 10 ⁻⁷ x 1.196	= acres = square feet = square miles = square yards
Square miles	x 640 x 27.88 x 10 ⁶ x 2.590 x 3.098 x 10 ⁶	= acres = square feet = square kilometers = square yards
Weeks	x 168 x 10,080 x 604,800	= hours = minutes = seconds
Yards	x 91.44 x 3 x 36 x 0.9144	= centimeters = feet = inches = meters

MISCELLANEOUS MATHEMATICAL FORMULAS

Shape	Formula	Explanation
PERIMETER FORMULAS		
Square	$P = 4s$	s = length of one side
Rectangle	$P = 2 (l + w)$	l = length; w = width
Triangle	$P = a + b + c$	a = length of one side; b = length of second side; c = length of third side
Circle	$C = 2 \pi r$	$\pi = 3.1416$; r = radius
AREA FORMULAS		
Square	$A = s^2$	s = length of one side
Rectangle	$A = lw$	l = length; w = width
Circle	$A = \pi r^2$	$\pi = 3.1416$; r = radius
Triangle	$A = \frac{1}{2} bh$	b = length of base; h = height
VOLUME FORMULAS		
Cube	$V = e^3$	e = length of one edge
Rectangular prism	$V = lwh$	l = length; w = width; h = height
Pyramid	$V = Bh/3$	B = area of base; h = height
Cylinder	$V = \pi r^2 h$	$\pi = 3.1416$; r = radius of base; h = height
Cone	$V = \frac{1}{3} \pi r^2 h$	r = radius of base; h = height
Sphere	$V = \frac{4}{3} \pi r^3$	$\pi = 3.1416$; r = radius

Additional Resources

Missouri's Economic Development Tools: A Practical Guide to Building a Better Missouri

The Department of Economic Development (DED) and the Missouri Development Finance Board (MDFB) — in cooperation with attorneys from Gilmore & Bell, P.C. and The Stolar Partnership LLP and individuals at the Public Policy Research Center of the University of Missouri St. Louis — developed this economic development finance guide for the purpose of providing technical assistance to Missouri communities and the regional-based development partners representing Missouri's communities. This guide serves as a “how to” manual in accessing and implementing existing economic development initiatives and services.

www.ded.mo.gov/BDT/topnavpages/Research%20Toolbox/Finance%20Guide.aspx

Summary of Economic Development Terms

Is a 92-page summary from the City of Southlake, Texas that includes over 740 terms intended as a reference and educational tool for professionals and board members. Descriptive processes, typical requirements, recommended procedures and insights into its use in the economic development field are included.

www.cityofsouthlake.com/repository/unmanaged

The Missouri Economic Development Council (MEDC)

Is a statewide, not-for-profit association of economic development professionals and community leaders. Created in 1979 to provide a unified voice for economic development, MEDC offers its members programs in professional education, legislation and marketing.

www.showme.org/

Know Your Region

Is designed to address discontinuity by developing and disseminating curriculum that enables practitioners to understand and apply core concepts of regionalism and industry cluster development. The project is a tripartite collaboration among Western Carolina University's Institute for the Economy and the Future, the University of Illinois at Urbana-Champaign's Regional Economics Applications Laboratory, and The Council for Community and Economic Research (formerly ACCRA). The link below is an online training module linking work force development with economic development.

knowyourregion.wcu.edu/index.php?option=com_content&task=view&id=46&Itemid=78

