

Recent APA Energy-Related Publications

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Climate Change

Euston, Stanley R. 2005. "Rebooting State Planning: Climate Change and the Energy Challenge." *Planning and Environmental Law*. No. 11, pg.3.

After years of fits and starts, strategic planning has the potential to assert itself as a vital function of state government. In the discouraging absence of federal action on human-induced climate change, now clearly recognized as one of society's most significant threats, states are filling the vacuum. State government is only one part of the climate equation, and the ultimate payoff will need to include vigorous federal participation and international agreements well beyond Kyoto targets.

Kelly, Robert. 2006. "The Kyoto Protocol: Are America's Cities About to Miss Out?" *Practicing Planner*. vol. 4, no.2.

Nonparticipation by the United States in the Kyoto Protocol represents a missed opportunity for American cities, a British journalist contends.

Kelly, Robert. 2006. "Weathering the Weather: How Derivatives Can Help." *Practicing Planner*. Vol. 4, no. 1.

Can weather become a tradable commodity? British Journalist Robert Kelly explains the little-known weather derivative and how it might help rescue communities from weather-related costs.

Knack, Ruth Eckdish, AICP. 2006. "Hot Topic: You Can't Miss the Buzz about Global Warming." *Planning*. August/September, p. 40.

In the last year, planners have begun to recognize climate change as an issue that every community must address. Planners have a role to play in encouraging new thinking about issues from energy and emissions reductions to heat island mitigation to land use.

Stone, Brian Jr. 2005. "Urban Heat and Air Pollution: An Emerging Role for Planners in the Climate Change Debate." *Journal of the American Planning Association*. Winter, pg. 13.

This article presents empirical evidence linking recent fluctuations in regional temperatures to enhanced ozone formation within the country's 50 largest metropolitan regions. The results of an analysis of regional climate and ozone formation during the 1990s indicate that annual violations of the national ozone standard were more strongly associated with regional temperatures than with the emissions of regulated ozone precursors from mobile and stationary sources. Based on the results of this analysis, the author argues that the air quality management strategies outlined in the Clean Air Act may be insufficient to control ozone formation due to ongoing and unanticipated changes in global and regional climate. He further argues that the emergence of urban heat as a significant air "pollutant" demands a strategic response from the field of urban planning. The article concludes with a discussion of the linkages between urban form and regional temperature and outlines a set of design strategies that have proven successful in mitigating urban heat production.

Stone, Brian Jr. 2001. "**Urban form and thermal efficiency: How the design of cities influences the urban heat island effect**" *Journal of the American Planning Association*. Spring; pg. 186.

This article presents findings from a study on residential development patterns and urban heat island formation in the Atlanta metropolitan area. High-resolution thermal imagery collected by NASA is used in conjunction with parcel-level tax records to examine the interaction between the design of single-family residential parcels and the emission of radiant heat energy. Results from a path analysis illustrate that lower density patterns of residential development contribute more radiant heat energy to surface heat island formation than higher density development patterns within the Atlanta region. Compact moderate-to-high-density new construction and area-based tree ordinances are recommended as policy strategies for mitigating the effects of urban development on regional climate change.

Distributed Energy

Engle, David. 2006. "**With the Power at Hand: Examining the Merits of Distributed Energy.**" *Planning*. July, p. 34.

Seventy percent of energy consumption is directly influenced by spatial separation of land uses and by dependence on private automobiles to move between them, according to an estimate of the Global Energy Center for Community Sustainability. Through better planning these consumption levels can be reduced.

Financial Incentives

Lewis, Megan, AICP. 2002. "Renewable Energy and Energy Efficiency Incentives for Local Governments." *Public Investment*. December.

Federal and state energy legislation has the potential to impact local governments and the planners who work in them. Exploring renewable energy and energy efficiency before it is required has been successful in several communities. Incentives and examples from various states are included as well as a glossary of alternative fuel terms.

General

Berke, Philip R. 2000. "**Are we planning for sustainable development?**" *Journal of the American Planning Association*. Winter, pg. 21.

A set of six principles are set forth that define and operationalize the concept of sustainable development. Using these six principles, a sample of 30 comprehensive plans was evaluated to determine how well their policies support sustainable development. Findings indicate no significant differences in how extensively sustainability principles are supported between the plans that state an intention to integrate sustainable development and those that do not. In addition, these plans do not provide balanced support of all six sustainability principles, as they support some principles significantly more than others.

Lewis, Megan AICP, Naomi Friedman, and Lynn Ross, AICP. 2006. "**The Role of Planning in the New Energy Era: Results of a Survey.**" *PAS Memo*. March/April.

In August 2005 a national survey was conducted to assess the current state of planners' capacity, knowledge, and educational needs concerning the integration of energy issues and community planning. The survey results are presented here with the goal of identifying the areas where planners can still make significant progress toward creating more energy-efficient and independent communities.

Schwab, Jim, AICP. 2002. "**Who's Got the Energy?**" *Planning*. October.

Local governments, by confronting their energy challenges through planning and experimentation, are producing some of the most creative ideas for helping the environment and stimulating economic development.

Wolcott, Barbara. 2004. “**Sun, Wind, Water, Earth.**” *Planning*. December.

In the last decade, local governments have been taking a hard look at solar, wind, geothermal, and hydroelectric technologies in an effort to reduce maintenance costs and keep public services running smoothly.

Green Building

Retzlaff, Rebecca, AICP. 2005 “**Building Green: Onus or Bonus?**” *Zoning Practice*. April.

Green buildings are ideal for reducing negative environmental impacts. In several American cities, green building incentives and requirements in the zoning ordinance make them an attractive option for developers of sustainable projects who also watch the bottom line.

Stromberg, Meghan. 2005. “**Green Is Coming Out on Top.**” *Planning*. July.

Green, or vegetated, roofs are becoming a sustainable alternative for buildings because they offer a number of environmental and economic benefits.

Stromberg, Meghan. 2005. “**Green Grow the Buildings.**” *Planning*. July.

Technologies that promote green building--which designs and constructs buildings in a way that maximizes efficient use of energy, resources, water, site planning, and indoor environmental quality--are blossoming.

Land Use

Weitz, Jerry, AICP. 2003. *Jobs-Housing Balance*. PAS Report No. 516.

This report examines a controversial concept — jobs-housing balance. Some have argued that the market is the mechanism that will achieve such balance. Jerry Weitz, in his research of four types of jobs-housing imbalance, concludes that the market has failed to achieve balance in three of the four scenarios he lays out. He provides case studies to support his findings, including one from King County, Washington, showing that increases in housing costs are more gradual in areas with a jobs-housing balance. This report counters the skeptics and points to those actions planners can take to help bring appropriate housing, jobs, and workforces together, resulting in overall community improvements.

Legislation—State

California

58 PEL 1004

California imposes efficiency and demand reduction standards on gas and electrical corporations

The Public Utilities Commission and the State Energy Resources Conservation and Development Commission are to identify all potentially achievable cost effective electricity and gas efficiency savings and establish efficiency targets for electrical and gas corporations. Procurement plans for electrical and gas corporations must show that the corporation will first meet its needs through all available gas or energy efficiency and

demand reduction resources that are feasible, reliable, and cost effective. 2006 New Laws, S.B. No. 1037

56 PEL 1006

California will develop particulate matter emission standards

The State Air Resources Board, in consultation with the air pollution control districts and after a public workshop, is to identify, develop, and adopt a list of the most readily available, feasible, and cost-effective control measures to reduce emissions of coarse and fine particulate matter (PM 10 and PM 2.5) from new and existing sources. The list is to include control measures for certain specified emission sources, including woodstoves and fireplaces, construction and grading, heavy-duty vehicle idling, and agricultural burning. The Board and each district are to adopt implementation schedules for the list's most cost-effective local measures. 2004 New Laws, S.B. No. 656

55 PEL 1102

California has eliminated an exemption from air quality permit requirements for equipment used in agricultural operations.

California has eliminated an exemption from air quality permit requirements for equipment used in agricultural operations. Air quality management districts designated as serious federal nonattainment areas must adopt and implement rules requiring best available retrofit control technology for agricultural practices at agricultural sources of air pollution. Districts designated as moderate nonattainment areas must adopt and implement measures necessary to reduce emissions from agricultural practices. Districts designated as ozone nonattainment areas must adopt and implement rules requiring large confined animal facilities to obtain permits to reduce emissions. The California Air Pollution Control Officers Association is to develop a clearinghouse of available control measures and strategies for agricultural sources of air pollution. 2003 New Laws, S.B. No. 700

Connecticut

56 PEL 1145,

State will develop action plan for contributing to regional targets for reducing greenhouse gas emissions

Connecticut has established a state goal of reducing greenhouse gas emissions as part of a regional effort by the Conference of New England Governors and Eastern Canadian Premiers to reduce such emissions to 1990 levels by 2010, and to 10 percent below those levels by 2020. The state also will work with the conference to set a date for the long-term regional goal of reducing the emissions of greenhouse gas by 75 to 85 percent below 2001 levels. The Governor's Steering Committee on Climate Change is to develop a multi-sector comprehensive climate change action plan by January 1, 2005, to achieve the first goal and amend the plan as necessary by January 1, 2008, to meet the second goal.

In addition, the Department of Environmental Protection will, in conjunction with other states or a regional consortium, establish a regional greenhouse gas registry for greenhouse emissions and provide for the mandatory reporting of emissions to the registry by facilities with reporting responsibilities under the federal Clean Air Act, and for voluntary reporting by other facilities. 2004 New Laws, S.B. No. 595

District of Columbia

59 PEL 1007

District of Columbia adopts the Green Building Act of 2006

The Green Building Act of 2006 establishes high-performance building standards that require the planning, design, construction, operation, and maintenance of building projects; establishes a green building incentives program that includes an expedited construction documents review program; and establishes a Green Building Fund and Green Building Advisory Council. The Act applies to both publicly and privately owned buildings; incentives include grants and expedited review of construction documents. The Green Building Fund will be separate from the General Fund of the District of Columbia and will be used for staffing and operating costs to provide technical assistance, plan review, and inspection and monitoring of green buildings; education, training, and outreach to the public; and incentive funding for private buildings. A green building fee is established by increasing the building construction permit fees. 2007 New Laws, L.B. No. 515

Hawaii

56 PEL 1120

Electric utilities must increase percentage of electrical supply from renewable energy resources
To build Hawaii's sustainable future by reducing its dependence on oil imports through renewable energy resources, the state requires electric utilities to increase the percentage of their electricity supply from renewable energy resources. The new renewables portfolio standard starts at eight percent of net electricity sales for 2005 and increases to 10 percent in 2010, 15 percent in 2015, and 20 percent in 2020. The law allows credit for a broad range of renewable energy systems, including solar-powered, seawater-cooling, and other nonfossil-fueled, heat recovery systems. The public utilities commission will develop and implement a rate structure that provides incentives to electric utility companies to use cost-effective renewable energy resources to meet the standard. The commission may also relieve a utility from the standard if it is unable to meet the standard in a cost-effective manner, or because of circumstances beyond its control that could not have been reasonably anticipated or ameliorated. 2004 New Laws, S.B. No. 2474

Illinois

57 PEL 1036

Illinois will adopt energy conservation code for commercial buildings

The Energy Efficient Commercial Building Act directs the Capital Development Board to consult with the Department of Commerce and Economic Opportunity to adopt the 2000 International Energy Conservation Code, the ASHRAE 90.1-1999 Standard, with adaptations to reflect the state's particular economy, population, geography, and climate. The adopted code will provide minimum standards for commercial buildings, effective one year after its adoption. The statute lists exemptions, including historic buildings and buildings that do not contain heated or cooled space. 2005 New Laws, H.B. No. 4099

Maine

56 PEL 1082

State commission will promote and protect marketability of wind power

The Maine Wind Energy Act directs the Public Utilities Commission to monitor electricity markets physically accessible to wind power installations and determine whether those markets are available for sale of wind energy. The commission is also to inform consumers of the benefits and availability of energy from renewable resources, and to adopt rules for incorporating renewable resources into standard-offer service. The

act authorizes the commission to initiate regulatory and legal actions to protect access to markets by wind power facilities. 2004 New Laws, H.B. No. 1429

55 PEL 1072

The Maine Department of Environmental Protection has been directed to establish a lead-by-example initiative.

The Department of Environmental Protection has been directed to establish a lead-by-example initiative- to inventory greenhouse gas emissions associated with state-owned facilities and state-funded programs and create a plan for reducing those emissions to below-1990 levels by 2010. The Department is also to establish carbon emission reduction agreements with businesses and nonprofit organizations, and to participate in a regional effort to create a greenhouse gas registry with third-party verification. By July 2004, the Department is to adopt a state climate action plan to meet specified goals. The plan must allow sustainably managed forestry, agriculture, and other natural resource activities to be used to sequester greenhouse gas emissions. 2003 New Laws, H.B. No. 622

Maryland

56 PEL 1122

Public Service Commission will establish renewable energy portfolio standard for retail sales of electricity

The Maryland Public Service Commission is to establish a renewable energy portfolio standard for retail sales of electricity beginning in 2006. Renewable energy sources are defined as including solar, wind, qualifying biomass, methane from anaerobic decomposition of organic material in a landfill or wastewater treatment plant, geothermal, ocean, and certain fuel cell sources. Hydroelectric and waste-to-energy sources can be used to meet the standard under specified circumstances. The Commission is also to establish a market-based renewable energy credit transfer system and a Renewable Energy Fund. 2004 New Laws, H.B. No. 1308

56 PEL 1121

Local governments in Maryland may establish property tax credits for high performance sustainable buildings

Local governments are authorized to provide a credit against local property taxes for “high performance” sustainable buildings, defined as buildings that achieve at least a silver rating under the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) Green Building Rating System. 2004 New Laws, H.B. No. 804

Massachusetts

59 PEL 168

Environmental Protection Agency may not refuse to regulate emissions of greenhouse gases absent a finding that those emissions do not contribute to climate change

After the United States declined to enter into the Kyoto Protocol for reducing greenhouse gas emissions, a group of environmental organizations petitioned the Environmental Protection Agency (EPA) to regulate such emissions from new motor vehicles under §202 of the Clean Air Act (CAA). That section provides that the EPA shall regulate emission of “any air pollutant” from new motor vehicles which, in the judgment of the EPA administrator, contributes to air pollution reasonably anticipated to endanger public health or welfare. 42 U.S.C. §7521(a)(1). The EPA received more than 50,000 comments

during its rule-making process and a report was prepared that concluded that accumulation of greenhouse gases is causing temperatures to rise. The EPA nonetheless denied the petition, stating that it lacked authority to regulate greenhouse gases and that if it had authority, it would be unwise to exercise it at that time. The groups sought review, joined by local governments and the states of California, Connecticut, Illinois, Maine, Massachusetts, New Jersey, New Mexico, New York, Oregon, Rhode Island, Vermont, and Washington, as well as the District of Columbia. The Court of Appeals for the D.C. Circuit denied review.

The United States Supreme Court reversed and remanded. Justice Stevens wrote the opinion for the 5–4 majority, joined by Justices Kennedy, Souter, Ginsburg, and Breyer. First, the Court held that Massachusetts has standing to challenge the EPA’s refusal to promulgate regulations, relying heavily on the “special solicitude” owed the Commonwealth. Massachusetts owns substantial land and has suffered direct and substantial harms resulting from climate change because “the rising seas have already begun to swallow Massachusetts’ coastal land.” The Court noted that the state itself cannot “invade Rhode Island to force reductions in greenhouse gas emissions” or negotiate treaties and is acting to secure federal protections for its citizens, not to protect its citizens from federal laws. Although the harms from global warming are widely shared, Massachusetts has a substantial interest in the outcome of the litigation. The fact that regulation of emissions from new vehicles will not halt or reverse climate change does not justify the EPA’s refusal to act.

After concluding that Massachusetts has standing, Justice Stevens turned to the merits and acknowledged that the Court’s review of the statutory issues is narrow. The Court distinguished a challenge to EPA’s denial of rulemaking petitions from an agency’s refusal to initiate enforcement proceedings which are not ordinarily subject to judicial review. Although EPA concluded the Clean Air Act did not authorize it to regulate greenhouse gas emissions, the Court disagreed and noted that the statute is unambiguous and covers “any” physical or chemical substance that enters the ambient air. There is no indication that Congress intended to limit the EPA’s ability to regulate greenhouse gases; the EPA cannot “shirk” its duties based on the fact that regulating emissions would overlap the authority of the Department of Transportation to regulate mileage standards.

The Court also rejected the reasons EPA claimed for its refusal to regulate greenhouse gas emissions: that by regulating greenhouse gas emissions it would interfere with the President’s negotiations with other nations and nonregulatory programs to promote reduction of emissions. The Court noted that the EPA did not argue that greenhouse gases do not present a danger. The agency can only avoid promulgating regulations, Justice Stevens wrote, “if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do.”

Chief Justice Roberts, joined by Scalia, Thomas and Alito, dissented. Even though they acknowledged that global warming may be the “most pressing environmental problem of our time,” they concluded the challenges were nonjusticiable and the petitioners’ grievances should properly be redressed by the Congress and the Chief Executive. Judicial Decision, *Massachusetts v. E.P.A.*, Supreme Court of the United States [highest court], Decided April 2, 2007, 127 S.Ct. 1438

New Hampshire

54 PEL 1109

New Hampshire's zoning enabling statute has been amended to include a statement that zoning ordinances should not unreasonably limit installation of solar, wind, or other renewable energy systems or the building of structures that facilitate the collection of renewable energy, except as necessary to protect the public health, safety, and welfare.

New Hampshire's zoning enabling statute has been amended to include a statement that zoning ordinances should not unreasonably limit installation of solar, wind, or other renewable energy systems or the building of structures that facilitate the collection of renewable energy, except as necessary to protect the public health, safety, and welfare. The amendment states that zoning should encourage and protect such installations by regulation of orientation of streets and buildings, maximum height and minimum setback requirements, limitations on vegetation, buffer zones, and encouragement of solar skyspace easements. 2002 New Laws, H.B. No. 701

New Mexico

56 PEL 1038

Electric utilities must use renewable energy sources

The Renewable Energy Act prescribes the amounts of renewable energy resources that public utilities include in their electric energy supply portfolios for sale to retail customers and allows public utilities to recover costs through the rate-making process, but protects public utilities and their customers from renewable energy costs above a reasonable cost threshold. Covered utilities must use not less than five percent renewable energy by 2006, increasing by one percent annually, and leveling off at 10 percent by 2011. Renewable energy is defined as including energy from sources such as wind, solar power, hydropower, geothermal, and biomass, but not from fossil fuel or nuclear sources. 2004 New Laws, S.B. No. 43

56 PEL 1037

New Mexico provides funds to encourage use of alternative fuels and advanced energy technologies

The Advanced Energy Technologies Economic Development Act establishes the Clean Energy Grants Fund, to be administered by the Energy, Minerals and Natural Resources Department. The act is intended to stimulate the use of alternative fuels—such as natural gas, liquefied petroleum gas, ethanol, and methanol—and advanced energy technologies—such as hydrogen, fuel cells, and renewable energy. The fund is to provide grants to governmental entities, tribes and pueblos, universities, and public schools for energy education, technical assistance, training, and projects. 2004 New Laws, H.B. No. 251

55 PEL 1054

The New Mexico secretary of energy, minerals and natural resources is to develop a statewide watershed restoration strategy that focuses on reestablishing the natural ecology.

The secretary of energy, minerals and natural resources is to develop a statewide watershed restoration strategy that focuses on reestablishing the natural ecology by removing the overabundance of woody vegetation, particularly non-native species that consume excessive amounts of water. The strategy is to set guidelines for coordination among federal, state, and local agencies and include incentives to encourage formation of businesses to remove vegetation and to encourage biomass energy use. 2003 New Laws, H.B. No. 910

New York

58 PEL 346

Moratorium on wind farms was not unconstitutional, facially or as-applied

Ecogen is a wind energy producer whose projects use windmill-like turbines and generators to produce electricity (wind farms). Wind farms have locational requirements, including areas of strong wind and nearby electrical transmission lines. In 2001, Ecogen proposed to build 30 wind turbines in the Town of Prattsburgh, another 23 turbines and a substation in the Town of Italy, and assembling land and easements in both towns. In 2004, community opposition caused Italy's town board to impose a six-month moratorium on the construction of wind towers, relay stations, and other support facilities pending the adoption of comprehensive zoning regulations. The board was authorized to approve hardship exceptions by application, but there was no provision for a date of decision. Several renewals extended the moratorium's duration, with the new expiration date set for October 2006.

In March 2006, Ecogen brought a § 1983 action against the Town of Italy in federal court, contending the moratorium was facially unconstitutional because the town had abused its police powers in violation of Ecogen's substantive due process rights. Ecogen sought a preliminary injunction against the moratorium's enforcement. The town sought to dismiss on the ground that Ecogen was actually making an as-applied challenge about the substation, which was not ripe for adjudication because Ecogen had never applied for a hardship exception. The court granted the town's motion, holding Ecogen had not stated a viable claim under either a facial or as-applied theory.

The facial challenge failed because the moratorium was neither so arbitrary or irrational as to violate Ecogen's substantive due process rights. The town board had a rational basis for its legislative action: the preservation of its aesthetic character. Wind turbine towers and supporting facilities like substations posed a legitimate aesthetic concern. The as-applied challenge failed for lack of ripeness because Ecogen had not applied for a hardship exception. While there was some hostility to the project, Ecogen could not claim the application was futile simply because its availability was doubtful. Finally, the court denied the requested injunction, but ordered the town to enact a comprehensive zoning plan within 90 days of its decision or to render a decision on Ecogen's hardship application within 90 days of filing. Judicial Decision, *Ecogen, LLC, v. Town of Italy*, U.S. District Court [trial court], Decided July 11, 2006, WL 1966734

North Carolina

58 PEL 1023

Legislative Commission on Global Climate Change will study global warming

The Legislative Commission on Global Climate Change has been established and directed to study issues relating to global warming, the emerging carbon economy, and whether the state should establish a global warming pollutant reduction goal; and, if so, what that goal should be. 2006 New Laws, S.B. No. 1134

Ohio

57 PEL 1037

Ohio establishes new energy policy calling for increased and environmentally sound use of renewable energy and Ohio coal, oil, and gas

Ohio has established a policy regarding energy use, production, and delivery and has required every state agency to implement that policy. The Department of Development (DOD) is to coordinate implementation and act as an ombudsman to other agencies. The DOD is to assist in developing facilities and technologies for increased, environmentally

sound use of renewable energy and Ohio coal, oil, and gas, and to assist developers and manufacturers. All state agencies must seek ways to improve energy facilities at all of their facilities and assure best available, economically reasonable, energy-efficient measures on all agency projects. The law authorizes Ohio Air Quality Development Authority funding for air quality facilities that promote its goals.

Among other things, the Public Utilities Commission is to promote distributed electric generation and assist developers of facilities, work on mandatory reliability procedures for electric transmission, and encourage rate transparency. The commission is required to act within 90 days on complaints and is authorized to award treble damages against utilities for violations of public utility laws. The law establishes a state power-siting policy, changes various filing and procedural requirements relating to siting, and authorizes nonrefundable corporation tax credits for use of energy-efficient technology. 2005 New Laws, S.B. No. 265

Utah

58 PEL 1037

Utah states policies of promoting development of renewable and nonrenewable sources of energy and allowing market forces to drive prudent use of resources

The Utah Energy Act sets forth state policies of promoting development of both renewable and nonrenewable sources of energy, promoting study of nuclear power generation, and allowing market forces to drive prudent use of energy resources while using incentives and other methods to ensure optimal development and use of those resources. The law establishes the office of the governor's energy advisor to implement those policies. 2006 New Laws, H.B. No. 46

57 PEL 1061

Utah adopts Energy Resource Procurement Act

Utah has amended its Public Utilities law and enacted the Energy Resource Procurement Act, including procedures to be followed when an electric utility acquires or constructs a significant energy resource. The procedures to obtain approval of a resource acquisition include a solicitation process and appointment of an independent evaluator to monitor solicitation. Affected utilities must file action plans that are developed as part of an integrated resource plan. The law also addresses implementation and cost recovery. 2005 New Laws, S.B. No. 26

Washington

56 PEL 1072

Public agencies and universities are directed to collaborate with private sector to develop state's lead in renewable energy sector

On finding that the state derives many benefits from its renewable energy and energy efficiency sector, Washington has directed public agencies to work with institutions of higher learning and the private sector to establish the state as leader in clean energy research, development, manufacturing, and marketing. The law also instructs the University of Washington technology center to provide a forum for collaboration of academic research faculty with the state's technology-based industries. 2004 New Laws, S.B. 1279

Public Health

Frank, Lawrence D. et al. 2006 “**Many Pathways from Land Use to Health.**” *Journal of the American Planning Association*. Winter; pg. 75.

The literature shows single-use, low-density land development and disconnected street networks to be positively associated with auto dependence and negatively associated with walking and transit use. These factors in turn appear to affect health by influencing physical activity, obesity, and emissions of air pollutants. We evaluated the association between a single index of walkability that incorporated land use mix, street connectivity, net residential density, and retail floor area ratios, with health-related outcomes in King County, Washington. We found a 5% increase in walkability to be associated with a per capita 32.1% increase in time spent in physically active travel, a 0.23-point reduction in body mass index, 6.5% fewer vehicle miles traveled, 5.6% fewer grams of oxides of nitrogen (NOx) emitted, and 5.5% fewer grams of volatile organic compounds (VOC) emitted. These results connect development patterns with factors that affect several prevalent chronic diseases.

Morris, Marya, AICP, editor. 2006. *Planning Active Communities*. PAS Report Nos. **543/44**.

This report looks at how planning processes, development regulations, and community participation can be used to ensure that development patterns facilitate everyday physical activity. Includes information about safe routes to school programs and accessible schools, along with case studies of planning active communities in Denver, San Diego, Portland, Nashville, Minneapolis, and more.

Morris, Marya, AICP, editor. 2006. *Integrating Planning and Public Health*. PAS Report Nos. **539/540**.

Examines collaborations between planners and public health professionals committed to building healthy communities. It outlines the five strategic points of intervention at which planners and public health professionals can coordinate their efforts: visioning and goal setting, plans and planning, implementation tools, site design and development, and public facility siting and capital spending. Case studies illustrate the specific tools—including health impact assessments—used in such collaborations. The report also examines the role of universal design in creating healthy communities

Site Planning and Design

Boubekri, Mohamed. 2005. “Solar Access Legislation- A Historical Perspective of New York and Tokyo.” *Planning and Environmental Law*. No. 5, pg.3.

Sunlight is an important natural resource deserving regulatory protection as much as other resources do. Formal interpretation of solar zoning originated with the concept of a solar envelope. William Atkinson’s study of building shape and height, and the resulting illumination at street level, directed attention to the need for legislative control over building form.

Foss, Asa. 2005. “**Low Impact Development: An Alternative Approach to Site Design.**” *PAS Memo*. May/June.

Low impact development (LID) involves innovative land planning practices and technologies for managing stormwater and wastewater. This article provides background on the development of LID; an overview of the four areas of emphasis: stormwater management, wastewater management, circulation design, and site design; examples of

communities that have adopted LID principles; and some of the issues to address when incorporating LID into practice.

Nisenson, Lisa. 2006. “[Integrating Stormwater Regulation and Urban Design.](#)” *Zoning Practice*. November.

This issue of *Zoning Practice* addresses the new NPDES requirements, links them to common zoning and planning efforts already under way, and offers cautionary observations about the potential for unintended results when merging land-use and water regulations.

Transit-Oriented Development

Dittmar, Hank. 2004. “[Driving Growth Through Transit-Oriented Development.](#)” *Zoning Practice*. August

Key to TOD success is the creation of standards that can be replicated from community to community, and until such standards are created and recognized, TOD will succeed through clever exceptionalism, rather than because it is easy to do. Planning and zoning are at the heart of making TOD a replicable product. Getting the codes right and distinguishing development around transit from auto-oriented development will enable these projects to be entitled more quickly and financed more easily, and hopefully, to perform better.

Tumlin, Jeffrey and Adam Millard-Ball. 2003 “[How to Make Transit-Oriented Development Work.](#)” *Planning*. May, p. 14.

In order to ensure that TODs actually achieve positive outcomes of choice, livability and financial return, planners should increase density, encourage a mix of uses, and incorporate parking management as part of transit demand management.

Transportation Demand Management

Cervero, Robert. 2006. “[Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing?](#)” *Journal of the American Planning Association*. Autumn; pg. 475

Which land-use strategy yields greater reductions in vehicular travel: improving the proximity of jobs to housing or bringing retail and consumer services closer to residential areas? We probe this question by examining the degree to which job accessibility is associated with reduced work travel and how closely retail and service accessibility is correlated with miles and hours logged getting to shopping destinations. Based on data from the San Francisco Bay Area, we find that jobs-housing balance reduces travel more, by a substantial margin. The article concludes by discussing policy measures that have been introduced in California to bring housing, workplaces, and retail centers closer together.

Handy, Susan. 2006. “[The Road Less Driven.](#)” *Journal of the American Planning Association*. Summer; pg. 274.

Americans gain tremendous benefits from their driving in the form of access to opportunities. But the benefits do not come without burdens, for individuals and for society. To manage those burdens, transportation planners should focus on strategies that selectively reduce driving in two ways: by making it possible to drive less through land use policies and investments in non-auto infrastructure, and by discouraging less important driving with pricing policies. But merely layering a "drive less" approach on top of traditional efforts to make driving easier doesn't make sense. A more effective blend of strategies is needed.

Krizek, Kevin J. 2003. “**Residential relocation and changes in urban travel: Does neighborhood-scale urban form matter?**” *Journal of the American Planning Association*. Summer; pg. 265.

This article presents an empirical study of the relationship between neighborhood-scale urban form and travel behavior. It focuses on households who relocate within the Central Puget Sound region to determine if they change their travel behavior when they move from one neighborhood type to another. Regression models are used to predict change in travel behavior as a function of change in neighborhood accessibility, controlling for changes in life cycle, regional accessibility, and workplace accessibility. The study is unique in that it analyzes the travel behavior of the same households in a longitudinal manner in concert with detailed urban form measures. The findings suggest that households change travel behavior when exposed to differing urban forms. In particular, locating to areas with higher neighborhood accessibility decreases vehicle miles traveled.

515 Planning for Street Connectivity: Getting from Here to There. Susan Handy, Robert G. Paterson, and Kent Butler. 2003. 95pp.

Urban Forestry and Greening

Benedict, Mark, PhD. 2000 “Green Infrastructure.” *PAS Memo*. October.

Green infrastructure is our nation's natural life support system, an interconnected network of natural areas, conservation lands, and working landscapes that support native species, maintain natural ecological processes, sustain air and water resources, and contribute to the health and quality of life for America's communities and people. This *PAS Memo* introduces green infrastructure as a strategic approach for land conservation and provides eight guiding principles for successful green infrastructure initiatives.

Duerksen, Chris, Molly Mowery, and Michele McGlyn. 2006. “**Got Trees?**” *Zoning Practice*. July.

This issue of *Zoning Practice* discusses recent trends in local tree protection, including:

- reliable sources that can help communities establish the value of trees and the rationales for protecting them;
- key legal issues and recent court decisions regarding tree protection;
- popular regulatory approaches to saving trees; and
- cutting-edge tree protection programs around the United States.

McPherson, Greg, and Jim Geiger. 2005. “**Environmental Benefits of Trees in Urban Areas.**” *PAS Memo*. March/April.

Discusses some specific environmental benefits of trees, reinforcing their importance as part of the overall urban infrastructure, specifically for watershed health, energy, air quality, and greenhouse gas reduction. Information on trees in parking lots is also included.

Urban Heat Island

Estes, Maurice, Jr., AICP. 2000. “Urban Heat Island Mitigation Strategies.” *PAS Memo*. May.

The urban heat island effect is where an area's pavement and roofs absorb more of the sun's rays than vegetation does, causing surface temperatures and overall ambient temperature to rise. This issue describes in detail the urban heat island effect, how it is generated, and what planners can do to lessen the impact and protect both the environment and the economy. Includes specific mitigation strategies and lists communities that are currently adopting heat island mitigation programs.

Kelly, Robert. 2006. "The Urban Laboratory: Turning Up the Heat." *Practicing Planner*. Vol. 4, No. 3.

The urban heat island and climatic warming are increasingly important considerations in planners' efforts to promote safe growth. What is in store if we do nothing?

Water

Van Lare, Paula. 2005. "How Thirsty Is Your Community?" *Zoning Practice*. May.

This issue of *Zoning Practice* shows how urban form affects the demand for and cost of drinking water. It will draw on a variety of studies showing how lot size is a particularly important determinant of water demand and cost, as is the dispersion of developments.

Both factors are of interest to planners and municipal code writers.

Wind Power

Wyckoff, Mark. 2003. "Planning and Zoning for Wind Power Facilities." *Zoning News*. February.