Record Nr. UNISA996418176603316 Autore Fidell Sanford **Titolo** A Guide To U.S. Aircraft Noise Regulatory Policy [[electronic resource] /] / by Sanford Fidell, Vincent Mestre Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-39908-7 Edizione [1st ed. 2020.] 1 online resource (XIV, 144 p. 21 illus., 15 illus. in color.) Descrizione fisica 363 Disciplina Noise barriers Soggetti Acoustical engineering Aerospace engineering **Astronautics** Geography Community psychology Environmental psychology Acoustics **Engineering Acoustics** Aerospace Technology and Astronautics Geography, general Community and Environmental Psychology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto History of Aviation Noise Management and Regulation -- Effects of Aviation Noise on Residential Populations -- Local and Federal Roles in Airport Land Use Planning -- Airport Noise Mitigation Programs --Trends in Management of Aviation Noise. Sommario/riassunto Aviation noise remains the primary hindrance to expansion of airport and airspace capacity in the United States. This book describes the development and practice of U.S. aircraft noise regulation, as well as

the practical consequences of regulatory policy. Starting in the pre-jet

framework for characterizing, standardizing, predicting, disclosing, and

transport era, the book traces the development of the modern

mitigating aircraft noise and its effects on airport-vicinity communities. Among other matters, the book treats noise-related consequences of the 1978 deregulation of the airline industry; prediction and mitigation of community reaction to airport noise; land use compatibility planning; recent research and industry trends; and some suggestions for potential improvements to current policy. Initial chapters describe the assumptions underlying aircraft noise regulation, and lay out the chronology of U.S. aircraft noise regulatory practice. Later chapters provide overviews of population-level effects of aviation noise, including health effects, speech and sleep interference, and annoyance. Readers will learn why predictions of the prevalence of aircraft noiseinduced annoyance have systematically underestimated adverse community response to aircraft noise, and how such underestimation has complicated approval and funding of airport and airspace improvement projects. They will also learn why attempts at noisecompatible land use planning are seldom fully successful.