Healthy Historic Districts
The Historic Preservation League of Oregon makes recommendations to preserve and revitalize Oregon’s Historic Downtowns. > Go to Story

INSIDE THIS ISSUE
Road Ecology
Better highway design for wildlife
> Go to Story

Oregon Architecture
Oregon: A place where heaven and earth are fraternal twins > Go to Story
Oregon Planners’ Journal

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INSIDE THIS ISSUE

President’s Message [page 3]
Healthy Historic Districts [page 5]
Road Ecology: Wildlife Habitat and Highway Design [page 11]
Oregon Architecture in a Place Where Heaven and Earth are Fraternal Twins [page 14]
Electric Vehicles, Oregon Style [page 17]
Upcoming Events and Announcements [page 19]

Cover photo: Albany Historic District—Courtesy of Oregon Main Street.
The just concluded Cascadia Collaborative Oregon/Washington Joint Planning Conference was a great success. Those attending were rewarded with diverse and very educational sessions, two inspiring and entertaining lunch speakers, a lively exhibition hall with great networking opportunities, and some good times after hours at the reception and pub crawl. It was certainly one of the best organized and best run conferences I have ever attended. For that I would like to thank the Conference Committee, both Oregon and Washington members, for an outstanding job, one that will be tough to match in coming years. Specifically, representing Oregon we had Scott Whyte, co-chair, committee members Susan Aldrich, Derrick Chisholm, Bob Clay, Chris Cocker, Amanda Ferguson, Elise Scolnick, Ronalee Spellecacy, Read Stapleton, Becky Steckler, Larry Vasquez, and Pat Zepp our Executive Director. I would also like to thank our forty sponsors. That we met our ambitious sponsorship target represents a great show of support for our profession in these tough economic times. And because of their support, and that of the almost 600 attendees, the conference was also a huge financial success as well. That is very important for OAPA, because it enables us to continue to provide services to our members while keeping dues at a very modest level.

Speaking of services, I want to mention several new OAPA initiatives and products that I hope many of you will be interested in. Last year we started a Sustainability Strategy Team which, in January 2011, produced a definition for “sustainability” in the Oregon planning context, and an accompanying Strategy with a number of proposed actions. One of those actions was to produce a catalog of “best practices” that would help planners in Oregon better understand how to incorporate sustainable concepts into their planning documents and actions. At the conference on Thursday we announced that our new, interactive Sustainable Planning Toolkit webpage was now live and accessible from the OAPA website. The Toolkit is a compilation of a wide variety of planning tools with links that enable you to check them out on line, and to communicate directly to the Oregon planners and others who have developed them and/or are using them. There are over 150 entries already and others can be added as all of you help us find more examples, and offer your feedback about how to improve the Toolkit overall. Special thanks for creating the Toolkit over the last few months go to our Sustainability Team intern Erica Smith, coordinator Nicole Isle of Brightworks, and to Pat Zepp for her timely assistance.

As I mentioned, the two lunch speakers were very inspiring, and their talks are generating ideas for future action by OAPA and Oregon planners generally. On Thursday we heard from Robin Morris Collin, the Norma J. Paulus Professor of Law at Willamette University. She is a very accomplished scholar and a passionate champion of introducing more equity into planning. She has published a three volume “Encyclopedia of Sustainability” on the Environment, Economy and Equity that should be a standard reference work for our profession in the years to come. In her speech she discussed the importance of addressing environmental justice and the inclusion of equity provisions in all aspects of our planning work. A couple of the actions we will be taking as a result of her speech are to focus on incorporating a diverse and meaningful set of equity provisions in our Sustainability Toolkit,
and for the Board to reinforce this message in our ongoing work as well.

On Friday we heard from our new national APA president, Mitch Silver, Chief Planning & Economic Development Officer and Director of Raleigh, North Carolina. Mitch entertained the crowd for well over an hour with his analysis of the demographic shifts underway in this country and what the implications are for planning, and for planners. He challenged us to be more assertive in leading the discussion about the future of our communities. He specifically mentioned that we had become more the American “Process” Association, and that as the experts in the field of urban development we needed to be doing more actual Planning. He said that he has talked to countless mayors over the last few years, and many have expressed very strong interest in having visionary leadership from our profession, and that we needed to step up and begin to provide bigger ideas based on solid research and creative thinking.

Several Oregon and Washington APA Board members had dinner with Mitch on Friday evening and continued the discussion about how to enable and inspire us all to do more of that in our work. In that discussion we conveyed some of what we are doing in the Pacific Northwest and he talked about what he wants to accomplish in his two-year term as APA president. In particular, he is adamant about elevating the Comprehensive Plan as the most important work we do, and to significantly changing the way zoning codes work in order to inspire the kind of development we want to see rather than just stopping inappropriate development. We expressed interest in working with him on that agenda, and will be talking with national APA about this.

Finally, at the start of the Conference last Wednesday, Washington APA president Jill Sterrett and I hosted a four hour Symposium to talk about creating “Game Changing Initiatives” to address the crises that our society is facing, including climate and energy changes, major demographic shifts, political gridlock, and media meltdowns. While not attempting to solve all the world’s problems, the diverse group of 40 plus people (half planners, half related professionals) in attendance were able to create some very promising ideas for moving past the usual barriers and engage in intelligent and meaningful dialog at the regional and state levels that would address the significant problems facing the future of our urban areas. Those present have made a strong commitment to expand the conversation about some of these ideas, and to explore ways to develop them into specific actions. Jill and I also talked about these ideas with Mitch on Friday evening, and he is very interested in how this kind of dialog can be initiated elsewhere in the country.

So, stay tuned! I will be reporting back about ways in which many of you can get involved in these very exciting endeavors. The ideas and the energy of the last week have certainly reinforced a strong feeling that planners are highly relevant in these turbulent times, and that there is no better time to be more innovate and assertive in our work.
Healthy Historic Districts

From the Historic Preservation League of Oregon

Think “Main Street,” and images of Normal Rockwell come to mind. Friendly people, sidewalks that invite a stroll, authentic well-crafted buildings of brick, wood, and native stone, storefronts filled with local businesses...you think community.

Oregon has 119 districts listed in the National Register of Historic Places and more are on the way. Among these are 30 commercial districts. Unlike ubiquitous strip malls, which convey no sense of place, historic downtowns with their iconic buildings tell the unique story of their community - its heritage, values, craftsmanship, and enterprise. Today many are worn around the edges, under-occupied, or hidden behind ill-conceived “remuddled” facades, but still these districts represent an enormous economic asset. They’re as much a bellwether for the future as they are a reminder of the past and they help make Oregon, Oregon.

The Historic Preservation League of Oregon and the nearly 100 people who participated in the 2010 Preservation Roundtable believe it’s time to invest in the revitalization of our historic districts. And this isn’t about nostalgia. This is about economic, cultural, and environmental sustainability:

- Preservation = Jobs. Dollar-for-dollar, building rehabilitation creates more jobs than manufacturing or new construction.1 Additionally, preservation supports local employees, relies on regional suppliers, and increases the economic potential of commercial buildings and districts.

- Preservation is about people, culture, and livability. Historic downtowns encapsulate the stories of the past while providing an affordable and creative environment for future generations. They serve as models of community planning for the 21st century, providing all of life’s necessities within a 20 minute walk.

- Preservation is green. Retaining and reusing the embodied energy found within historic buildings minimizes the need for new materials, keeps waste from the landfill, and circumvents the need for intensive demolition and construction activities that produce harmful greenhouse gases.

Oregon’s historic downtowns are a tremendous

Silverton historic wall mural.

CREDIT: HISTORIC PRESERVATION LEAGUE OF OREGON
This article outlines nine practical ways we can invest in and benefit from them.

This summary highlights the 2010 HPLO Preservation Roundtable recommendations for maintaining and improving the economic, cultural, and environmental health of Oregon’s National Register historic districts. While these action items are aimed at historic districts that are primarily commercial in nature, many are applicable to residential districts, individual historic properties, and designated Main Streets.

According to Roundtable participants, healthy historic districts require four things:

- Coordinated vision and planning to provide a clear path for the future that encourages change but upholds the fundamentals of historic preservation.
- Infill design that is compatible with its surroundings and tells the evolving story of the district.
- Financial and honorific incentives that close the development gap and reward best practices.
- Clear and consistent regulations that protect the district’s history but don’t prevent positive change.

**Historic Preservation in Oregon—A Brief Overview**

The historic downtowns and Main Streets found across Oregon are unique: they tell the stories of the past while still largely functioning as the economic, social, and cultural center of their communities. Oregon boasts 119 National Register historic districts that encompass:

- 12,274 properties
- At least 17,000 acres of land
- About 30 commercial districts
- Over 1,386 commercial buildings

Ashland, Albany, Baker City, Condon, Cottage Grove, Independence, La Grande, Medford, Roseburg, Silverton, St. Helens, The Dalles, Union, and a host of other communities have successfully nominated their historic commercial districts to the National Register of Historic Places, declaring that their story matters. Additionally, two commercial districts - Jacksonville and Portland’s Skidmore/Old Town - have been recognized as National Historic Landmark districts for their exceptional national significance.

Oregon’s historic districts exist within a...
framework that extends from individual property owners to the National Park Service. Standards for rehabilitation have been established, state and federal tax incentives have been codified by legislators, ordinances have been crafted by city councils, and historic areas have become some of the most popular places to live, work and play.

The State Historic Preservation Office's Certified Local Government program allows grant monies and technical assistance to flow from the National Park Service to urban and rural communities that meet the qualifications of the program. Additionally, the Oregon Main Street Program assists communities in implementing the 4-Point Approach® developed by the National Trust for Historic Preservation. However, ever-changing political, economic, and natural forces necessitate new ideas for protecting and promoting the state's historic resources. Many continue to deteriorate. While Oregon communities use differing standards for designating places as historic, Goal 5 of the Statewide Planning Goals and Guidelines employs the National Register as the general baseline for determining historic significance. National Register listing makes properties eligible for state and federal incentives, but it is up to local communities to adopt their own rules for managing historic places. While some larger cities have adopted ordinances that can deny the demolition of National Register properties, many smaller communities have no codified measures to protect their historic resources.

Our Historic Districts tell the story of Oregon! They deserve to be protected, revitalized, and passed forward to future generations.

Preservation: Dollars, Sense, and Environments

The motivations for protecting historic places differ from community to community, but the benefits are essentially the same. A plethora of data shows that preservation is economically, culturally, and environmentally sustainable.

Economic Benefits

• 75% of economic benefits generated by rehabilitation stay within the local community. Because preservation projects require skilled labor, specialized materials, and attention to detail, less money is sent overseas to import building materials that often have environmental and human rights implications.

• Investing in rehabilitation creates more jobs than new construction.4 In addition to producing skilled construction jobs, rehabilitating a vacant building leads to a substantial increase in the local tax base.

• Oregon's tourism industry employs 90,000 and generates $7 billion annually. A 2006 survey concluded that 28% of the state's overnight visitors seek out historic sites, bringing with them significant heritage tourism dollars.5

Social and Cultural Benefits

• Historic downtowns provide creative opportunities for affordable housing and small business generation. Nationally, about two-thirds of recent rehabilitation projects were located in neighborhoods with average incomes below the area's median family income.6 Many historic
Historic districts are socioeconomically diverse, housing and employing people from all walks of life.

- Historic districts are mixed-use and walkable. Current planning initiatives to create “20 minute neighborhoods” need to look no further than the commercial historic district to find a model of a walkable community with a mix of business activities.

- Historic places and traditional downtowns foster community pride. Learning more about a community’s history deepens local residents’ sense of place and helps instill values and pride.

**Environmental Benefits**

- Historic preservation is “green” at its very core. It is about conserving and reusing what we already have!

- Adaptive reuse reduces urban sprawl. Converting a vacant historic building into 40 residential units can save the 10 acres of land required to provide the same number of single-family residences. As Oregon’s population grows, protecting valuable farmland hinges on increasing the density of urban areas. While most commercial historic districts are only a few stories in height, infilling vacant lots and reusing historic buildings can generate the density needed for mass transit and multifamily housing, as well as provide small business and office space.

- Owners of historic buildings spend 27% less on utilities. Most buildings constructed before the 1920s employed techniques for passive heating, cooling, and lighting, reducing the need for resource-intensive temperature control and making them models of energy conservation.

It will take about 65 years for the new building to save the amount of energy lost in demolishing an existing one (U.S. Energy Information Administration, “Commercial Buildings Energy Consumption Survey,” Washington, DC, 2003). Demolishing historic buildings requires fossil-fueled equipment, sends materials to the landfill, and necessitates the manufacture of new materials.

As the state’s population continues to grow, the global economy becomes increasingly complex, and scarce resources must be used more conservatively, historic districts are positioned to become centerpieces of Oregon’s commitment to sustainability.

**Obstacles to Compatibility & Viability**

When stakeholders were asked what had to be addressed for commercial historic districts to be successful, two themes emerged: compatibility and viability. Compatibility refers to how well the design of additions and new buildings fits into the historic context. Viability refers to how well the design fits into the long-term economic success of districts. Although every district tells a different story, features a different stock of buildings, and exists within a different economic and political environment, they face common obstacles:

- A lack of long-term vision and planning leaves districts subject to ad hoc change.

- Many districts are improperly zoned, discouraging the type of mixed-use development that made the district economically viable in the first place. The National Register nomination is not used as well as it could be to inform planning and development activities.

- The district is not adequately marketed to residents, businesses, and visitors.

- Public agencies do not coordinate with district stakeholders prior to and during major infrastructure projects.

- Design of new buildings is often out of sync with the character of the district.

- The height and footprint of new buildings often conflicts with existing patterns.

- Abundant surface parking lots create an aesthetic nuisance that detracts from the district’s continuity.

- New buildings are not built with the same...
quality of materials as their historic counterparts.

- Infill is often too jarringly different from the design of existing buildings, disrupting the harmony of the streetscape; or inappropriately tries to imitate vintage buildings.

Financial incentives often aren’t enough to stimulate redevelopment.

- Seismic upgrades and ADA accessibility requirements are too expensive.

- Vacant lots remain undeveloped because compatible new construction is too costly.

- Oregon’s Special Assessment program does not incentivize preservation activities as successfully as it once did.

Regulations are too bureaucratic in some communities, while weak or non-existent in others.

- Property owners are given inconsistent information by city government.

- Developing within a district with regulations is costlier than developing outside the district.

- Yet without sufficient regulation, incremental alterations and demolitions diminish the story of a district over time.

- Building codes (or their interpretation) don’t offer the flexibility needed to allow all buildings to be rehabilitated.

Findings and Recommendations

As Oregon forges its leadership position at the center of the sustainability movement, a major component must be the conservation and reuse of existing resources. Implementing the following recommendations conserves some of our most significant, irreplaceable historic places while also boosting the cultural and economic health of communities in every quadrant of the state.

1. Chart a clear course with a comprehensive district development plan. Oregon’s historic districts will inevitably continue to evolve. Without a comprehensive vision for how the district should look, function, and serve its citizens, piecemeal development can slowly diminish the very fabric that made it significant in the first place. Development plans offer the potential to manage change that will enhance the character and vitality of the district over the long-term.

2. Establish economic development districts that support business and provide funding for the rehabilitation of historic buildings. Urban renewal areas, business and economic improvement districts, and Main Street programs leverage local assets to achieve greater viability for business and buildings. Economic development strategies should channel resources into historic districts where dollars and technical expertise are needed the most.

3. Create design guidelines and standards for infill to ensure the new is compatible with the old. Thoughtful design guidelines informed by the historic and architectural significance of the place are needed to encourage and shape infill construction that adds to, rather than detracts from or mimics, the evolving story of the district. Additionally, state and federal standards for infill are needed to set a clear and simple minimum baseline for what’s appropriate and what’s not.

4. Expand state and federal incentive programs to make appropriate development feasible. Current state and federal tax breaks to incentivize the rehabilitation of historic buildings often aren’t enough to make preservation projects pencil financially. A state tax credit for rehabilitation and a federal incentive for compatible infill would make commercial historic districts even more economically, culturally, and environmentally sustainable.

5. Tailor local incentive and disincentive programs to meet local needs. Local jurisdictions can and should direct district change and preservation activities through the use of creative grants, fees, and policies. Among other ideas, landfill taxes on the demolition
of older buildings, prioritization of locating government services in historic districts, and grants for storefront improvements can enhance the character and economic vitality of districts around the state.

6. Update preservation ordinances to ensure clarity, consistency, and defensibility. To promote appropriate local control of historic districts and create a consistent baseline across the state, model preservation ordinances should be developed to assist communities in implementing sound preservation policies that meet today’s legal standards.

7. Identify a single point of contact to cut through red tape. Every commercial historic district should have a single point of contact to provide clear and consistent answers and assistance to business and property owners. This individual would help streamline the development process, disseminate information about incentives and regulations, help coordinate planning activities, and work closely with district stakeholders and policy-makers. With the historic district as their primary client, coordinators would be the municipal stewards of district health.

8. Tell the story of the district. The historic narrative is what makes a district significant and should be infused in everything from design guidelines to walking tours. Heritage education campaigns can be big or small, but fostering a sense of place is a must for each of the state’s unique districts.

9. Promote best practices through a statewide preservation awards program. To recognize and honor preservation success stories from around the state, an inclusive awards program is needed. In addition to receiving recognition, award recipients would encourage and inform future preservation victories through sharing best practices and lessons learned.

Conclusion

A relatively modest investment in Oregon’s historic districts offers a significant cultural, economic and environmental return. This report hopes to start conversations, initiate research, spur policy shifts, and inspire the legislation needed to make our commercial historic districts the compatible and viable models of sustainability they deserve to be. It will require participation from public and private institutions at the local, state, and federal levels. Judging from the enthusiastic participation in the 2010 Preservation Roundtable, that support does exist. The HPLO is committed to working toward the implementation of these recommendations and bringing forward additional solutions to preserve, utilize, and pass forward these wonderful and irreplaceable resources to future generations of Oregonians.

This article was condensed and adapted from the September 2010 Special Report on Healthy Historic Districts by the Historic Preservation League of Oregon. For a copy of the full report and more information about the Historic Preservation League of Oregon, go to: www.HistoricPreservationLeague.org.
Road Ecology: Wildlife Habitat and Highway Design

By Laura Tepper

High-speed rail may get the flashy headlines, but most U.S. transportation dollars go to building, widening and maintaining roads.

President Obama’s 2012 budget proposal called for substantially increased spending on rail and public transit, but nonetheless allocates 55 percent of transportation funds to the Federal Highway Administration. [1] The United States adds 32,000 lane miles annually to the 4 million miles of public roads already crisscrossing the country. [2] For more than a century, we have allowed expressways, arterials and rural roads to define our landscapes without seriously considering how we might redefine the road. Engineers have rarely attempted to incorporate ecological functions, let alone artistry, into a design practice historically dominated by concerns for speed and efficiency.

In the last decade, the emerging field of road ecology has galvanized scholars and practitioners eager to address this problem. Road ecologists investigate the complex interactions between roads and the natural environment: how roads act as barriers inhibiting the movement of plants, animals, water and soils; how traffic run-off contaminates surface and underground water; and how particulate emissions and noise pollution affect habitats. They also help develop...
and test solutions to these pervasive problems.

The practice of road ecology began in Europe in the 1970s and later spread to the U.S. by way of the annual International Conference on Ecology and Transportation. In 2003, the seminal text Road Ecology, written by Richard T.T. Forman and Daniel Sperling along with twelve co-authors, helped to formalize the movement. As Forman explains, the book “pulled the diverse scientific and planning threads of the field together and added distinctive synergisms, resulting in a distinct field which researchers and planners can and do hang their hat on, and push important frontiers.” Major research centers now include the Road Ecology Center at UC Davis, the Center for Transportation and the Environment at North Carolina State University, and the Western Transportation Institute’s Road Ecology Program at Montana State University. The WTI organized last year’s ARC International Wildlife Crossing Infrastructure Design Competition, which brought new momentum and attention to the practice, particularly from architects and landscape architects. In the long term, Forman and many colleagues advocate reducing automobile dependence and removing roads. In the near term, the focus is on innovative design and renovation. As long as we remain politically and financially committed to the highway system, road ecologists say, we must consider not only if, but how we design roads.

Several European countries — notably France, the Netherlands, Switzerland and Germany — mandate an intensive highway design process that integrates environmental factors in the earliest phases of project design and makes extensive use of wildlife crossings and other ecological mitigation infrastructure. The scope of this investment manifests in large-scale systems like the 108 water treatment basins lining France’s new “eco-motorway” and the nine ecoducts (Europe’s equivalent to wildlife overpasses) currently under construction in the Netherlands as part of a national landscape connectivity initiative working towards the creation of a National Ecological Network.

In North America, such large-scale projects are less common; yet the most iconic works of ecological road infrastructure in the world are the six massive wildlife overpasses lining the Trans-Canada Highway in Banff National Park. The overpasses are part of a larger system of ecological infrastructure that Parks Canada began developing in the early 1980s to address concerns about increased traffic and collisions between vehicles and large mammals. The expansion of the crossing system coincides with the phased “twinning” or widening of the Trans-Canada Highway. Ongoing, year-round monitoring by the Banff Wildlife Crossings Project has proven the crossings’ effectiveness at reducing wildlife mortality, and it is also informing the implementation for future phases of the highway expansion. [3]

Unfortunately, the monumental overpasses come with an outsized price tag. Parks Canada constructed the first two overpasses at Banff in 1997 for $3 million each, but the cost for additional overpasses last year shot up to $12 million each. The high cost has hindered widespread use. Nonetheless, cost-benefit analyses increasingly include potential financial savings from the $8 billion in property damage that, according to the Federal Highway Administration, results annually from animal-vehicle collisions in the U.S. [4]

Banff wildlife ecologist Tony Clevenger sees the high cost of wildlife crossings as a design problem and initiated the ARC Competition as a response. His colleagues at the Western Transportation Institute, together with the Woodcock Foundation, invited interdisciplinary teams to design wildlife overpasses for West Vail Pass, which is along a stretch of I-70 passing through the Rockies 100 miles west of Denver, and to compete for a $40,000 honorarium. The crossings would serve populations of black bear, bighorn sheep, lynx, bobcat, elk, coyote and deer inhabiting the national forests divided by the freeway. Five finalist teams — chosen from a pool of 36 — developed solutions that were not only materially and functionally innovative, but also cost-effective. Finalists included teams led by Balmori Associates, the Olin Studio, Janet Rosenberg & Associates, Zwarts & Jansma...
Architects; the winner was the team of HNTB and Michael Van Valkenburgh Associates.

The ARC competition generated a store of viable design ideas that add to the substantial body of research the U.S. has already contributed to road ecology; yet Clevenger noted that presently the nation is behind the curve in translating its research into infrastructure, particularly relative to European countries. This photo essay looks at two of the proposals from ARC as well as existing ecological road infrastructure in the U.S. and Europe. The projects, both built and proposed, underscore the promise of road ecology to enhance habitat connectivity and reduce wildlife mortality, and also to ameliorate the broader conflicts between human infrastructure and natural ecosystems.

Notes

2. American Road & Transportation Builders Association, FAQs, accessed June 8, 2011.
3. Wildlife ecologist Tony Clevenger’s 14-year study of the project showed that large carnivore mortality rates dropped by more than 80 percent on the 28-mile pilot stretch of the TCH after the crossings were installed. See Clevenger, A.P., Chruszcz, B., Gunson, K., Wierzchowski, J., 2002, Conservation Biology 16:503-514.
Oregon architecture in a place where heaven and earth are fraternal twins

By Stan Chesshir, AIA President

At the AIA 2011 National Convention in New Orleans, “Regional Design Revolution – Ecology Matters,” AIA Oregon was acknowledged for its 100-year anniversary with a Presidential Citation from AIA National President Clark Manus, FAIA. On the citation was written: “The American Institute of Architects Presidential Citation awarded to AIA Oregon, for a century of service to the Architects and Citizens of a special place, where heaven and earth seem to be fraternal twins. Enablers of a modern profession as it matured to become a leading force on a national and international stage as advocates for sustainable design, they are leaders in a revolution that is elevating and enriching the public’s understanding of the essential contribution Architects make as enlightened stewards of the land.”

What would Oregon (architects) do?

The news in the last few months has been inundated, literally and figuratively, with natural disasters such as the earthquake and tsunami in Japan, flooding along the Mississippi, tornadoes in the Central United States and volcanic eruptions in Iceland affecting life in Europe. Along with this comes evaluation of man-made structures that have attempted to provide shelter and, in the case of nuclear plants, power to the areas affected. These structures have, for the most part, proven to be unworthy opponents to the tremendous forces imposed on them. While we can’t assume that architects and engineers are expected to provide safety in the structures they design in these extreme conditions, it begs the questions: What must we do in future design processes, and what role do we play in the reaction to such forces in the aftermath? The other side to this equation is, in the event of rebuilding, what will we learn from other places that have had the unfortunate task of trying to rebuild? I toured New Orleans’ Lower Ninth Ward and saw the extent of the damage from Hurricane Katrina, where more than 4,000 homes were destroyed. It is alarming to see the lack of significant reconstruction six years later. This is after massive federal money (a reported $6 billion) was allocated for that purpose and now seemingly unaccounted for.

The corruption in the Louisiana government is legendary; our tour guide replied that the politicians always serve two terms, one in office, one in prison. The question that is also being asked is whether some of the areas should have ever been built upon and whether manmade changes to the ecosystem have had an unchangeable impact that is contributing to vulnerability.

The Make-it-Right Foundation, started by actor Brad Pitt, is attempting to do the right thing in this devastated area by building 150 new, LEED-
certified homes, guided by William McDonough’s Cradle to Cradle principles. So far, about 20 homes have been built and about that many more are planned. The challenges posed to architects to create the next generation of homes appropriate to that situation illustrate the dilemma of meeting a frugal budget yet providing good design. Many homes were apparently far over budget, and when asked to find ways to build the next iterations within budget, many of the architects declined – to preserve the integrity of their portfolios.

Should this be construed as pure design vanity or a challenge with respect to what it takes to truly be “leaders of the design revolution?” By building over budget, it means that fewer homes will be built. Mediocrity of design is not the answer, either.

Hopefully this development will become more than a tour-bus destination and evolve into a viable community. The rebuilding efforts in the area so far have not incorporated basic needs such as grocery stores, medical facilities, schools, etc. The only food found within miles was an older woman resident who, with her grandson, was selling pralines along the street to tourists.

By contrast, the rebuilding of Greensburg, Kan., following the tornado devastation four years ago has been far more successful. BNIM, the AIA National Firm of the Year for 2011, has been very involved in developing a sustainable comprehensive master plan for rebuilding the community and designed a school, now built, that serves as a model of sustainability. It would be interesting to dig deeper into the background of the efforts of this community and of New Orleans to see what could be learned by the comparative rebuilding process. It also would be interesting to see how these processes compare to those of Japan’s and Haiti’s. It is truly an honor for Oregon architects to be recognized leaders in our profession, to be practicing in a place “where heaven and earth seem to be fraternal twins” and to be considered “enlightened stewards of the land.”

However, in Oregon it is said that it’s not a matter of whether a major earthquake or tsunami will occur, but when. In hearing reports from architects and others evaluating our state of preparedness, it appears we are woefully inadequate in our readiness to deal with a natural event on any scale. Where do architects fit in both in terms of first response and longer term planning? How will we continue to apply all that we know to advocate and plan for our sustainable communities? Some of these questions came into play during a recent seismic symposium sponsored by AIA Portland.

Optimists make changes

In Thomas Friedman’s keynote address at the AIA national conference, he emphasized the urgent need for sustainable thinking and action in this country since it has such worldwide impact. The sooner we create a new paradigm, the more likely the rest of the world will mimic that new paradigm as opposed to the consumptive precedent that we have set. He spoke of the idea of “Americoms,” or segments of population equating to 300 million people that live like Americans. A short time ago, our planet had three Americoms and now there are eight. Biodiversity loss and species extinction is happening 1,000 times faster than before. We are not applying what we know about this at a fast enough rate. Friedman said doom-sayers fall into hopelessness. However, optimists have produced all the world’s great changes.

To get there, we need leadership that addresses the problems of petropolitics and to adopt a stringent energy policy – and the priority of changing our politicians while we change our light bulbs!

It is evident on a state legislative level – in tracking the many proposed bills and watching the national political scene – that the continued debate about how we prioritize spending in a weak economy speaks volumes about where we stand as a society. Amid a challenging economy, it is difficult to address needs proactively (witness the recent school improvement bond measure failure in Portland). The will must be supported
by the means.

It is said that with knowledge comes responsibility and that there is no such thing as bad knowledge, it is just how you use it. As architects continue to seize opportunities presented in a thoughtful way, the more the paradigm can shift toward a more harmonious relationship with natural forces. The bright side facing challenging natural phenomena and economic frugality is that it tends to force questions and choices onto people to express core values – the true “will of the people” – and to determine the policies that chart a better future. Our profession has evolved dramatically in the past decade or so in embracing and implementing climate-responsive designs and early incorporation of other disciplines through integrated design. Given the role of designers, temperance of our innate intuition and opening our hearts and ears can produce a built environment that both satisfies basic needs and offers inspirational places. Political systems, community action, and social and financial well-being need to be balanced, and there are no quick, easy solutions.

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Electric Vehicles, Oregon Style

By David Mayfield, Sustainable Transportation Strategies

Planners react with differing opinions about the introduction of the Nissan LEAF, the Volt, and other electric cars. Those involved with the US Department of Energy’s Clean Cities coalitions see electric propulsion helping to reduce our need for foreign oil and lower greenhouse gas emissions. Because over 30% of Oregon’s GHG emissions come from transportation, much needs to be accomplished. But some planners voice concern about a resurgence of the cheap-to-run automobile with its associated land use patterns and environmental consequences.

Consider that electric cars represent one type among many kinds of electric vehicles that will help meet transportation needs. Oregonians already use electric propulsion in the form of light rail transit, streetcars, the aerial tram, delivery trucks, scooters, lightweight electric cars, electric bicycles, and Segways. Each offers unique advantages depending on the context. As with their gasoline counterparts, electric vehicles vary considerably in their energy use. For example, energy use of the all-electric, four-passenger Nissan LEAF is rated with a 99 mpg equivalent, while the two-passenger Arcimoto SRK is estimated at twice that efficiency. A combination of electric transit, lightweight electric vehicles, scooters and electric bicycles will provide highly efficient travel and help reduce transportation-related GHG in urban areas.

The Oregon Department of Transportation’s GreenSTEP modeling results indicate that Oregon’s GHG goals are likely to be achieved through a combination of factors such as low carbon fuels (including electricity), land use form, and pricing. Electric vehicles offer critical help, but will not stop transportation’s adverse greenhouse gas emissions. “Zero emission” electric vehicles still depend upon nonrenewable energy sources like coal and gas burned at power plants.

Oregon’s land use planning approaches create compact communities whose relationship to vehicle miles traveled gives Oregon a head start on meeting GHG goals. Dense urban form in Metropolitan Portland has helped reduce VMT per capita since the mid-1990s while nationally VMT trends upward.

A Nissan LEAF owned by the City of Portland gets a quick boost from a fast charger at PSU’s Electric Avenue.

CREDIT: DAVID MAYFIELD
Battery electric vehicles rely on recharging equipment placed at homes, employment centers, and in public. Most batteries will recharge during the night which also coincides with the greatest electrical grid capacity. Most EVs will use three categories of charging equipment known as Level 1, Level 2, and Fast Chargers. Level 1 chargers operate at 120 volts and will be useful for vehicles with small batteries such as electric bikes, scooters, and neighborhood electric vehicles. Since 120-volt power is so ubiquitous, these will be the easiest and least expensive types of chargers to install. However, Level 1 charging stations will be inadequate for convenient charging of cars like the Nissan LEAF, which uses a 24-kilowatt hour battery.

Level 2 equipment typically operates with a 240-volt, 40-amp circuit that can be found in most homes and businesses. For a standard sized automobile like the LEAF, a Level 2 charge could take 2 to 6 hours. EV operators will benefit from availability of Level 2 chargers at work, educational, and recreational destinations where they plan to park for 1 or more hours. Trenching and wiring to connect charging stations with existing infrastructure is commonly more expensive than the cost of the charging station itself so planners helping with new development should locating conduit for future infrastructure needs.

EV operators will seek fast chargers when they need a charge that could not be accomplished while doing other activities. Most vehicles will recharge at a fast charger in ½ hour or less. The stations could generate additional local traffic. Fast chargers operate at high voltage (for example, 480 volts) and/or high amperage and many potential locations do not have adequate capacity (or funds) for installation. Few EV manufacturers currently utilize fast charging; hardware standards are lacking. But infrastructure planners should provide site locations and electrical capacity for this technology.

Electric vehicle charging station companies are already scrambling for the best locations to set up networks and provide services to electric car owners – so how much publicly funded effort should go into planning infrastructure? Public dollars can help facilitate initial stages of the EV rollout through policy and planning documents, ordinances, and permit streamlining. Public agencies can also fund socially beneficial actions without duplicating private efforts; for example,

- Linking EV charging with park-and-ride lots and carpool parking;
- Integrating electric propulsion into publicly funded transportation for the disadvantaged;
- Funding public fleet vehicles that have electric propulsion; and
- Locating Fast Charge and Level 2 charging stations to best support car sharing and van pooling for electric vehicles.

Washington State legislature passed HB 1481 that mandates most urban counties to include electric vehicle charging stations as an allowable use in most zones. The law resulted in a July 2010 report on model ordinance and development regulations as well as guidance related to EV infrastructure and batteries. In Oregon, a Governor-appointed working group published policy recommendations for the rollout of electric vehicles. Through the EV Project, the federal government funded EV charging infrastructure deployment guidelines in both Oregon and Washington.

While the current buzz is about cars, planners and engineers now have more tools than ever to bring multimodal electric propelled transportation solutions to any urban or rural context. Planning for dense urban centers can focus on multimodal roadway solutions, rail, human-powered bicycles and pedestrian trips, and also managing VMT through smart land use planning choices.

David Mayfield, Principal at Sustainable Transportation Strategies, focuses his activities on reducing the carbon footprint of transportation through planning, policy, and technological innovation. He has three years experience planning electric vehicle infrastructure and over 20 years of experience with multimodal transportation in Oregon.
Call for Nominations - Oregon APA Board of Directors

The Oregon APA Nominations Committee is soliciting nominations for 2012 election to the Oregon APA board for five positions:

- Vice President
- Secretary
- Treasurer
- At-Large (2 positions)

Nominations must be submitted no later than December 19, 2011. If you are interested in serving on the OAPA Board or would like to nominate another Oregon APA member, please contact Amanda Ferguson, Vice President, at 541-942-3340 or amandafergus@gmail.com.

Terms and Responsibilities of the Board Positions:

The Vice President acts in the absence or incapacity of the President, serves as parliamentarian serve on the nominating committee, acts as the communications coordinator between the Chapter and APA and carries out other duties as assigned by the President. Should the President resign, the Vice-President assumes the office for the remainder of the term.

The Secretary keeps minutes and be responsible for their timely transmission to the Executive Board, serves on the nominating committee, prepares ballots and notifies members of their elections to offices and appointments to committees, and performs other duties customary to the office.

The Treasurer maintains the Chapter’s general funds and accounts, which shall always be open for Executive Board inspection, provides the Board with quarterly financial statements of income, expenditures, and the status of Chapter accounts, prepares an annual financial statement of the Chapter’s budget, including deficits or carryover, submits dues rate changes to the national office, provides for an audit not less than once every four years or as directed by the President, and performs other duties as customary to the office.

The two At-Large Directors serve two-year terms of office with the option of seeking a second two-year term. At-Large Directors duties include general involvement in board and chapter activities, and typically lead and/or provide active support of one of the chapter committees, as well as assume other liaison responsibilities. Eligible At-Large candidates can be National APA or Oregon APA Chapter-only members in good standing.

This is a great time to be actively involved in Oregon APA, as we work with planners throughout Oregon and the nation to achieve sustainable planning objectives in a rapidly changing planning environment. The Nominating Committee will submit a tentative list of candidates to the OAPA Board in January.

Board elections will take place in February and successful candidates will be announced by April 1, 2012. More information about OAPA, visit our website at www.oregonapa.org.

2012 Oregon Chapter of the American Planning Association Awards: Call for Entries

Each year, the Oregon Chapter of the American Planning Association honors outstanding efforts in planning and planning leadership. We invite you to participate in the celebration of the best in plans and planning by nominating projects and people you think deserving of such recognition.

Nominations for 2012 Awards are now being accepted. February 28, 2011 is the deadline for submitting nominations for the following awards:

- Professional Achievement in Planning
- Professional Achievement in Journalism
- Student Achievement in Planning
- Special Achievement
- Distinguished Leadership by a Professional Planner
- Distinguished Leadership by a Community Planner
- Distinguished Leadership by an Elected Official
- Betty Niven Award for Distinguished Leadership in Affordable Housing Advocacy

Application packets and additional award information are now available on-line at www.oregonapa.org. If you have questions about any of the awards, contact Awards Committee Chair Steve White at steve@orphi.org, or at (503) 227-5502 x228.
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