

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where OAR 660-023-0180 sets a default maximum mining impact area of 1500 feet, and the county employed an impact area of one-half mile and relied on testimony from the operator of a nearby cattle operation and a second person with experience with mining impacts on cattle in other locations to conclude that the one-half mile impact area did not need to be extended based on potential mining noise impacts on cattle, the county's decision that the one-half mile impact area need not be extended is supported by substantial evidence. *Central Oregon Landwatch v. Deschutes County*, 72 Or LUBA 45 (2015).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** While the evaluation of impacts on estuarine resources required by Goal 16, Implementation Requirement 1 need not be prepared by an expert, the nature of some types of potential adverse impacts caused by development on estuarine resources may be such that some technical expertise is necessary to provide substantial evidence to support conclusions based on the evaluation. *Oregon Coast Alliance v. City of Brookings*, 72 Or LUBA 222 (2015).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where the record includes expert testimony that residential development may adversely impact endangered salmon species in an adjacent estuary through pollution from stormwater runoff, some level of scientific or professional expertise is necessary to rebut that testimony in order to provide supporting evidence for a contrary conclusion. A letter from the applicant's attorney opining that stormwater runoff will not adversely impact salmon is not substantial evidence to support that conclusion. *Oregon Coast Alliance v. City of Brookings*, 72 Or LUBA 222 (2015).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Land use proceedings are not governed by rules of evidence, and a local government may rely in part on a planner's testimony regarding a phone conversation with the fire district chief, among other evidence, to conclude that the water supply is sufficient for fire suppression, notwithstanding that the fire district chief did not submit direct testimony. *Foland v. Jackson County*, 70 Or LUBA 247 (2014).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A city's finding that a historic resource is not capable of generating a reasonable economic return is supported by substantial evidence, where the applicant submitted detailed studies showing that the cost of rehabilitating the structure to meet current building codes would far exceed the reasonable rental value, notwithstanding conflicting testimony by opponents that rehabilitation costs could be lower, and rental returns higher, than the applicant's experts estimated. *Rushing v. City of Salem*, 70 Or LUBA 448 (2014).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where a hearings official is faced with testimony from one expert that a proposal's sewage effluent would be residential strength and from another expert that the proposal's effluent would be greater than residential strength, and both experts' testimony is believable, the

choice of which expert to believe lies with the hearings official. *Teen Challenge v. Lane County*, 67 Or LUBA 300 (2013).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A governing body errs in relying upon the personal knowledge of its members who are farmers to resolve a disputed issue regarding whether proposed disturbances to topsoil would render the subject property unfit for future agricultural use. The effect of topsoil disturbance on agricultural productivity is an arcane subject, and even if the farmer/commissioners have expert personal knowledge of that subject, it is inappropriate to approve or deny an application based on the decision-makers' personal knowledge of disputed facts rather than on the evidence submitted during the evidentiary proceeding. *Hood River Valley PRD v. Hood River County*, 67 Or LUBA 314 (2013).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** LUBA will not second guess a land use decision maker's choice between conflicting expert testimony, so long as it appears to LUBA that a reasonable person could decide as the decision maker did based on all of the evidence in the record. *Willamette Oaks, LLC v. City of Eugene*, 67 Or LUBA 351 (2013).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Despite some equivocal statements in a soil scientist's report regarding whether soil represents a variant of an existing soil type or a new unknown soil type, the county's conclusion that the soil represents a variant is supported by substantial evidence, where the only evidence on this point is the soil scientist's, and it is reasonably clear that he ultimately concluded that the soil is a variant. *Rogue Advocates v. Josephine County*, 66 Or LUBA 45 (2012).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where none of the applicable approval criteria require that evidence must be provided by an engineer licensed in Oregon or require the city's decision to be based solely on the testimony of a licensed engineer, the fact that the engineer is not licensed in Oregon, by itself, is not a basis to reverse or remand the decision. *Hill v. City of Portland*, 66 Or LUBA 250 (2012).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A petitioner's unsupported opinion that locating a proposed cell tower in a residential zone with a 75-foot height limit is a reasonable alternative to locating the proposed 150-foot tall tower in a farm zone, because there is no significant difference in coverage between 75-foot and 150-foot tall towers, does not undermine the expert evidence the county relied upon to conclude that a 75-foot tall tower would not meet the cell provider's coverage objectives. *Oberdorfer v. Harney County*, 64 Or LUBA 47 (2011).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A petitioner's argument that a cell-phone provider could meet its coverage objectives by co-locating its antennas on existing cell-phone towers does not provide a basis for remand, where the record includes expert testimony that co-location would not meet the provider's coverage objectives and petitioner cites no evidence in the record to the contrary. *Oberdorfer v. Harney County*, 64 Or LUBA 47 (2011).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where a hearings officer specifically recognizes that there is conflicting expert testimony and the expert testimony he finds more persuasive is believable, his decision is supported by substantial evidence. *Tonquin Holdings LLC v. Clackamas County*, 64 Or LUBA 68 (2011).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** In order to add a site to a local government’s inventory of significant aggregate sites, an applicant must demonstrate that threshold amounts of aggregate are present on the site based on a “representative set of samples of aggregate material in the deposit on the site” under OAR 660-023-0180(3)(a). Where nothing in the Goal 5 rule specifies any particular standards that govern the methodology used to collect “a representative set of samples,” a county does not err in accepting and relying on samples collected using methods that a reasonable professional geologist would employ to determine the quantity of aggregate present on the site. *Protect Grand Island Farms v. Yamhill County*, 64 Or LUBA 179 (2011).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where the local government recognizes that there is conflicting expert testimony and the expert testimony the local government finds more persuasive is believable, the decision is supported by substantial evidence. *Protect Grand Island Farms v. Yamhill County*, 64 Or LUBA 179 (2011).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where a local code provision requires that an applicant for a partition demonstrate that the parcels created be “suitable for residential use considering \* \* \* fire hazards,” the local government errs in failing to consider expert evidence regarding the proposed parcels’ unsuitability for residential use considering fire hazards because the local government mistakenly concludes that such considerations will be considered at dwelling approval stage. *Central Oregon Landwatch v. Deschutes County*, 63 Or LUBA 288 (2011).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A forestry consultant’s conclusion that land is not forest land subject to Goal 4 is not supported by the record, where it is based on an erroneous assumption that the county’s comprehensive plan provides a productivity threshold of 80 cubic feet per acre of per year for lands suitable for commercial forestry. *Wetherell v. Douglas County*, 62 Or LUBA 80 (2010).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Although a hearing official is entitled to rely on the expert opinion of a county sanitarian that a required septic drain-field expansion is feasible, where opponents offer a detailed explanation for why the subject property may not be able to accommodate the required expansion and replacement drain-field, the county sanitarian must supply more than an unexplained expression of belief that the needed expansion is feasible. *Phillips v. Lane County*, 62 Or LUBA 92 (2010).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A condition of zone change approval limiting use of the property to a proposed travel plaza is insufficient to ensure consistency with the Transportation Planning Rule at OAR 660-012-0060, where the record indicates that even limited to the travel plaza the zone change will significantly affect nearby transportation facilities, and the county failed to require other mitigation or improvements necessary to ensure that allowed uses are consistent with the capacity and performance measures of affected intersections. *Devin Oil Co., Inc. v. Morrow County*, 62 Or LUBA 247 (2010).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where the opponents' traffic engineer testifies based on data in the record that a left turn lane is required to ensure that the proposed use complies with a local transportation standard, and the applicant's traffic engineer disagrees, but without citing any evidence or explaining the basis for the contrary opinion, the applicant's engineer's unsupported opinion is not substantial evidence demonstrating compliance with the standard. *Devin Oil Co., Inc. v. Morrow County*, 62 Or LUBA 247 (2010).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Remand is necessary where the applicant's traffic engineer declines to consider the impact of large spectator events at an already approved speedway near the proposed travel plaza, because the speedway events would "overwhelm" the local transportation system, without explaining why those impacts can be ignored in evaluating whether the local transportation system has the "carrying capacity" to handle traffic from the proposed travel plaza. *Devin Oil Co., Inc. v. Morrow County*, 62 Or LUBA 247 (2010).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Absent countervailing evidence, a letter from an applicant's engineer relating the site visit and verbal agreement of representatives from the Department of State Lands (DSL) and Department of Geology and Mineral Industries (DOGAMI) that DOGAMI and not DSL has jurisdiction over a proposed riparian mining operation is substantial evidence a decision maker could rely upon to conclude that DOGAMI has jurisdiction over the operation. *Oregon Shores Cons. Coalition v. Curry County*, 61 Or LUBA 8 (2010).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** When nearby ranchers submit evidence that conflicts with the applicant's expert testimony regarding whether the property could be used in conjunction with other land for farm use, even though that evidence could constitute substantial evidence, the county was entitled to rely on the conflicting evidence submitted by the applicant's expert. *Wetherell v. Douglas County*, 60 Or LUBA 131 (2009).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A local partition criterion that a new parcel be suited for the intended use does not necessarily require submission of engineering studies or design plans for water, septic, or storm water facilities. In the absence of parcel size, topographic or other constraints on facility adequacy, a reasonable person could rely on expert testimony that the parcel can accommodate required facilities for the intended use, even if that testimony is

unsupported by engineering studies or facility design plans. *Devin Oil Co., Inc. v. Morrow County*, 60 Or LUBA 336 (2010).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Testimony from a land surveyor and project manager at an engineering consulting firm that the firm’s engineers have conducted preliminary investigations and consulted with appropriate state agencies and concluded based on those investigations and consultations that a proposed parcel is suited for the intended use, considering water supply, septic and storm water disposal, is expert testimony that a decision maker could reasonably rely upon to find that the parcel is suited for the intended use. *Devin Oil Co., Inc. v. Morrow County*, 60 Or LUBA 336 (2010).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where the record includes conflicting believable evidence about whether an applicant’s assumption that 90 percent of the groundwater withdrawn for use by a destination resort will be returned to the subsurface hydrologic system and the county hearings officer findings recognize the conflicting evidence but choose to rely on the applicant’s expert’s position, which had been accepted by the Oregon Water Resources Department, the hearings officer’s findings on that question are supported by substantial evidence. *Gould v. Deschutes County*, 59 Or LUBA 435 (2009).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A county reasonably concludes that the record does not include “factual information indicating significant potential conflicts” with respect to whether a proposed quarry will disrupt sage grouse flights to and from a protected breeding site, where the only evidence suggesting that grouse flights come near the quarry site is a map the significance of which is subject to conflicting expert testimony. *Walker v. Deschutes County*, 59 Or LUBA 488 (2009).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A county does not err in relying on a 2007 soil study to conclude that a parcel is not agricultural land under Goal 3, notwithstanding the absence in the record of a 2001 soil study that the applicant’s consultant cites, where the 2007 study is intended to stand on its own and petitioners do not identify any critical information missing from the 2007 study that might be found in the 2001 study. *Wetherell v. Douglas County*, 58 Or LUBA 101 (2008).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A finding that a proposed truck stop will not create a traffic hazard is not supported by substantial evidence, where the traffic impact analysis finds that the nearest intersection presents only a “marginal safety concern” but fails to take into account the 1,000 daily truck and vehicle trips the proposed truck stop will send through the intersection, and there is no evidence that the additional traffic will not significantly decrease the intersection’s safety or significantly increase the crash rate. *Western Land & Cattle, Inc. v. Umatilla County*, 58 Or LUBA 295 (2009).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Reports and approvals from the Federal Aviation Administration and Oregon Department of Aviation that a proposed personal use airport complies with federal and state safety requirements is substantial evidence that a county could rely upon, among other evidence, to conclude that the airport is consistent with a comprehensive plan policy requiring that airports be located in areas that are safe for air operations. *Johnson v. Marion County*, 58 Or LUBA 459 (2009).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Substantial evidence supports a county’s finding that a 160-acre parcel is not suitable for an independent grazing operation, where the property has never supported an independent grazing operation, and an agricultural consultant’s study details significant capital inputs needed to establish a new, independent grazing operation that could not be recovered from income reasonably expected from such a grazing operation. *Wetherell v. Douglas County*, 58 Or LUBA 638 (2009).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A county could reasonably choose to rely on a consultant’s economic analysis to conclude that a 160-acre parcel is not “other suitable land” under OAR 660-033-0020(1)(a)(B) because it cannot be profitably combined with nearby grazing operations, notwithstanding that nearby ranchers testified that they had successfully used the property in conjunction with their grazing operation in the past and believe they can do so again, where the economic analysis sets out a detailed, if hypothetical, budget demonstrating that such combined use could not be conducted with the primary purpose of obtaining a profit in money, and the nearby ranchers do not provide any similar budget or explanation for why they believe a combined operation would be financially beneficial to them. *Wetherell v. Douglas County*, 58 Or LUBA 638 (2009).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A county errs in relying on testimony of a general well constructor to conclude that digging 32 new wells would not adversely affect the underlying aquifer, where (1) the constructor’s testimony is based on the current functioning of three wells in the area and does not address the impacts of 32 new wells, (2) the constructor provided no water budget for the aquifer or similar data, and (3) the opponents submitted a detailed study and water budget from an acknowledged aquifer expert who testified that 32 new wells would adversely impact the aquifer. *Gardener v. Marion County*, 56 Or LUBA 583 (2008).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A hearings officer may rely on undisputed expert testimony that compliance with federal radio frequency exposure limits depends on whether non-employees at the site are aware of occupational exposure levels and have the ability to remove themselves from the site, combined with the fact that the site is fenced and signed to warn of occupational exposure levels, to conclude that a proposed broadcast tower complies with federal exposure limits. *Curl v. City of Bend*, 56 Or LUBA 746 (2008).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** While an astronomer’s testimony regarding the impact of dust on an observatory’s telescopes is substantial evidence from which a reasonable decision maker could conclude that dust from an open-pit mining operation would significantly conflict with the observatory, the county could nonetheless rely on the distance between the site and the observatory and proposed measures to control dust to conclude that the mine would not significantly conflict with the observatory. *Walker v. Deschutes County*, 55 Or LUBA 93 (2007).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Expert testimony that an existing firearms training facility in a forest zone is a fire hazard and increases costs and risks of fire suppression is not sufficient to undermine a finding to the contrary, where the testimony is based on the operation of the facility as a whole, and not on the post-1995 improvements that are the subject of the application. *Citizens for Responsibility v. Lane County*, 54 Or LUBA 1 (2007).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** LUBA will affirm the hearings officer’s choice to rely on a traffic model that has not been “calibrated” against real-world data, where the applicable guidelines stress the importance of calibration but do not state that calibration is the only way to ensure that the model is accurate, and the applicant’s expert testifies that the model is reliable notwithstanding the absence of calibration. *Wal-Mart Stores, Inc. v. City of Gresham*, 54 Or LUBA 16 (2007).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A finding that it is feasible to construct a driveway that complies with maximum finished grade standards is not supported by substantial evidence, where the proposed driveway alignment clearly does not comply, the applicant’s engineer stated generally that an alternate alignment is likely to meet grade standards but submitted no plans or drawings demonstrating the location or feasibility of that alignment, and the opponents’ engineer submitted detailed testimony supported by drawings showing that the suggested alternate alignment will not comply. *Lenox v. Jackson County*, 54 Or LUBA 272 (2007).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A county reasonably relies on a forester’s opinion that Ponderosa pine is a more valuable species to grow on certain soils than Douglas fir, over conflicting opinions by persons who are not soil or forestry experts. *Anderson v. Lane County*, 54 Or LUBA 669 (2007).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A hearings officer errs in concluding, based on expert testimony that isolated dwellings force firefighters to choose either to abandon such homes or to devote insufficient resources to defend them, that the proposed isolated dwelling will not significantly increase fire suppression costs or risks to fire suppression personnel because firefighters would simply abandon the dwelling. *Central Oregon Landwatch v. Deschutes County*, 53 Or LUBA 290 (2007).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Remand is necessary where the applicant’s forest consultant recommends vegetation removal as necessary to ensure compliance with approval criteria for a large tract forest dwelling, but the hearings officer does not adopt a condition of approval to that effect or explain why such measures are not necessary to ensure compliance with approval criteria. *Central Oregon Landwatch v. Deschutes County*, 53 Or LUBA 290 (2007).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Under a code standard requiring that a forest dwelling be located at a site that minimizes the risks associated with wildfire, remand is necessary where the opponents’ expert testified that the preferred site is isolated and will incur significantly more risk and cost to firefighters over alternative sites, there is no rebuttal of that testimony, and the findings do not state a sufficient basis to reject that testimony. *Central Oregon Landwatch v. Deschutes County*, 53 Or LUBA 290 (2007).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Expert testimony is not required in order to satisfy the requirement that a demonstration of forest productivity of a property be shown by empirical evidence; a study, prepared by an applicant seeking to redesignate the subject property as nonresource, which is subsequently reviewed by a Department of Forestry forester, is evidence upon which a reasonable person would rely. *Hecker v. Lane County*, 52 Or LUBA 91 (2006).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Absent countervailing evidence, expert testimony expressing doubt that Ponderosa pine can be established on a parcel even under intensive management techniques is substantial evidence supporting the local government’s conclusion that the property cannot produce Ponderosa pine. *Just v. Linn County*, 52 Or LUBA 145 (2006).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** In determining whether a property is generally unsuitable for the production of farm crops and livestock or merchantable tree species, a county’s conclusion that any historic agricultural use on the property before that time does not provide a substantial hurdle is supported by substantial evidence where the county chooses to rely on an expert’s opinion that proposed nonfarm parcels have not been used for agricultural operation in the past 20 years. *Peterson v. Crook County*, 52 Or LUBA 160 (2006).

**1.6.4 Administrative Law - Substantial Evidence - Expert Testimony.** Under *Armstrong v. Asten-Hill Co.*, 90 Or App 200, 752 P2d 312 (1988), the substantial evidence standard is not satisfied when “the credible evidence apparently weighs overwhelmingly in favor of one finding and the [decision maker] finds the other without giving a persuasive explanation.” *Wal-Mart Stores, Inc. v. City of Bend*, 52 Or LUBA 261 (2006).

**1.6.4 Administrative Law - Substantial Evidence - Expert Testimony.** It is not unreasonable for a local decision maker to cite issues raised regarding the evidence submitted by an applicant’s engineers that were not responded to, and to rely on

opponents' experts' testimony to find that the applicant failed to carry its burden of proof. *Wal-Mart Stores, Inc. v. City of Bend*, 52 Or LUBA 261 (2006).

**1.6.4 Administrative Law - Substantial Evidence - Expert Testimony.** A local government could reasonably accept as true an expert's testimony about the findings in a biological assessment, even though the biological assessment itself is not in the record. *Neighbors 4 Responsible Growth v. City of Veneta*, 52 Or LUBA 325 (2006).

**1.6.4 Administrative Law - Substantial Evidence - Expert Testimony.** The testimony of experts in assessing the risk of turbid water discharges from proposed aggregate mining in a river's floodplain and the risk of avulsion is likely to be critical. Experts must collect and analyze the data and draw scientific conclusions to assess that risk and ultimately the issue will likely be which experts the decision maker finds more believable. *Westside Rock v. Clackamas County*, 51 Or LUBA 264 (2006).

**1.6.4 Administrative Law - Substantial Evidence - Expert Testimony.** Where there is conflicting expert testimony regarding the location of a river channel migration zone and the probability that the river channel might migrate to capture a proposed floodplain mining site causing river turbidity, the county's decision to believe the larger channel migration zone should apply is supported by substantial evidence. *Westside Rock v. Clackamas County*, 51 Or LUBA 264 (2006).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A fire district letter opining that conducting large concert events of up to 5,500 people on a forest-zoned parcel would not significantly increase the risk of wildfires is not substantial evidence to support a finding to that effect, where the letter is expressly contingent on the applicant maintaining a prohibition on burning of any kind, and the evidence regarding the effectiveness of banning burning of any kind during large concert events is extremely limited and conclusory. *Horning v. Washington County*, 51 Or LUBA 303 (2006).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** LUBA will affirm a hearings officer's conclusion that a standard requiring that development not "seriously interfere" with sensitive riparian habitat is not met, notwithstanding that the only evidence on that point is the testimony of the applicant's consultant, where that testimony is based on an assertion that the proposed campground and parking areas "stay well clear" of sensitive riparian habitat, but the site plan clearly shows that the proposed campground and parking area are located adjacent to the riparian habitat. *Horning v. Washington County*, 51 Or LUBA 303 (2006).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** An acoustic engineer's statement that the procedures followed in conducting a noise study for an aggregate mine were "generally consistent" with procedures required by state administrative rule is sufficient to demonstrate compliance with the rule, particularly where the petitioners do not identify any material difference between the procedures followed and those required the rule. *Ray v. Josephine County*, 51 Or LUBA 443 (2006).

**1.6.4 Administrative Law - Substantial Evidence - Expert Testimony.** Largely unchallenged testimony of a county engineer who is a professional engineer, but not a traffic engineer, may constitute substantial evidence concerning the safety of a proposed intersection. *Ghena v. Josephine County*, 51 Or LUBA 681 (2006).

**1.6.4 Administrative Law - Substantial Evidence - Expert Testimony.** Where a development code requires that a city find that transportation facilities will be available prior to or at the time of development of annexed property, testimony by an applicant's traffic engineer and the city engineer that traffic facilities needed to serve annexed property will be available prior to or at the time of development is substantial evidence supporting a city's finding that the development code requirement is satisfied. *Friends of Bull Mountain v. City of Tigard*, 51 Or LUBA 759 (2006).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A county's decision to amend its deer winter range map redesignating property from "critical" deer habitat to "impacted deer winter range" is supported by substantial evidence where the county makes a reasonable choice to rely on the applicant's expert, who conducted only one site visit and reviewed data that had previously been prepared by the Oregon Department of Fish and Wildlife, and concluded that the proposal would not significantly impact deer winter range. *Anthony v. Josephine County*, 50 Or LUBA 573 (2005).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A herbaceous forage survey is not substantial evidence upon which a county may rely in determining that a property is "generally unsuitable" for the production of farm crops and livestock or merchantable tree species pursuant to ORS 215.263(5), where it is impossible to ascertain what area the surveys studied and where the survey does not consider potential herbaceous forage capacity if the properties were irrigated. *Peterson v. Crook County*, 49 Or LUBA 223 (2005).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** An expert study concluding that a clay layer prevents rainwater from permeating down to the aquifer and that proposed storm water facilities will ensure that post-development hydrology differs little from pre-development hydrology is substantial evidence a reasonable person could rely upon to conclude that proposed development will not adversely affect the aquifer or wells that rely on it. *Dinges v. City of Oregon City*, 49 Or LUBA 376 (2005).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A local government may rely on portions of two conflicting expert studies of soil classifications, although explanatory findings may be necessary to identify what portions are relied upon, and to resolve any differences or contradictions between the studies relied upon, so that LUBA may perform its review function. *Doob v. Josephine County*, 48 Or LUBA 227 (2004).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Expert evidence that an enhanced wetland is very unlikely to attract species that would conflict

with operation of an adjoining aggregate mine is substantial evidence to support a finding that the enhanced wetlands will not “adversely impact” the mine, notwithstanding conflicting evidence on that point and the fact that the applicant’s expert could not guarantee no adverse impacts. *Cadwell v. Union County*, 48 Or LUBA 500 (2005).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A code standard requiring that a proposed use will not interfere with or cause an adverse impact on a mining operation does not require evidence that adverse impacts are impossible; rather, it requires the decision maker to evaluate probabilities. Expert evidence that it is “highly unlikely” that wetland enhancements will attract species that might lead to restrictions on a mining operation is evidence a reasonable person could rely on to find compliance with the adverse impacts standard, notwithstanding conflicting expert evidence on that point. *Cadwell v. Union County*, 48 Or LUBA 500 (2005).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Expert testimony that is not in the record and that appears only as reported by the applicant to staff is not sufficient to establish the capacity of the subject property for farm and forest uses. *Friends of Douglas County v. Douglas County*, 46 Or LUBA 757 (2004).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Substantial evidence supports a hearings officer’s conclusion that only five percent of traffic generated by a proposed church would turn south at an affected intersection, and that traffic counts performed in February are indicative of summer peak traffic loads, where it is undisputed that few if any church members reside south of the intersection, and the applicant’s traffic engineer testified that the affected intersection is not subject to seasonal fluctuations in traffic levels. *Noble v. Clackamas County*, 45 Or LUBA 366 (2003).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A traffic study concluding that there is adequate vehicular access to a shopping mall is substantial evidence supporting a finding of “adequate access and traffic control,” notwithstanding that the study did not consider or quantify internal store-to-store vehicular traffic, where there is no evidence that such internal traffic is significant. *Graham Oil Co. v. City of North Bend*, 44 Or LUBA 18 (2003).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where petitioners present evidence and testimony that a property is not predominately composed of Class IV through Class VIII soils because an access easement that covers over 25 percent of the property is not wholly comprised of Class VI soils, and the testimony of the applicant’s soil scientist does not explain why the entire easement is comprised of Class VI soils, the county’s determination that the property is predominately composed of Class IV through VIII soils is not supported by substantial evidence. *Friends of Yamhill County v. Yamhill County*, 44 Or LUBA 777 (2003).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A city is entitled to rely on expert testimony that a specific model of the flood depth and velocity over the subject property is necessary to demonstrate compliance with a standard requiring no significant hazard to life or property, and the city may decline to extrapolate that information from other expert testimony that models an adjacent area. *Starks Landing, Inc. v. City of Rivergrove*, 43 Or LUBA 237 (2002).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** ORS 672.025(3), pertaining to the duties of engineers, permits an engineer to survey property to “determine area and topography” and to “establish lines, grades and elevations,” so long as the engineer’s survey is not used to convey property. *Mertz v. Clackamas County*, 43 Or LUBA 313 (2002).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where a regional transportation plan (RTP) specifies that a proposed interchange will include “five lane overpasses,” and the record includes a planning program manager’s interpretation that a short sixth exit lane does not make the interchange inconsistent with the RTP, it is not error for the decision maker to rely on that interpretation and reasoning in determining that the interchange is consistent with the five-lane overpass described in the RTP. *Witham Parts and Equipment Co. v. ODOT*, 42 Or LUBA 435.

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** In determining whether conflicting uses can be minimized pursuant to OAR 660-023-0180(4), a local government may draw reasonable inferences from expert testimony to determine that a numerical standard for minimization, such as for turbidity, cannot be satisfied. *Molalla River Reserve, Inc. v. Clackamas County*, 42 Or LUBA 251.

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where a finding concerning traffic safety is not supported by substantial evidence in the record, but it is clear that traffic safety was at most a peripheral concern and other findings addressing a general “adversely affects neighborhoods” standard make it clear that the county’s focus was on roadway and intersection capacity rather than traffic safety per se, the lack of evidence supporting the disputed traffic safety finding provides no basis for reversal or remand. *Swyter v. Clackamas County*, 42 Or LUBA 30.

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Petitioner fails to overcome the county’s determination that property is forest land under Goal 4, and fails to demonstrate as a matter of law that land is not “suitable for commercial forest uses,” where petitioner’s own expert testifies that notwithstanding limitations on productivity the subject property is in a “medium productivity range” and would yield \$81,300 worth of commercial timber at 50 years, after an investment of \$7,450. *Potts v. Clackamas County*, 42 Or LUBA 1.

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where expert testimony that grazing use of property would require .45 inches of irrigation water per day during peak irrigation times is not challenged below, the county could reasonably rely on that testimony. *Doob v. Josephine County*, 41 Or LUBA 303 (2002).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Substantial evidence supports a finding that a proposed high school will not increase traffic through an affected intersection during the peak morning hour, notwithstanding failure of the traffic study to take certain trips into account, where the decision imposes conditions that effectively eliminate the possibility of those trips impacting the intersection. *Friends of Collins View v. City of Portland*, 41 Or LUBA 261 (2002).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** An architect's unsupported statement that a proposed structure is 14,719 square feet in size and thus complies with a local standard limiting permissible size to 14,723 square feet is not substantial evidence supporting a finding of compliance with the standard, where the opponents offered detailed evidence showing that the structure exceeds the maximum size and the applicant failed to either explain the architect's supporting calculations or refute the opposing evidence. *Weaver v. Linn County*, 40 Or LUBA 203 (2001).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Expert testimony that existing riprap will prevent dune retreat if repaired when damaged is substantial evidence supporting the county's finding under Goal 18 that the dune upon which development is proposed is stabilized and not subject to wave overtopping or ocean undercutting, notwithstanding conflicting expert evidence that the riprap may be insufficient or may fail. *Save Oregon's Cape Kiwanda v. Tillamook County*, 40 Or LUBA 143 (2001).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Although continued location of wells on a single aquifer may eventually have an adverse impact on other properties that use the aquifer, a decision based on expert testimony that the application at issue will not have an adverse impact on other properties is supported by substantial evidence. *Durig v. Washington County*, 40 Or LUBA 1 (2001).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where a county adopts unchallenged findings that siting a cellular phone tower next to a power line right-of-way does not create a hazardous condition, because the tower is designed to collapse in on itself in high winds rather than fall to the side, and those findings are supported by testimony from an engineer with the company that will construct the tower, the county's findings are adequate and supported by substantial evidence. *Pereira v. Columbia County*, 39 Or LUBA 575 (2001).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A local government may not explicitly rely on a traffic study to demonstrate compliance with Goal 12 and then ignore a portion of the traffic study that describes anticipated deterioration in level of service. *DLCD v. Klamath County*, 38 Or LUBA 769 (2000).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A local government could reasonably rely upon evidence given by a photogrammetrist with 21 years of experience who had provided services for local governments in the past and provided a detailed analysis of his findings in a written report, where no challenge to the

photogrammetrist's credentials was made to the local decision maker. *Crook v. Curry County*, 38 Or LUBA 677 (2000).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** LUBA will affirm a hearings officer's choice between conflicting expert testimony where a reasonable person could conclude, based on the testimony of applicant's expert, that a proposed intersection provides a sight distance exceeding that required by the code, notwithstanding the contrary testimony of opponents' engineer. *Mitchell v. Washington County*, 37 Or LUBA 452 (2000).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where a hearings officer rejects a proposed stormwater control method as inadequate to ensure compliance with an approval criterion that requires reduction of flood flows below erosive capacity, but nonetheless finds compliance with the standard based on the hearings officer's unsupported opinion that more adequate methods are available, the finding of compliance is not supported by substantial evidence. *Mitchell v. Washington County*, 37 Or LUBA 452 (2000).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A city's denial of a permit to construct a house proposed to be cantilevered out over the face of a sand bluff is supported by substantial evidence, where there is conflicting expert testimony regarding adverse impacts from structural supports sunk into the face of the bluff, and the city reasonably chose to believe an expert opinion that under no circumstances should the face of the bluff be compromised. *Johns v. City of Lincoln City*, 37 Or LUBA 1 (1999).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Neighbors' testimony regarding adverse impacts of vibration from construction on the integrity of a sand bluff underlying adjacent properties is substantial evidence supporting the city's denial of a house proposed to be built on the bluff, notwithstanding a contrary conclusion inferred from geotechnical reports supporting the application. *Johns v. City of Lincoln City*, 37 Or LUBA 1 (1999).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Whether composting qualifies as a farm use under ORS 215.203(2)(a) is a question of statutory interpretation, not a question of whether agricultural experts believe composting, in the abstract, falls within a scientific definition of farm use. *Best Buy in Town, Inc. v. Washington County*, 35 Or LUBA 446 (1999).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** The evidence supporting a decision denying a permit need not match the evidence supporting the permit application in a qualitative and quantitative sense. *Johns v. City of Lincoln City*, 35 Or LUBA 421 (1999).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where there is no evidence that a property only functions as winter range between December 1 and March 31, the selection of that time period for a condition of approval is not supported by substantial evidence. It is not within generally accepted knowledge that property only

functions as winter range between December 1 and March 31. *Botham v. Union County*, 34 Or LUBA 648 (1998).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Selected portions of an engineer's letter, cited to support a finding that water supply is adequate, do not constitute substantial evidence where that finding is undermined by the engineer's letter taken as a whole and by other conflicting evidence. *Pekarek v. Wallowa County*, 33 Or LUBA 225 (1997).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Population projections of a witness who is not shown to be qualified by education or experience to evaluate evidence and draw conclusions concerning a highly technical and complex subject raise substantial evidence concerns, particularly when they are contradicted by the official population estimates prepared by the Center for Population Research and Census (CPRC) and letters from CPRC experts. *Concerned Citizens v. Jackson County*, 33 Or LUBA 70 (1997).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where the resume of a soil scientist does not establish his credentials to determine forest productivity and the only scientific data in the record are the results of soil tests, the soil scientist's conclusions with respect to forest productivity are not substantial evidence. *DLCD v. Curry County*, 31 Or LUBA 503 (1996).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Findings are inadequate when they rely on a consultant's summary conclusions which are not based on evidence in the record. *Friends of Metolius v. Jefferson County*, 31 Or LUBA 160 (1996).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** An unsupported statement in an application is not evidence, and an estimate of a geologist as to resource quantity, made without reference to evidence of any kind, is not substantial evidence. *Palmer v. Lane County*, 29 Or LUBA 436 (1995).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A lack of response from the county Road Master is not substantial evidence that a code provision requiring no undue impairment of traffic flow is met. *Mazeski v. Wasco County*, 28 Or LUBA 159 (1994).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** With regard to reliance on the testimony of an expert, the substantial evidence standard of ORS 197.835(7)(a)(C) requires only that, considering all the relevant evidence in the record, a reasonable person could have chosen to rely on the expert's conclusions. *Bates v. Josephine County*, 28 Or LUBA 21 (1994).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** There is no requirement that an expert witness explain the basis for all assumptions underlying the expert's evidence, or that evidence supporting the expert's assumptions be included in the

record. Under ORS 197.835(7)(a)(C), where petitioners argue an assumption underlying an expert's conclusions is undermined by other evidence, LUBA must determine whether, considering all relevant evidence in the record, a reasonable person could rely on the expert's conclusions. *ODOT v. Clackamas County*, 27 Or LUBA 141 (1994).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A state agency report, based on a recent inspection of the subject property, concluding that a limited exemption "remains valid for the majority of [the] site" is substantial evidence that a limited exemption from the agency's regulatory requirements has been granted. *Zippel v. Josephine County*, 27 Or LUBA 11 (1994).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** It is reasonable for a local government decision maker to rely upon statements made by representatives of the Oregon Department of Transportation (ODOT) stating that ODOT's requirements are met, even though the evidence underlying the ODOT representatives' statements is not included in the local record. *Citizens for Resp. Growth v. City of Seaside*, 26 Or LUBA 458 (1994).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A reasonable decision maker could rely upon testimony by a consultant that RV parks in a selected area are unable to accommodate RV travelers' needs, to support a decision granting a reasons exception to Goal 3 based on a demonstrated need for more RV parks in the area. *1000 Friends of Oregon v. Marion County*, 26 Or LUBA 448 (1994).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A local government's decision that a proposed plan map amendment would negatively impact groundwater quantity and violate an applicable plan criterion is supported by substantial evidence where there is conflicting lay and expert testimony, and the expert testimony concedes the uncertainty of the proposal's impacts. *Ericsson v. Washington County*, 26 Or LUBA 169 (1993).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Testimony from an Oregon Department of Forestry (DOF) representative which suggests a proposed dwelling could be compatible with forest uses, but was clarified by the DOF representative to eliminate any suggestion of compatibility, is not evidence a reasonable decision maker would rely upon to establish a proposed nonforest dwelling is compatible with forest uses. *DLCD v. Lincoln County*, 26 Or LUBA 89 (1993).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** An expression of belief that a local code standard imposing a specific decibel limitation will not be violated is not an adequate finding of compliance with that standard. Expressions by the applicant's attorney that noise generated by the proposed use will not be excessive or violate the standard are not substantial evidence that the standard will be met. *Weuster v. Clackamas County*, 25 Or LUBA 425 (1993).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** A county does not improperly rely on unadopted, unofficial criteria where its findings make it sufficiently clear that the county is simply relying on material submitted by the Oregon Department of Forestry as expert testimony in determining whether a code "necessary for and accessory to" standard for approval of forest management dwellings is met. *Lardy v. Washington County*, 24 Or LUBA 567 (1993).

**1.6.4 Administrative Law – Substantial Evidence – Expert Testimony.** Where a local decision maker relies on prior nonspecific and equivocal testimony concerning the location and presence of wetlands, in place of a well documented specific expert study, and adopts no findings explaining that choice, the challenged decision is not supported by substantial evidence. *Reeder v. Clackamas County*, 23 Or LUBA 583 (1992).